



HUMAN RIGHTS AND TECHNOLOGY

The 2030 Agenda for Sustainable Development

Mariateresa Garrido V.
Editor



University for Peace



“Human Rights and Technology. The 2030 Agenda for Sustainable Development”.

Mariateresa Garrido Villareal, editor



ISBN 978-9930-542-00-2

This Work is license under the Creative Commons: Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0). To view a copy of the license visit: <https://creativecommons.org/licenses/by-nc-sa/4.0/>



Acknowledgements

Someone once told me that if you share an idea it would never be yours again and this book is the best representation of that thought. I always have problems finding articles that explore the linkages between human rights and technology, and from that need I had the idea. Thanks to the support of the UPEACE Dean of Academic Affairs, Juan Carlos Sainz-Borgo, and the Head of the International Law Department, Mihir Kanade, and UPEACE Rector, Francisco Rojas Aravena, this idea became a project, and thanks to all the people who contributed in the different stages of this process, it became the book **“Human Rights and Technology. The 2030 Agenda for Sustainable Development”**.

Thanks to the authors for your submissions, for complying with the very tight deadlines, and for believing that this was the best option to publish your work. Without your hard work this book would not be published.

Many thanks to the reviewers - who are mentioned below- for helping me with the difficult task of selecting and improving the content of each article. I deeply appreciate your hard work and willingness to be part of this project. I cannot sufficiently express how grateful I am for all your help!

Thanks to my wonderful Editorial Assistants Ana Carolina Paci, Dafne Calderon, Laurisse Noel, and Sorang Saragih for helping me in the final revision of the articles; and of course, to the UPEACE professors Ross Ryan, Gal Harmat, and Manish Thapa, for allowing their participation in the project. Also, thanks to Glenn Oliva, the designer of the cover.

Thanks to my family and friends for always supporting my ideas, for helping me to find reviewers, for telling me what I needed to hear when I did not know how to handle time to finish this project, and for your everlasting love! But above all, thank you God for giving me the opportunity and the strength to do it.

Mariateresa Garrido Villareal

List of reviewers

Alonso Muñoz
Amber Macintyre
Aude Mulliez
Brett Goldberg
Celina del Felice
Daniel Salamanca
Daniela Martucci
Diana Ubico
Guillermina Gutnisky
Humprey Sipalla
Indira del Cornelio
Jana Lozanoska
Juan Amaya
Juan Garcia
Luis Araque
Mary-France Vary
Miriam Estrada
Mauricio Garita
Patricia Tarre
Ramiro Gomez
Rhina Cornejo-Hösl
Ross Ryan
Virpi Salojärvi
Zulmaire Gonzalez

About the Authors:

Andrea Isabel Garrido Villareal: Journalist from *Universidad Montevila* (Magna Cum Laude). Currently, she is General Coordinator at *Fundación Comunicas*. She has worked on the promotion of the right to Freedom of Expression in Venezuela since 2013, and in 2016 she completed the U.S. International Visitor Leadership Program.

Ankur Sarin: Assistant Professor at the Indian Institute of Management Ahmedabad (IIMA). His areas of teaching and research include social policy and social entrepreneurship. More recently, he has been working as part of an action research project (www.rterc.in), that seeks to making the Right to Education in India an instrument not only for increased access to education, but also one that promotes a more inclusive education system.

Ashish Ranjan: Researcher working at Indian Institute of Management Ahmedabad (IIMA). He has done his MBA from IIM Ahmedabad and Mechanical Engineering from NITK Surathkal. At IIM-A, he has been involved in initiating the action research project “RTE Resource Center”, which tries to understand the implementation of Right to Education Act by actively participating in the implementation process. Besides, he has been working on research projects to understand the access of public provisions like water to the marginalized section of the society. His research interest lies in Public Policy, Public Sector Reform, and Change Management.

David Buchbinder: Human rights researcher, activist, and educator with nearly 20 years of experience working in Africa, central Asia and South America. As project director in the Human Rights Program of Benetech, David has been working with LGBTI rights organizations in eastern and southern Africa since 2014, focusing on capacity building for human rights documentation, fact-finding, and advocacy. He has additional experience on capacity building with human rights organizations from across Africa with the Botswana-based African Human Rights Consortium. He conducted primary human rights research in Chad and Sudan for Human Rights Watch and Child Soldiers International.

Deborah Sun Kim: Entrepreneur and consultant based in Seoul, driven by behavioural economics and social innovation. Her diverse background extends across both public and private sectors, and she is always seeking opportunities that cultivate multicultural, multigenerational, and multidisciplinary collaboration for sustainability. More recently, she has been directing workshops for startups, tech developers, and educators on leadership, community wellbeing, and activating

systems change. Deborah holds an MA in Responsible Management from the UN Mandated University for Peace, an MA in Sustainable Development from Hankuk University of Foreign Studies, and is an associate of the award-winning UnSchool of Disruptive Design's Network.

Dora Elia Ramos Muñoz: Doctor in Ecology and Sustainable Development (Ecosur 2000) and Industrial Engineer (ITESM 1989) Author of scientific papers on technological innovation, women's work, and leadership in Mexico and Guatemala. Her research interest is: social consequences of the uses of ICTs, disasters and social change, women's work, and urban-rural development.

Juan Pablo Delgado Miranda: B.A. in Law from *Universidad Iberoamericana* (2013), graduate student in the UN Mandated University for Peace and graduate fellow from Georgetown University's Global Competitiveness Leadership Program 2016. He worked in the Center for Justice and International Law (CEJIL), the Office of the Human Rights Ombudsman of the State of Guanajuato and the Municipal Government of the City of León as Director of Social Development. Since 2015, he is Cofounder and Director of Amicus DH, a civil society organization devoted to Human Rights promotion and defense, currently undertaking an integral defense strategy for the recognition of gender identity in Guanajuato, México.

Ivory Mills: Law & Science Fellow and dual degree candidate pursuing a PhD in Media, Technology, and Society and a JD at Northwestern Law. With interests in both theory and practice, she investigates international and comparative ICT (information and communication technologies) law and policy from an organizational and interorganizational perspective. Interdisciplinary in nature, her work draws upon the technological, economic, legal, social, and cultural implications of corporate, civil society, and regulatory institutions in the international system. Ivory holds a B.A. in International Studies from Spelman College and is a Fellow with the Institute for International Public Policy, Cohort 16.

Kevin Kester: Research Assistant Professor of International & Area Studies in the John E. Endicott College of International Studies at Woosong University in Daejeon, Korea. His research interests lie in the sociology and politics of education with a focus on the international system, social theory, and qualitative research methods. He teaches courses on peace and conflict studies; modernity, globalization, and education; and educational sociology.

Kris Hyesoo Lee: Doctoral candidate at the University of Oxford, where she conducts a sociological study of the transnational mobility through education, particularly contemporary migration from the West to China. She uses a range of disciplinary lenses including human geography, sociology, and education to deepen an understanding on the meaning of globalisation, international and transnational mobility, and identity and belonging. Prior to undertaking her doctoral studies, she served various roles in the higher education sector. She holds a master's degree in Education from the University of Cambridge, where she was a member of Wolfson College.

Linda Annala: PhD Candidate at Hanken School of Economics, Finland. Her research looks into the nexus of equal access to drinking water, sustainable technology, and public policy in the contexts of Ethiopia and India. Her theoretical interests lie within corporate citizenship, critical innovation studies, and post-colonial, de-colonial and transnational theories.

Loughlin Sweeney: Irish historian specialising on elites and communities of violence in a transnational context. He lectures on modern British political history and on research methods, and recently completed a PhD thesis on nationalism and the British Army in Ireland between 1870 and 1925. He is currently preparing a research project on the development of global norms of peace-making expertise in the League of Nations mandates, 1919-1939.

Mariateresa Garrido Villareal: Lawyer from *Universidad Central de Venezuela* and PhD Candidate at the UN mandated University for Peace. Her current research is focused on the exercise of the right to freedom of expression in the digital era, with particular emphasis on the protection of journalists. She has worked in this field with Transparency International, *Espacio Público*, *Fundación Comunicas*, and UNESCO.

Mihir Kanade (Dr.): Head of the Department of International Law and Human Rights, and Director of the Human Rights Centre at the UN mandated University for Peace.

Navdeep Mathur: Assistant Professor at Indian Institute of Management Ahmedabad (IIMA), in Public Systems Group. His research is on the political foundations of urban governance, business-society relations and the social anthropology of infrastructure related conflict. He teaches courses on qualitative research methods, participatory theatre, corporate social irresponsibility, and the political impact of large corporations on democratic policy processes.

Nathalie Maréchal: Doctoral candidate at the Annenberg School for Communication and Journalism at the University of Southern California. She is also a senior research fellow with Ranking Digital Rights.

Nnenna Ajufu: Law lecturer at Baze University, Abuja, Nigeria. She has worked with the Anglophone Africa Office of the Coalition for International Criminal Court in Nigeria. She also worked with an NGO in Aberdeen, United Kingdom on a role funded by the Equalities and Human Rights Commission. She has written articles on human rights and is presently a doctoral student at the University of Johannesburg, South Africa where she is researching on access to ICT as a human right.

Pallab Raj Nepal: Social worker, specialized on rural development and integrated water resource management issues with priority on drinking water supply, sanitation and hygiene (WASH). He is also a researcher in Environmental Economics and a PhD candidate at Sai Nath University, Jharkhand, India. He has a post graduate degree in Economics and is doing research on Economic Cost Benefit Analysis: Comparative study on standalone Drinking Water Supply System and Multiple Use of Water System with Drinking Water Supply System. He has more than 11 years of experience in rural development, especially in the Water Supply and Sanitation and Water Resource management sector.

Pamela White: She is a generalist, working with rural development, water supply, sanitation and hygiene (WASH) issues, and gender and human rights. She works with a consulting company in Finland (FCG International) and carries out short term consultancies globally, but with a particular focus on Nepal. She is also currently working on a PhD in Development Studies with the University of Helsinki, focusing on the role of technical assistance. Her prior degrees include Bachelor Veterinary Science and Masters Social Sciences (International Development).

Priya Kumar: Doctoral student at the University of Maryland College of Information Studies. Until August 2016, she was a research analyst with Ranking Digital Rights.

Ramón Abraham Mena Farrera: Doctor in Social Science and Humanities from the *Estudios Superiores de México y Centroamérica* (CESMECA) and *Universidad de Alicante*. Currently, he works as *Técnico Académico Titular Adscrito* at the Department of Society, Culture, and Health at the Academic Group on Gender Studies at *El Colegio de la Frontera* (ECOSUR). His research focuses on socio-technical phenomena and technological experience through the use of the Internet. He has imparted several courses and workshops on ICTs and uses of software for qualitative and quantitative analysis.

Sanna-Leena Rautanen: Doctor of Science (Technology), focusing on capacity development for WASH, with Masters in Civil Engineering. She has been working as the Chief Technical Adviser in rural water projects in Nepal since 2009, within the long term expert team by the Technical Assistance consultant FCG International. She has studied a range of topics related to rural water and sanitation, including various cross-cutting themes. HRBA & GESI Strategy and Action Plan (2015) is one example of the various guidelines and manuals that she has contributed to over the years in Nepal. She is affiliated with Tampere University of Technology, Finland.

Revati Prasad: Doctoral student at the Annenberg School for Communication at the University of Pennsylvania. In summer 2016, she was a COMPASS fellow with Ranking Digital Rights.

Yewondwossen Tesfaye: PhD Candidate (in Supply Chain Management and Social Responsibility) at Hanken School of Economics, Finland. Previously studied sociology and rural development. Also worked as a consultant for over 9 years in Water, Sanitation and Hygiene (WASH) sector in Ethiopia. Current research areas: meaning and identity construction, subject positioning and power relations in cross-sector partnerships, with an emphasis on corporate/business – NGO; and NGO – government/public partnerships in ‘rural development’ projects.

Table of Contents

Acknowledgements	v
About the Authors:	vii
Introduction	
<i>Francisco Rojas Aravena & Mariateresa Garrido Villareal</i>	1
Technology and the Sustainable Development Goals: A Right to Development Approach	
<i>Mihir Kanade</i>	7
I. Introduction	7
II. The 2030 Agenda and Technology	10
III. Right to Development in the Text of the 2030 Agenda	14
IV. The Scope and Content of RtD.....	15
V. The Symbiotic Relationship between Sustainable Development and RtD.....	18
VI. Technology-related Targets in the 2030 Agenda and a RtD Approach.....	21
VII. Conclusion.....	25
VIII. References	27

Economic development and technology

Emergent Challenges in International Investment Law: Investing in ICT

<i>Ivory Mills</i>	34
I. Introduction	34
II. Background.....	34
A. ICT Regulation.....	35
III. Emergent Challenges for International Investment Law in the Context of ICT.....	36
A. Strategic Challenges	36
B. Structural Challenges	43
C. Substantive Challenges	46
IV. Conclusion.....	50
V. References	52

**Networks for sustainability:
The role of social media in converging offline gaps**

<i>Deborah Sun Kim</i>	55
I. Introduction	56
II. Social Media and Economics	60
III. Social Media and the Environment	63
IV. Social Media and Society	65
V. Networks for Sustainability	70
VI. Conclusion.....	74
VII. References	76

Social Development and Technology

**Las plataformas digitales de acceso a la información pública como
mecanismos de visibilidad y prevención de la violencia hacia
las personas LGBTI en las Américas**

<i>Juan Pablo Delgado Miranda</i>	83
I. Introducción.....	84
II. El Derecho de Acceso a la Información	84
A. Antecedentes históricos.....	84
B. Marco jurídico del Derecho al Acceso a la Información.....	85
C. La obligación estatal de producir información y las personas LGBTI.....	90
III. La Alianza por los Gobiernos Abiertos y su rol en la garantía del derecho a la información	91
A. La AGA y las plataformas de acceso a la información	92
B. La AGA, el acceso a la información y la Agenda 2030 para el Desarrollo Sostenible	93
IV. Las plataformas digitales de acceso a la información	95
A. La utilidad de las plataformas de acceso a la información y su relevancia como mecanismos de generación de información relacionada con las personas LGBTI	95
V. Conclusión.....	97
VI. Referencias	98

Emergent LGBTI Rights Documentation Policy and Practice in Africa

<i>David Buchbinder</i>	101
I. Introduction	101
II. Methodology.....	103
III. Framework.....	104
A. LGBTI Rights and the Sustainable Development Goals	104
B. African Political and Cultural Context.....	105
IV. Traditional Human Rights Documentation and Advocacy.....	108
V. Emergent Human Rights Documentation and Advocacy.....	110
A. Participatory Fact-Finding	111
B. Digital Storytelling.....	112
VI. Use Case for Health Care Worker Inclusivity Training.....	113
VII. Conclusion.....	115
VIII. References	116

Libertad de expresión, participación ciudadana y los Objetivos de Desarrollo Sostenible en Venezuela

<i>Mariateresa Garrido Villareal & Andrea Isabel Garrido Villareal</i>	119
I. Introducción.....	119
II. Libertad de expresión y participación ciudadana: marco legal venezolano	120
III. Las personas como fuente de información	123
Periodista ciudadano	129
IV. Comunicas, del tweet a la noticia	130
V. Participación y organización ciudadana para la exigencia de los derechos	132
VI. Conclusiones.....	134
VII. Referencias	136

Technology and Human Rights: Revisiting the Role of ICT in Bridging Gender Inequality in Sub-Saharan Africa

<i>Nnenna Ajufu</i>	139
I. Introduction	139
II. The ICT Gender Divide.....	142
III. Human Rights, African Women and Access to ICT	149
IV. Benefits of ICT for Women	151
V. Conclusion.....	154
VI. References	159

Mujeres, derechos humanos y Web 2.0 en el sureste de México

<i>Dora Elia Ramos Muñoz & Ramón Abraham Mena Farrera</i>	163
I. Introducción.....	163
II. Metodología.....	165
A. Métodos y análisis de los datos de la investigación.....	167
III. Marco conceptual	167
A. Economía del compartir	167
B. Desarrollo de software	168
IV. Resultados y discusión	168
A. Paisaje	168
B. Régimen	173
C. Nicho.....	178
V. Discusión.....	181
VI. Conclusiones.....	183
VII. Referencias	184

Progress and peril: the role of ICT companies in promoting and curtailing human rights

<i>Priya Kumar, Revati Prasad & Nathalie Maréchal</i>	189
I. Introduction	190
II. How ICT Companies Can Put Human Rights at Risk.....	191
III. How to Hold ICT Companies Accountable.....	196
IV. How ICT Companies Can Better Respect Human Rights.....	201
A. Clearly communicate company policies to users.....	201
B. Institutionalize human rights commitments throughout the company	202
C. Provide transparency on the extent to which companies restrict content and release user information	203
D. Enable users to keep themselves secure.....	204
E. Provide grievance and remedy mechanisms for users	204
F. Engage with policymakers for changes that will help companies better respect users' rights.....	205
V. How Governments Can Help ICT Companies Better Respect Users' Rights.....	205
A. Assess the human rights impacts of laws.....	205
B. Provide transparency on requests for companies to restrict content or share user information.....	207
VI. Conclusion.....	208
VII. References	210

Capacity Building, Technology Transfer and Development

Operationalising the right to water and sanitation and gender equality via appropriate technology in rural Nepal

<i>Pamela White, Sanna-Leena Rautanen & Pallab Raj Nepal</i>	217
I. Introduction	218
II. Literature	219
III. Two Rural Water Projects	223
IV. Discussion: how technology supports the SDGs and Human Rights	226
A. How the projects address Goal 5: Achieve gender equality and empower all women and girls	227
B. How the projects address Goal 6. Ensure availability and sustainable management of water and sanitation for all.....	232
V. Conclusions	234
VI. References	237

Technological innovations and equitable access to clean drinking water – three case studies from Gujarat, India

<i>Ashish Ranjan, Linda Annala, Navdeep Mathur, Ankur Sarin & Yewondwossen Tesfaye</i>	241
I. Introduction	242
II. Water quality.....	245
A. Information asymmetries and the need for technology.....	246
III. Methodology and setting	247
A. Technologies examined.....	249
IV. Findings	252
A. Case study 1: Hydrogen Sulphide water test kits in Ahmedabad	252
B. Case study 2: Household RO water filters in Ahmedabad.....	255
C. Case study 3: Community-level RO water purification plants in rural villages...	257
V. Discussion and conclusions.....	260
VI. References	263

**Critical Human Rights Education and Technologies of Peace:
A Teleology Too Far?**

<i>Kris Hyesoo Lee, Loughlin Sweeney & Kevin Kester</i>	267
I. Introduction	267
II. “Technologies” of Power and Self.....	269
III. Human Rights and Technology	272
IV. Human Rights Education: Critiques and Possibilities.....	275
V. Conclusion.....	279
VI. References	280

Introduction

Francisco Rojas Aravena & Mariateresa Garrido Villareal

Societies are under continuous change. At the national level this means that states need to adapt and effectively respond to the challenges faced by its people; but this also requires organization and active participation of citizens in public matters. At the international level, these social changes require more cooperation among states, civil society, and the private sector, to improve living conditions and guarantee peace and international security. The United Nations (UN), aware of these changes, has developed different strategies to address them at the international level throughout the last 70 years.

One of those strategies was the creation of the United Nations mandated University for Peace (UPEACE) in order

...to provide humanity with an international institution of higher education for peace and with the aim of promoting among all human beings the spirit of understanding, tolerance and peaceful coexistence, to stimulate cooperation among peoples and to help lessen obstacles and threats to world peace and progress, in keeping with the noble aspirations proclaimed in the Charter of the United Nations.¹

For the past 36 years UPEACE has stimulated academic debates and research on the most important global issues. In the 21st Century the importance of technology has increased and for that reason UPEACE considered necessary to evaluate its potential to positively contribute to the promotion of tolerance, peaceful coexistence, and the protection of human rights. Particularly, we noticed that the achievement of the Sustainable Development Goals (SDGs), included in the new global Agenda for Sustainable Development, is highly dependent on technology.

The 2030 Agenda for Sustainable Development is a global plan that includes 17 SDGs and 169 targets. It was designed to “to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.” In order to implement it, states indicated that they are determined to put people on the centre, to protect the planet, promote peace, create partnerships, and ensure prosperity. However, it is surprising that no specific mention to human rights is made in the preamble of this resolution, while technological progress is perceived as a requisite to enjoy prosperous and fulfilling lives.

¹ UNGA Res. 35/55 (1980).

The Declaration in which it was adopted goes further in this idea and present technology as a key aspect for the implementation of the global Agenda. In fact, goal 17, strengthen the means of implementation and revitalize de Global Partnership for Sustainable Development, includes 3 specific targets on the use of technology. Moreover, the Declaration launched a “Technology Facilitation Mechanism” composed of a UN inter-agency task team on science, technology and innovation to promote coordination, coherence, and cooperation between the civil society, the private sector and the scientific community, and states, though, no expert on human rights is included in this mechanism, and no mention to the relationship between technology and human rights is made in goal 17. Yet, states indicated that they “envisage a world of universal respect for human rights and human dignity”, and they specified that the Agenda is grounded in the Universal Declaration of Human Rights, international human rights treaties, and applicable international law.

For international law experts the linkages between human rights and technologies seem pretty obvious, but for specialists in other fields it is not that evident. In practice, interdisciplinary studies are not very common. Scholars tend to focus in one area, and for that reason, to find research in which different fields of expertise are combined is very difficult, and this situation motivated us to publish this book. We consider that the new global agenda provides the necessary elements to study how the uses of current technologies, and the development of new ones, can contribute to guarantee and protect human rights. Thus, the book on **“Human Rights and Technology. The 2030 Agenda for Sustainable Development”** is a compilation of studies from all over the world that pretends to start the discussion and promote interdisciplinary research on this matter.

The book begins with the article written by Mihir Kanade from India, **“Technology and the Sustainable Development Goals: A Right to Development Approach”**, who argues that without technology and without considering the right to development SDGs cannot be achieved. Following SDG 17, this article indicates that there are mainly 3 ways in which technology can contribute to the achievement of all goals and to foster right to development: through international cooperation on and access to science, technology and innovation; through the transfer, dissemination and diffusion of technologies; and by operationalizing capacity-building mechanisms. This framework is further developed in the rest of the book, and articles are organized in accordance with the 3 dimensions of sustainable development: economic, social, and environmental.

The first group of articles explores the relationship between economic development and technology. The economic aspect is essential for the achievement of the

SDGs. States depend on the availability of resources to improve people's lives and to guarantee sustainable development. There are many forms in which this can be done, and 2 articles review this issue from different perspectives.

Firstly, the article **“Emergent challenges in International Investment Law: Investing in ICT”**, of Ivory Mills from United States of America, discusses the consequences that foreign investment has, and will have, in developing the information and communication technologies (ICT) sector and promoting the use of these technologies to achieve SDGs. The second article, **“Networks for sustainability: The role of social media in converging offline gaps”**, written by Deborah Sun Kim from South Korea, promotes the use of social media to create economic development. It explores the idea of using social media to prompt our collective, not individualistic identities to drive behaviours and values supporting the achievement of the 2030 Agenda.

The second section of the book relates to the social aspect of development, and it considers the use of ICT to achieve different SDGs. Today's world is driven by information, and without it, it is impossible to meet the goals set by the 2030 Agenda, especially goal 16, promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. To achieve this goal many aspects need to be considered, and 5 articles present different approaches.

States must start by gathering the data needed to understand the issues that need to be considered to implement the most appropriate and effective plans. The article written by Juan Pablo Delgado Miranda from Mexico, **“Las plataformas digitales de acceso a la información pública como mecanismos de visibilidad y prevención de la violencia hacia las personas LGBTI en las Américas”**, discusses the importance of the right to access to information and it considers that through the implementation of traditional monitoring mechanisms (i.e. statistics on attacks, statistics on filed cases and condemnatory decisions) states will have the possibility to know the main challenges that Lesbian, Gay, Bisexual, Trans, and Intersex (LGBTI) communities are facing, and which are the best mechanisms to protect them. Nonetheless, formal mechanisms can be complemented by other non-traditional type of data collection tool (i.e. storytelling, videos) to collect information and to better protect members of these communities. This aspect is explored in the article prepared by David Buchbinder from United States of America, **“Emergent LGBTI Rights Documentation Policy and Practice in Africa”**, in which cases of Sub-Saharan countries are presented to illustrate the benefits of using other mechanisms to promote and respect the rights of the people belonging to these communities.

Yet to create more peaceful societies, citizens' participation is indispensable. One of the forms in which their participation can be promoted is through the use of Internet-based platforms to exercise their human right to freedom of expression. In this sense, the article **“Libertad de expresión, participación ciudadana, y Objetivos de Desarrollo Sustentable en Venezuela”**, written by Mariateresa Garrido V. and Andrea I. Garrido V., presents a successful example on the use of digital technologies to promote and increase civil participation. It shows that when citizens are involved in the identification of problems and solutions they positively contribute with the transformation of the society.

However, none of this is possible if women are not included. Hence, it is necessary to consider how the uses of ICTs are impacting women's lives and affecting the achievement of SDG 5. Two articles discuss this topic. The first of them **“Technology and Human Rights: Revisiting the Role of ICTs in Bridging Gender Inequality in Sub-Saharan Africa”**, of Nnenna Ajufo from Nigeria, makes a detailed analysis of how the gender divide impedes women from accessing these technologies, its consequences for the protection of women's rights, and the benefits that it produces when they can access ICTs. The second article, **“Mujeres, Derechos Humanos y Web 2.0 en el Sureste de México”**, developed by Dora Elia Ramos Muñoz and Ramón Abraham Mena Farrera, presents a practical approach to the issue. It evaluates how access to education and ICTs can improve living conditions of young women in the Southeast of Mexico. It presents statistics and it evaluates different local and national plans that have been implemented in this region and that can contribute to achieve SDG 5.

Within this context, we can forget that ICTs are mainly developed by private actors; therefore, we also need to consider their role. Decisions taken by technology developers, Internet Services Providers not only affect people's lives but the possibilities to achieve the SDGs. Hence this topic is also considered in this book. The article **“Progress and peril: the role of ICT companies in promoting and curtailing human rights”**, by Priya Kumar, Revati Prasad and Nathalie Maréchal, discusses the human rights' risks of increased use of ICT and offers a framework for private sector and government actors to mitigate them.

Since technology is not only about ICT, the third section of the book explores some examples on capacity-building and technology transfer. Goal 6 promotes access to water and sanitation for all, and this goal depends on the cooperation between different stakeholders. Inhabitants, representatives of the state, and donors must agree on which are the needs and on the most appropriate technologies to satisfy them. Two articles take this into consideration in water sanitation projects.

The first article “**Operationalising the right to water and sanitation and gender equality via appropriate technology in rural Nepal**”, prepared by Pamela White, Sanna-Leena Rautanen, and Pallab Raj Nepal, is focused on the capacity-building among local authorities, rural communities, and donors. It presents two examples on how the implementation of projects aiming to improve access to water and sanitation are also contributing with the achievement of SDG 6.

The second article, “**Technological innovations and equitable access to clean drinking water**”, of Ashish Ranjan, Linda Annala, Navdeep Mathur, Ankur Sarin, and Yewondwossen Tesfaye, analyses the uses of three separate technologies: Hydrogen Sulphide (H₂S) water test kits, household reverse osmosis water filters, and community-level reverse osmosis water filters, in Gujarat, India. It explains how lack of information affects people’s perception on water quality, and how private companies can take advantage of the situation to improve their business but with several consequences to the people.

Finally, the book **Human Rights and Technology. The 2030 Agenda for Sustainable Development** cannot be complete without some critics and thought-provoking ideas. The article written by Kris Hyesoo Lee, Loughlin Sweeney, and Kevin Kester, **Critical Human Rights Education and Technologies of Peace: A Teleology Too Far?** challenges our perceptions on what technology is. By using a Foucaultian framework it argues that education in itself is a technology and it offers critiques of liberal humanism and SDGs in its realist/empirical enactments through interventionist policies and imperialism.

For UPEACE this book constitutes an important contribution to the evaluation of the SDGs from a comprehensive perspective. This is one of the first publications covering some of the linkages between human rights and technology and we are glad to present to humanity examples on how SDGs can be achieved. Nevertheless, we are conscious that there are still many issues that should be evaluated from an academic perspective, and we hope that scholars continue researching these issues.

To be the editor of this book was an incredible experience. I am grateful for the opportunity that the rector, Francisco Rojas Aravena, gave me to publish this book with UPEACE, the support from UPEACE faculty and staff, the trust of authors and reviewers, and everyone who helped me to present to all of you this publication.

As UPEACE rector, I want to express my gratitude to all authors, reviewers and collaborators for your important contributions to this book. Also, I would

like to make special recognition to Mariateresa Garrido, editor of this book, for her effort in putting together high quality articles that provide us with different examples on the interconnection and interdependence of peace, sustainable development, and human rights.

Technology and the Sustainable Development Goals: A Right to Development Approach

Mihir Kanade¹

Abstract

The 2030 Agenda for Transforming Our World, adopted by world leaders on 25 September, 2015, has heralded a new and ambitious collective global plan of action for ending poverty and hunger, protecting the planet, fostering peace, ensuring prosperity, and building partnerships with the objective of ensuring sustainable development. This agenda replaces the eight Millennium Development Goals which ran their course in 2015, with a robust set of 17 Sustainable Development Goals accompanied by 169 Targets to be achieved by 2030. Goal 17 specifically enlists three technology-related targets, not only as self-standing targets but also as part of the means for implementing the other 16 SDGs, some of which goals, in turn, contain references to technology within their corresponding targets. This paper argues that if the technology-related targets and the rest of the SDGs are to be successfully implemented by 2030 as intended, then a Right to Development Approach is not only appropriate, but indispensable.

Keywords: right to development, sustainable development, SDG 17, technology, innovation.

I. Introduction

On 25 September, 2015, at the United Nations Sustainable Development Summit held in New York, world leaders unanimously adopted a new and ambitious collective global plan of action for replacing the Millennium Development Goals (MDGs) which were breathing the last of their partly unsatisfactory existence. This new global agenda, promisingly entitled as the “2030 Agenda for Transforming Our World”, seeks to usher in an era for humankind where sustainable development becomes a lived reality for everyone.² The edifice of the 2030 Agenda is constructed on an integrated foundation of 5 Ps: people, planet, prosperity, peace and partnership.³ Based on this foundation, the 2030 Agenda is sought to be erected through the implementation of 17 newly adopted Sustainable Development Goals (SDGs) and 169 accompanying targets. The agenda stresses that “the interlinkages and integrated nature of the SDGs are of crucial importance in ensuring that the purpose of the new Agenda is realised.”⁴

1 Head of the Department of International Law and Human Rights, and Director of the Human Rights Centre at the UN mandated University for Peace.

2 A/RES/70/1.

3 Idem., Preamble.

4 Ibidem.

Of particular significance in this schema are the “means of implementation” of the SDGs. Indeed, the 2030 Agenda explicitly acknowledges that without identification and operationalization of the means by which the SDGs can be implemented by States, none of the goals and targets would be achievable in reality.⁵ As such, in addition to the “means of implementation targets” under each of the SDGs, the 2030 Agenda also specifically incorporates SDG 17, self-eloquently entitled “Strengthen the means of implementation and revitalize the global partnership for sustainable development.”⁶ Among the several targets enshrined under SDG 17, Targets 17.6 to 17.8 focus on the importance of technology, and as a natural corollary, on the importance of a global partnership for technology facilitation, as one of the essential means for implementation of the SDGs and the 2030 Agenda.⁷ Sixteen other targets in the SDGs additionally refer to the term “technology” or its close derivatives, however, the means of implementing those other targets and goals are captured in Targets 17.6 to 17.8.⁸

The significant presence of technology-related targets in the 2030 Agenda is an acknowledgement of the fact that “technology is essential for achieving the SDGs and reaping the benefits of synergies among them, as well as for minimizing trade-offs among goals”.⁹ This might seem rather unremarkable and mundane on first blush. One might even be tempted to assume that technology must have always been at the forefront of any previous global agenda for alleviating poverty, addressing climate change, and better responding to human rights and humanitarian crises. A juxtaposition of the SDGs with their predecessor MDGs, however, will reveal that inclusion of technology-related targets in the former was not a mere formulaic carry-over from the past. The MDGs were, in fact, conspicuously silent on technology, except for a feeble whisper in its Target 8.F, whereby States were encouraged “in cooperation with the private sector, [to] make available the benefits of new technologies, especially information and communications.”¹⁰

The inclusion of technology-related targets in the SDGs, especially Targets 17.6 to 17.8 as the “means of implementation”, is in fact a reflection of an overall markedly improved design of the 2030 Agenda over the MDG framework.

5 Idem., paragraph 61.

6 Idem., Goal 17.

7 Idem., Targets 17.6 to 17.8

8 The term technology has also been referred to in Targets 1.4, 2.a, 4.b, 5.b, 6.a, 7.a, 7.b, 8.2, 9.4, 9.5, 9.a, 9.b, 9.c, 12.a, 14.a, and 17.16.

9 United Nations Department of Economic and Social Affairs, Global Sustainable Development Report 2016 (New York, United Nations, 2016), p. xiv.

10 “Official List of MDG Indicators”. Available from <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm> (Accessed 26 November 2016).

Technology and the Sustainable Development Goals: A Right to Development Approach

Although the MDGs were presented as having emanated directly from the Millennium Declaration of 2000, they were in reality not designed through any participatory process; rather they were infamously the brainchild of a select group of officials in the UN Secretariat.¹¹ It is no secret that as a result of this flawed process, the MDGs suffered from several structural shortcomings in the design of targets and indicators thereof and indeed some contradictions with the Millennium Declaration itself.¹²

On the other hand, the design of the SDGs and the targets were the result of a truly collective and participatory process of engagement by several stakeholders, including the UN system, States, civil society, and academia.¹³ Despite these noteworthy improvements, and especially the clear and necessary linkages drawn between technology and sustainable development, this paper will argue that implementing the SDGs successfully, including the technology-related targets, can be accomplished only if development is viewed as a right of human beings and a duty of States, and not merely as a charity, privilege or generosity. This calls for adoption of a Right to Development (RtD) approach as enshrined in the 1986 UN Declaration on RtD (DRTD),¹⁴ both to the implementation of the SDGs, as well as to the very means of implementation of the SDGs. In the specific context of technology-related Targets 17.6 to 17.8, this paper will argue that neither those targets nor any of the other SDGs for the implementation of which those targets are the means, can be brought to fruition unless use, promotion, access, and facilitation of technology, including through international cooperation, is seen from the prism that human beings have a right to development and States have a corresponding obligation to fulfil this right.

Indeed, this is a specific lesson which must be learnt from the MDG story where despite admirable progress in some goals, some others unfortunately remained off-track. As the 2030 Agenda regretfully acknowledges, progress on MDGs by the end of 2015 was uneven, particularly in Africa, least developed countries, landlocked developing countries, and Small Island developing States.¹⁵ As I have argued elsewhere,¹⁶ this was a result of the absence of a RtD approach

11 Jan Vandermoortle, “The MDG Story: Intention Denied”, *Development and Change*, vol. 42, No. 1 (2011).

12 United Nations Office of the High Commissioner for Human Rights, *Claiming the Millennium Development Goals: A Human Rights Approach* (Geneva, United Nations, 2008); United Nations Millennium Campaign and United Nations Development Programme, *Millennium Development Goals and Indigenous Peoples* (Bangkok, United Nations, 2010).

13 A/RES/70/1, paragraph 6.

14 A/RES/41/128.

15 A/RES/70/1, paragraph 16.

16 Mihir Kanade, “Advancing Peace, Rights and Well-being: A Right to Development Approach to SDGs as the Way Forward”, Speech delivered at the event “In Search of Dignity and Sustain-

despite the fact that one of the stated objectives of the Millennium Declaration from which the MDGs were presented as having emanated was “making the right to development a reality for everyone.”¹⁷ If therefore, we are to ensure that peace, human rights, well-being, and ecological sustainability are advanced as envisioned by the 2030 Agenda, then a RtD approach to the SDGs, including to the technology-related targets, is not only the most appropriate, but it is indeed indispensable.

II. The 2030 Agenda and Technology

As indicated above, the wholesome inclusion of technology in the 2030 Agenda was the direct result of participation and inputs by various stakeholders in the process of designing the agenda. The scope and content of Targets 17.6 to 17.8 was however shaped to a large extent by few important milestones achieved at the UN level, beginning with the Agenda 21 adopted by world leaders in 1992.¹⁸ Agenda 21 highlighted in several places the key role of technology and technology transfers as well as the importance of an evolution towards environmentally sound technology. It also sought to ensure greater involvement of the “scientific and technological community” in order “to make a more open and effective contribution to the decision-making processes concerning environment and development.”¹⁹ Ten years later, the outcome document of the World Summit on Sustainable Development held in Johannesburg, identified technology transfer as one of the areas in continued need “for a dynamic and enabling international economic environment supportive of international cooperation” to reduce the gap between developed and developing countries.²⁰ It was also described as a tool to increase food availability and affordability,²¹ to develop water management systems,²² and to “promote concrete international support and partnership for the conservation and sustainable use of biodiversity”,²³ amongst others. In the context of climate change, in 2009, the Copenhagen Accord established a new Technology Mechanism to accelerate technology development and transfer for

able Development for All”, Geneva, United Nations, 29 February 2016. Available from <http://www.ohchr.org/EN/Issues/Development/Pages/SearchOfDignity.aspx> (accessed 26 November 2016).

17 A/RES/55/2, paragraph 11.

18 United Nations Conference on Environment and Development, “Agenda 21”, Rio de Janeiro, Brazil, 3 to 14 June 1992.

19 *Idem.*, chapter 31.

20 *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chapter I, resolution 2, annex, paragraph 4.

21 *Idem.*, paragraph 7.k.

22 *Idem.*, paragraph 22.1.

23 *Idem.*, paragraph 44.f.

Technology and the Sustainable Development Goals: A Right to Development Approach

both climate change adaptation and mitigation.²⁴ The most important concrete step leading up to the final inclusion of Targets 17.6 to 17.8 in the SDGs was probably the 2012 General Assembly Resolution entitled “The Future We Want” wherein Member States requested “the identification of options for a facilitation mechanism that promotes the development, transfer and dissemination of clean and environmentally sound technologies by, inter alia, assessing the technology needs of developing countries, options to address those needs and capacity-building.”²⁵ Member States further requested the Secretary-General (UNSG) “to make recommendations regarding the facilitation mechanism to the sixty-seventh session of the General Assembly.”²⁶ In compliance thereof, the UNSG submitted a “Synthesis Report” in 2014, whereby he proposed the setting up of an online, global platform to “map existing technology facilitation initiatives, needs and gaps, including in areas vital for sustainable development, including agriculture, cities and health.”²⁷ He furthermore invited Member States to finalize arrangements for a proposed Technology Bank and a Science, Technology and Innovation Capacity-Building Mechanism for LDCs; scale up cooperation for sharing technologies and strengthening knowledge for innovation capacities; and transfer technologies to developing countries.²⁸ All these events set the tone for the final milestone leading up to the adoption of the SDGs — the Addis Ababa Action Agenda on Financing for Development — adopted in July 2015,²⁹ just a couple of months prior to the adoption of the 2030 Agenda. Among its deliverables, the Addis Ababa Action Agenda established a Technology Facilitation Mechanism (TFM),³⁰ and decided to launch the same at the UN Sustainable Development Summit, which ultimately led to the inclusion of Targets 17.6 to 17.8 in the SDGs.

The technology-related targets in SDG 17 are as follows:

- Target 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing

24 *Report of the Conference of the Parties under the UN Framework Convention on Climate Change, Fifteenth Session, Copenhagen, 7–19 December 2009* (FCCC/CP/2009/11/Add.1), decision 2/CP.15, paragraph 11.

25 A/RES/66/288, paragraph 273.

26 *Ibidem*.

27 A/69/700, paragraph 125.

28 *Idem.*, paragraph 126.

29 *Outcome document of the Third International Conference on Financing for Development, Addis Ababa, Ethiopia, 13–16 July 2015*, Endorsed by UNGA Resolution 69/313 of 27 July 2015.

30 *Idem.*, paragraph 123.

mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.

- Target 17.7: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.
- Target 17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

It would be worthwhile to highlight a few important aspects of the aforesaid targets:

- a. These targets are enlisted under the sub-heading “Technology”, which in turn is enlisted under SDG 17 aimed at strengthening the “means of implementation” of the SDGs and at revitalizing “the global partnership for sustainable development.” As such, not only are Targets 17.6 to 17.8 themselves part of goals essential for sustainable development, they are also part of the means of implementing the preceding 16 SDGs, including the technology-related targets within those other Goals.
- b. Technology as a means of implementation of the SDGs is complemented by other means enlisted under the subheadings of “finance”, “capacity-building”, “trade”, and “systemic issues”, the last of which includes further subheadings of “policy and institutional coherence”, “multi-stakeholder partnerships”, and “data, monitoring and accountability.”³¹ As such, the role of technology as a means of implementation of the SDGs cannot be viewed in isolation from the other means, but forms an integral part of a larger engine.
- c. The most important theme running through SDG 17 in general and the technology-related targets in particular, is the importance of “international cooperation”. This does not include only North-South cooperation, but also South-South and triangular regional and international cooperation. International cooperation is obviously recognized as the key to ensuring a “global partnership for sustainable development.”

31 A/RES/70/1, Goal 17.

**Technology and the Sustainable Development Goals:
A Right to Development Approach**

- d. Although developing countries and LDCs must play their part in international cooperation to the extent of their capabilities, developed countries clearly have the most important role to play. This is evident from Target 17.7 which focuses on “promoting the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries” on terms which are favourable to developing countries.
- e. There are three main mechanisms which are sought to be operationalized for the purpose of promoting the use and access of technology as a means to implement the SDGs. The first is the Technology Facilitation Mechanism (TFM) agreed upon in the Addis Ababa Action Agenda. The second is the technology bank for LDCs and the third is the science, technology and innovation capacity-building mechanism also for LDCs as suggested by the UNSGs Synthesis Report of 2014. The latter two are to be operationalized by 2017, while the structure of the TFM has been more robustly elaborated in the 2030 Agenda and has partly been set in motion already.

In Paragraph 70 of the 2030 Agenda, Member States formally “launched” the TFM in order to support the implementation of the SDGs. It envisages that the TFM will be “based on a multi-stakeholder collaboration between Member States, civil society, private sector, scientific community, United Nations entities and other stakeholders.”³² The TFM has the following three components:

- a. The United Nations Interagency Task Team on Science, Technology and Innovation for the SDGs (IATT): This body will “promote coordination, coherence, and cooperation within the UN System on STI related matters, enhancing synergy and efficiency, in particular to enhance capacity-building initiatives.”³³ The Task Team will “draw on existing resources and will work with 10 representatives from the civil society, private sector, the scientific community” with the objective of preparing the meetings of the “Multistakeholder Forum on Science, Technology and Innovation for the SDGs”, as well as in the development and operationalization of the on-line platform. The Task Team will initially be composed by the entities that currently integrate the informal working group on technology facilitation.³⁴

32 Idem., paragraph 70.

33 Ibidem.

34 Ibidem. These include the UN Department of Economic and Social Affairs, United Nations Environment Programme, UNIDO, United Nations Educational Scientific and Cultural Organization, UNCTAD, International Telecommunication Union, WIPO and the World Bank.

- b. The Multi-Stakeholder Forum on Science Technology and Innovation for the SDGs (STI Forum): This Forum will be convened once a year, for a period of two days, to “discuss STI cooperation around thematic areas for the implementation of the SDGs, congregating all relevant stakeholders to actively contribute in their area of expertise”. The objective is to provide a venue for “facilitating interaction, matchmaking and the establishment of networks between relevant stakeholders and multi-stakeholder partnerships in order to identify and examine technology needs and gaps, including on scientific cooperation, innovation and capacity building, and also in order to help facilitate development, transfer and dissemination of relevant technologies for the SDGs.”³⁵ The meetings of the Forum will be co-chaired by two Member States and will result in a summary of discussions elaborated by the two co-chairs, as an input to the meetings of the High Level Political Forum, in the context of the follow-up and review of the implementation of the 2030 Agenda.
- c. The On-Line Platform: This will be used to establish “a comprehensive mapping of, and serve as a gateway for, information on existing STI initiatives, mechanisms and programmes, within and beyond the UN.”³⁶ It will focus on collecting, sharing, disseminating and supplementing such information.

These components of the TFM are in the nascent stages as 2016 draws to a close. Thus far, the IATT has been operationalized and the 10 representatives from the civil society have also been appointed.³⁷ With respect to the STI Forum, the first event took place in June 2016, addressing the topic of “realizing the potential of science, technology and innovation for all to achieve the sustainable development goals.”³⁸ The Online Platform is not yet operational, although initial steps have been taken to conduct technical assessments.³⁹

III. Right to Development in the Text of the 2030 Agenda

Since this paper seeks to demonstrate that any success of the technology-related targets mentioned above, and indeed the SDGs in general, can be ensured only through a RtD approach, it is first important to establish the link between the

35 Ibidem.

36 Ibidem.

37 Sustainable Development Knowledge Platform, Available from <https://sustainabledevelopment.un.org/TFM> (accessed on 26 November 2016).

38 Ibidem.

39 Ibidem.

2030 Agenda and RtD, before explaining in detail what such an approach would entail. The textual and legal justification for why the RtD approach ought to be the way forward in implementing the SDGs is already inherent in the 2030 Agenda, which categorically states that it is “informed” by the DRTD.⁴⁰

The term “informed” might seem to suggest a watering-down from the more vehement assertion in the UN Millennium Declaration of 2000, where the stated objective was “making the right to development a reality for everyone.”⁴¹ However, a closer look at the 2030 Agenda reveals that it also “reaffirms” the RtD and is indeed “grounded” in it. It reaffirms RtD by reaffirming the outcomes of the major UN conferences and summits listed therein, all of which in turn reaffirm the RtD.⁴² The 2030 Agenda specifically singles out the 1992 Rio Declaration on Environment and Development by reaffirming all its principles.⁴³ And of course, the Rio Declaration famously recognizes in its third principle that RtD must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.⁴⁴

But the 2030 Agenda goes even further. It recognizes that it is also “grounded” in RtD. It does this by specifically acknowledging that the 2030 Agenda is “grounded” in the UN Millennium Declaration,⁴⁵ which as pointed out earlier, contained a categorical commitment of making RtD a reality for everyone.

IV. The Scope and Content of RtD

RtD first appeared as a concept in the context of the decolonization process in the 1960s and 70s. Newly independent countries immediately realized that they had been born into a global political and economic system which they

40 A/RES/70/1, paragraph 10.

41 A/RES/55/2, paragraph 11.

42 A/RES/70/1, paragraph 11. The 2030 Agenda reaffirms “the outcomes of all major UN conferences and summits which have laid a solid foundation for sustainable development and have helped to shape the new Agenda”, including “the Rio Declaration on Environment and Development; the World Summit on Sustainable Development; the World Summit for Social Development; the Programme of Action of the International Conference on Population and Development, the Beijing Platform for Action; and the United Nations Conference on Sustainable Development (“Rio+ 20”); as well as the “follow-up to these conferences, including the outcomes of the Fourth United Nations Conference on the Least Developed Countries, the Third International Conference on Small Island Developing States; the Second United Nations Conference on Landlocked Developing Countries; and the Third UN World Conference on Disaster Risk Reduction”.

43 *Idem*, paragraph 12.

44 *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3–14 June 1992* (A/CONF.151/26 Vol. I), annex 1.

45 A/RES/70/1, paragraph 10.

had neither created, nor was in their interest.⁴⁶ The then existing global order, especially the financial and trading institutions, were created by the victors of WWII with the primary objective of reconstructing post-war Europe. Thus, in 1974, the UNGA, which by then comprised developing and least-developed countries in the majority, adopted the Declaration on the Establishment of a New International Economic Order.⁴⁷ The Declaration stated that “the developing countries, which constitute 70 per cent of the world’s population, account for only 30 per cent of the worlds income”; that “it has proved impossible to achieve an even and balanced development of the international community under the existing international economic order”; and finally that “the gap between the developed and the developing countries continues to widen in a system which was established at a time when most of the developing countries did not even exist as independent States and which perpetuates inequality.”⁴⁸ In 1977, developing and least-developed countries managed to pass a resolution at the then existing UN Commission on Human Rights recognising RtD for the first time as a human right and not merely as a charity bestowed upon them by the developed countries.⁴⁹ They also recommended to the ECOSOC that it should request the UNSG to undertake a study of the subject.⁵⁰ This led to the creation in 1981 of a Working Group of Government Experts on RtD. However, before the issue could get swallowed by the political marsh, the African block created a *fait accompli* by incorporating RtD as a binding obligation on States in the African Charter on Human and People’s Rights.⁵¹ With one major continent of the world having recognised RtD as an enforceable human right, and having recognised a legal obligation on States to ensure it, the rest of the world could no more ignore the topic. This led, in 1986, to the adoption of the DRTD with 146 countries voting in favour, 8 countries abstaining and only the US voting in opposition.

Since then, RtD has become firmly embedded in international human rights law through several resolutions and declarations. Despite the abstention of 8 countries and opposition of the US while voting in favour of DRTD, such opposition had largely tapered off by 1992 when the Rio Declaration incorporating RtD as a key principle was unanimously adopted. Immediately thereafter, in 1993, States also unanimously adopted the Vienna Declaration and Programme of Action making

46 Raghavan Chakravarthi, *Recolonization: GATT, the Uruguay Round and the Third World* (London, Zed Books, 1990). p. 52.

47 A/RES/S-6/3201.

48 Idem., paragraph 1.

49 United Nations Commission on Human Rights Resolution 4 (XXXIII).

50 Ibidem.

51 Organization of African Unity, *African Charter on Human and Peoples’ Rights*, CAB/LEG/67/3 rev. 5, Article 22.

**Technology and the Sustainable Development Goals:
A Right to Development Approach**

explicit reference to DRTD and reaffirming RtD as a universal and inalienable right and an integral part of fundamental human rights,⁵² thereby settling the status of RtD as a human right once and for all.

Key features of DRTD relevant for the purposes of this paper can be summarized as follows:

- a. RtD is an inalienable self-standing human right.⁵³ Development is thus not just a privilege enjoyed by human beings, nor is it just a subject of charity or generosity.
- b. RtD should be understood as a vector, which in turn comprises all other human rights — civil, political, economic, social, and cultural — as its elements along with the resources of growth such as GDP, technology etc.⁵⁴ The Vector approach simply means that given the very nature of development as a human right, it cannot be enhanced when there are violations of other human rights.
- c. RtD requires focusing not only on outcomes which are sought to be achieved as a result of a development plan (the “what” question), but also on the process by which those outcomes are achieved (the “how” question).⁵⁵
- d. Human beings are individually and collectively the right-holders of RtD against their States as well as other States. States are also right-holders of RtD against other States, as agents of their citizens. The duty-bearers of RtD are States, individually and collectively, including at international organisations. This duty is towards their own citizens as well as towards other States and their citizens.⁵⁶
- e. RtD imposes an obligation on States, individually and collectively, to create conditions favourable to the realisation of RtD, and refrain from making policies which are adverse to its realisation.
- f. Most importantly, RtD imposes a duty on States with respect to international cooperation to achieve RtD.

52 *Report of the World Conference on Human Rights, Vienna, Austria, 14–25 June 1993 (A/CONF.157/24, Part I)*, chapter III, Article 10.

53 A/RES/41/128, Article 1.

54 *Third Report of the Independent Expert on the Right to Development, Mr. Arjun Sengupta, E/CN.4/2001/WG.18/2*, paragraph. 9–10.

55 *Study on the Current State of Implementation of the Right to Development Submitted by Mr. Arjun Sengupta, Independent Expert, E/CN.4/1999/WG.18/2*, paragraph. 36.

56 A/RES/41/128, Article 2. See also: Anne Orford, “Globalization and the Right to Development”, in *People’s Rights*, Philip Alston, ed. (Oxford: Oxford University Press, 2001).

What is evident from the above summary is that the duty of States to ensure RtD is not limited within their own jurisdictions, but extends beyond the States' borders as well and permeates through international decision-making at international organisations. This is most explicit in Article 3(1), which stipulates that "States have the primary responsibility for the creation of national and international conditions favourable to the realisation of the right to development."⁵⁷ States would, therefore, be failing in their obligations if their actions or the policies they support lead to creation of international conditions unfavourable to the realisation of RtD. These include the whole gamut of policies supported by States at the UN, IMF, WB, WTO, and other international as well as regional organizations. Article 4(1) further stipulates that "States have the duty to take steps, individually and collectively, to formulate international development policies with a view to facilitating the full realisation of the right to development."⁵⁸ As Sengupta has stressed, "making RtD a human right recognised by all Governments, enjoins them to follow a code of conduct that not only restrains them from disrupting the conditions required to fulfil that right but also actively assists and promotes its fulfilment."⁵⁹

This duty of States is also evident from the provisions related to "international cooperation" enshrined in DRTD. Article 3(3) lays down that "States have the duty to co-operate with each other in ensuring development and eliminating obstacles to development."⁶⁰ Specifically, with reference to developing countries, DRTD states in Article 4(2) that "sustained action is required to promote more rapid development of developing countries" and that "as a complement to the efforts of developing countries, effective international co-operation is essential in providing these countries with appropriate means and facilities to foster their comprehensive development."⁶¹ It is in this context that the focus on international cooperation in Target 17.6 specifically with respect to technology facilitation must be situated.

V. The Symbiotic Relationship between Sustainable Development and RtD

Since the 2030 Agenda recognizes that the implementation of the SDGs should be informed by DRTD and that the Agenda itself is grounded in RtD, it is pertinent to articulate the relationship of RtD with the notion of sustainable development.

57 A/RES/41/128, Article 3(1).

58 A/RES/41/128, Article 4(1). See also: Article 10. "Steps should be taken to ensure the full exercise and progressive enhancement of the right to development, including the formulation, adoption and implementation of policy, legislative and other measures at the national and international levels".

59 E/CN.4/1999/WG.18/2, paragraph 59.

60 A/RES/41/128, Article 3(3).

61 Idem., Article 6(1).

“Sustainable development” as a concept has gained massive policy significance in the last thirty years or so, ever since its famous articulation by the Brundtland Commission, in its 1987 report titled “Our Common Future”.⁶² In this report, Sustainable Development was defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁶³ It encompasses three general policy areas: social development, economic development and environmental protection.⁶⁴ The social development dimension of the concept obviously includes human rights, inasmuch as, it is impossible to have social development and in turn sustainable development if it is accompanied by undermining of human rights.⁶⁵

Whether “sustainable development” is a legally binding norm under international law has been a subject of debate among scholars.⁶⁶ In *Gabčíkovo — Nagymaros Project*, the ICJ referred to sustainable development as a “concept” in its majority opinion.⁶⁷ In his separate opinion in support of the majority, Judge Weeramantry, however, opined that sustainable development was more than a mere concept, and that it was a “principle with normative value” and an “integral part of modern international law.”⁶⁸ In a later case, the ICJ did not go the same extent, however, it did elevate “sustainable development” from being merely a concept to being an “objective” under international law.⁶⁹

However, until the adoption of the 2030 Agenda, not everyone had come to an agreement on the definition of “sustainable development”, although as mentioned above, the definition by the Brundtland Commission was and still is the most accepted one. In his landmark book entitled “Idea of Justice”, Amartya Sen argued that the definition by the Brundtland Commission does not adequately capture all the tenets of sustainable development.⁷⁰ For instance, he singled out

62 World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987).

63 Idem, paragraph 43.

64 A/RES/S-19/2.

65 A/RES/66/288, paragraphs 8, 9.

66 See Marie-Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices, and Prospects* (Oxford, Oxford University Press, 2004); Nico Schrijver, *The Evolution of Sustainable Development in International Law: Inception, Meaning and Status* (Leiden, Martinus Nijhoff, 2008).

67 *The Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, *Judgement*, *I.C.J. Reports 1997*, p. 7, paragraph 140.

68 *The Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, *Separate Opinion of Vice-President Weeramantry*, *I.C.J. Reports 1997*, p. 88, at pp. 88–89.

69 *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, *Judgement*, *I.C.J. Reports 2010*, p. 14, at pp. 75–77.

70 Amartya Sen, *The Idea of Justice*. (London, Penguin Press, 2009), pp. 248–52.

Robert Solow's critique of the Commission's definition that it unnecessarily focuses on "needs" in a narrow manner. In turn, Solow suggested that Sustainable Development should mean "that the next generation must be left with whatever it takes to achieve a standard of living at least as good as our own and to look after their next generation similarly."⁷¹ While Solow enlarged the focus from "needs" to "standard of living", Sen still argued that neither of these definitions addressed the fact that for many people around the world, development includes expansion of their freedoms, capabilities and the values they cherish, and not only their needs or standards of living. Therefore, Sen proposed that Sustainable Development should be defined as "development which encompasses the preservation, and when possible expansion, of the substantive freedoms and capabilities of people today without compromising the capability of future generations to have similar or more freedom".⁷² Despite the disagreement on the precise scope of sustainable development, it is vitally important to note that everyone agreed that the Brundtland Commission's definition represented the lowest common denominator. The dispute was about how much it ought to be expanded from that threshold.

This open-endedness and lack of consensus on the scope and content of sustainable development is not necessarily problematic. Indeed, as has been argued, the concept is of an intrinsically evolutive nature, and that "rather than being a weakness, [this] represents the strength of the concept" because, "to be able to function, the contents of sustainable development must evolve, the specificities of each situation and each set of circumstances must be taken into account, and this inherent malleability is not an obstacle to sustainable development's legal classification."⁷³ Nothing exemplifies this better than the 2030 Agenda itself. I would argue that its adoption has for the first time given a robust shape, colour and texture to the concept of sustainable development. The 17 SDGs and their accompanying 169 targets as outlined in the 2030 Agenda can today be seen as representing a global consensus on what Sustainable Development entails.

It is in the aforesaid context that I contend that RtD and sustainable development are essentially the same concepts in different incarnations. The former gives proper shape, colour and texture to the latter by purposely stressing on the right and duty aspects of sustainable development. By insisting that development is a

71 Robert Solow, *An Almost Practical Step toward Sustainability* (Washington, DC, Resources for the Future Press, 1993).

72 Amartya Sen, *The Idea of Justice...*, supra note 70, pp. 251–52.

73 Virginie Barrel, "Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm", *The European Journal of International Law*, vol. 23, No. 2 (2012), p. 383.

human right which has clearly identified duty-bearers, RtD hammers down the point that the only way development can be sustainable is if it is itself treated as a right and not as a charity, and if it encompasses all human rights as equally important and ensures that no human right is undermined. Indeed, in a study authorized by the UN Commission on Human Rights, Gutto noted that RtD necessarily includes the notion of sustainable development, and should be more appropriately called “Right to Sustainable Development.”⁷⁴ Unsurprisingly, several recent Declarations have directly linked sustainable development with RtD.⁷⁵ Most importantly, the 2030 Agenda completes the circle by categorically reaffirming RtD in the context of implementing the SDGs and by emphasizing that it is informed as well as grounded in the DRTD.

As I have argued recently, the SDGs should be seen as an expression by States of their intention individually and collectively to fulfil their obligations under the DRTD.⁷⁶ In other words, RtD is nothing but the human rights avatar of the SDGs; and the SDGs are nothing but a policy expression and plan of action for operationalizing the RtD.

VI. Technology-related Targets in the 2030 Agenda and a RtD Approach

Having demonstrated the symbiotic relationship of RtD with the 2030 Agenda and the SDGs, and having highlighted the importance of technology-related targets as means of implementing the SDGs, it is now important to specifically identify what adopting a RtD approach would entail. The following analysis will demonstrate that while some aspects of a RtD approach have been incorporated already, some others must be ensured, if the technology-related targets are to be successful both independently and as means of implementing other SDGs.

Firstly, a RtD approach to the technology-related targets requires focusing not only on the outcomes which must result from the implementation thereof, but equally on the processes by which those outcomes must be achieved. This includes, of course, participation of all stakeholders, as well as respecting the policy space of States and their people in determining and implementing their

74 *The Legal Nature of the Right to Development and Enhancement of its Binding Nature*, E/CN.4/Sub.2/2004/16, paragraph. 50.

75 Association of Southeast Asian Nations, *ASEAN Human Rights Declaration*, adopted on 18 November 2012 at Phnom Penh, Cambodia, Articles 35–37. Also see A/RES/66/288, paragraph 8.

76 Mihir Kanade, “Operationalizing the Right to Development for Implementing the SDGs”, Presentation made at the 32nd session of the UN Human Rights Council at the event ‘Commemoration of the 30th Anniversary of the Right to Development’, Geneva, United Nations, 15 June 2016. Available from <http://www.ohchr.org/EN/Issues/Development/Pages/PaneldiscussionCommemoration30thAnniversary.aspx> (accessed on 26 November 2016).

own development priorities and technology-related needs. While the 17 SDGs focus on what is to be achieved, only by operationalizing the RtD can we also focus on how they are achieved as well. Fortunately, the three mechanisms set out in Targets 17.6 to 17.8, especially the TFM, are at least conceptually based on participation of various stakeholders. The key is to ensure that this participatory process is maintained and leads to effective actions for achieving the outcomes.

Secondly, operationalizing RtD means that technology facilitation, establishment and operationalization of the technology bank and the science, technology and innovation capacity-building mechanism for LDCs, must not be seen as a charity, privilege or generosity, but as a right of human beings everywhere, who are the central subjects of development and should be the active participants and beneficiaries of RtD. Unless these targets and the corresponding mechanisms are oriented towards an approach which treats access to technology for sustainable development as a human right, particularly of those in developing countries, they are doomed for failure.

Thirdly, understanding that fulfilment of technology-related targets is not a charity, privilege or generosity also means clearly acknowledging that all States are duty-bearers. This duty extends not only internally towards their own citizens, but also beyond the States' borders and permeates through international decision-making and actions at international organizations, particularly through the TFM and related mechanisms. Target 17.6, in particular, focuses on the importance of international cooperation for technology facilitation. RtD approach insists on viewing this as an expression of the duty of States towards international cooperation, which is enshrined not only in the DRTD but also in the UN Charter.⁷⁷

Fourthly, adopting a RtD approach means insisting on a comprehensive, multidimensional and holistic approach to development as a human right. On the one hand, this means that all SDGs must be achieved in a manner which is aligned with human rights and promotes their fulfilment. On the other hand, a RtD approach requires us to ensure that no goals, including those related to technology, are achieved at the cost of some or the other human right, whether substantive or procedural. Although this paper consciously focuses on technology as an enabler of development, it is equally true that its abuse can have disruptive effects on some human rights. For instance, it is well recognized that abuse of information technology, especially the Internet, can have adverse impacts on the right to freedom of speech and expression, particularly as a result of States censoring information online through arbitrary blocking or filtering

⁷⁷ United Nations, *Treaty Series*, vol. 1: XVI, Article 1(3) and 55.

Technology and the Sustainable Development Goals: A Right to Development Approach

of content, criminalization of legitimate expression, imposition of intermediary liability, disconnecting users from Internet access including on the basis of intellectual property rights law, cyberattacks, and inadequate protection of the right to privacy and data protection.⁷⁸ Similarly, technology can also be a source of conflict and environmental pollution and can thus pose challenges to human rights.⁷⁹ A RtD approach requires that when development itself is viewed as a human right, it can neither be the result of, nor can it result in, violations of other human rights. It ensures that there is no trade-off between rights, even when we need to prioritize some rights over others through the SDGs. Thus, promotion of technology must be accomplished in a manner which does not trample upon human rights and other SDGs, nor should other SDGs be promoted in a way which hinders access to technology.

Fifthly, operationalizing RtD means going beyond a Human Rights Based Approach to Development (HRBA), which is the current framework adopted by the UN system and promoted by developed countries. HRBA focuses on linking and aligning the objectives of development projects to specific human rights norms, standards and principles.⁸⁰ However, under HRBA, development and human rights remain distinct concepts. The only thing necessary is to ensure that in any development project, human rights must not be violated. On the other hand, RtD approach goes further and makes development itself a self-standing human right. This is not merely a semantic armchair distinction but is profoundly important in practice.

In programmatic terms, HRBA has always insisted on recipients of development aid ensuring respect for human rights while implementing development projects through transparent and accountable institutions. While that is obviously necessary, it has not looked at international cooperation to ensure development and not impede it as a matter of duty of the donors. A RtD approach encompasses HRBA within its fold, but it also requires understanding that States have duties to ensure development as a matter of human rights. A RtD approach to the technology-related targets would, therefore, not only require the recipients

78 *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, Frank La Rue, A/HRC/17/27.*

79 This dual feature of technology as both a concrete solution and a possible challenge to sustainable development objectives has been illustrated recently in the context of digital automation, nanotechnology, biotechnology and genomics, and synthetic biology. See United Nations Department of Economic and Social Affairs, *Global Sustainable Development Report 2016*, supra note 8, pp. 41–60.

80 United Nations Office of the High Commissioner for Human Rights, *Frequently Asked Questions on a Human Rights-Based Approach to Development Cooperation* (Geneva, United Nations, 2006).

of international cooperation under Targets 17.6 and 17.8 to fulfil their human rights obligations internally through accountable and transparent institutions, but also require the donors in international cooperation to be duty bound by human rights principles while providing financial or technical aid for the implementation of technology-related targets. It would also mean that when developed countries “promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed” under Target 17.7, they respect the policy space which developing countries need in order to define their own development and technology-related priorities in line with the SDGs and their own mechanisms for implementing them.⁸¹ It also requires ensuring that donors do not impose conditionalities on financial and technical technology-related aid under the guise of “concessional and preferential terms” which violate the national policy space and human rights of the recipients. These principles, including RtD itself, are inherent to the Addis Ababa Action Agenda on Financing for Development, which has been reaffirmed by the 2030 Agenda.

Finally, a RtD approach means ensuring that the indicators for the technology-related targets are compatible with the objective of making RtD a reality for everyone. This includes ensuring that there are clear, quantifiable indicators for both national and international action, with appropriate benchmarks. This is especially important considering that Member States only agreed to the SDGs and the corresponding targets in the 2030 Agenda, while outsourcing the development of indicators to measure progress to the UN’s Statistical Commission. This process for indicators by itself runs contrary to the participatory approach adopted for the design of goals and targets. Unsurprisingly, the current operational indicators as developed by the Statistical Commission for Targets 17.6 to 17.8 have come under scathing criticism from developing countries. These indicators, as they currently stand, read as follows:⁸²

- 17.6.1 Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation.
- 17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed.

81 The need for respecting national policy space is already incorporated in the 2030 Agenda. See A/RES/70/1, paragraphs 21, 44, 63, 74(a), 81. See also SDG 17.5.

82 *Final List of Proposed Sustainable Development Goals Indicators*, Available from <http://unstats.un.org/sdgs/indicators/indicators-list/> (accessed on 26 November 2016).

Technology and the Sustainable Development Goals: A Right to Development Approach

- 17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies.

- 17.8.1 Proportion of individuals using the Internet.

Bare perusal makes it evident that these indicators do not necessarily reflect the most important aspects of the corresponding targets, especially the predominant role envisaged therein for developed countries. Indeed, the G77 has objected that several aspects of SDG 17 have not been adequately integrated in the indicators; that the current indicators are not faithful to the SDGs; and that they reinterpret the targets.⁸³ In particular, the G77 and China emphasized that many targets emphasize the obligations of developing countries and undermine those of developed countries.⁸⁴ Specifically, with respect to the technology-related targets, the LDCs Group objected that despite the LDC technology bank being mentioned in Target 17.8, it is not addressed at all in the sole corresponding Indicator 17.8.1, which speaks only of measuring the proportion of individuals using the Internet.⁸⁵ The same criticism can be levelled against the indicators corresponding to Targets 17.6 (particularly the TFM) and 17.7. A RtD approach to the technology-related targets requires that the indicators measure specifically the compliance by developed countries of the role envisaged for them, including whether funding has been granted to developing countries on preferential and concessional terms.

VII. Conclusion

This paper has sought to present a strong case for the indispensability of adopting of a RtD approach if the technology-related targets in SDG 17, along with the rest of the SDGs and the technology-related targets therein, are to be successfully implemented by 2030 as intended. In order to build this case, section II highlighted the importance placed by the 2030 Agenda on technology, both as a self-standing goal as well as a means for implementing the remaining SDGs. The mechanisms established by the 2030 Agenda with respect to technology facilitation were also culled out. In this backdrop, Section III introduced the relationship between RtD and the text of the 2030 Agenda. It was pointed out that the Agenda is not only “informed” by the DRTD, but it also strongly “reaffirms” RtD and is “grounded”

83 Bhumika Muchhala, “SDG Indicators Challenged by Many States”, *Third World News Network*, 24 March 2016, Available from <http://www.twn.my/title2/climate/info.service/2016/cc160309.htm> (accessed on 26 November 2016).

84 *Ibidem*.

85 *Ibidem*.

in it. As such, it was pointed out that Agenda 2030 itself contains a mandate for adoption of a RtD approach to implementation of the SDGs. In order to develop a scenario of what this entails, Section IV identified the scope and content of RtD and outlined its most important characteristics pertinent to the implementation of the SDGs. Section V then completed the circle by demonstrating the symbiotic relationship between RtD and sustainable development, which is the primary objective of the 2030 Agenda. It argued that RtD is the human rights avatar of sustainable development and thus gives it proper shape, colour and texture by purposely stressing on the right and duty aspects of sustainable development. This symbiotic relationship is further fortified by viewing the SDGs as an expression by States of their intention individually and collectively to fulfil their obligations under the DRTD. Thus viewed, the SDGs are inherently a policy expression and plan of action for operationalizing the RtD. Building on these observations, Section VI finally presented what adoption of a RtD approach, particularly in the context of implementing the technology-related targets in the SDGs entails.

In conclusion, it can be said that the DRTD is an empowering instrument because it provides the normative basis for human beings to claim development as a human right. While it is true that the DRTD emerged in the context of the decolonization process, it is equally true that its principles have never been more relevant than they are today, particularly in the face of the increasing popular backlash against the asymmetric and inequitable impacts of global governance in trade, investment, finance and development. The 2030 Agenda is envisioned as an agenda for “people, planet and prosperity”, and promises to transform our unequal and inequitable world through the implementation of the SDGs, including through promotion of technology and its facilitation. It seems inevitable that if the RtD approach is not followed in implementing the technology-related targets and indeed all the SDGs, we will most certainly ensure that the goals will be off-track and the promise of the 2030 Agenda (and technology) will remain unfulfilled. As I have emphasized in my address to the United Nations Human Rights Council on the occasion of the 30th anniversary of DRTD, the RtD approach to the SDGs, including the technology-related targets, is indeed the only way forward if we are to have a safe journey to a sustainable future.⁸⁶

86 Kanade, *Operationalizing the Right to Development...*, supra note 76.

VIII. References

- “Official List of MDG Indicators”. Available from <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm> (Accessed 26 November 2016).
- A/69/700.
- A/RES/41/128.
- A/RES/55/2.
- A/RES/66/288.
- A/RES/70/1.
- A/RES/S-19/2.
- A/RES/S-6/3201.
- Amartya Sen, *The Idea of Justice*. (London, Penguin Press, 2009).
- Anne Orford, “Globalization and the Right to Development”, in *People’s Rights*, Philip Alston, ed. (Oxford: Oxford University Press, 2001).
- Association of Southeast Asian Nations, *ASEAN Human Rights Declaration*, adopted on 18 November 2012 at Phnom Penh, Cambodia, Articles 35–37.
- Bhumika Muchhala, “SDG Indicators Challenged by Many States”, *Third World News Network*, 24 March 2016, Available from <http://www.twn.my/title2/climate/info.service/2016/cc160309.htm> (accessed on 26 November 2016).
- E/CN.4/1999/WG.18/2.
- Final List of Proposed Sustainable Development Goals Indicators*, Available from <http://unstats.un.org/sdgs/indicators/indicators-list/> (accessed on 26 November 2016).
- Jan Vandermoortle, “The MDG Story: Intention Denied”, *Development and Change*, vol. 42, No. 1 (2011).
- Marie-Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices, and Prospects* (Oxford, Oxford University Press, 2004).

- Mihir Kanade, “Advancing Peace, Rights and Well-being: A Right to Development Approach to SDGs as the Way Forward”, Speech delivered at the event “In Search of Dignity and Sustainable Development for All”, Geneva, United Nations, 29 February 2016. Available from <http://www.ohchr.org/EN/Issues/Development/Pages/SearchOfDignity.aspx> (accessed 26 November 2016).
- Mihir Kanade, “Operationalizing the Right to Development for Implementing the SDGs”, Presentation made at the 32nd session of the UN Human Rights Council at the event ‘Commemoration of the 30th Anniversary of the Right to Development’, Geneva, United Nations, 15 June 2016. Available from <http://www.ohchr.org/EN/Issues/Development/Pages/PaneldiscussionCommemoration30thAnniversary.aspx> (accessed on 26 November 2016).
- Nico Schrijver, *The Evolution of Sustainable Development in International Law: Inception, Meaning and Status* (Leiden, Martinus Nijhoff, 2008).
- Organization of African Unity, *African Charter on Human and Peoples’ Rights*, CAB/LEG/67/3 rev. 5.
- Outcome document of the Third International Conference on Financing for Development, Addis Ababa, Ethiopia, 13–16 July 2015*, Endorsed by UNGA Resolution 69/313 of 27 July 2015.
- Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgement, I.C.J. Reports 2010*, p. 14.
- Raghavan Chakravarthi, *Recolonization: GATT, the Uruguay Round and the Third World* (London, Zed Books, 1990).
- Report of the Conference of the Parties under the UN Framework Convention on Climate Change, Fifteenth Session, Copenhagen, 7–19 December 2009* (FCCC/CP/2009/11/Add.1).
- Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, Frank La Rue, A/HRC/17/27*.
- Report of the United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 3–14 June 1992* (A/CONF.151/26 Vol. I).
- Report of the World Conference on Human Rights, Vienna, Austria, 14–25 June 1993* (A/CONF.157/24, Part I).
- Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum).

**Technology and the Sustainable Development Goals:
A Right to Development Approach**

- Robert Solow, *An Almost Practical Step toward Sustainability* (Washington, DC, Resources for the Future Press, 1993).
- Study on the Current State of Implementation of the Right to Development Submitted by Mr. Arjun Sengupta, Independent Expert*, E/CN.4/1999/WG.18/2.
- Sustainable Development Knowledge Platform*, Available from <https://sustainabledevelopment.un.org/TFM> (accessed on 26 November 2016).
- The Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Judgement, I.C.J. Reports 1997*, p. 7.
- The Gabčíkovo-Nagymaros Project (Hungary/Slovakia), Separate Opinion of Vice-President Weeramantry, I.C.J. Reports 1997*, p. 88.
- The Legal Nature of the Right to Development and Enhancement of its Binding Nature*, E/CN.4/Sub.2/2004/16.
- Third Report of the Independent Expert on the Right to Development, Mr. Arjun Sengupta*, E/CN.4/2001/WG.18/2.
- United Nations Commission on Human Rights Resolution 4 (XXXIII).
- United Nations Conference on Environment and Development, “Agenda 21”, Rio de Janeiro, Brazil, 3 to 14 June 1992.
- United Nations Department of Economic and Social Affairs, *Global Sustainable Development Report 2016* (New York, United Nations, 2016), p. xiv and pp. 41–60.
- United Nations Millennium Campaign and United Nations Development Programme, *Millennium Development Goals and Indigenous Peoples* (Bangkok, United Nations, 2010).
- United Nations Office of the High Commissioner for Human Rights, *Claiming the Millennium Development Goals: A Human Rights Approach* (Geneva, United Nations, 2008).
- United Nations Office of the High Commissioner for Human Rights, *Frequently Asked Questions on a Human Rights-Based Approach to Development Cooperation* (Geneva, United Nations, 2006).
- United Nations, *Treaty Series*, vol. 1: XVI, Article 1(3) and 55.

Virginie Barrel, “Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm”, *The European Journal of International Law*, vol. 23, No. 2 (2012).

World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987).

Economic development and technology

Emergent Challenges in International Investment Law: Investing in ICT

Ivory Mills¹

Abstract

Information and communication technologies (ICT) represent a comprehensive sector of communication devices, applications, and services. As this sector has rapidly developed, its transformative impact on nearly every component of modern life has made sustainable development a priority, as detailed in many national economic agendas, as well as the 2030 Agenda for Sustainable Development. Countries around the world invest in and/or receive investments in ICT to support their growth and development goals. International investment laws, namely bilateral investment treaties govern these investments and attempt to balance the interests of the host states with those of foreign investors. These competing interests and laws raise questions and create unique challenges for the respective parties - challenges that emerge within the context of the international investment laws governing foreign investment in ICT. This article explores three particularly tenacious categories: strategic, structural and substantive. Strategic challenges threaten macro-level interests and major policy aims that influence the survival and inherent functions of a nation state when considering and allowing actors from other locales to own and/or control technologies that have far reaching public policy implications including economic progress, national security and human development. In contrast, structural challenges in this context relate to the compositional and definitional makeup of the investment agreements, demonstrating the incompatibility of terms and coverage detailed in investment agreements and treaties for investments in the ICT sector's intellectual property and digital assets. Finally, substantive challenges relate to the rights and duties included in investment agreement provisions and are key to determining what investors and host states can/cannot do post-investment.

Keywords: Information and communication technology (ICT), foreign investment, human development, international law.

¹ Law & Science Fellow and dual degree candidate pursuing a PhD in Media, Technology, and Society and a JD at Northwestern Law.

I. Introduction

Information and communication technologies (ICT) represent a comprehensive sector of communication devices, applications, and services. As this sector has rapidly developed, its transformative impact on nearly every component of modern life has made it an economic and developmental priority, both domestically and internationally because it either enhances or contributes to the growth and sustainability of various economic sectors, including but not limited to healthcare, education, energy and civics. As such, the prevalence and ubiquity of the technologies demonstrate their importance to international development goals, such as those detailed in the 2030 Agenda for Sustainable Development.²

Countries around the world invest in and/or receive investments in ICT to support their social and economic growth goals. Bilateral investment treaties govern these investments and attempt to balance the interests of the host states with those of foreign investors. Competing interests and sometimes poorly fit laws raise questions and create unique challenges for the respective parties - challenges that emerge within the context of the international investment laws governing foreign investment in ICT. Because prior research has demonstrated the importance of ICT for development, inconsistent laws and policies potentially limit the dissemination of the technologies, thereby preventing them from being taken up throughout key development sectors, such as education, healthcare, and transportation.

This article provides an exploration of the emergent challenges foreign investment in ICT creates for international investment law, noting three particularly tenacious categories: strategic, structural and substantive. The remainder of this article will proceed as follows. Part II provides an overview of information and communication technology and ICT regulation, highlighting its defining characteristics and the importance of regulation. Part III discusses the emergent strategic, structural and substantive challenges that emerge pre- and post- foreign investment in ICT. It provides an overview of each category, and highlights specific instances when the challenges emerge. And part IV concludes with a brief summary of the emergent challenges, as well as their implications on development, security, and investment.

II. Background

ICT is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network

² A/RES/70/1

hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.³ Over the last 70 years, this sector has dramatically evolved from mere telephone and telegraph systems to one of the most dynamic technological systems of all time, accounting for around 10 per cent of Gross Domestic Product (GDP) in most developed countries, and up to 20 per cent of global economic growth.⁴ It is now a crucial driver of both economic and social growth in both international and domestic arenas, not only providing the infrastructure for modern economies to function, but also fostering efficiency and growth in other sectors such as healthcare, education and commerce. It “provides one of the most important and ubiquitous infrastructures of the modern economy and society, the infrastructure that facilitates information processing and storage and communication.”⁵ This foundation, coupled with electricity and transportation networks, provides the infrastructural basis on which all human activity in the modern world depends.

A. ICT Regulation

As the benefits of ICT investments continue to materialize, foreign direct investment (FDI) in the sector has become a global phenomenon, with the technology serving a dual role as a traded product and a facilitator of trade in other products and services.⁶ Globalization has made it increasingly important to connect to international communication and trade networks. So, at the same time that international free trade became the norm for many countries, investment in and prioritization of information and communication technologies became necessary. Liberalized foreign investment in ICT promote economic gains including infrastructural development, new and improved telecommunication products and services, lower prices and additional investment, as well as increased technological skills, funds, and market competition. Specifically, ICT are key to the development of modern infrastructure including wireless grids for telecommunication services, lights and signals for transportation networks, and systems needed for energy pipelines and terminals. As such, many countries have sought to increase their global competitiveness and levels of development by utilizing foreign investments in information and communication technologies.

3 Martin Fransman, *The New ICT Ecosystem* (Cambridge, UK, Cambridge University Press, 2010).

4 *Idem.*, p. xi.

5 *Ibidem.*

6 Chun Hung Lin, “Selected international rules of foreign direct investment in the telecommunications sector and its influence on Taiwan’s telecommunications legislation”, *Annual Survey of International & Comparative Law*, vol. 16, (2010).

But opening one's market to foreign investment also creates a variety of challenges, especially in the ICT sector. Telecommunications have a substantial role in national security, social stability, and economic development, so foreign investment opportunities in the sector have historically been limited.⁷ As countries work to achieve economic development and meet the 2030 Sustainable Development (amongst other international) goals, they seek to utilize investment in the information and communication technologies that have come to promote well-being, inclusive and equitable education and engagement. But with liberalized private ICT markets, national issues of sovereignty and security collide with the priorities and interests of investor.⁸ Nevertheless, countries not willing to make investor-friendly commitments may find it difficult to attract foreign investment in ICT, potentially limiting their infrastructural development, access to technology, and access to modern skills and knowledge.

Varied benefits and competing interests between host states and foreign investors reveal the complexities that have emerged at the intersection of two prevalent global phenomena: the growth and development of information and communication technologies and regulation of FDI by bilateral investment treaties. While technology and investment laws both purportedly support international development goals, the characteristics of information and communication technologies and the geopolitical climate governing modern international investment are not inherently compatible. And these incompatibilities create a variety of strategic, structural and substantive challenges for international investment law.

III. Emergent Challenges for International Investment Law in the Context of ICT

A. Strategic Challenges

As noted above, the intersection of ICT and international investment law is very complex and results in a myriad of challenges. One category of emergent challenges is strategic. Strategic challenges threaten macro-level interests and major policy aims that influence the survival and inherent functions of a nation state. With regard to foreign investment in the ICT sector, the most notable and apparent strategic challenges require balancing competing investment interests with economic growth, national security, and human development.

7 Idem., p. 30.

8 Idem., p. 31.

Economic Growth

There is no precise definition of a strategic industry; in fact it varies greatly with time and national priorities. In the modern world however, most, in both the developed and developing world, will agree that ICT are strategic because of their expansive economic implications. And the international community and the United Nations, as reflected in the Sustainable Development Goals,⁹ continue to highlight the importance of these technologies in sustained and inclusive economic growth, quality education, healthy lives, and infrastructural development. In the field of economic development, an industry is considered to be strategic if it provides services that facilitate a variety of economic activities, is highly public, and has backward and forward linkages to suppliers and users that lead to more growth and innovation.¹⁰ The United States of America, Western European countries, South Korea and China have targeted ICT as central component of their national economic strategies, noting their importance in promoting competitiveness.¹¹

As communication technologies have developed over the past few decades, the ICT sector differentiated itself from other regulated industries because telecom consumers want and need access to their counterparts in virtually every geographic location in the world to communicate internationally. This continued interconnectivity is key to the inclusivity, reliability, and access needed for the growth and engagement of sustainable societies. Thus, national ICT regulation and FDI seek to provide service to the population by facilitating investment and trade in services and infrastructure. Allowing foreign investment let developing states to take advantage of the knowledge and resources of developed states, while developed states grow their domestic enterprises. Additionally, foreign investment in ICT provides more competition, improving consumer choice and lowering overall costs.¹²

While international investment in ICT can be lucrative for investors and economically beneficial for host countries, further inquiry evinces some cause for concern. First, because ICT is so transformative economically, foreign control and ownership of it is not always welcome. Foreign investors, like all

9 A/RES/70/1.

10 Robert G. Harris, "Telecommunications services as a strategic industry: Implications for United States public policy, competition and the regulation of utilities", in *Competition and the Regulation of Utilities*, Michael A. Crew, ed. (New York, Springer, 1991), p. 101.

11 *Idem.*, p. 98.

12 Laura S. Huffman, "Comparative review of foreign direct investment policies for Telecom services in the United States, India, and Australia: Why back to the multilateral future is the best choice for states, consumers, and suppliers", *Emory International Law Review*, vol. 22, (2008), p. 308.

business actors, seek to maximize their profits; this can be done in a variety of ways that could limit or inhibit national economic competitiveness. And because Bilateral Investment Treaties (BIT) often provide more stringent protection for foreign investors than what national laws provide, an erosion of economic competitiveness resulting from investor actions and protected by international agreements could cause financial setbacks or even crisis and social unrest.¹³ Strategically, this creates a seemingly never-ending cost-benefit analysis between protecting an economically strategic industry and fostering development by allowing foreign investment into it.

For example, for years now, there have been negotiations aimed at developing a BIT between the United States of America and China. Because of the divergent geo-political, economic, and social priorities between the two, no such agreement has been reached. These efforts, in conjunction with other policy developments reveal the potential benefits for both states, but also highlight the ways in which foreign investment could inhibit economic progress. Professor Daniel C.K. Chow identifies objectives that China could achieve by reaching an investment agreement with the US, objectives that include investment in ICT, but that threaten the economic interest and growth of the United States of America.¹⁴

By providing market access and injecting international trade law principles into the domestic legal systems to protect from discriminatory measures, first, the BIT would allow China to expand the reach of its state owned enterprises, which are already massive.¹⁵ State owned enterprises (SOEs) are government owned, but (supposedly) operate as independent commercial entities. Historically, China has had a policy of promoting its SOEs to be able to compete with the world's largest multinational companies. Increasing the dominance of SOEs by allowing them to invest in the US ICT sector threatens the stability and progress of US firms. The United States of America believe SOEs operate as instruments of the state and Communist Party and thus “threaten the economic viability of US firms at home and abroad.”¹⁶ Because mergers and acquisitions are the common mode by which FDI occurs in the US today, when China acquires a US Company, it would obtain the tangible and intangible assets such as its portfolio of intellectual property, as well as confidential business information. As such, the BIT would allow Chinese SOEs to gain access to key technology and infrastructure, allowing China to “further its national goal of becoming a global

13 UNCTAD/DIAE/IA/2008/5.

14 Daniel C. K. Chow, “Why China wants a bilateral investment treaty with the United States,” *Boston University International Law Review*, vol. 20 (2015).

15 *Idem.*, p. 426.

16 *Ibidem.*

leader in technology innovation.”¹⁷ While this is very beneficial for competition, allowing such investments threaten the position of the US economy as a world leader in information and communication technologies.

In addition to such threats to national economic progress, international investment agreements challenge all economic progress because, functionally, it has been argued that they are inadequate regulatory mechanisms for ICT.¹⁸ From a consumer standpoint, BIT are potentially counterproductive. The goal of modern telecommunication service regulations is to foster a global network with common technology, wherever possible, thus the technology encourages coherent regulation.¹⁹ Investment agreements between two countries make the overall system more difficult by requiring numerous agreements per country and throughout the global ICT ecosystem. And these conflicting regulations increase transaction costs. “Conflicting regulations drive the costs of service up, diverting investment in cost reductions and technology enhancements, which provide a better end result for the consumers.”²⁰ Strategically, existing international investment law wastes diplomatic resources by requiring a plethora of bilateral agreements, which vary in structure and substance, and create divergent policies for a comprehensive and yet rapidly changing ICT sector, potentially costing for consumers and investors.

National Security

Another strategic challenge that emerges at the intersection of international investment law and foreign investment in ICT is national security. National security is a collective term for the defence and foreign relations of a country and the protection of that country’s interest.²¹ Essentially, countries face a paradox of wanting to reap the benefits of international trade and investment, but also wanting to protect themselves, their territory and their citizens. ICT create new and prevalent threats to peace and security. And because ICT are such integral parts of life, they make modern states especially vulnerable. But in their efforts to promote peace, inclusivity and accountability, countries recognize the importance and sensitivity of the technologies and thus try to manage the

17 Idem, p. 427.

18 Mila Gasco-Hernandez, *Information Communication Technologies and Human Development: Opportunities and Challenges: Opportunities and Challenges*. (London, UK, Idea Group Publishing Global, 2006).

19 Idem., p. 312.

20 Ibidem.

21 In 2016 Kim R. Holmes, “What is national security?”, *Index of U.S. Military Strength* (2015). Available from <http://index.heritage.org/military/2015/important-essays-analysis/national-security/>.

threats and enhance the security of foreign investments in ICT that influence infrastructure, defence and security. The increased dependency on technology creates security threats ranging from everyday activities such as banking, but also to more serious and potentially life threatening activities, such as air traffic control.²²

This prevalence and dependence has changed the traditional notion of national security. Most notably, it has made state governments dependent on private industry and commercial infrastructure.²³ The ICT industry and its critical infrastructure are so interlinked that an organized attack or disruption could have a significant impact on a state's ability to defend it.²⁴ The President of the United States of America issued an Executive Order noting, specifically, that incapacity or destruction of telecommunications would have a debilitating impact on the defence or economic security of the country.²⁵ Additionally, the US developed the National Security Telecommunications Advisory Committee.²⁶ The committee is composed of a group of CEOs from some of the nation's leading telecommunications and information technology corporations, tasked to focus on the private sector's relationship and support of specified national security applications. These efforts and assertions represent the real and perceived threats ICT pose to national security and highlight the importance of the interaction between government and the private ICT sector.

As the adoption for information-based products and services have become a trend, countries struggle to balance their pecuniary interests from investments with the national security threats that could potentially emerge. Private investors have a variety of motives that may or may not inhibit security, including but not limited to profit maximization, maintaining economically efficient operations, protecting trade secrets and other intellectual property, and maintaining a satisfied customer base.²⁷ Because ICT are so strategic and critical to enhancing and maintaining security, some countries have elected to take a more restrictive approach toward foreign investment in the sector. Foreign control over critical communications infrastructure could have numerous and insurmountable

22 Peter Gross, "An introduction to the impact of information technology on national security", *Duke Journal of Comparative & International Law*, (1999), p. 395.

23 Walter Gary Sharp Sr., "Redefining national security in today's world of information technology and emergent threats", *Duke Journal of Comparative & International Law*, vol. 9, (1998), p. 383.

24 *Idem.*, p. 384.

25 William J. Clinton, Executive Order 13010, *Critical Infrastructure Protection*, (1996), p. 13.

26 William Gravel, "Some observations along the road to national information power", *Duke Journal of Comparative & International Law*, vol. 20, (1998).

27 *Idem.*, p. 401.

repercussions if and when the investor's ownership or investment rights are one day misused.

For example, in 2008, the Committee of Foreign Investment in the United States (CFIUS) blocked a \$2.2 billion bid by the Chinese Company Huawei Technologies to purchase the US company 3Com.²⁸ Huawei allegedly has ties to the Chinese military and government and 3Com is an insolvent US Technology firms. US officials, including the Secretary of Treasury, argued that Huawei's acquisition of US technology would pose a threat to national security interests.²⁹ In particular, CFIUS noted that it believed large national Chinese companies to be controlled by the Chinese government so any investments it make could become tools that the Chinese government uses to accomplish strategic geopolitical and military objectives.³⁰ Additionally, permitting Huawei to acquire 3Com would provide China's government a medium to gain access to sensitive information technology.³¹

Arguably, states could voice the same concern about their own nationals owning and controlling critical ICT infrastructure. But because international investment agreements are often more stringent than national laws and require compromise and consensus building, BIT impose certain limitations on the rights of each country to regulate foreign investment in its territory, exclusively. In most cases, there may be national security exceptions in investment agreements, but it remains unclear whether or not the restrictions are broad enough to cover restrictions on foreign investment to protect critical infrastructure or whether the exceptions are limited to traditional military defence efforts.³² It is thus a continued challenge for the host state's government to find the appropriate balance between reaping the benefits of foreign investment in the ICT sector and being able to secure and protect its strategic interests impacted by the ICT sector.

Human Development

Another strategic challenge that could potentially emerge at the intersection of international investment law and foreign investment in ICT concerns human development. Human development is understood as the process of expanding people's choices, "that is, the range of things that a person could do and be in

28 Wayne M. Morrison, "China U.S. Trade Issues", Congressional Research Service RL33536 (Current Politics and Economics of Northern and Western Asia 20.3, 2011).

29 Tina Lam, "The legal hurdles preventing a U.S. China bilateral investment treaty: Problems with national security, environmental and labor standards, and investor state dispute settlement mechanisms", *Florida Coastal Law Review*, (2014).

30 *Idem.*, p. 309.

31 *Idem.*, p. 310.

32 UNCTAD/DIAE/IA/2008/5.

life, or the functioning and capabilities to function such as to be healthy and well nourished, to be knowledgeable, or to participate in the life of a community.”³³ Scholars, civil society, and policy makers assert that there is undeniably a link between the adoption of ICT and human development, because they improve how well resources are allocated, expand the possibilities of fulfilling capacities, create a foundation for other substantial benefits.³⁴ While ICT are not considered to be a development panacea by anyone, they are undeniably a piece of the puzzle because they are essential to economic success, personal advancement, entry into good career and educational opportunities, full access to social networks, and opportunities for civic engagement.³⁵ Furthermore, they have been included in the Millennium Development Goals and in the UN 2016 Sustainable Development Goals.³⁶ And while these development implications are far-reaching and pervasive, they are rarely the concerns of investors, particularly those with few or no ties to the nation because of their narrowly focused, pecuniary goals.

As such, domestic policy makers must find an effective mix of strategies to attract foreign investment while complying with the rules of BIT and furthering their domestic human development goals. Research has shown that outside control and top-down approaches to ICT investment in the developing world does not work and endangers stability. And even in developed markets, there is usually a divide between what ICT service providers are willing and/or able to do on commercial grounds and what the government considers to be necessary from a development perspective.³⁷ When investing internationally, ICT owners are seeking new markets, higher returns, and diversified exposure. Additionally, in poor and rural communities (of both developed and developing countries), ICT cost more and the spending capacity of the local communities is lower than the operating costs. So governments focusing on human development goals must work diligently and strategically to attract substantial foreign investment in ICT, while also developing domestic policies that support and enhance infrastructural development, universal access, and affordability, health and well-being, quality education, gender equality, safety, resiliency and peace.

Not only are these interests difficult to balance, the imposition of the rules contained in BIT limit domestic governments’ ability to achieve that balance. BIT are part of a modern liberalization agenda, and thus are inherently

33 Gasco-Hernandez, *Information Communication Technologies* supra note 18, p. viii.

34 *Idem.*, p. vi.

35 *Idem.*, p. 2.

36 A/RES/70/1.

37 C. Z. W. Qiang and others, *Information and Communications for Development: Global Trends and Policies* (Washington, D. C., The World Bank Group, 2006).

designed to limit government control. So while some suggest that governments could catalyse foreign investment in ICT by awarding subsidies to targeted beneficiaries, this practice would conflict with several of the key provisions of investment agreements such as fair and equitable treatment, national treatment, and most favoured nation. Governments also need to encourage the investors to provide access to all and at prices they can afford. But because BIT provide investors with strict protection, government's development goals must work within the margins of privatization, liberalization, intellectual property rights and investor protection. In Timor-Leste, ICT service costs are far beyond the budgets of the local communities because private investors are focused on profit maximization.³⁸ Consequently, there is substantial investment in the sector, but the majority of the population still lacks service and thus, access to knowledge, personal advancement tools, and other resources for civic engagement. In this and many other cases, each with varying structures, working within those margins to achieve strategic human development goals through foreign investment in ICTs has proved to be especially challenging.

B. Structural Challenges

In addition to the aforementioned strategic challenges, several structural challenges also emerge at the intersection of ICT and international investment law. Structural challenges in this context relate to the compositional and definitional makeup of the investment agreements and determine what the law governs and whether it threatens the rule of law by failing to establish clarity and order within the legal text. With regard to foreign investment in the ICT sector and international investment law the two structural challenges relate to intellectual property protection and digital assets.

Intellectual Property

ICT do not easily fit into the existing rules and structures of international investment agreements. As the proliferation of hardware, software, multimedia networks, and digital communications technology has produced a new global information infrastructure, investment in the ICT sector around the world has proven to be particularly lucrative for those owning the intellectual property rights to the technologies. Nevertheless, the rapid development of the sector and the pressing development needs of many nations left little time for a clear and functional understanding of what (national and/or international) and to what the laws apply.

38 HDRP2010/37.

Intellectual property (IP) is a work or invention that is the result of creativity, to which one has rights and for which one may apply for a patent, copyright, trademark, or trade secret protection.³⁹ Around the world, national and international standards vary regarding how to protect the IP within the ideas, tools, functions, hardware, and software that makeup ICT. National laws determine the scope, content and form of IP rights in their country if they have the characteristics of investments. While bilateral investment treaties and multilateral agreements, such as the WTO's Agreement on Trade-Related Aspect of Intellectual Property Rights (TRIPS), have different, and often more inclusive, definitions of "investment," these differences often result in different levels of protection of IP rights.

For example, if a bilateral investment treaty provides IP protection for an encrypted program carrying satellite signals,⁴⁰ but one member party does not include IP protection for such technologies in its domestic law because it does not recognize it as an investment (perhaps because it is a developing country, with no access or knowledge to the technology), that domestic law clashes with the agreement to which the host country has signed. Because neither the domestic law nor the BIT explicitly includes or excludes the rapidly developing technology, leaving the terms open for interpretation so the coverage is left to interpretation. This issue is especially important for ICT investors because it determines if, when and how their investment will be protected. Both intellectual property law and international investment law attempt to create conditions that encourage private companies to invest in ways that benefit the company and the state, such inconsistencies in the structure of the laws raises questions about the rights of the property holder and potentially, the legality of the state's conduct.⁴¹

Structurally, the rules governing the protection of IP rights for ICTs are inconsistent and out-dated, as they were created in a different technological context. These deficits in international investment law regarding if and when intellectual property constitutes an investment asset and what kind of IP rights apply to the technology have great implications for the future of foreign investment in ICT. The definition of "investment" sets out the subject matter coverage of the agreement and establishes the scope and breadth of investments being covered. If BIT include IP in their definition of investment, the substantive provisions of the agreement are applicable, but may require states to update

39 Ermias Tekeste Biadgleng, *IP Rights Under Investment Agreements: The TRIPS-Plus Implications for Enforcement and Protection of Public Interest*, (2006).

40 Ibidem.

41 Peter B. Rutledge, "TRIPS and BITS: An essay on compulsory licenses, expropriation, and international arbitration", *NC Journal Law & Technology*, vol. 13, (2012), p.149-287.

their domestic standards of protection. For ICT in particular, this prevents host states from being able to license or utilize the digital, and seemingly intangible, components of the technologies. It also grants the owner/investor the temporary monopoly that allows them to make profits, encouraging more investment.

Unfortunately, the dissonance and conflicts between the laws are particularly challenging for both sustainable development and economic growth generally, but also for many of the specific goals particularly. For example, in many cases, BIT and domestic IP laws limit the amount of technology transfer that could occur. Technology transfer refers to the uptake and utilization of modern and innovative technologies used by the general public, but also, within industries. Limiting the transfer of technology from investors to the host countries forces the individuals in the host country to continually rely on investors. This is especially unsustainable because the laws may change and the investor's interest frequently changes so the technology could be taken away. The unsustainability of the current investment in ICTs as intellectual property practices threatens the long-term goals detailed in the 2030 Agenda for Sustainable Development.

Services and Digital Assets

As a result of recent technological advancements and economic policies, many countries have shifted their foci from manufacturing to services. Services comprise a diverse set of activities and in the ICT space they touch nearly every economic sector.⁴² Furthermore, within the modern technology driven service economy, a variety of digital assets and service mechanisms, such as websites, have arisen and provide an enabling framework for other social, political and economic activities. And while services and digital assets are of utmost importance, their innate characteristics have proven especially challenging to fit into existing regulatory structures, including the BIT that govern foreign investment. Essentially, the issue comes down to whether or not ICT services and digital assets are considered investments or not because if they are, then the BIT apply.

While “investment” does not explicitly include or exclude digital assets or services in BIT, it is understood in broad terms to encompass every kind of asset owned by the investor.⁴³ Furthermore, “services” covers a heterogeneous range of intangible products and activities that are difficult to categorize and

42 UNCTAD/ITE/IIT/2005/2.

43 Rudolf Adlung and Molinuevo Martín, “Bilateralism in services trade: Is there fire behind the (BIT-) smoke?”, *Journal of International Economic Law*, vol. 11, No. 2 (2008), pp. 365-409.

distinguish from products in the ICT space.⁴⁴ Because the activities are occurring ubiquitously, they are often assumed to be included in the investment agreements as “investments”.⁴⁵ Yet, because it has not been explicitly resolved, if a dispute arises, investors or host states struggle to determine how BIT terms apply. This is especially challenging because the intangible and constantly changing nature of ICT services and digital assets do not fit the mould of existing asset categories that exist in foreign investment law.

Notably, arbitrators have interpreted the terms broadly, with one detailing the difficulties arising in the space as follows, “the IT industry has grown out of a convergence of telecommunications, computer technology and software and the combination with services from more content oriented industries such as broadcasting and publishing which were on the horizon, resulting in a blend of hybrid IT services cloud and is therefore more difficult to categorize into any particular sector.”⁴⁶ Then going further to say,

if a service activity falls within the scope of the defining of a sector, then the activity does not explicitly have to be enumerated in the defining, and the mere fact that separate suppliers provide one particular component of a service does not imply that the service is to be classified as a distinct service.⁴⁷

In the few cases that have been brought to arbitration, the trend has been to acknowledge the services and digital assets of the ICT sector as investments. Nevertheless, the equal treatment of electronic/non-electronic services has not been confirmed or denied. And because arbitration decisions are not precedent setting, having unclear specifications in the BIT increases the likelihood of contradictory decisions on closely related issues emerging.

C. Substantive Challenges

And while the lack of detail regarding the scope of ICT investments covered in BIT is a pressing pre-investment concern, there are also substantive challenges that emerge at the intersection of foreign investment in ICT and international investment law that greatly influence investor and state action for investments that have already occurred. Substantive challenges relate to the rights and duties included in investment agreement provisions and are key to determining what investors and host states can/cannot do post-investment. Much like the

44 Rolf Weber and Rainer Baisch, “Tensions between developing GATS classifications in the IT markets”, *Hong Kong Law Journal*, vol. XX, (2003).

45 Adlung and Martin, *Bilateralism in services trade...*, supra note 43, p. 374.

46 Idem., p. 98.

47 Idem., p. 97.

structural challenges, substantive challenges in this space arise because of the characteristics of the technology, but instead they threaten the protections and stability provided by investment agreements. The most apparent substantive challenges arising from BIT regulation of foreign investment in ICT concern standards for expropriation and full protection and security.

Expropriation

Expropriation is an action by the state or an authority of taking property from its owner for public use or benefit. As detailed in the prior section, technology/investment transfers are a contentious area because of its economic importance to investors, but also because of the sustainability and growth implications for host states. As noted before, ICT have far-reaching implications for economic and human development. The technologies are influential in the provision of education, health care, and social services, as well as the infrastructural development and progress. The dilemma arises when host governments allow foreign investment in their ICT sectors to utilize the technologies more expansively than the investor (or investment law) allows or expects. BIT and international investment laws prohibit expropriation, so host governments cannot simply take or use the technologies without compensating the investor. But when the products, services, or assets are inadequately defined (as detailed in part B), it is even more difficult to understand how the host government must behave.

One particularly contentious expropriation debate with regard to ICT concerns compulsory licenses. Compulsory licensing is when a government allows someone else to produce the patented product or process without the consent of the patent owner, usually for the domestic market. Under the TRIPS agreement, compulsory licensing is not necessarily an expropriation. It does not deprive ownership rights to the technology or intellectual property, but instead provides an exception, for which the host state has to pay.⁴⁸ Nevertheless, it still affects the value and return from the protected asset for the IP right holder. Thus, while countries work to enhance their investor protection so that they are more attractive and have the kind of sustainable economics and infrastructure continually highlighted by the UN in the Sustainable Development Goals, they are limited by how much they can utilize their current investments because of expropriation and licensing concerns. And because the BIT and the exceptions included in TRIPS are unclear, an arbitral panel often decides whether or not a host state's compulsory licensing constitutes expropriation. In such cases, neither the state nor the investor are completely satisfied because the state's

48 Rutledge, *TRIPS and BITS...*, supra note 41, p. 161.

development, technology transfer, and economic progress are key concerns which rarely align with investors profit maximization and investment protection goals.

One on-going case that illustrates the complexities of expropriation and compulsory licensing in the ICT sector is Sistema v. India, in which a Russian corporation invoked arbitration under the India-Russia BIT after the Indian Supreme Court cancelled 21 telecom licenses.⁴⁹ The court held that the allocation of the licenses was arbitrary, capricious and contrary to public interest and thus violated the doctrine of equity by favouring some telecom companies.⁵⁰ Sistema and other foreign investors had set up joint ventures with Indian telecom licensee companies and claimed that the court's ruling revoking the licenses was an expropriation, raising "various unforeseen and unsettling questions regarding the application and scope of investment law" in the Indian context. Sistema supported its claim for indirect expropriation by arguing that the cancelling of the licenses brought about the same results of a physical taking because it neutralized the investor's enjoyment and benefit.⁵¹

The standard for determining whether governmental measures amount to expropriation is to see whether the cumulative effect is to substantially deprive the investor of the use, value and enjoyment of the investment.⁵² In other cases, arbitral practice has established that revocation or denial of government permits and licenses constitute indirect expropriation when it interferes with the investor's enjoyment. In Goetz v. Burundi, the panel ruled even in the absence of any formal taking of the property, revoking free zone certificates resulted in a halt of all activities and deprived the investment of all utility and expected benefits.⁵³ And in Tecmed v. Mexico, the tribunal found that revoking an operating license was an act tantamount to expropriation.⁵⁴ Also, in CME Czech Republic B.V. v. The Czech Republic, the tribunal held that the acts of a regulator forcing an investor to give up exclusive licensing rights amounted to expropriation.⁵⁵ Further, in cases where government measures interfere with an investor's legitimate expectation that the state will honour the assurances initially offered to induce the investment, tribunals have ruled that expropriation occurred.

49 Sanya Malhorta, "Cancellation of Telecom licenses in the 2G Case: Claim for indirect expropriation," *NUIJ Law Review*, vol. XX, (2013).

50 *Idem.*, p. 335.

51 *Ibidem.*

52 *Idem.*, p. 344.

53 *Idem.*, p. 346.

54 *Ibidem.*

55 *Idem.*, p. 347.

These rulings suggest that the cancellation of compulsory licenses in India is likely to violate BIT provisions and constitute expropriation. But the Indian government could assert that it is exempt from payment because “states are entitled to expropriate foreign property for a public purpose in exercise of their sovereignty...or in exercise of their police powers.”⁵⁶ But this may be difficult to support since telecom is not related to public health and or safety. Nevertheless, this and similar cases regarding host state’s regulation of its domestic markets and the impacts such regulation has on foreign investment in such a timely and lucrative industry demonstrate yet another contentious challenge emerging from foreign investment in the sector and international investment law.

Full Protection and Security

Another challenge of foreign investment in ICTs and international investment law relates to full protection and security provisions (FPS). Full protection and security refers to a standard of protection and security against physical damage that may occur to a foreign investor’s property arising from war or civil unrest in the host state.⁵⁷ FPS traditionally governed the physical security of investors’ tangible assets, but because of the nature of modern investments in ICT, it is unclear if and how the standard applies to digital and intangible assets, like websites. Attempting to apply this standard highlights one of the most complex qualities of ICTs: their boundless nature, which makes them seemingly incompatible with geographically based laws.

As discussed in part A, digital assets are often considered investment assets covered by BIT. And if they are considered investments, they are to be afforded the same protections and security provided to tangible and physical investments, even though it may be difficult for host states to retain and thus ensure control over things in the digital world. The full protection and security standard refers to the need to protect the investor against physical violence resulting from war or civil disturbances, whether the harm comes from state action or state’s failure to protect when caused by someone else.⁵⁸ It requires host states to adopt some reasonable measures to protect the assets and property of foreign investors and has been found not only to “simply concern physical protection but also contains[s] a further requirement that host governments ensure the stability afforded by a secure investment agreement.”⁵⁹ Hence, cyberattacks (or the

56 Ibidem.

57 David Collins, “Applying the full protection and security standards of international investment law to digital assets,” *Journal of World Investment and Trade*, vol. XX, (2011), p. 225.

58 Idem., p. 230.

59 Idem., p. 233.

like), which are becoming increasingly commonplace and are likened to civil disturbances, seemingly create an obligation for states to protect and secure the digital assets of corporations.

Furthermore, in Siemens v. Argentina, the arbitral tribunal held that the FPS could cover investments of an intangible nature, despite the fact that it is difficult to understand and provide physical security to intangibles.⁶⁰ So, while some protection from the BIT is required for digital assets, it is difficult to propose meaningful government oversight of a website or similar assets. But it may be fair to assert that large-scale Internet insecurity or the integrity of ICT infrastructure and communication networks should fall within host state's realm of foreign investment protection. But because of the nature of the technology and the novelty of such attacks and insecurities, "a foreign investor should not expect the same level of Internet security from every state in which it operates, as security against cybercrime can be expensive and requires a high level of technical proficiency and human resources."⁶¹

IV. Conclusion

As detailed above, the nature and ubiquity of ICTs have significant implications for diverse and far-reaching social, economic, and technological growth and development outlined in the 2030 Agenda for Sustainable Development. And the same innate characteristics however, make ICT particularly challenging to regulate. In the context of international investment law, these challenges manifest in three categories: strategic, structural, and substantive. Strategic challenges at the intersection of foreign investment and international investment law highlight the competing macro-level interests that exist when considering and allowing actors from other locales to own and/or control technologies that have far reaching public policy implications including economic progress, national security, and human development. Structural challenges in this realm demonstrate the incompatibility of terms and coverage detailed investment agreements and treaties for investments in the ICT sector. These challenges require reconsideration of the definitions and scope provided for investments in modern times, with intellectual property, digital assets, and services challenging existing structures. Substantive challenges for international investment law governing foreign investment in ICT reveal the need for reassessing and updating the protective provisions included in investment agreements and make clear that host state actions must consider the purpose of provisions when acting to protect or utilize foreign ICT investments.

⁶⁰ *Idem.*, p. 236.

⁶¹ *Idem.*, p. 241.

Advanced economies and emerging nations have demonstrated that ICT have a pervasive impact on social and economic life and development. These implications have manifested in governance, education, healthcare, poverty reduction, communication and service delivery, urban development, and innovation. Investment in ICT enables more access to information, transparency, accountability, and citizen empowerment for enhanced governance. The technologies and services of the ICT sector have changed the nature of education and skills, requiring e-literacy, creativity, and innovation. ICT applications have improved healthcare provision through education, training, digitalization, and information sharing. ICT contribute to poverty reduction by improving communication and delivery infrastructure, increasing productivity, and lower transaction costs. And investment in the ICT sector has resulted in an unprecedented network for communication and information access around the world, allowing individuals, organizations, and states to share knowledge, be more inclusive, and more connected than ever before.

The continued growth and uptake of the technologies throughout society detailed above have transformed some economies, and encouraged others to increase competition through investment to realize those same benefits. And despite the seemingly similar aims of both the sector and investment laws, there is still a huge disconnect between the potential and realized benefits of foreign investment in ICT. And this disconnect is not only problematic for the particular investor and host-nation involved in a transaction, but also for the advancement and success of the international community, as highlighted by the United Nations in the Sustainable Development Goals. The existing BIT that dominate foreign investment law in the international community limit the prospective benefits of foreign investment in ICT because of strategic, structural, and substantive interests of either the host states or the investors. As described in part III, the national security, economic protectionism, human development goals, intellectual property rights, intangible characteristics of services and digital assets, provisions of investment treaties and agreements undermine and inhibit the impact and pervasiveness ICT can have, thus minimizing their reach and the resultant educational, health, governance, development, and growth potential of societies. Because the sector is so lucrative and has such a significant role in modern life, there are no easy solutions, none that will satisfy the vested stakeholders. However, these emergent challenges demonstrate the need for more critical and situational investment agreements that considers the unique issues of differing geographic and socioeconomic situation.

V. References

- Adlung, Rudolf & Molinuevo Martín, Bilateralism in services trade: is there fire behind the (BIT-) smoke? *Journal of International Economic Law*, vol. 11.No. 2 (2008), pp.365-409.
- A/RES/70/1.
- Biadgleng, Ermias Tekeste, *IP Rights Under Investment Agreements: The TRIPS-Plus Implications for Enforcement and Protection of Public Interest*, (2006), Available at SSRN 943013.
- Chow, Daniel C.K., Why China Wants a Bilateral Investment Treaty with the United States, *Boston University International Law Review*, Vol XX, (2015).
- Clinton, William J., Executive Order 13010. *Critical Infrastructure Protection* (1996): 13.
- Collins, David, Applying the Full Protection and Security Standards of International Investment Law to Digital Assets, *Journal of World Investment and Trade*, vol. XX (2011).
- Fransman, Martin, *The New ICT Ecosystem* (Cambridge, UK, Cambridge University Press, 2010).
- Gasco-Hernandez, Mila, ed. *Information Communication Technologies and Human Development: Opportunities and Challenges: Opportunities and Challenges*. (London, UK, Idea Group Publishing Global, 2006.)
- Gravel, William, Some Observations Along the Road to National Information Power, *Duke J. Comp. & Int'l L.*, vol. XX (1998).
- Gross, Peter, *An Introduction to the Impact of Information Technology on National Security* (Duke Journal of Comparative & International Law, 1999).
- Harris, Robert G., *Telecommunications Services as a Strategic Industry: Implications for United States Public Policy, Competition and the Regulation of Utilities* (United States, Springer, 1991).
- Holmes, Kim R., “What is National Security?”, 2015 Index of U.S. Military Strength, 2016”, 2016, Available from <http://index.heritage.org/military/2015/important-essays-analysis/national-security/>

- Huffman, Laura S., Comparative Review of Foreign Direct Investment Policies for Telecom Services in the United States, India, and Australia: Why Back to the Multilateral Future is the Best Choice for States, Consumers, and Suppliers, *Emory Int'l L. Rev.* vol. 22 (2008).
- Lam, Tina, *The Legal Hurdles Preventing a U.S. China Bilateral Investment Treaty: Problems With National Security, Environmental and Labor Standards, and Investor State Dispute Settlement Mechanisms* (Florida Coastal Law Review, 2014).
- Lin, Chun Hung *Selected International Rules of Foreign Direct Investment in the Telecommunications Sector and its Influence on Taiwan's Telecommunications Legislation* (Annual Survey of International & Comparative Law. 2010).
- Malhorta, Sanya, Cancellation of Telecom Licenses in the 2G Case: Claim for Indirect Expropriation, *NUJS Law Review*, vol. XX (2013).
- Morrison, Wayne M., Cong. Research Serv. RL33536, China U.S. Trade Issues 3, (Current Politics and Economics of Northern and Western Asia 20.3, 2011).
- Qiang, C. Z. W., Lanvin, B., Minges, M., Swanson, E., Wellenius, B., Clarke, G. R. & Safdar, Z. Information and Communications for Development: Global Trends and Policies (The World Bank Group, 2006)
- Rutledge, Peter B., TRIPS and BITS: An essay on compulsory licenses, expropriation, and international arbitration, *(NCJL & Tech.* vol. 13 (2012), pp. 149-287.
- Sharp Sr., Walter Gary, Redefining National Security in Today's World of Information Technology and Emergent Threats, *Duke J. Comp. & Int'l L.*, vol. 9 (1998).
- UNCTAD/DIAE/IA/2008/5.
- Weber, Rolf and Baisch, Rainer, Tensions between Developing GATS Classifications in the IT Markets, *Hong Kong Law Journal*, vol. XX (2003).

Networks for sustainability: The role of social media in converging offline gaps

Deborah Sun Kim¹

Abstract

One of the greatest technological developments, the Internet, has become today's greatest economic tool, but it would not function as it does without social motivations and behaviours. Social media is a prime model of economics fuelled by behavioural decisions. Is social media merely a reflection of its users or it has also changed social behaviours offline? Furthermore, what are the implications for offline interactions? More importantly, what are the implications of social media on the relationships and values of global human rights? We are presumably more connected now than ever before, yet the world is experiencing intensified individualistic tendencies. Social media is certainly an effective tool for professional human rights workers; however, a new voice of activism for human rights has been released by citizens worldwide. This paper aims to explore the role of such a vastly adapted tool that is so intricately connected to our daily public and private interactions in engaging the general masses with social issues that affect all populations. Can social media reliance and enthusiasm offer a platform for citizen activism, to encourage more impactful cooperation and build responsible behaviours that support human rights achievements per the 2030 Agenda? Here, the impact of social media is broken down in relation to the three pillars of sustainable development — economics, the environment, and society — aiming to address the overlaps, links, and gaps between them. It is proposed that an interwoven, socially-minded network driven by responsible interactions and decisions must be strengthened as a result of our time and attention that is captivated by social media. Just as technology is reflective of and progresses human development, social media can be an ideal platform that motivates us to grow into, not just fabricate from our ideals, a network for sustainability — global citizens pursuing justice and equality actively offline in the midst of our daily lives.

Keywords: behavioural economics; social media; Internet; networks; sustainability

¹ Entrepreneur and consultant based in Seoul, driven by behavioural economics and social innovation.

I. Introduction

Technology is not an unfamiliar topic that we suddenly have to face today, yet the extent of its realms remains uncharted. It has been around almost as long as scientific and artistic developments have,² yet it is always evolving and ever-growing to provide the needs of the society it serves, in addition to being a result of the also ever-changing society.³ It has expedited momentum behind not only social movements, but human progress. Technology is “the medium of daily life in modern societies”, and “reverberates at many levels, economic, political, religious, [and] cultural”.⁴ If the spread of information as knowledge is “the most powerful engine of production”,⁵ it is logical that the technology we rely on most today is the Internet. Sociologist Manuel Castells compares today’s demand for the Internet to “both the electrical grid and the electric engine because of its ability to distribute the power of information throughout the entire realm of human activity.”⁶ What started as a communications service has become a non-territorial platform for and a society of networking.

As of September 2016, the average scope of global Internet availability was 49 per cent. North America was the most connected region, rating at 88 per cent, and the least connected region, Africa, totalled at 30 per cent.⁷ As of January 2016, the global social media penetration rate was estimated at 30 per cent, with Facebook accounting for 1.5 billion active users per month.⁸ In 2015, over half of mobile phone users worldwide had access to the Internet on their devices, and are expected to reach 61.2 per cent in 2018.⁹ The Millennial Generation, currently aged between 18 and 32 years, were found to be the most active Internet users, averaging nearly 8 hours daily. What makes the Internet different than prior technologies is the availability of an instant, mobilized, and almost uninhibited connection through various verbal and nonverbal mediums (voice, video,

2 C.G. Weeramantry, Judge of the International Court of Justice at The Hague, “The Impact of Technology on Human Rights,” Presentation, United Nations University, Tokyo, 14 May 1993. Available from <http://archive.unu.edu/unupress/lecture4.html>.

3 Manuel Castells, *The Internet Galaxy* (New York, Oxford University Press, 2001).

4 Andrew Feenberg, *Questioning Technology*. (New York, Routledge, 1999), p. 2.

5 Jan Berting, “Technological impact on human rights: Models of development, science and technology, and human rights”, in *The Impact of Technology on Human Rights: Global Case-Studies*, (United Nations University Press, Tokyo, 1993), n.p.p.

6 Castells, *The Internet Galaxy*; supra note 3, p. 1.

7 Statista, “Global internet penetration rate as of September 2016, by region”. Available from <http://www.statista.com/statistics/269329/penetration-rate-of-the-Internet-by-region/>.

8 Statista, “Social network penetration rate as of January 2016, by region”. Available from <http://www.statista.com/statistics/269615/social-network-penetration-by-region/>.

9 Statista, “Mobile phone Internet user penetration worldwide from 2014 to 2019”, Available from <http://www.statista.com/statistics/284202/mobile-phone-Internet-user-penetration-worldwide/>.

SMS, 140-character reporting, emoticons, memes, etc.) without a full range of real-time social cues.¹⁰ However, the contrast between the quality and rate of connectivity levels in each region posed challenges in developing information and market exchanges. Castells notes that the influence of the Internet reaches past user quantity and includes the usage quality. He states that economics, politics, cultures, and society are being structured by and around the Internet; “in fact, exclusion from these networks is one of the most damaging forms of exclusion in our economy and in our culture.”¹¹

The global appeal lies in the availability of an intangible territory that has created a new public and private sphere. If scientific development is at the root of human progress, then the Internet is at the root of a vast percentage of each pillar of sustainable development — economic, social, and even environmental movements — today, due to the implied access, speed, and mobility at which almost any information is consumed or dispersed.

Does society control the Internet, or does the Internet control society? In response to Castells’ analysis on the evolution of the Internet, technology researcher John Naughton offers that it “is shaping society and, in turn, being shaped by society.”¹² Admittedly, every technological development that humans have relied on so intensely has impacted economic growth, social interaction, and environmental consumption, but in accordance with Castells’ claims, such developments have not successfully eliminated economic gaps, social divergence, and environmental degeneration — otherwise, we would not be in constant pursuit of better developments or technologies. A case example of this is demonstrated by the instability of the financial market based on the highly-valued technology stocks, which depend on “crowd psychology and information turbulences, rather than by a sound evaluation.”¹³ Castells states that “volatility, insecurity, inequality, and social exclusion go hand in hand with creativity, innovation, productivity, and wealth creation.”¹⁴

By definition, the Internet is an ever-changing socially fuelled and fuelling engine. Social networking ranks among the most popular uses of the Internet, with Facebook accounting for nearly half of all Internet users around the world.¹⁵ Social media plays a major role in both creating and tracking a social

10 Zizi Papacharissi, “We have always been social”, *Social Media + Society*, vol. 1, No. 1 (April-June 2015).

11 Castells, *The Internet Galaxy*, supra note 3, p. 1.

12 Ibidem.

13 Ibid., p. 4.

14 Ibid., p. 4.

15 Statista, “Number of Internet users worldwide from 2005 to 2016 (in millions)”. Available from <http://www.statista.com/statistics/273018/number-of-Internet-users-worldwide/>.

history of technology as well as progress. Do users control social media, or does social media control its users? The Internet would simply not be what it has become so far without such active social demand and participation — but society also would not be the same without public availability of the Internet. The intensifying demand for connectivity with quality is shaped not only by global commerce but also social cultures and activities, thus it would be responsible to explore the role of social media outside of commerce and personal communities in global social issues — especially considering its implications in today’s economic and environmental conditions. The implications, directly and indirectly, address each one of the 2030 Agenda Goals. Much discussion around technology and human rights regularly revolves around how the Internet can be used to quantifiably and tangibly strengthen the human rights movement around the world. Information-based networks have opened opportunities for better reporting, alarming, campaigning, funding, monitoring, and tracking—among other uses. The general discussion has also circled around concerns of privacy and security, knowledge and privilege, cyber warfare, and innovation as economic progress. There is no doubt that technology can help human rights workers have more impact in less time, but what does it mean for citizen activists around the world in their daily routines and livelihoods?

It is true that the intensified social networking online poses threats we have never had to face beforehand. However, as one extreme causes another, the discussion on the Internet and human rights should expand from discussing protection against perceived perils of the virtual territory to also anticipate how strengthened connection can proactively work toward eliminating inequality, injustice, and degradation with better organized interdisciplinary and interconnected social and systemic resources.

The logic of industrialism implies that social life can only adapt to the deterministic line. [...] But this is not considered to be a disadvantage. By the march of rationality and the rationalization of economic and social life, society is pushed towards a better future. It achieves a high level of welfare and a lower degree of social inequality. [...] Social and cultural differences between nations, regions, and peoples continue to exist only as long as they do not stand in the way of progress or when they contribute to a nation’s specific advantage. [...] The relationship between technological development and human rights is... not considered to be problematic. On the contrary, the way of industrialism leads to the liberation of man from traditional and limiting social and cultural bonds and thus from bondage and ignorance. Industrial development reduces class antagonism and depression by the state; it enhances opportunities for individual

choice; it provides the opportunities for democratic participation and for the development of socio-economic rights. [This] is also optimistic with respect to the possibilities for the solution of problems in the future, including those problems that are caused by industrial development itself. This optimism is, of course, grounded on the confidence that logico-empirical science will always find new opportunities and technologies to handle present and future problems.¹⁶

The 2030 Agenda revolves around improving the relationship between humans through higher equality and economic progress as well as between humans and the environment for better living conditions and economic resilience. This paper sees the opportunities in the unconfined space of social media that has opened greater advocacy for each Sustainable Development Goal directly from involved and participating citizens. It is proposed that in order to see the complementary balance between the three pillars, technological developments must be understood outside of profit-centric value, and the implications of increased reliance must be accounted for in offline channels. In order to better define the parameters of social action, we must simultaneously consider social values of nature: seeing improvements in the human-to-nature relationship will require addressing human-to-human relations,¹⁷ which, because of current trends, requires by default, further exploring human-to-technology relations. Achieving equilibrium between the three pillars will come through not only exploring what technology, and increased participation of quality interactions via social media in particular, can do for society or for nature, but by better understanding the reciprocate interactions between humans, technology, and nature.

As a case model of sociological behaviours applied throughout the seemingly endless online channels of interaction, this paper will focus on the implications of intensifying social media in building attitudes and lifestyles that support human rights activism outside of official or professional advocacy. The impact of online actions and representations in correlation to offline behaviours will be explored to better understand the impact of connection and individualism in mitigating barriers to the 2030 Agenda, thus, proposing that perhaps our social inclinations can work to prevent and counter the behavioural reasons why some global issues persist, and social media actions can actually serve as a means to boost changes in these behavioural barriers. The arguments are broken down into the impact of social media in relation to economics, the environment, society,

16 Jan Berting, "Technological impact on human rights: Models of development, science and technology, and human rights", in *The Impact of Technology on Human Rights: Global Case-Studies*, (United Nations University Press, Tokyo, 1993), n.p.p.

17 Elizabeth Jelin, "Towards a global environmental citizenship?", *Citizenship Studies*, vol. 4, No. 1, (2000), p. 47-63.

and the human rights movement. The paper will follow an exploratory analysis of a combination of normative economic and sociological theories. While social media has certainly expanded opportunities for more widespread activism by official human rights workers, this paper aims is to anticipate the prospect of overall social media reliance and enthusiasm to create a global network of citizen activists driven by behaviours and values that support fulfillment of the 2030 goals and targets.

II. Social Media and Economics

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion which we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner.¹⁸

Neoliberal economists have insisted on the nature of strict rationality of humans to pursue self-interest over collective benefit. Neoliberal capitalism prioritises limitless economic growth, resulting in the deprecation of social and environmental sustenance.¹⁹ The New Economics Foundation profiles seven behavioural principles of economics that suggest “new forms of thinking must be considered in standard analytical frameworks to more accurately entail human behaviours.”²⁰ The seven principles propose that (1) in social norms and relationships, consensus, cooperation, and corporately aligned behaviours do matter, (2) people are driven by habit rather than persistent logical reasoning, (3) people are, in fact, motivated toward altruism and empathy — but money demotivates intrinsic wilfulness for cooperation and reciprocity, (4) personal identities and self-expectations influence external behaviours, (5) people are averse toward scarcity, (6) people are usually not accurate in the calculative decision-making processes, and (7) emotional investments, not information and incentives, drive action for long-term change.

Neuroeconomics is a subfield of behavioural economics that explores physiological connections to reactions such as willpower, greed, compassion, and happiness to complement other economic theories. Neuroscience and psychology are brought together and bring biophysical evidence that demonstrates cognitive processes

18 Adam Smith, *The Theory of Moral Sentiments*, (London, A. Millar, 1790), p. 1.1.4 Available from <http://www.econlib.org/library/Smith/smMS.html>.

19 Donella H. Meadows and others, *The Limits to Growth*, (New York, Universe Books, 1972).

20 Hetan Shah and Emma Dawney, *Behavioural Economics: Seven Principles for Policy-Makers*. (London, New Economics Foundation, 2005), p. 2.

of economic decisions.²¹ Neuroscientific studies have “identified brain circuits active during moral judgement that have been linked to prosocial emotions such as empathy, guilt, and pity.”²² This confirms that decision-making processes occur more often as automatic reactions based on subjective values rather than deliberative cognitive control, and offers that such subjective values could be the baseline to highlighting and increasing behaviours that support sustainability across economics, society, and the environment. Barriers to sustainability are issues of imbalance in social values and behaviours. Sustainable Development Goals (SDGs) 1-9 and 11-17 will only truly occur if Goal 10 is first addressed. Simply put, as long as we continue to be motivated by self-seeking values (such as greed and pretentious display fostered by inequality -- as opposed to collective values, such as service and generosity fostered by humility, gratitude, and community), the path to sustainability is guaranteed to be obstructed.²³ As a widely adapted platform that engages subjective values for social interaction, social media could conceivably be utilised as a primary platform for building collectively minded responsibility that supports decision-making toward the achievement of the 2030 Agenda.

Papacharissi states that “all media are social. All media foster communication and by definition are social. This is not that ground breaking a position anymore”, adding that “each medium is social in its own unique way and invites particular social behaviours, its own form of sociality.”²⁴ Social media, as termed in this paper, refers to today’s leading platforms for networking and interaction, beyond traditional Internet functions of reading, watching, and consuming. Kietzmann et al. present seven building blocks of social media for networking that are also key characteristics of sustainability-supporting behaviours and values: identity (position), conversation (storytelling), sharing (information exchange), presence (active participation and the availability of other members), relationships (engagement), reputation (integrity, responsibility, or credibility), and groups (collectivity).²⁵

21 Colin Camerer, *Behavioural Economics*, (London, World Congress of the Econometric Society, 2005); Colin Camerer, “Neuroeconomics: Using neuroscience to make economic predictions”, in *The Philosophy of Economics: An Anthology*, 3rd ed. (Cambridge, Cambridge University Press, 2008), p. 356-377.

22 Heike Tost and Andreas Meyer-Lindenberg, “I fear for you: A role for serotonin in moral behavior”, *Proceedings of the National Academy of Sciences*, vol. 107, No. 40 (Washington DC, PNAS, 2010), p. 17071.

23 Interview with Annie Leonard, Author of “The Story of Stuff”, by Wendy Koch, *USA Today*, 24 March 2010.

24 Papacharissi, *We have always been social*, supra note 10, p. 1.

25 Jan H Kietzmann and others, “Social media? Get serious! Understanding the functional building blocks of social media”, *Business Horizons*, vol. 54, No. 3, (May-June 2011), pp. 241-251.

It is no secret that commerce and institutions have found opportunity in the voluntary disclosure of information for market or organisational advantage. Social media metrics have been a wellspring for targeted marketing, seemingly creating more wellbeing for industry prosperity than for consumer livelihoods. A plethora of theories have been suggested as alternative economic models to incorporate social principles. Among them, we have seen a rise of alternative participatory economics such as “uberization”,²⁶ or the sharing economy, and micro-financing or crowdfunding — albeit some channels continue to feed neoliberal economic systems relying on overconsumption and inequality, where the objective maintains profit that overshadows social benefit.²⁷

Even still, although commerce and institutions have benefited from the reservoir of information, consumer feedback and demands have also impacted industry performance. Despite the availability of alternatives for previous patterns of economic decision-making that may lead to transitions for sustainability, we are still responsible for proceeding more deliberately toward accepting the new technologies and business models formed around those alternatives. Humans have historically managed to justify overconsumption if the benefits for self (including trend-keeping) are separated from the costs of society. Consumption is an imminent part of human nature, but overconsumption has preceded the earth’s regeneration capacity. The highest rates of overconsumption are in wealthier regions²⁸, demonstrating that such behaviours indeed result in material degradation or asymmetric power dynamics, upon which, more innovation for more solutions is sought after without countering the initial issue – values prioritising the individual over the collective good.

Aside from concerns of mass global overconsumption, the spread of social media has brought favourable conditions to build income in methods and areas previously unheard of. However, another concern remains regarding industry control over social usage that could impact opportunities for income and networking in varying regions. In some cases, search engines have been noted to produce biased results based on search terms and rhetoric.²⁹ Additionally,

26 Sunny Freeman, “‘Uberization’ of everything is happening, but not every ‘Uber’ will succeed.”, *The Huffington Post*, 1 April 2015. Available from http://www.huffingtonpost.ca/2015/04/01/uberization-uber-of-everything_n_6971752.html.

27 Jagdish N Sheth, Nirmal K Sethia and Shanthi Srinivas, “Mindful consumption: A customer-centric approach to sustainability”, *Journal of the Academy of Marketing Science*, vol. 39, No. 1 (17 August 2010), pp. 21-39.

28 Gary T. Gardner and Eric Assadourian, “Rethinking the good life”, *Worldwatch Institute State of the World*. (New York, W.W. Norton & Company, 2004).

29 Laura Sydell, “Can computer programs be racist and sexist?”, *NPR*, (15 March 2016), Available from <http://www.npr.org/sections/alltechconsidered/2016/03/15/470422089/can-computer-programs-be-racist-and-sexist>.

smartphone search algorithms from Google allegedly favour results with mobile over desktop websites.³⁰ Not only does this raise questions on search control and dominance as well as suspicion of antitrust violations,³¹ but it also creates a disadvantage to populations searching for results in areas where mobile design may not yet be dominant or popular, especially under Google’s own definitions for mobile web design. This is a prime example of how, rather than attempting to better understand the interactions between humans and technology, the dominance held by industry giants over consumers and the majority of users should be re-evaluated to better understand the implications of power dynamics in human-to-human interactions.

There is a vicious cycle of “volatility, insecurity, inequality, and social exclusion [that] go hand in hand with creativity, innovation, productivity, and wealth creation.”³² We should certainly seek collective solutions that boost our current limits and capabilities, but we must be attentive to not become more heavily reliant on sources outside of our natural inclinations or that have not led us closer to sustainability in the past. Technological developments are meant to expand access and opportunities, not create a debilitating dependence or obsession that fundamental human cognitive, physical, and social functions disintegrate over time.

“Liberation from technological fetishism will follow the course of liberation from economic fetishism. The same story will someday be told about machines that we tell today about markets.”³³

III. Social Media and the Environment

Heightened demand for faster and more Internet resources, and especially the perks of social media on-the-go, has raised implications for hardware production and environmental sustainability. In an immediate response to environmental concerns, online content developers have worked to cope with climate change and its contributors — such as apps and maps, the Internet of Things, green hackathons, as well as open sourcing patents and designs. However, further diligence on behalf of developers and users must be actively considered.

30 Sam Sanders, “Google’s new search algorithm stokes fears of mobilegeddon”, *NPR*. (21 April 2015), Available from <http://www.npr.org/sections/alltechconsidered/2015/04/21/401269739/google-new-search-algorithm-stokes-fears-of-mobilegeddon>.

31 Bill Chappell, “EU charges Google with antitrust violations, will also look at Android”, *NPR*. (15 April 2015), Available from <http://www.npr.org/sections/thetwo-way/2015/04/15/399788719/eu-charges-google-with-antitrust-violations-will-also-look-at-android>.

32 Castells, *The Internet Galaxy*, supra note 3.

33 Feenberg, *Questioning Technology*, supra note 4, p. 1

Product management for device design and manufacturing should take elements into consideration beyond profit and capital returns. Product development should follow due diligence not only for retroactive supply chain reporting, but also in reporting how the hardware devices will better serve the people through its integrated use — as opposed to how users will grow more reliant and demanding of the product and its upgrades by specifically excluding options for customisation, repair and open sourcing.³⁴ Hardware manufacturers are known for “planned obsolescence”³⁵ — intentionally releasing products that are not able to last, be repaired, or be upgraded. This encourages consumers to discard such products because it is easier and cheaper to replace than to repair. Manufacturing brands currently also depend on “perceived obsolescence”³⁶— motivating consumers to replace perfectly functioning products to appear more updated. Furthermore, by releasing products intentionally with minimal upgrades to secure profit margins, especially when the full upgrade package is readily available in advance, financial prosperity is valued much higher than social benefit. Brand interest may be captured, but expectations for brand reciprocity are lowered, and a normally cooperative network becomes a fixed network with little dynamic variability.

Computers and mobile devices account for a large portion of global electronic waste (e-waste) due to higher perceived obsolescence, thus shorter lifespans.³⁷ The chemical composition of e-waste is known to emit environmental contaminants and consists of valuable reusable metals. E-waste is exported to poorly quarantined areas in regions facing extreme poverty, where unprotected populations then burn and dissolve the pieces in acids while the contaminants are spread into the water supply, local food chains and air quality, and neighbouring communities face variations of the toxins as well. Furthermore, traces of contaminants have been proven to be exported to farther regions through agricultural or manufactured products.³⁸

The heightening trend of apps, social media profiles, and live updates, instead of sitting websites or printed advertisements which hold no requirements for consistent interaction, simultaneously calls for more Internet users to purchase

34 Jason Koebler, “The New MacBook Pros Mark the End of Upgradeable Apple Computers”, *Motherboard Vice*, 1 November 2016. Available from <https://motherboard.vice.com/read/new-macbook-pros-mark-the-end-of-upgradeable-apple-computers>.

35 Interview with Annie Leonard, Author of *The Story of Stuff*, supra note 23.

36 Ibidem.

37 BH Robinson, “E-waste: An assessment of global production and environmental impacts”, *Science of The Total Environment*, vol. 408, No. 2, (20 December 2009), pp. 183-191.

38 Ibidem.

mobile devices due to requirements for higher interactive ability. Social media, for most of us, may appear to have little environmental impact, but creators of pair-able products and mobile devices should fall under the same scrutiny and due diligence as manufacturers of non-Internet reliant material products. Furthermore, if app updates require systems upgrades as they offer better functions only with upgraded devices or if other apps are energy-intense, perhaps developers should also be held accountable for the device-related emissions that are created. For instance, if a popular app demands, hypothetically, a 15 per cent increase in device usage per diem, should its developing company not share in the accountability of energy consumption rather than leaving scrutiny only for the hardware manufacturer?

Nonetheless, the spread of heightened social media usage has also led to positive environmental and social impacts. For example, the 2016 protests against the Dakota Access Pipeline shifted to and expanded through social media, as users around the world marked their live locations to the actual site. While the Standing Rock Indian Reservation population does not reach 10,000 residents, over 100,000 online participants joined the protests virtually in response to local authorities allegedly using Facebook to identify and arrest protestors.³⁹ Unquestionably, the news spreading throughout social media brought international attention to the issue, but also shifted mere awareness of the protests to collective action via a virtual platform that highlighted direct threats to the economy, healthy livelihoods, clean water, clean energy, reduced inequalities, sustainable communities, responsible consumption, land degradation, and infrastructure development rights, at minimum — pointing to nine out of seventeen 2030 Goals.

IV. Social Media and Society

The success of social media is highly reliant on the innately social inclinations of humans. We interact in networks — to the point that each human’s existence begins within a network of a familial structure. “We have always been social, and we will always be social. Even the rejection of social activity is, in effect, a social decision and behaviour.”⁴⁰ Networks are created based on cooperation and reciprocity, not at random.⁴¹ Sociology experts have empirically found

39 Justin Worland, “How activists are using Facebook check-in to help Dakota Access Pipeline Protesters”, *TIME*, 31 October 2016. Available from <http://time.com/4551866/facebook-dakota-access-pipeline-check-in/>.

40 Papacharissi, *We have always been social*, supra note 10, p. 1.

41 DG Rand, Samuel Arbesman and Christakis, “Dynamic social networks promote cooperation in experiments with humans”, *Proceedings of the National Academy of Sciences*, vol. 108, No. 48, (18 October 2011), pp. 19193-19198.

that human networks are organized and structured, but waves of dynamic interactions must exist for cooperation to continue. There is often control over points of interaction, and patterns of interaction transition with time, creating variability in the population structure based on its responses to cooperation. Conditional actions “[occur] via changes in network structure rather than via changes in cooperation behaviour”,⁴² as reciprocity is at the core of changes in cooperation. When behavioural reciprocity links are broken, it has been found that connections between co-operators are made stronger when the network sees rapid updates and acquires more connections, rather than highlighting the punishment of defectors. Furthermore, cooperation is strengthened over time when there are waves of rapid change, but falls when networks are randomly shuffled, are fixed consistently, and when plateaus persist. Humans are social beings: we look to others for clues on collective action, but are easily bored without dynamic levels of interactions within networks we choose to associate ourselves with. Cialdini breaks down network interactions into six principles of when cooperation, or influence, is highest: Reciprocity, Scarcity, Authority, Consistency, Liking, and Consensus.⁴³

Social media is a virtual reproduction of the way we interact offline in our various networks. Cialdini’s six principles intended for offline networks also apply online.⁴⁴ There is constant interflow of reciprocity (positive and negative), fear of scarcity (or even fear of being defected), search for authority (whether as credibility or authenticity), dynamic but habitual consistency (smaller commitments sprouting from voluntary and public action put into writing grow into bigger and longer commitments), liking (literally - but also in the support of identities and self-presentation), and collective consensus (power of peers). Regardless of an individual’s commitment or level of participation on social media, the informal but binding elements for interaction remain the same. Then, is social media merely a reflection or has it also changed social behaviours offline?

There is much discussion on the impact of social media on society today, but perhaps the bilaterally and progressively reflective nature of such platforms is a key pathway for a transition toward balanced sustainability. Though it does serve as a virtual mirror of offline dynamics and interactions, the measurability of behaviours has allowed it to also serve as a predictor of upcoming trends. Essentially, social media has become a way to time travel. At any given time,

42 Idem., p. 19194.

43 Robert Cialdini, “Harnessing the science of persuasion”, *Harvard Business Review*, vol. 79, No. 9, (October 2001), pp. 72-81.

44 Ibidem.

a portion of the global population's past, present, and analytically foreseeable future are readily available for review within the palm of one's hand — all of which is factored into personalised ads and search engine results. If social media is considered, in practice, to be fair grounds for shaping users' decisions at various forms of network interaction — such as consumption, production, knowledge, communication, even transportation, among others — why, then, should it not be a primary platform for building cooperative behaviours that support sustainable development and the 2030 Agenda? Rather than merely extracting user information for commercial or institutional data, users can drive practical demands aligned with collective justice, equality, and fair consumption in addition to motivating their social circles to responsibly reinforce such demands as well.

The binding characteristics of sustaining social media networks are not foreign to characteristics needed in offline social behaviours. Trends on social media vary chaotically, yet methodically. Trends fluctuate in response to the network's interests, but the network interactions remain rich in demand. Offline dynamics also vary, yet show consistent patterns that humans still require social networks. The same characteristics required that keep social media in such high demand are shaping behaviours that support social sustainability. As such, social behaviours offline (especially considering the intensifying reliance on the Internet) are systemically linked to economic and, consequently, environmental interactions. Therefore, in advocating for the 2030 Agenda, sharing information for sustainability and responsible livelihoods on social media networks must not be overpowered by strictly commercial agendas in order to better address social norms and behavioural issues that contradict and build barriers against the corresponding human rights.

For instance, current algorithms may produce results based on an individual's network activity, but at what point is the user held accountable for their personal knowledge database or even expected to self-initiate to broaden their search engine habits or adjust leisurely preferences to boost the diversity produced in algorithm outcomes? As an example, when issues of inequality or biased views are represented across varying media outlets, responsible consumers actively seek a diverse range of sources or even expand their own social surroundings to encounter more credible and impartial information. Arguably, with ranging tastes and interests, people can simply be unwilling or unable to take the time to control their personal algorithm results through behavioural changes. In such cases, on one hand, implementing policy changes or providing reward incentives will produce stronger short-term results, thus hinder the targeted longevity of the

SDGs. On the other hand, per sociological studies and principles⁴⁵ on cooperation and reciprocity, unmotivated individuals have been proven to eventually alter their own behaviours to merge with the consensus. Thus, as motivated citizens increase efforts to feature more observant and better-informed knowledge throughout social media, the number of individuals motivated by responsibility and collective justice would imaginably grow.

On one hand, social media is a representation and celebration of the diversity and dynamism of collective networks. On the other hand, it requires both a personal and a social identity. As Turner's self-categorization theory prescribes,⁴⁶ personal identity ('I' or 'me') indicates "self-categories that define the individual as a unique person in terms of [their] individual differences from other (in-group) persons,"⁴⁷ while social identity ('we' or 'us') is the "social categorizations of self and others... that define the individual in terms of [their] shared similarities with members of certain social categories."⁴⁸ As social identities become more distinct, self-categorizations of the personal identity become "depersonalized,"⁴⁹ but the perceiver gains behavioural flexibility in accordance with the cognitive context of the social identity. As the personal identity grows more in line with the social context, this may be criticized as manipulation,⁵⁰ insincerity, conformity, or cursory,⁵¹ when, in fact, it is merely one's subjective cognition of their personal identity within a given context. In online social networks, as the collective dynamic grows stronger, cooperation increases and personal identities are presented more optimistically. Foucault describes technology as a "set of structured forms by which we... inevitably exercise power over [nature and over] ourselves".⁵² Participation through technology "inevitably and without easy demarcation also shade[s] from an individual or personal into a group or institutional forms."⁵³

45 Rand, Arbesman and Christakis, *Dynamic social networks promote cooperation in experiments with humans*, supra note 41.

46 John C. Turner and others, "Self and Collective: Cognition and Social Context", *Personality and Social Psychology Bulletin*, vol. 20, No. 5, (October 1994), p. 454-463.

47 Idem., p. 454.

48 Ibidem.

49 Ibidem., p. 455.

50 Zizi Papacharissi, "The presentation of self in virtual life: Characteristics of personal home pages", *Journalism & Mass Communication Quarterly*, vol. 79, No. 3, (Autumn 2002), p. 455.

51 Turner and others, *Self and collective: Cognition and social context...*, supra note 36.

52 Jim Gerrie, "Was Foucault a philosopher of technology?", *Charlottesville: Techné: Research in Philosophy and Technology*, vol. 7, No. 2, (Winter 2003).

53 Carl Mitcham, *Thinking Through Technology: The Path Between Engineering and Philosophy*. (Chicago, University of Chicago Press, 1994), p. 204.

Castells refers to this dynamism by explaining that “our societies are increasingly structured around a bipolar opposition between the Net and the Self”.⁵⁴ He continues to state there is a “liberating power of identity, without accepting the necessity of either its individualization for its capture by fundamentalism”⁵⁵ and that “all major trends of change constituting our new, confusing world are related, and that we can make sense of their interrelationship.”⁵⁶ The ability to interact from a position of mobility enhances the knowledge and power dynamic of personal and social identity; or as Foucault may describe it, “a web of social forces and tensions in which everyone is caught as both subject and object.”⁵⁷

The presentation of the self-identity has been extensively studied and analysed across several sectors. On online social profiles, Marwick and boyd describe self-presentations as “highly managed and limited in collaborative scope; people tend to present themselves in fixed, singular, and self-conscious ways”.⁵⁸ However, social networks, as in offline interactions, are more than just publicly projected self-presentations. In early cyber platforms, there was a lack of interactional space, but today’s websites “are imbedded in or transformed by other forms of [computer-mediated communications] that facilitate the interaction necessary to self-ing”.⁵⁹ In response to the interactions based on profile pages, the “I” identity becomes a stronger “me” as “the very construction of the homepage presumes the expectation of the virtual ‘generalized other’.”⁶⁰

The next section will further propose how the use of social media can prompt our collective, not individualistic identities to drive behaviours and values supporting the achievement of the 2030 Agenda. If identities can be represented online in a more optimistic yet practical manner as a complementary representation of one’s networks, is it too idealistic and unattainable to expect people to take small measures to enact those values into our daily decisions? As long as our values of self and identity online lie in the context of separate online and offline territories, critical elements of the economic, social, and environmental systems will remain

54 Manuel Castells, *The Rise of the Network Society*. (Oxford, Blackwell Publishers Ltd., 1996), p. 3.

55 *Idem.*, p. 4.

56 *Ibidem.*

57 Andrew Feenberg, *Critical Theory of Technology*; (New York, Oxford University Press, 1991), p. 71.

58 Alice E. Marwick and danah boyd, “I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience”, *New Media & Society*, vol. 13, No. 1, (7 July 2010), p. 2.

59 Laura Robinson, “The cyberself: The self-ing project goes online, symbolic interaction in the digital Age”, *New Media & Society*, vol. 9, No. 1 (February 2007), p. 104.

60 Marwick and boyd, *I tweet honestly, I tweet passionately*; supra note 58.

too difficult to attain.⁶¹ Just as technology is reflective of and progresses human development, social media can be the platform that motivates us to grow into — not just fabricate — model global citizens.

V. Networks for Sustainability

On one hand, social media has proven to be a great tool for human rights workers and organizations to update, educate, report, alarm, campaign, fundraise, track and monitor, and maintain a consistent connection both professionally and personally while on the field.⁶² This has been evident in multiple occurrences of social conflict and natural disaster responses.

On the other hand, social media has provided a worldwide platform to collect live data and knowledge from local civilians, witnesses, occupants, victims, communities, and surrounding populations without much of the same restraints in the international communications infrastructure. Achieving the 2030 Agenda mandates an active participatory approach, as has emerged from widened usage of social media platforms. As Internet access, speed, and mobility spread, the number of first-hand accounts around the world that are represented in and available for reporting grows as well. By definition, technology — and especially social media — are continuously germinating both for and as a result of the society it serves. Consequently, as contributors and consumers of the collective knowledge, we should be intentionally more responsible with the content and values behind the information and behaviours that are being circulated.

With an ever-increasing presence and number of voices, how is the credibility of participatory input verified? Even if algorithms can structure reports based on specific criteria, the problem remains that they are constructed representations of human minds layered in cognitive biases to some degree. However, this should not undervalue or hinder any participatory reporting completely, only to be kept within an exclusive pool of participants and contributors able to maintain access to continuous streams of education or knowledge. As previously mentioned, Castells asserts that isolation from networks is “one of the most damaging forms of exclusion in our economy and in our culture.”⁶³ All actions are amalgamations of theories, ideas, and data. If social media is now so integral in facilitating market data and advertising based on purchases, clicks, search histories, and network activity, similar sets of quantifiable data should be considered valid in analysing social data along with overlaps and contrasts. Very rarely does a single

61 Feenberg, *Questioning Technology*, supra note 4.

62 Muhammad Imran and others, “Processing Social Media Messages in Mass Emergency: A Survey”, *ACM Computer Surveys*, vol. 47, No. 4, (July 2015), pp.1-38.

63 Castells, *The Internet Galaxy*, supra note 3, p. 3.

person carry a full portion of informational pieces. Mediums and methods of discovering and collecting the pieces are now more widely available for human rights-oriented action, but the quantity and quality of available data cannot lead to progress without the proper social support and cooperation behind it. Additionally, advocates must move beyond mere awareness to action, but the ultimate goal must be to see more results in behavioural transitions as a response to values and responsibility — not incentives, greenwashing, pity, or entitlement — for the collective wellbeing and sustainable livelihoods of all.

The above sections have brought together analyses on the implications of social media on economic, environmental, and social rights outlined by the 2030 Agenda, outlining how the utilitarian value of social media can be shifted to encourage pro-sustainability behaviours and values offline as a result of online self-presentations that highlight ideal identities and views. How can existing social media create new opportunities for sustainable progress that did not previously exist? As Kietzmann et al. state, “given the tremendous exposure of social media in the popular press today, it would seem that we are in the midst of an altogether new communication landscape.”⁶⁴ Among leading social media sites, some are open to universal access and others target specific niches. Whether on Facebook pages, LinkedIn profiles, Google Communities, Pinterest-motivated purchases, or Reddit “Ask Me Anything” forums, online self-presentation and interactions should presumably match offline values and behaviours, and encourage more collective integrity and responsibility rather than drawing lines between “I” and “the others”. However, images of integrity and responsibility are evidently easier to control in a publicly existing sphere that allows generous time for editing and calculated actions that offline social settings to do not grant.

The ambition behind this paper is not only to point out the minimal social motivations required for holistic sustainable livelihoods worldwide, and the usage of social media to increase informational exchanges on issues of sustainability, but to principally propose that the enhanced online representation of offline identities serve as a behavioural liaison to enhance personal development into more responsible real-time citizens. The utility of a publicly accessible social space actually presents an opportunity to spark a cycle of initial offline identities presented as enhanced self-identity to be conveyed in a more accountable presentation that supports actions required to achieve the 2030 Agenda. The reality that engagement on social media already raises ‘improved’ or ideal versions of ourselves demonstrates that understanding values in line with

64 Kietzmann and others, *Social media? Get serious!...*, supra note 25, p. 241.

sustainability — responsibility and community, among others — already exists. It is expected that there may be some contrast in the enactment of such values, due to cultural contexts, but the objective remains that citizens around the world agree every individual does hold the right to the same set of human rights.

Sociologist Castells addresses networks as “the new social morphology of our societies”⁶⁵ and “a set of interconnected nodes”.⁶⁶ He states that social networks have long been in existence, but the information technology age has allowed the shared knowledge to permeate throughout a society’s operation and outcomes in processes of production, experience, power, and culture. Social structures based on networks are “highly dynamic, open system, susceptible to innovating without threatening its balance. Networks are appropriate instruments for a capitalist economy based on innovation, globalization, and decentralized concentration”.⁶⁷ Network societies are naturally subject to dynamic processes and flows.

Alan AtKisson has formerly proposed “networks for sustainable development” as facilitating more knowledge management and capacity building.⁶⁸ While knowledge networks are critical, especially as we continue to seek technological progress, it has been argued here that, instead of targeting data, practices or profit for asymmetrical development, the core motive for building sustainability-driven attitudes and behaviours is at the root of knowledge and communication — human interaction networks. Practices such as knowledge management and capacity building are recognizably pertinent to building progress toward a sustainable future, but the goal must delve further beyond the list of interconnected and interdependent goals and targets to be achieved by 2030.

Networks for sustainability, as explored here, do not refer to building new communities or new platforms to engage in new ways. The networks already exist in society both offline and online; the platforms and related technology, the participants and their relationships, and the world-wide interactions have already been operating successfully. What exists today, that previous generations did not have, is a virtually timeless, borderless, and social platform to endure through coming generations with more inclusive systems and mindful planning, responsibly working together to enhance cooperation and reciprocity for better

65 Castells, *The Rise of the Network Society*, supra note 54, p. 469.

66 Idem., p. 470.

67 Idem., pp. 470–471.

68 Alan AtKisson, *Knowledge, Capacity Building, and Networks for Sustainable Development: A Review*, (Incheon, United Nations Office for Sustainable Development, 2012). Available from <http://www.unosd.org/content/documents/90UNOSD%20KST%20Assessment%20Report%202013-03-04.pdf>.

futures. Networks for sustainability are interconnected societies motivated by human rights, intentionally and ceaselessly building on their internal and external interactions to eliminate economic, environmental, and social barriers for the generations to come.

Perhaps if our schools' curriculums integrate sciences with arts just as they occur naturally, coding in addition to humanities, empathy in addition to intercultural studies, or sharing economies within capitalism, our overall social media etiquette would see changes as a result and driver of our real-time social exchanges and attitudes. Perhaps if tech developers and start-ups took proactive measures to regularly check for racially or socially biased algorithms,⁶⁹ worked beyond power-based competitive strategies and pursued complimentary engagement, or adapted truly responsible social ethics into corporate cultures — rather than being driven by unfairly targeted liabilities or financial incentives for greenwashing, cryptic privacy rules, or self-audited supply chain due diligence, then employees, consumers, and industry counterparts would confidently participate in positive reciprocity in and around their own surrounding networks.

Within networks for sustainability, “inclusive and equitable quality education” (SDG 4) reaches beyond literacy rates, cognitive skills, and enrolled students through secondary years in underserved countries — by gathering and presenting collective knowledge of actual human rights issues directly from those affected to their global neighbours. Through quick updates, business reviews, shared pins, and viral videos, the demand and anticipation for clean water (SDG 6) and clean energy (SDG 7), sustainable cities (SDG 11), responsible innovation, production, and consumption, (SDGs 9 and 12) is conspicuous. Social media is equally a platform for business marketing, as it is for SDG advocacy. Due to the open nature of social media, issues related to every single SDG are addressed on a personal level. Rather than focusing on lost time for equality and climate action, networks for sustainability aim to propel attitudes toward — and even surpassing — the achievement of the 2030 Goals.

Networks for sustainability are existing communities that advocate for and represent simultaneous economic, environmental, and social sustainability. Whatever the means, the rate of our reliance on the Internet, and especially social media, should not be viewed as a hindrance to social progress or for opportunities to find substitutes for or distractions from our reality, or even to become preoccupied with inventive practices for more incentives and activities that only characterize the tip of the iceberg. Instead, we should grasp the opportunities for

69 Sanders, *Google's new search algorithm stokes fears of 'mobilegeddon'*, supra note 30.

our existing networks to be catalysts in building more responsible identities and, thus, stronger communities worldwide.

Man, according to the Stoics, ought to regard himself, not as something separated and detached, but as a citizen of the world, a member of the vast commonwealth of nature. To the interest of this great community, he ought at all times to be willing that his own little interest should be sacrificed. Whatever concerns himself, ought to affect him no more than whatever concerns any other equally important part of this immense system. We should view ourselves, not in the light in which our own selfish passions are apt to place us, but in the light in which any other citizen of the world would view us. What befalls ourselves we should regard as what befalls our neighbour, or, what comes to the same thing, as our neighbour regards what befalls us.⁷⁰

VI. Conclusion

The Internet is an ever-changing socially fuelled and fuelling engine. The Internet would simply not be what it has become so far without such active social demand and participation — but society also would not be the same without public availability of the Internet. Social media plays a particularly major role in both creating and tracking a history of social development, due to how it has entered the complex structure of our public and private lifestyles.

Our economic, social, and environmental decisions are never isolated. Each economic decision is inevitably intertwined with our social and environmental preferences, just as our social inclinations impact our economic and environmental positions, and so forth. As such, the intensifying demand for connectivity is shaped by global commerce and social cultures, and even impacts environmental conditions. Thus, it would only be responsible for exploring the role of social media, outside of the comfort zone of commercial and personal communities, in relation to human rights issues. Social media has aided human rights workers to have more impact in less time, but what does it mean for citizen activists around the world in their daily routines and livelihoods? The implications, directly and indirectly, address each one of the 2030 Agenda Goals.

The primary function of technological development is to strengthen the relationships and interactions of human activities with knowledge, through the use of artefacts and production in addition to design and construction processes. Online social media is not the first technology engineered as a response and reflection of the fact that humans are social beings.⁷¹ However, it is the most in

⁷⁰ Smith, *The Theory of Moral Sentiments*, supra note 18, p. III.I.53.

⁷¹ Papacharissi, *We have always been social*, supra note 10.

demand today, and the implications affect prospective sustainability. Increasing reliance on the Internet, especially its mobility, has brought forth great economic opportunities and social implications for consumption, but has not been exempt from carrying environmental ramifications. A solution presented by social media to counter economic, environmental, and social gaps against sustainable development is not to rely on mobilized interaction as a substitute for previous systems and patterns, and it is certainly not to grow more socially independent while theoretically more interconnected in an abstract space. It is to discover and highlight ways to enhance our fundamental capabilities for more inclusive systems and mindful planning, working together cohesively to enhance cooperation and reciprocity.

Social media usage is certainly not a requirement for building communities. However, the global spread of social media creates a potential catalyst to build stronger local and international communities, even considering variations in Internet quality or socio-geographic background. The best feature of social media should not be valued as the justification of replacing human relationships or finding compensations merely to satisfy instant gratification. Rather than grasping onto *social media* networks for further disengagement and individualism, we should resolve to step outside of our personal comfort zones and take a look at our handheld virtual mirrors, reflecting on how to build into – not compromise with – our current networks to become better advocates of and achievers for holistic sustainability for one another and for generations to come.

Networks for sustainability are existing communities that advocate for and represent simultaneous economic, environmental, and social sustainability. The rate of our Internet reliance, and especially social media, should not become a hindrance to social progress or a way to find substitutes for or distractions from our reality, or even to become overly preoccupied with the excessive discovery of inventive practices that only provide short-term solutions without addressing the issues at hand. Instead, we should grasp the opportunities to bridge our ideal standards into more exemplary identities, becoming game-changers and communities that activate greater social justice and equality for all.

VII. References

- Adam Smith, *The Theory of Moral Sentiments*, (London: A. Millar, 1790), Available from: <http://www.econlib.org/library/Smith/smMS.html>.
- Alan AtKisson, *Knowledge, Capacity Building, and Networks for Sustainable Development: A Review.*, (Incheon: United Nations Office for Sustainable Development, 2012), Available from: <http://www.unosd.org/content/documents/90UNOSD%20KST%20Assessment%20Report%202013-03-04.pdf>.
- Alice E. Marwick and danah boyd, “I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience”, in *New Media & Society*, vol. 13, no. 1, (7 July 2010).
- Andrew Feenberg, *Critical Theory of Technology*, (New York: Oxford University Press, 1991).
- Andrew Feenberg, *Questioning Technology*. (Routledge, 1999).
- BH Robinson, “E-waste: An assessment of global production and environmental impacts”, in *Science of The Total Environment*, vol. 408, No. 2, (20 December 2009).
- Bill Chappell, “EU Charges Google With Antitrust Violations, Will Also Look At Android”, in NPR. (15 April 2015), Available from <http://www.npr.org/sections/thetwo-way/2015/04/15/399788719/eu-charges-google-with-antitrust-violations-will-also-look-at-android>.
- Carl Mitcham, *Thinking Through Technology. The Path Between Engineering and Philosophy*. (Chicago: University of Chicago Press, 1994).
- C.G. Weeramantry, Judge of the International Court of Justice at The Hague, “The Impact of Technology on Human Rights,” Presentation, United Nations University, Tokyo, 14 May 1993. Available from <http://archive.unu.edu/unupress/lecture4.html>.
- Colin Camerer, *Behavioural Economics*, (London: World Congress of the Econometric Society, 2005).
- Colin Camerer, “Neuroeconomics - Using Neuroscience to Make Economic Predictions”, in *The Philosophy of Economics: An Anthology*, 3rd ed. (Cambridge: Cambridge University Press, 2008).

- DG Rand, Samuel Arbesman and Christakis, “Dynamic social networks promote cooperation in experiments with humans”, in *Proceedings of the National Academy of Sciences*, vol. 108, no. 48, (18 October 2011).
- Donella H. Meadows and others, *The Limits to Growth*, (New York: Universe Books, 1972).
- Elizabeth Jelin, “Towards a Global Environmental Citizenship?”, in *Citizenship Studies*, vol. 4, No. 1, (2000).
- Gary T. Gardner and Eric Assadourian, “Rethinking the good life”, in *Worldwatch Institute State of the World*. (New York: W.W. Norton & Company, 2004).
- Heike Tost and Andreas Meyer-Lindenberg, “I fear for you: A role for serotonin in moral behavior”, in *Proceedings of the National Academy of Sciences*, vol. 107, No. 40 (Washington DC: PNAS, 2010).
- Hetan Shah and Emma Dawney, *Behavioural Economics: Seven Principles for Policy-Makers*. (London: New Economics Foundation, 2005).
- Interview with Annie Leonard, Author of “The Story of Stuff”, by Wendy Koch, *USA Today*, 24 March 2010.
- Jagdish N Sheth, Nirmal K Sethia and Shanthi Srinivas, “Mindful consumption: a customer-centric approach to sustainability”, in *Journal of the Academy of Marketing Science*, vol. 39, No. 1 (17 August 2010).
- Jan Berting, “Technological Impact on Human Rights: Models of Development, Science and Technology, and Human Rights”, in *The Impact of Technology on Human Rights: Global Case-Studies*, (United Nations University Press, Tokyo, 1993).
- Jan H Kietzmann and others, “Social media? Get serious! Understanding the functional building blocks of social media”, in *Business Horizons*, vol. 54, No. 3, (May-June 2011).
- Jason Koebler, “The New MacBook Pros Mark the End of Upgradeable Apple Computers”, in *Motherboard Vice*, (1 November 2016), Available from: <https://motherboard.vice.com/read/new-macbook-pros-mark-the-end-of-upgradeable-apple-computers>.
- Jim Gerrie, “Was Foucault a Philosopher of Technology?”, in *Charlottesville: Techné: Research in Philosophy and Technology*, vol. 7, no. 2 (Winter 2003).

- John C. Turner and others, “Self and Collective: Cognition and Social Context”, in *Personality and Social Psychology Bulletin*, vol. 20, no. 5, (October 1994).
- Justin Worland, “How Activists Are Using Facebook Check-In to Help Dakota Access Pipeline Protesters”, in *TIME*, (31 October 2016), Available from: <http://time.com/4551866/facebook-dakota-access-pipeline-check-in/>.
- Laura Robinson, “The cyberself: the self-ing project goes online, symbolic interaction in the digital age”, in *New Media & Society*, vol. 9, no. 1 (February 2007).
- Laura Sydell, “Can Computer Programs Be Racist And Sexist?”, in *NPR*, (15 March 2016), Available from: <http://www.npr.org/sections/alltechconsidered/2016/03/15/470422089/can-computer-programs-be-racist-and-sexist>.
- Manuel Castells, *The Internet Galaxy* (New York: Oxford University Press, 2001).
- Manuel Castells, *The Rise of the Network Society*, (Oxford: Blackwell Publishers Ltd., 1996).
- Muhammad Imran and others, “Processing Social Media Messages in Mass Emergency: A Survey.” in *ACM Computer Surveys*. vol. 47, no. 4, (July 2015), pp.1-38.
- Robert Cialdini, “Harnessing the science of persuasion”, in *Harvard Business Review*, vol. 79, no. 9, (October 2001).
- Sam Sanders, “Google’s New Search Algorithm Stokes Fears Of ‘Mobilegeddon’ ”, in *NPR*. (21 April 2015), Available from: <http://www.npr.org/sections/alltechconsidered/2015/04/21/401269739/googles-new-search-algorithm-stokes-fears-of-mobilegeddon>.
- Statista, Global Internet penetration rate as of September 2016, by region. Available from <http://www.statista.com/statistics/269329/penetration-rate-of-the-Internet-by-region/>.
- Statista, Mobile Phone Internet user Penetration Worldwide from 2014 to 2019, Available from <http://www.statista.com/statistics/284202/mobile-phone-Internet-user-penetration-worldwide/>.
- Statista, Number of Internet users worldwide from 2005 to 2016 (in millions). Available from <http://www.statista.com/statistics/273018/number-of-Internet-users-worldwide/>.
- Statista, Social Network Penetration Rate as of January 2016, by region. Available from <http://www.statista.com/statistics/269615/social-network-penetration-by-region/>.

Sunny Freeman, “‘Uberization’ Of Everything Is Happening, But Not Every ‘Uber’ Will Succeed.”, in *The Huffington Post*. (1 April 2015), Available from: http://www.huffingtonpost.ca/2015/04/01/uberization-uber-of-everything_n_6971752.html.

Zizi Papacharissi, “The Presentation of Self in Virtual Life: Characteristics of Personal Home Pages”, in *Journalism & Mass Communication Quarterly*, vol. 79, no. 3, (Autumn 2002).

Zizi Papacharissi, “We Have Always Been Social”, in *Social Media + Society*, vol. 1, No. 1 (April-June 2015).

Social Development and Technology

Las plataformas digitales de acceso a la información pública como mecanismos de visibilidad y prevención de la violencia hacia las personas LGBTI en las Américas

Juan Pablo Delgado Miranda ¹

Resumen

Ante la ausencia de mecanismos oficiales que permitan dilucidar la situación que afecta a las personas LGBTI en las Américas, el presente artículo propone situar a las plataformas digitales de acceso a la información pública como herramientas de visibilidad y prevención de la violencia hacia las personas LGBTI en el continente. En primer lugar se exponen las obligaciones a cargo de los Estados en relación al derecho al acceso a la información, destacando la obligación de producir la información necesaria para el cumplimiento de sus deberes.² En este sentido la Comisión Interamericana de Derechos Humanos ha señalado que establecer mecanismos de recolección de datos resulta fundamental para analizar el alcance y las tendencias de los diferentes tipos de violencia a la que personas de la comunidad LGBTI están expuestas.³ En la segunda parte se analiza el rol de la Alianza por los Gobiernos Abiertos, su responsabilidad en la promoción de creación de portales de acceso a la información y la importancia que le ha otorgado a estas acciones en el marco de la implementación de la Agenda 2030 para el Desarrollo Sustentable, particularmente para el cumplimiento del Objetivo 16. Por último, se aborda la utilidad que las plataformas de acceso tienen en relación con la protección de los derechos de las personas LGBTI, en su carácter potencial de ser mecanismos de presión hacia los Estados con respecto a sus obligaciones de producción de información y de prevención de violencia y discriminación.

Palabras clave: Acceso a la información, recolección de datos, plataformas digitales, violencia, personas LGBTI.

1 Director General, Amicus DH, A.C.

2 CIDH, Relatoría Especial para la Libertad de Expresión, El derecho de acceso a la información pública en las Américas: Estándares interamericanos y comparación de marcos legales, documento OEA/Ser.L/V/II CIDH/RELE/INF.7/12, 30 de Diciembre de 2011. Disponible en: <http://www.oas.org/es/cidh/expresion/docs/publicaciones/EI%20acceso%20a%20la%20informacion%20en%20las%20Americas%202012%2005%2015.pdf>, párr. 285.

3 CIDH, Violencia contra Personas Lesbianas, Gays, Bisexuales, Trans e Intersex en América, documento OEA/Ser.L/V/II.rev.1 Doc. 36, 12 de Noviembre de 2015. Disponible en: <http://www.oas.org/es/cidh/informes/pdfs/ViolenciaPersonasLGBTI.pdf>, párr. 391.

I. Introducción

De acuerdo a la CIDH las personas Lesbianas, Gays, Bisexuales, Trans e Intersex (en adelante LGBTI) en América sufren diversas formas de discriminación y violencia. De hecho, de acuerdo con el Registro de Violencia elaborado por la propia Comisión, entre enero de 2013 y marzo de 2014, se documentaron un total de 770 actos de violencia cometidos en contra de personas LGBTI en los Estados Americanos, y de los cuales 594 fueron homicidios.⁴ Sin embargo, a decir del más reciente informe de la propia Comisión, las estadísticas disponibles no reflejan la verdadera dimensión de la violencia que enfrentan las personas LGBTI en el continente.⁵

En este marco de violencia generalizada en contra de las persona LGBTI, en el presente artículo propongo en un primer momento, resaltar la relevancia que tiene el derecho al acceso a la información en el marco de la visibilización y prevención de la violencia a la que estas personas están expuestas, particularmente en relación a la obligación estatal de producir y captar información.

Acto seguido, analizaré el rol activo que ha jugado la Alianza por los Gobiernos Abiertos en la promoción del derecho al acceso a la información y las plataformas de acceso a la información como mecanismos que posibilitan el optimizar la disponibilidad y la generación de información pública. También analizaré su relación con el Objetivo 16 de la Agenda 2030 para el Desarrollo Sostenible, que es el objetivo dedicado a la promoción de la creación de sociedades pacíficas e inclusivas, facilitar el acceso a la justicia y crear instituciones eficaces, responsables e inclusivas a todos los niveles.

Por último me referiré a la utilidad que tienen las plataformas de acceso en relación a los derechos de las personas LGBTI, en su carácter potencial de ser mecanismos de presión hacia los Estados con respecto a sus obligaciones de producción de información, prevención de violencia y discriminación, así como de atención especial y prioritaria a este grupo vulnerado.

II. El Derecho de Acceso a la Información

A. Antecedentes históricos

Existen evidencias dentro de diversos instrumentos internacionales de que el derecho al acceso a la información (en adelante “DAI”) es un derecho que ha sido contemplado desde mediados del siglo pasado. Sin embargo, cabe señalar que actualmente su amplio contenido es el resultado de un desarrollo

4 Idem, párr. 2.

5 Idem, párr. 97.

histórico-jurídico a cargo de organismos internacionales que se han preocupado por elevarlo al rango de derecho humano y de darle un alcance jurídico más importante.

En este orden de ideas, la creación de las Relatorías sobre la Libertad de Expresión en los diferentes sistemas protectores de derechos humanos (Naciones Unidas en 1993, Comisión Interamericana en 1997, Organización para la Seguridad y la Cooperación en Europa en 1997 y Comisión Africana en 2004), puede ser considerado como uno de los pasos más remarcables. Dichos organismos se han encargado de la emisión de veinticinco declaraciones conjuntas (1999-2016) que, entre otros, han logrado ubicar el DAI dentro de las prerrogativas contenidas en el marco de la libertad de expresión.

A su vez, es de señalar que el Sistema Interamericano de Derechos Humanos ha cobrado especial relevancia en el tema. Tras la emisión de la sentencia en el Caso Claude Reyes y otros vs. Chile (2006), la Corte Interamericana de Derechos Humanos (en lo sucesivo “Corte IDH”) se convirtió en el primer Tribunal internacional en reconocer el acceso a la información como un derecho humano.

Es a partir de la emisión de la mencionada sentencia, que la actividad concerniente a este tema por parte de los organismos protectores de los derechos humanos de la OEA, se ha intensificado, traducándose en importantes informes de la Relatoría para la Libertad de Expresión de la CIDH, la creación de una Ley Modelo de Acceso a la Información para América Latina y su respectiva Guía de Implementación (2010), la emisión de nuevas sentencias de la Corte Interamericana, así como la adopción del Programa Interamericano sobre Acceso a la Información Pública.⁶ Este importante esfuerzo, ha derivado en la promulgación de 22 leyes de acceso a la información en el continente, incluyendo a Colombia y Paraguay quienes sancionaron sus respectivas leyes en 2015.

B. Marco jurídico del Derecho al Acceso a la Información

La libertad de expresión es un derecho humano garantizado en el artículo 13 de la Convención Americana sobre Derechos Humanos (CADH); que establece el derecho de toda persona a la libertad de pensamiento y de expresión, así como la obligación positiva de los Estados de permitir acceder a la información que se encuentra en su poder.⁷

6 Organización de Estados Americanos, Asamblea General, documento AG/RES. 2885 (XLVI-O/16), 14 de Junio de 2016.

7 Corte IDH, Caso Claude Reyes y otros Vs. Chile. Sentencia de 19 de Septiembre de 2006. Serie C No. 151, párr. 58 a) y b).

Según lo que ha establecido la Corte IDH, la libertad de expresión se caracteriza por ser un derecho con dos dimensiones. Una individual, consistente en el derecho de cada persona a expresar los propios pensamientos, ideas e informaciones; y una colectiva, que abarca el derecho de la sociedad a procurar y recibir cualquier información, lo que incluye, el derecho de acceso a la información.⁸

Así, el DAI es una herramienta fundamental para el control ciudadano del funcionamiento del Estado y la gestión pública⁹ así como también un instrumento que permite a la ciudadanía el ejercicio informado de sus derechos; ya que sólo a través de una adecuada implementación del DAI, las personas pueden saber con exactitud cuáles son sus derechos y qué mecanismos existen para protegerlos.¹⁰

1. Principios rectores del Derecho de Acceso a la Información

De acuerdo a los estándares internacionales existentes. Los Estados deben regirse por dos principios fundamentales para garantizar el ejercicio pleno del DAI: el principio de máxima divulgación y el principio de buena fe.

a) Principio de máxima divulgación

El Comité Jurídico Interamericano ha establecido que, en principio, toda la información en poder del Estado es accesible, por lo que los órganos públicos únicamente podrán limitar el acceso bajo un régimen estricto de excepciones.¹¹ Dicha situación genera seguridad jurídica en el ejercicio del DAI porque evita la actuación discrecional y arbitraria de quienes actúan en nombre del estado.

Adicionalmente, en el supuesto de que se presentara un conflicto de normas regulando el DAI, la ley de acceso a la información deberá prevalecer sobre cualquier otra legislación.¹² Esta obligación contribuye con la promoción

8 Corte IDH, Caso Ricardo Canese Vs. Paraguay, Sentencia de 31 de Agosto de 2004. Serie C No. 111, párr. 77.

9 Idem, párr. 86.

10 CIDH, Relatoría Especial para la Libertad de Expresión, El Derecho de Acceso a la Información en el Marco Jurídico Interamericano, documento OEA/Ser.L/V/II CIDH/RELE/INF.1/09, 30 de Diciembre de 2009. Disponible en: <http://www.oas.org/es/cidh/expresion/docs/publicaciones/ACCESO%20A%20LA%20INFORMACION%20FINAL%20CON%20PORTADA.pdf>, párr. 5.

11 Comité Jurídico Interamericano, Principios sobre Derecho de Acceso a la Información, documento OEA/Ser. Q CJI/RES. 147 (LXXIII-O/08), 7 de Agosto de 2008. Disponible en: http://www.oas.org/cji/CJI-RES_147_LXXIII-O-08.pdf, Numeral 1.

12 Relator Especial de las Naciones Unidas para la Libertad de Opinión y Expresión, Representante de la Organización para la Seguridad y Cooperación en Europa para la Libertad de los Medios de Comunicación y Relator Especial de la OEA para la Libertad de Expresión, Declaración Conjunta de los Relatores para la Libertad de Expresión, 6 de Diciembre de 2004. Disponible en: <http://www.oas.org/es/cidh/expresion/showarticle.asp?artID=319&IID=2>.

del establecimiento de leyes que fijen estándares claros sobre el DAI en las legislaciones nacionales y que fomenta que su interpretación resulte favorable al derecho de acceso.¹³

b) Principio de buena fe

Este principio requiere que los funcionarios públicos interpreten la ley de manera que sirva para cumplir los fines últimos del derecho. De esta forma, los representantes del estado están obligados no sólo a la estricta aplicación de la mencionada prerrogativa, sino también a brindar los medios de asistencia necesarios para los solicitantes, a promover una cultura de transparencia, a coadyuvar en la tarea de transparentar la gestión pública y a actuar con diligencia, profesionalidad y lealtad institucional.¹⁴

2. Contenido y alcance del Derecho de Acceso a la Información

Como en toda relación jurídica, en el marco del DAI existe un sujeto activo y un sujeto pasivo, esto es, un titular del derecho legitimado para exigirlo y un sujeto obligado constreñido a cumplir con lo establecido por la norma. Respecto al DAI, el artículo 13 de la CADH, establece que se trata de un derecho humano universal, por lo que toda persona tiene derecho a solicitarlo. Bajo este criterio, se ha precisado que no es necesario acreditar un interés directo ni una afectación personal para obtener la información que se encuentra en poder del Estado. E incluso, la persona que accede a dicha información, está legitimada para divulgarla de forma tal que circule en la sociedad para que ésta pueda conocerla y valorarla.¹⁵

Ahora bien, en cuanto al sujeto obligado en la relación jurídica en cuestión, el DAI genera obligaciones para todas las autoridades públicas. No obstante, no es exclusivo para ellos ya que este derecho también vincula a todos aquellos sujetos que cumplen funciones públicas delegadas, concesionadas o subrogadas por el Estado en lo concerniente al manejo de los recursos públicos, la satisfacción de los servicios a su cargo y el cumplimiento de las funciones públicas mencionadas.

3. Obligaciones impuestas al Estado por el Derecho de Acceso a la Información

Resulta entonces conveniente enunciar aquellas obligaciones impuestas al Estado por el DAI, y describir aquellas que resultan relevantes con el objeto del presente trabajo.

13 Corte IDH, *Claude Reyes y otros Vs. Chile*, Supra nota 7, párr. 58 d.

14 CIDH, *El Derecho de Acceso a la Información...* Supra nota 10, párr. 15.

15 Corte IDH, *Caso Claude Reyes y otros Vs. Chile*, Supra nota 7, párr. 77.

a) Obligación de contar con un recurso que permita la satisfacción del derecho de acceso a la información pública

La CIDH ha considerado como necesaria dentro del orden jurídico de los países, la creación de recursos efectivos e idóneos de carácter administrativo que puedan ser utilizados por todas las personas en ejercicio de su derecho.¹⁶

Tal recurso debe contar con ciertas características específicas, a saber: ser sencillo y de fácil acceso; ser gratuito o de bajo costo; ser decidido en un plazo razonable, corto y previamente establecido para suministrar la información requerida y que pueda ser tramitado oralmente en casos en que la tramitación escrita resulte imposible. De igual forma deberán existir mecanismos de asesoramiento al solicitante, las normas deben prever la obligación de fundar y motivar la respuesta negativa en los casos en que la autoridad no pueda facilitar la información solicitada; y, ante la posibilidad de la mencionada negativa, deberá existir un mecanismo de impugnación ante un órgano superior de carácter judicial.¹⁷

Adicionalmente, los Estados deberán crear un recurso judicial que permita determinar si se produjo una vulneración al DAI y, en el caso de que se encontrase una violación, deberá establecer el mecanismo por medio del cual se ordenará al órgano correspondiente la entrega de la información solicitada. En estos casos, los recursos deberán ser sencillos y rápidos, pues la celeridad en la entrega de información suele ser indispensable para el logro de los fines últimos que este derecho tiene aparejados.¹⁸

b) Obligación de responder a las solicitudes que sean formuladas

Al estar amparado el derecho de las personas a acceder a la información en poder del Estado en los diversos instrumentos internacionales, la obligación correlativa se traduce en el deber positivo de suministrar de forma oportuna, completa y accesible las informaciones que sean solicitadas o en su defecto, aportar en un plazo razonable las razones legítimas que impiden el acceso.¹⁹

c) Obligación de transparencia activa y creación de una cultura de transparencia

A través de la Declaración Conjunta de 2004, la ONU, la OEA y la OSCE, por medio de sus respectivos Relatores sobre la libertad de expresión, han

16 CIDH, *El Derecho de Acceso a la Información...* Supra nota 10, párr. 205.

17 CIDH, Relatoría Especial para la Libertad de Expresión, *Estudio Especial sobre Derecho de Acceso a la Información*, (Washington, D.C., 2006), págs. 41 y 42.

18 Idem, párrs. 116-139.

19 Corte IDH, Caso Claude Reyes y otros Vs. Chile, Supra nota 7, párr. 77.

precisado que las autoridades públicas tienen la obligación de publicar cualquier información que sea de interés público.²⁰

En este sentido la CIDH, ha indicado que el Estado tiene la obligación de suministrar la máxima cantidad de información sobre la estructura, funciones y presupuestos de operación e inversión estatales; la oferta de servicios públicos, beneficios, subsidios y concesiones; y los procedimientos por medio de los cuales se han de interponer quejas o consultas. El carácter de dicha información, debe ser completa, comprensible, con lenguaje accesible y periódicamente actualizada.²¹

Adicionalmente, tal como el principio de buena fe lo dicta, el Estado tiene la obligación de promover una verdadera cultura de transparencia entre población.²² Lo que implica la implementación de campañas para divulgar la existencia y los mecanismos de ejercitar el DAI.

d) Obligación de producir o capturar información

Como explicaré más adelante, esta obligación cobra especial relevancia en virtud de las obligaciones internacionales de producir información vinculada al ejercicio de derechos de sectores vulnerables, excluidos o discriminados. A manera de ejemplo, la CIDH ha establecido que

“la producción de información debidamente desagregada, a efectos de determinar sectores desaventajados o postergados en el ejercicio de sus derechos, desde esta perspectiva, no es sólo un medio para garantizar la efectividad de una política pública, sino una obligación indispensable para que el Estado pueda cumplir con su deber de brindar a estos sectores atención especial y prioritaria”.²³

e) Obligación de implementación adecuada las normas en materia de acceso a la información

El Estado debe tomar las acciones que permitan la adecuada implementación de las normas que garantizan el ejercicio del DAI. Entre ellas deben: asignar el presupuesto necesario para poder satisfacer las demandas que el derecho de acceso generará, adoptar políticas y prácticas entre las autoridades públicas que

20 Relator Especial de las Naciones Unidas para la Libertad de Opinión y Expresión, *Declaración Conjunta...* Supra nota 12.

21 CIDH, *El derecho de acceso a la información pública...* Supra nota 2, párr. 261.

22 CIDH, *Estudio Especial...* Supra nota 17, párr. 96.

23 CIDH, Lineamientos para la Elaboración de Indicadores de Progreso en Materia de Derechos Económicos, Sociales y Culturales, documento OAS/Ser.L/V/II.132. Doc. 14, 19 de Julio de 2008. Disponible en: <http://www.cidh.oas.org/pdf%20files/Lineamientos%20final.pdf>, párr. 58.

permitan el adecuado manejo y conservación de la información, y proceder a la capacitación de los funcionarios de forma que conozcan la normativa que rige a este derecho y puedan atender de manera diligente las solicitudes que se les planteen.²⁴

f) Obligación de adecuar el ordenamiento jurídico a las exigencias del derecho de acceso a la información

Como última obligación y en estrecha relación con lo estipulado todas las obligaciones anteriores, los Estados deberán implementar en su ordenamiento jurídico interno, los estándares internacionales que sean desarrollados al respecto del DAI.²⁵

C. La obligación estatal de producir información y las personas LGBTI

La existencia de información estadística debidamente desagregada permite visibilizar la situación que guardan determinados grupos y/o poblaciones; por eso el establecimiento de mecanismos adecuados para la recaudación de datos debe ser una estrategia estatal que facilite el cumplimiento del deber de prevenir la violencia en contra de personas o grupos particularmente vulnerables a sufrir ataques a su integridad, tal y como es el caso de las personas LGBTI.²⁶

Desde el año 2013 la Asamblea General de la OEA ha instado a los Estados Americanos a producir información estadística sobre la violencia basada en la orientación sexual y la identidad de género, con miras a desarrollar políticas públicas que protejan los derechos humanos de las personas LGBTI. Al respecto, la CIDH ha subrayado la crucial importancia de que los mecanismos de recolección de datos incluyan estadísticas desagregadas por factores tales como la raza y la etnia; que se sistematice información en varios sectores, desde la policía y el sistema de administración de justicia, hasta los sectores educativos, laboral y de salud; y que la información sea recolectada de manera estandarizada tanto a nivel nacional, como estadual y distrital, de forma que los datos de las distintas regiones puedan ser comparados y agregados en aras de revelar tendencias a nivel nacional.²⁷

No obstante, en recientes informes se ha encontrado que los mecanismos de recolección de datos en los países de la OEA son muy limitados. Clara muestra de lo anterior, es el reciente ejercicio de monitoreo de asesinatos y actos de

24 CIDH, *El derecho de acceso a la información pública...* Supra nota 2, párrs. 313-315

25 CIDH, *El derecho de acceso a la información...* Supra nota 10, párr. 43.

26 CIDH. *Violencia contra Personas LGBTI...* Supra nota 3, párr. 391.

27 Idem, párrs. 392, 402.

violencia contra personas LGBTI realizado por la CIDH durante quince meses, y que determinó que las estadísticas oficiales eran insuficientes. De hecho la Comisión tuvo que recurrir a fuentes complementarias de información tales como la cobertura periodística en medios de comunicación, informes de organizaciones de la sociedad civil y otras fuentes de monitoreo para obtener los datos requeridos. Este esfuerzo de monitoreo produjo un Registro de Violencia que, sin ser exhaustivo, reveló la existencia de violencia generalizada contra personas LGBTI en la región.²⁸

Entre los vicios encontrados dentro de la práctica de los Estados se encuentran: la insuficiente capacitación de agentes de policía, fiscales y autoridades forenses, quienes confunden o incluso desconocen nociones mínimas relacionadas con los conceptos de orientación sexual e identidad de género; la ausencia de registro y denuncia de actos violentos; el temor a la extorsión, represalias o violación de la confidencialidad por parte de las víctimas y sus familiares; categorización inexacta o prejuiciada de los casos, derivados en errores de identificación, encubrimiento y registros incompletos; así como la falta de investigación, enjuiciamiento y castigo por los actos violentos denunciados.²⁹

Una vez entendida la función que tiene el DAI en materia de visibilización y prevención de la violencia perpetuada en contra de las personas LGBTI, en la siguiente sección destacaré el rol que la Alianza por los Gobiernos Abiertos ha asumido como promotora del DAI, a través del fomento de la creación de portales digitales de acceso a la información y su relación con el cumplimiento de la Agenda 2030 para el Desarrollo Sostenible

III. La Alianza por los Gobiernos Abiertos y su rol en la garantía del derecho a la información

Villoria Mendieta señala que el concepto de gobierno abierto ha sido utilizado desde los años ochenta; sin embargo, luego de la toma de posesión de Barack Obama como Presidente de los Estados Unidos y la firma del Memorándum Ejecutivo por la Transparencia y el Gobierno Abierto, fue cuando este tema adquirió mayor relevancia.³⁰ Así pues la Iniciativa por un Gobierno Abierto del Gobierno Estadounidense (“OGI” por sus siglas en inglés), se basó en tres ideas principales: la transparencia promueve la rendición de cuentas; la participación

28 Idem, párr. 98.

29 Idem, párr. 101.

30 Manuel Villoria Mendieta, “El gobierno abierto como subsistema de políticas: Una evaluación desde el institucionalismo discursivo”, en *La Promesa del Gobierno Abierto*, Andrés Hoffman y otros, eds. (México, ITAIP-INFODE, 2013), pág. 69.

mejora la eficacia gubernamental y la calidad de la toma de decisiones; y la colaboración incorpora a los ciudadanos a la acción de gobierno.³¹

Aunada a la OGI, el concepto de gobierno abierto tomó fortaleza a raíz de su adopción en las administraciones públicas en Gran Bretaña, México y Brasil, países que en conjunto con los Estados Unidos, se encargaron de impulsar la creación de la Alianza por los Gobiernos Abiertos (AGA). De esta forma, en el marco de la 66ª Asamblea General de las Naciones Unidas, Barack Obama y Dilma Rousseff, presentaron las bases de la AGA, como una iniciativa multilateral e internacional basada en los principios de confianza pública, sistema de transparencia y participación de la sociedad con el gobierno.³²

De acuerdo al Informe de Actividades del año 2015 69 países forman parte de la Alianza, de los cuales 15 son estados americanos, a saber: Argentina, Brasil, Canadá, Chile, Colombia, Costa Rica, El Salvador, Estados Unidos, Guatemala, Honduras, México, Panamá, Paraguay, Perú y Trinidad y Tobago.³³

A. La AGA y las plataformas de acceso a la información

Todo país que decida unirse a la AGA debe suscribir la Declaración de Gobierno Abierto. Este instrumento crea la obligación de “fomentar una cultura de gobierno abierto que empodere y brinde resultados a los ciudadanos, y promueva los ideales de gobierno abierto y participativo del Siglo XXI”³⁴ y destaca la importancia de cuatro acciones principales: aumentar la disponibilidad de información sobre las actividades gubernamentales, apoyar la participación ciudadana, aplicar los más altos estándares de integridad profesional en todos los gobiernos y aumentar el acceso a las nuevas tecnologías para la apertura y la rendición de cuentas.

Adicionalmente, cada Estado debe desarrollar un Plan de Acción en el que se incluyan políticas específicas que promuevan la participación ciudadana, la transparencia fiscal, el acceso a la información, datos abiertos, entre otros. Hasta la fecha, se han desarrollado 110 Planes de Acción, en el entendido de que países como Filipinas y los Estados Unidos ya han presentado su Tercer Plan de Acción.

31 Idem, pág., 70.

32 Jacqueline Mariscal, “Del gobierno abierto a la transparencia proactiva: la experiencia del IFAI en 2011”, en *La Promesa del Gobierno Abierto*, Andrés Hoffman y otros, eds. (México, ITAIP-INFODF, 2013), pág. 28.

33 Open Government Partnership, Informe Anual 2015. Disponible en: <http://www.opengovpartnership.org/sites/default/files/OGPreport2015.pdf>.

34 Open Government Partnership, Declaración de Gobierno Abierto, Septiembre 2011. Disponible en: <http://www.opengovpartnership.org/es/acerca-de/declaración-de-gobierno-abierto>.

Para auxiliar a los Estados en la elaboración de sus Planes de Acción, la organización *Transparency and Accountability Initiative* desarrolló una Guía para los Gobiernos Abiertos dividida en áreas o temáticas transversales y específicas sobre la que los gobiernos deben trabajar. Es de destacar que el DAI es una de las áreas transversales incluidas en esta guía. Así, en la Guía para los Gobiernos Abiertos, se señala que la importancia de la utilización de las TICS con respecto al DAI radica en la posibilidad de potenciar la publicidad de la información, reduciendo carga de trabajo de los organismos públicos y ampliando la posibilidad de acceder a la información pública hacia cualquier persona. Por ese motivo, las organizaciones *Access Info* y *Center for Law and Democracy* catalogan como compromiso innovador, el empleo de las tecnologías de la información y la comunicación (TICS) para mejorar el acceso a la información.

Entre las acciones sugeridas se encuentra la utilización de las TICS para la creación de portales o plataformas digitales como puntos centrales para acceder a la información pública. El desarrollo de estas tecnologías significa un avance fundamental en la implementación del principio de máxima publicidad, y constituye una herramienta adecuada para dar cumplimiento a las obligaciones estado que fueron explicadas en la sección B.3 de este artículo.

Así pues, como se verá más adelante, la existencia de portales de acceso a la información pública representa una herramienta invaluable para las personas LGBTI, pues les brinda la posibilidad de presionar a las autoridades estatales a cumplir con su obligación de producir información relacionada con la satisfacción de sus derechos sociales y la visibilización de los índices de violencia y discriminación a los que están expuestas. Lo anterior, en función de que el derecho de acceso a la información no se satisface plenamente con una respuesta estatal en la que se declara que la información solicitada es inexistente, sino en el momento en que dicha información es producida en aras de cumplir con su deber de brindar atención especial y prioritaria a los sectores desaventajados.³⁵

B. La AGA, el acceso a la información y la Agenda 2030 para el Desarrollo Sostenible

En septiembre de 2015, en el marco de la Asamblea General de las Naciones Unidas, miembros del Comité Directivo de la Alianza por los Gobiernos Abiertos firmaron la Declaración Conjunta de Gobiernos Abiertos para la Implementación de la Agenda 2030 por el Desarrollo Sostenible. Desde entonces, 47 países, entre ellos 13 pertenecientes a la OEA, han firmado la declaración que compromete a

35 Corte IDH, Caso Gomes Lund y otros (Guerrilha do Araguaia) Vs. Brasil, Sentencia de 24 de Noviembre de 2010, Serie C No. 219, párr. 292.

los gobiernos a utilizar a la AGA para promover una implementación transparente, responsable, participativa y tecnológica de la Agenda 2030.³⁶

Entre los cinco compromisos que aborda la Declaración Conjunta, destacan los puntos 1 y 2 pues resaltan la importancia que tiene promover un estado de derecho mediante la transparencia, apertura, rendición de cuentas, acceso a la justicia e instituciones efectivas e incluyentes. Estos compromisos promocionan el acceso público a información y datos abiertos vigentes y desagregados sobre actividades gubernamentales relativas a la implementación y financiamiento de la Agenda.³⁷

Adicionalmente la AGA desarrolló una Edición Especial de la Guía para los Gobiernos Abiertos en el marco de la Agenda 2030, en la que se identifican puntos de coyuntura y por medio de los cuales los gobiernos que apliquen una “perspectiva de gobierno abierto” pueden conseguir avanzar en el cumplimiento de los 17 objetivos.

Particularmente, el DAI deber ser considerado en el marco del Objetivo 16 de la Agenda 2030, denominado “Paz y Justicia”, porque el aumento en la producción y disponibilidad de información de las actividades gubernamentales tiene directas repercusiones en la prestación de servicios, y que como ha sido establecido, cobra especial relevancia al momento de dilucidar la situación que viven las personas LGBTI, en relación al acceso real que tienen a sus derechos y a posibles manifestaciones de discriminación y violencia a la que están sujetas en las sociedades en las que se desenvuelven. De hecho, el Grupo de Trabajo sobre Inclusión LGBTI en la Agenda 2030 en 2016, señaló la importancia que tiene “responder a la invisibilización de las personas LGBTI, conociendo sus realidades y recabando evidencia de las situaciones de desigualdad, estigma, discriminación, violencia, a las cuales se ven expuestas, impactando en sus trayectorias educativas, sociales, laborales y afectivo-sexuales”³⁸ para lograr las metas establecidas en el Objetivo 16 de la agenda.

36 *Open Government Partnership*, Declaración Conjunta de Gobierno Abierto para la Agenda 2030. Disponible en: http://www.opengovpartnership.org/sites/default/files/attachments/OGP_declaration.pdf.

37 Idem, Compromiso 2.

38 Conferencia Mundial sobre Derechos Humanos de las personas LGBTI, Nota Conceptual sobre el Grupo de Trabajo “Inclusión LGBTI en la Agenda 2030 para el Desarrollo Sostenible”. Disponible en: [http://www.lgbtimontevideo2016.org/admin/files/lgbtimontevideo2016/upload/files/GRUPO%20DE%20TRABAJO%20ROU.%20NOTA%20CONCEPTUAL%20FINAL%20\(15julio\)\(3\).pdf](http://www.lgbtimontevideo2016.org/admin/files/lgbtimontevideo2016/upload/files/GRUPO%20DE%20TRABAJO%20ROU.%20NOTA%20CONCEPTUAL%20FINAL%20(15julio)(3).pdf).

IV. Las plataformas digitales de acceso a la información

En cumplimiento con la Guía para los Gobiernos Abiertos y como consecuencia de la adopción de leyes de acceso de información, en los últimos años se han desarrollado plataformas digitales que permiten a los usuarios presentar solicitudes de información en línea, optimizando el acceso a la información tanto ciudadanos como para servidores públicos.³⁹

En las Américas, México fue el primer país en desarrollar un portal de solicitudes de información: Infomex.⁴⁰ Desde 2003, comenzó a funcionar bajo el nombre de SISI (Sistema de Solicitudes de Información), y tras la entrada en vigor de la Ley de Transparencia y Acceso a la Información Pública en 2008 comenzó a llamarse Infomex. A México le han seguido otros países como Chile, que en 2013 lanzó el “Portal de Transparencia Chile”,⁴¹ y Brasil, por medio de “e-SIC”⁴² que empezó a funcionar el 2012, experiencias de referencia que han servido como ejemplo a implementar en el marco de la AGA.

A. La utilidad de las plataformas de acceso a la información y su relevancia como mecanismos de generación de información relacionada con las personas LGBTI

Hemos observado que la creación de plataformas de acceso constituye una acción clave en la construcción de gobiernos abiertos. Asimismo, el uso de las TICS tiene el potencial de incrementar el acceso a la información pública, e incluso favorecen la generación de nuevas informaciones que sean de utilidad para la optimización en la prestación de los servicios públicos, en especial para los sectores menos aventajados de la sociedad. Al respecto, Silvana Fumega, asegura que gran parte del éxito de estas iniciativas está determinado por el uso o la falta de uso de las plataformas por parte de las y los solicitantes de información.⁴³ Por lo tanto, el contar con herramientas de promoción para incrementar el uso de los portales de acceso a la información se convierte en una línea de acción necesaria a implementar.

Lo anterior, adquiere mayor relevancia para el caso de los grupos en situación de riesgo, como las personas LGBTI, puesto que como lo demuestran estudios

39 Silvana Fumega, *El uso de las Tecnologías de Información y Comunicación para la implementación de Leyes de Acceso a la Información Pública*, (Santiago, Chile, Consejo para la Transparencia, Septiembre 2014), pág. 3.

40 <https://www.infomex.org.mx/gobiernofederal/home.action>.

41 <https://www.portaltransparencia.cl/PortalPdT/>.

42 <http://esic.cgu.gov.br/sistema/site/index.html?ReturnUrl=%2fsistema>.

43 Silvana Fumega, *El uso de las Tecnologías ...* Supra nota. 39, pág. 16.

publicados por el Banco Mundial⁴⁴ y por la organización *UK Citizens Online Democracy*,⁴⁵ no son las personas pertenecientes a estos grupos quienes le dan uso a las plataformas regularmente, sino aquellas que podría considerarse se sitúan en una mejor posición social, particularmente los hombres con niveles educativos altos y con mejores ingresos que el resto de la población.⁴⁶ Mayormente, cuando se tiene la presunción de que en el uso de la tecnología para fines cívicos, la información que las personas más valoran y por lo tanto solicitan, es la que se encuentra directamente relacionada con su bienestar.⁴⁷

De esta forma, encontramos que la obligación de generar una cultura de transparencia guarda una relación especialmente estrecha con los grupos vulnerados, en virtud de que difícilmente será generada información con respecto a su situación si no es solicitada por ellos o por organizaciones de la sociedad civil que tengan por objeto la promoción y defensa de sus derechos. Consecuentemente, la promoción del derecho al acceso a la información y la capacitación en la utilización de las herramientas de acceso a las personas pertenecientes a grupos que viven en situación de riesgo, tendrá que ser una acción paralela en la optimización de las plataformas de acceso a la información pública.

Ergo, en relación a los derechos de las personas LGBTI, la propuesta anterior cobra vigencia de manera muy relevante en nuestro continente, pues como se ha dicho, la información pública relacionada a su atención y destinada a visibilizar situaciones de violencia y discriminación en torno a ellas es escasa. Por lo que el empoderamiento de las personas LGBTI en materia de acceso a la información a través de la utilización de las plataformas de información juega un rol fundamental en la generación de información pública relacionada con ellas como un mecanismo de presión hacia los Estados en relación a su obligación de cumplir con su deber de brindar a estos sectores atención especial y prioritaria.

Dicho escenario, cobraría aún mayor relevancia en el caso de la potencial réplica de las informaciones obtenidas por parte de grupos y organizaciones LGBTI a manera de denuncia y como herramienta de visibilidad, pues convertiría este

44 Renee Kuriyan, *Technologies for Transparency and Accountability: Implications for ICT Policy and Implementation*, (Washington, D.C., Open Development Technology Alliance, World Bank, 2011).

45 Tobias Escher, *Analysis of users and usage for UK Citizens Online Democracy*, (London, UK, UK Citizens Online Democracy, 2011). Disponible en: https://www.mysociety.org/files/2011/06/TheyWorkForYou_research_report-2011-Tobias-Escher1.pdf

46 Silvana Fumega, *El uso de las Tecnologías ...* Supra nota. 39, pág. 16.

47 David Sasaki, “Design Thinking. Sitegeist as a Civic Entry Drug”, 5 de Febrero de 2013. Disponible en: <http://davidsasaki.name/2013/02/design-thinking-sitegeist-as-a-civic-entry-drug/>.

ejercicio en un mecanismo de transparencia proactiva, en el entendido de que la generación de dicha información sería difundida, interpretada y criticada en foros más allá de los propios espacios gubernamentales. Situación que bien puede cobrar vigencia para cualquier otro grupo rezagado, en torno a los cuales típicamente la información pública no es desagregada, provocando su poca o nula visibilidad y perpetuando así situaciones de exclusión, discriminación y violencia.

V. Conclusión

La promulgación de leyes de acceso a la información pública como consecuencia de la evolución en el desarrollo del DAI, ha modificado las relaciones entre las personas y sus gobiernos. Así pues, la aparición de mecanismos vinculados al empleo de las TICS, como las plataformas digitales de acceso a la información, generan nuevos retos a los estados en el cumplimiento de sus obligaciones en aras de la construcción de gobiernos abiertos.

En el marco de la Agenda 2030 para el Desarrollo Sostenible, la utilización de las TICS guarda especial relevancia en la optimización del acceso a la información, considerado como fundamental para el cumplimiento del Objetivo 16 que recalca la importancia de promover sociedades pacíficas e inclusivas, facilitar el acceso a la justicia para todos y crear instituciones eficaces, responsables e inclusivas a todos los niveles. Por ello, las plataformas digitales adquieren el carácter de mecanismos de facilitación de la información pública que, a su vez, permiten la producción de nueva información que puede ser utilizada por los gobiernos en la optimización de la prestación de los servicios públicos y en consecuencia, en la mejora de las condiciones de vida de todas las personas.

Particularmente, al respecto de los grupos que viven en situación de riesgo, como las personas LGBTI, la utilización de las plataformas de acceso tiene el potencial de convertirse en herramientas de visibilidad y, en consecuencia, de reducción de las situaciones de desigualdad, discriminación y violencia a las que están expuestas en las sociedades en las que se desenvuelven. No obstante, el rol de los gobiernos mediante la promoción del DAI y la utilización de las plataformas es fundamental para lograr que los grupos más rezagados se conviertan en usuarios activos de dichos mecanismos.

Así, las personas LGBTI, grupo que permanece en una situación de riesgo latente en el continente americano, en función de la poca producción de información pública que se produce en torno a ellas, puede encontrar en las plataformas de acceso a la información de los Estados Americanos, un instrumento de denuncia, protesta y presión hacia sus gobiernos en aras de mejorar sus condiciones de vida en la región.

VI. Referencias

- CIDH, Lineamientos para la Elaboración de Indicadores de Progreso en Materia de Derechos Económicos, Sociales y Culturales, documento OAS/Ser.L/V/II.132. Doc. 14, 19 de Julio de 2008. Disponible en: <http://www.cidh.oas.org/pdf%20files/Lineamientos%20final.pdf>.
- CIDH, Relatoría Especial para la Libertad de Expresión, El Derecho de Acceso a la Información en el Marco Jurídico Interamericano, documento OEA/Ser.L/V/II CIDH/RELE/INF.1/09, 30 de Diciembre de 2009. Disponible en: <http://www.oas.org/es/cidh/expresion/docs/publicaciones/ACCESO%20A%20LA%20INFORMACION%20FINAL%20CON%20PORTADA.pdf>.
- CIDH, Relatoría Especial para la Libertad de Expresión, El derecho de acceso a la información pública en las Américas: Estándares interamericanos y comparación de marcos legales, documento OEA/Ser.L/V/II CIDH/RELE/INF.7/12, 30 de Diciembre de 2011. Disponible en: <http://www.oas.org/es/cidh/expresion/docs/publicaciones/El%20acceso%20a%20la%20informacion%20en%20las%20Americas%202012%2005%2015.pdf>.
- CIDH, Relatoría Especial para la Libertad de Expresión, *Estudio Especial sobre Derecho de Acceso a la Información*, (Washington, D.C., 2006).
- CIDH, Violencia contra Personas Lesbianas, Gays, Bisexuales, Trans e Intersex en América, documento OEA/Ser.L/V/II.rev.1 Doc. 36, 12 de Noviembre de 2015. Disponible en: <http://www.oas.org/es/cidh/informes/pdfs/ViolenciaPersonasLGBTI.pdf>.
- Comité Jurídico Interamericano, Principios sobre Derecho de Acceso a la Información, documento OEA/Ser. Q CJI/RES. 147 (LXXIII-O/08), 7 de Agosto de 2008. Disponible en: http://www.oas.org/cji/CJI-RES_147_LXXIII-O-08.pdf.
- Conferencia Mundial sobre Derechos Humanos de las personas LGBTI, Nota Conceptual sobre el Grupo de Trabajo “Inclusión LGBTI en la Agenda 2030 para el Desarrollo Sostenible”. Disponible en: [http://www.lgbtimontevideo2016.org/admin/files/lgbtimontevideo2016/upload/files/GRUPO%20DE%20TRABAJO%20ROU.%20NOTA%20CONCEPTUAL%20FINAL%20\(15julio\)\(3\).pdf](http://www.lgbtimontevideo2016.org/admin/files/lgbtimontevideo2016/upload/files/GRUPO%20DE%20TRABAJO%20ROU.%20NOTA%20CONCEPTUAL%20FINAL%20(15julio)(3).pdf).
- Corte IDH, Caso Claude Reyes y otros Vs. Chile. Sentencia de 19 de Septiembre de 2006. Serie C No. 151.
- Corte IDH, Caso Gomes Lund y otros (Guerrilha do Araguaia) Vs. Brasil, Sentencia de 24 de noviembre de 2010, Serie C No. 219.
- Corte IDH, Caso Ricardo Canese Vs. Paraguay, Sentencia de 31 de Agosto de 2004. Serie C No. 111.

- David Sasaki, “Design Thinking. Sitegeist as a Civic Entry Drug”, 5 de Febrero de 2013. Disponible en: <http://davidasaki.name/2013/02/design-thinking-sitegeist-as-a-civic-entry-drug/>.
- Jacqueline Mariscal, “Del gobierno abierto a la transparencia proactiva: la experiencia del IFAI en 2011”, en *La Promesa del Gobierno Abierto*, Andrés Hoffman y otros, eds. (México, ITAIP-INFODF, 2013).
- Manuel Villoria Mendieta, “El gobierno abierto como subsistema de políticas: Una evaluación desde el institucionalismo discursivo”, en *La Promesa del Gobierno Abierto*, Andrés Hoffman y otros, eds. (México, ITAIP-INFODF, 2013).
- Open Government Partnership, Declaración Conjunta de Gobierno Abierto para la Agenda 2030. Disponible en: http://www.opengovpartnership.org/sites/default/files/attachments/OGP_declaration.pdf.
- Open Government Partnership, Declaración de Gobierno Abierto, Septiembre 2011. Disponible en: <http://www.opengovpartnership.org/es/acerca-de/declaración-de-gobierno-abierto>.
- Open Government Partnership, Informe Anual 2015. Disponible en: <http://www.opengovpartnership.org/sites/default/files/OGPreport2015.pdf>.
- Organización de Estados Americanos, Asamblea General, documento AG/RES. 2885 (XLVI-O/16), 14 de Junio de 2016.
- Relator Especial de las Naciones Unidas para la Libertad de Opinión y Expresión, Representante de la Organización para la Seguridad y Cooperación en Europa para la Libertad de los Medios de Comunicación y Relator Especial de la OEA para la Libertad de Expresión, Declaración Conjunta de los Relatores para la Libertad de Expresión, 6 de Diciembre de 2004 Disponible en: <http://www.oas.org/es/cidh/expresion/showarticle.asp?artID=319&IID=2>.
- Renee Kuriyan, *Technologies for Transparency and Accountability: Implications for ICT Policy and Implementation*, (Washington, D.C., Open Development Technology Alliance, World Bank, 2011).
- Silvana Fumega, *El uso de las Tecnologías de Información y Comunicación para la implementación de Leyes de Acceso a la Información Pública*, (Santiago, Chile, Consejo para la Transparencia, Septiembre 2014).
- Tobias Escher, *Analysis of users and usage for UK Citizens Online Democracy*, (London, UK, UK Citizens Online Democracy, 2011). Disponible en: https://www.mysociety.org/files/2011/06/TheyWorkForYou_research_report-2011-Tobias-Escher1.pdf.

Emergent LGBTI Rights Documentation Policy and Practice in Africa

David Buchbinder ¹

Abstract

Social and legal exclusion of people who are Lesbian, Gay, Bisexual, Trans or Intersex (LGBTI) takes place across Sub-Saharan Africa in various forms. In the context of the Sustainable Development Goals, such human rights beg for an improved climate for sexual minorities. This paper takes stock of the role that traditional human rights documentation and advocacy has had in shaping African government policy and practice toward sexual minorities and concludes that the impact of such efforts on vulnerable communities, while important, has been isolated and limited in scope. Non-traditional policies and practices being implemented by African LGBTI rights organizations capable of targeting both state and non-state actors may have greater potential to impact both the social and political determinants of stigma and discrimination, particularly in regressive country contexts where government leaders may be actively hostile to LGBTI concerns. Such practices are often grounded in information and communications technologies (ICTs) that are well suited to conveying the lived experiences of marginalized groups, developing customized advocacy products targeting niche constituencies, and democratizing the documentation process by incorporating members of vulnerable communities in monitoring and documentation. In the context of efforts to promote inclusive access to HIV/AIDS access, care, and treatment for sexual minorities in three countries in southern Africa, this paper asserts that emergent policies and practices, as well as the ICT tools that undergird them, can broaden and deepen the impact of efforts to promote LGBTI rights in Africa, and thereby contribute in important ways to a social, cultural, and economic environment supportive of the SDGs.

Keywords: LGBTI, Human Rights Monitoring and Documentation, Capacity Building, HIV/AIDS, Human Rights Defenders (HRDs).

I. Introduction

Across the length and breadth of Sub-Saharan Africa, people who are Lesbian, Gay, Bisexual, Transgender, and Intersex (LGBTI) face bullying in schools,

¹ Project Director Human Rights Program at Benetech.

discrimination by health service providers, rejection by employers, stigma from family members—and arrest and incarceration due to national laws that criminalize same-sex relations. Such social and legal exclusions curtail not only their enjoyment of human rights and freedoms enshrined in international law, but also their full participation in the work force.

In the context of the struggle to protect and promote the human rights of LGBTI people in Sub-Saharan Africa, this paper:

1. Takes stock of a classic human rights documentation and advocacy paradigm that:
 - a) Targets government decision makers;
 - b) Is grounded in rigorous methodology;
 - c) Consists primarily of documented facts associated with human rights violations;
 - d) Must convey credibility to be effective;
 - e) Pursues outcomes related to changes in law, policy, and practice; and
 - f) Is expressed predominantly in written outputs.
2. Reviews an emergent human rights documentation and advocacy paradigm that:
 - a) Targets non-state in addition to state actors;
 - b) Is grounded in conventions of storytelling;
 - c) Consists primarily of documented narratives by survivors of human rights violations;
 - d) Must convey humanity to be effective;
 - e) Pursues outcomes related to changes to attitudes and opinion; and
 - f) Is expressed primarily in digital audio/visual outputs.
3. Considers ICTs that undergird emergent documentation frameworks.
4. Asserts that emergent documentation policies and practices can contribute to advocacy impact in ways that are supportive of the realization of the SDGs in Africa.

The discussion that follows draws upon a project to build the documentation and advocacy capacity of LGBTI² human rights organizations in Malawi, Uganda, Zambia, and Zimbabwe.³ Benetech, a technology non-profit based in Palo Alto, California, implemented the project in four phases across five years (2011 to 2016) with support from the US Department of State's Global Equality Fund (GEF).⁴ For the fourth and final project phase, Benetech co-implemented the project in consortium with Iranti-org, a lesbian and transgender media organization based in South Africa, and HIVOS South Africa, the African regional office of a Dutch development organization. The findings in this paper are drawn primarily from the fourth project phase, which focused on stigma and discrimination against sexual minorities in the context of HIV/AIDS treatment, care, and services.⁵

Capacity building efforts across all four phases of programming evolved in response to a central research question: How can human rights documentation and advocacy achieve a tangible impact on LGBTI communities, especially in regressive and autocratic states that may be actively hostile to sexual minority rights? This paper asserts that the promotion of social and political inclusion for LGBTI communities in Africa contributes to the 2030 Agenda for Sustainable Development across a range of development areas, including poverty, health and education, and gender equality.

II. Methodology

At Benetech the author designed and implemented capacity building activities during the third phase of programming, from 2014 to 2015, and oversaw project design, implementation, and management for the fourth phase of the project, from 2015 to 2016.

- 2 Terminology is contested, particularly in Africa, where acronyms such as LGBTI are associated with Western cultural imperialism. This paper follows usage in United Nations documents.
- 3 Programming covered digital security and data storage and management (Phases I and II) monitoring, documentation and reporting (Phase III), and advocacy (Phase IV). LGBTI rights organizations in Uganda participated in the first three phases of work but not the fourth.
- 4 The Global Equality Fund was launched in December 2011 to support civil society organizations and HRDs working to advance and protect LGBTI rights in over eighty countries. United States, Department of State, *Global Equality Fund*. Available from <http://www.state.gov/globalequality/>. Accessed 14 August 2016.
The first three project phases were funded by the State Department's Bureau of Democracy, Human Rights, and Labour (DRL), and the fourth phase by the US President's Emergency Plan for AIDS Relief (PEPFAR).
- 5 Phase IV partner organizations included Centre for the Development of People (CEDEP) and Centre for Human Rights and Rehabilitation (CHRR) in Malawi; Voice of the Voiceless (VOVO) and Sexual Rights Centre (SRC) in Zimbabwe; and Transbantu Association Zambia (TBZ) and Friends of Rainka (FoR) in Zambia.

The author conducted a total of seven capacity building visits to target countries over three years as part of this project, and maintained regular remote contact with project partners using their preferred media, which included Skype, WhatsApp, mobile phone, e-mail, and Facebook messenger. Notes from face-to-face meetings with project participants and call notes from remote project support were important sources of findings for this paper, but for the purposes of attribution, the author collected testimony and observations in separate interviews with the explicit advance consent of subjects. Subjects included executive directors, documentation officers, and field-based volunteers from NGOs participating in this project. Sources are quoted anonymously out of consideration for personal safety. Interviews were conducted in English. A review of relevant literature also contributed to the findings.

III. Framework

A. LGBTI Rights and the Sustainable Development Goals

Despite sustained and intensive lobbying by LGBTI activists, the 2030 Agenda for Sustainable Development makes no explicit mention of sexual orientation and gender identity and expression, a fact that has been attributed to opposition from members of the working group drafting the Sustainable Development Goals (SDGs) to the explicit mention of sexual orientation and gender identity in the final document.⁶

It should be uncontroversial to assert that the poor use of human capital reduces potential economic output, and mainstream economic development thought has recently begun to pay explicit attention to LGBTI communities. A World Bank study from 2014 shows that in India where same-sex relations are criminalized, as much as 1.7 per cent of annual GDP is lost due to homophobia.⁷ Writing in the *Washington Post*, World Bank President Jim Yong Kim made the connection between development and exclusion: “There is clear evidence that when societies enact laws that prevent productive people from fully participating in the workforce, economies suffer.”⁸

6 Barbara Crossette, “No Room for LGBT Rights in the New UN Development Goals,” *Pass-Blue*, 17 May 2015. Available from <http://www.passblue.com/2015/05/17/no-room-for-lgbt-rights-in-the-new-un-development-goals/>.

7 Lee Badgett, “The Economic Cost of Homophobia and the Exclusion of LGBT People: A Case Study of India”, Unpublished presentation by SOGI Sexual Minorities and Development and World Bank. Available from <http://www.worldbank.org/content/dam/Worldbank/document/SAR/economic-costs-homophobia-lgbt-exclusion-india.pdf>. (Accessed 2 November 2016).

8 Jim Yong Kim, “The high costs of institutional discrimination”, *Washington Post*, 27 February 2014. Available from https://www.washingtonpost.com/opinions/jim-yong-kim-the-high-costs-of-institutional-discrimination/2014/02/27/8cd37ad0-9fc5-11e3-b8d8-94577ff66b28_story.html?utm_term=.49869795509f.

The cumulative effects of intolerance negatively impact economies across multiple priority development areas.⁹ Two recent studies identified seven SDGs that are impacted by social exclusion of LGBTI communities: poverty (Goal 1); health (Goal 3); education (Goal 4); gender equality and women’s empowerment (Goal 5); inequality (Goal 10); safe, resilient and sustainable settlements (Goal 11); and justice and accountability (Goal 16).¹⁰

In the realm of health, specifically in the context of inclusive access to HIV/AIDS care, numerous studies demonstrate that homophobia, including verbal harassment, is associated with increased risk behavior for HIV.¹¹ One study found that a 2014 law that criminalized same-sex marriage in Nigeria could prevent gay men from openly discussing their sexuality with their health care providers, which in turn could prevent HIV-infected gay men from accessing life-saving care and treatment services.¹²

The global human rights movement, rooted as it is in the promotion and protection of fundamental rights for all, has a key role to play in addressing the social and political exclusion of LGBTI communities—and by extension, in the realization of the SDGs.¹³ Less immediately apparent is the most effective means of achieving those ends, especially in country contexts characterized by widespread intolerance and homophobia.

B. African Political and Cultural Context

LGBTI rights do not exist as such; human rights apply universally to all people without distinction as to sexual orientation, gender identity, or gender expression.

9 Susie Jolly et al, *Poverty and Sexuality: What are the Connections? Overview and Literature Review* (Stockholm, Swedish International Development Cooperation Agency, 2010). Available from <http://www.sxpolitics.org/wp-content/uploads/2011/05/sida-study-of-poverty-and-sexuality1.pdf>.

10 Andrew Park, *A Development Agenda for Sexual and Gender Minorities* (Los Angeles, The Williams Institute, 2016). Available from <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Development-Agenda-for-Sexual-and-Gender-Minorities.pdf>. See also Stonewall International, *The Sustainable Development Goals and LGBT Inclusion*, 28 January 2016. Available from https://www.stonewall.org.uk/sites/default/files/sdg-guide_2.pdf.

11 Shauna Stahlman and others, “The Prevalence of Sexual Behavior Stigma Affecting Gay Men and Other Men Who Have Sex with Men Across Sub-Saharan Africa and in the United States”, *Journal of Medical and Internet Research Public Health and Surveillance*, vol. 2, No. 2 (July 2016); and Heather Fay, Gift Trapence and others, “Stigma, Health Care Access, and HIV Knowledge Among Men Who Have Sex with Men in Malawi, Namibia, and Botswana”, *AIDS and Behavior*, vol. 15, No. 6 (August 2011).

12 Man Charurat and others, “Uptake of Treatment as Prevention for HIV and Continuum of Care among HIV-Positive Men Who Have Sex with Men in Nigeria”, *Journal of Acquired Immune Deficiency Syndromes*, vol. 68, No. 2 (1 March 2015).

13 Elizabeth Mills, *Leave no one behind: Gender, sexuality and the sustainable development goals*, (Brighton, United Kingdom, Institute of Development Studies, October 2015).

If LGBTI people have any claim to exceptionalism, it lies in the fact that while rights violations typically stem from the failure of the state to prevent and punish breaches of international law, 73 countries around the world retain domestic laws that explicitly criminalize same-sex relations. In Africa, 33 states out of 54 provide statutory penalties for same-sex relations.¹⁴

At a time when public opinion in Western countries has undergone a fundamental shift in favour of sexual minority rights, the political and cultural climate in Africa has been trending in the opposite direction. In 2014 alone, Chad moved to make same-sex relations punishable by 20 years in prison,¹⁵ Gambia passed a bill imposing life imprisonment for “aggravated homosexuality,” Nigeria criminalized not only same-sex relations but also membership in LGBTI rights organizations, and Uganda aroused international obloquy over legislative efforts to introduce the death penalty for “aggravated” homosexuality.¹⁶ Between 2002 and 2012, similar bills were tabled by parliaments in the Democratic Republic of Congo, Liberia, Cameroon, and Burundi.¹⁷

Many of the concepts and terminologies used to petition for sexual minority rights in Africa, along with the bulk of the funding for African LGBTI rights groups, originates in the West—a fact has been seized upon by those opposed to the expansion of LGBTI rights in Africa in order to drive home the notion that LGBTI rights are the latest in a long line of intrusive instruments used by the West to push exogenous values on Africa.

14 All four of the target countries criminalize homosexuality. International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA), *State Sponsored Homophobia 2016: A world survey of sexual orientation laws: criminalization, protection and recognition*, (Geneva, ILGA, 2016). Available from http://ilga.org/downloads/02_ILGA_State_Sponsored_Homophobia_2016_ENG_WEB_150516.pdf.

15 David Smith, “Chad becomes 37th African state to seek ban on homosexuality”, *Guardian*, 22 September 2014. Available from <https://www.theguardian.com/world/2014/sep/22/chad-37th-african-state-seeking-ban-homosexuality>. Accessed 28 October 2016.

16 Oluwaseun Odumosu and others, “In the Picture: A situational analysis of LGBTI health and rights in Southern Africa”, (COC Nederland, Amsterdam, 2015) <http://didiri.org/side-menu/blog-and-news-feed/picture-situational-analysis-lgbti-health-rights-southern-af/>. Accessed 1 August 2016. See also Didiri Collective, *Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Human Rights in Southern Africa: A Contemporary Literature Review*, December 2014. Available from <http://didiri.org/side-menu/blog-and-news-feed/contemporary-literature-review-lgbti-human-rights-southern-a/>.

17 Paul Semugoma and others, “The irony of homophobia in Africa”, *The Lancet*, 20 July 2012. Available from [http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(12\)60901-5.pdf](http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(12)60901-5.pdf).

In Western countries, laws expanding the rights of LGBTI communities have been found to promote tolerance on the level of broader society.¹⁸ But trends in Africa have suggested that attempts to decriminalize same-sex relations have instead inspired lobbies in favour of enhanced criminalization.¹⁹ Statistical studies demonstrate that international human rights law is not effective in promoting human rights in repressive, undemocratic states—a finding that does not bode well for many African countries.²⁰ Freedom House, which assigns annual rankings to independent states based on political rights and civil liberties, considered only nine of the 50 Sub-Saharan African countries it ranked in 2016 to be free.²¹

One of Africa’s greatest LGBTI rights champions is South Africa, home to one of the world’s most progressive normative frameworks with respect to LGBTI rights.²² But South Africa’s legal protections have proven difficult to enforce with 61 per cent of the population believing that society should not tolerate homosexuality.²³ LGBTI South Africans are frequently attacked, verbally and physically—most notoriously including the practice of “corrective” rape of lesbians. Such crimes are often met with indifference when reported to the police.²⁴ South Africa’s failure to socialize respect for sexual minorities was thrown into stark relief in March 2016 at UN Headquarters in New York during the 60th session of the Commission on the Status of Women (CSW60),

18 Marc Hooghe and Cecil Meeusen, “Is Same-Sex Marriage Legislation Related to Attitudes Toward Homosexuality? Trends in Tolerance of Homosexuality in European Countries Between 2002 and 2010”, *Sexuality Research and Social Policy*, vol. 10, No. 4, December 2013.

19 Stella Nyanzi and Andrew Karamagi, “The social-political dynamics of the anti-homosexuality legislation in Uganda”, *Agenda*, vol. 29, No. 1, 24 March 2015. Available from <http://dx.doi.org/10.1080/10130950.2015.1024917>. Accessed 3 October 2016. See also Norimitsu Orishi, “U.S. Support of Gay Rights in Africa May Have Done More Harm Than Good”, *New York Times*, 20 December 2015. Available from http://www.nytimes.com/2015/12/21/world/africa/us-support-of-gay-rights-in-africa-may-have-done-more-harm-than-good.html?_r=0. Accessed 12 August 2016.

20 Emilie M. Hafner-Burton and Kiyoteru Tsutsui, “Justice Lost! The Failure of International Human Rights Law to Matter Where Needed Most”, *Journal of Peace Research*, vol. 44, No. 4 (2007).

21 Freedom House, *Freedom in the World 2016*, 27 January 2016. Available from https://freedomhouse.org/sites/default/files/FH_FITW_Report_2016.pdf. Accessed 1 November 2016.

22 The equality clause in South Africa’s 1996 constitution made it the first country in the world to outlaw discrimination based on sexual orientation, and in 2007 it became the fifth country in the world to legalize same-sex marriage.

23 “The Global Divide on Homosexuality: Greater Acceptance in More Secular and Affluent Countries”, Pew Research Center, 4 June 2013. Available from <http://www.pewglobal.org/2013/06/04/the-global-divide-on-homosexuality/>. Accessed 3 November 2016.

24 Roderick Brown, “Corrective Rape in South Africa: A Continuing Plight Despite an International Human Rights Response”, *Annual Survey of International & Comparative Law*, vol. 1, No. 1 (2012).

when the South African delegation was reportedly vociferous in its opposition to the inclusion of LGBTI-affirming language in the Commission's written conclusions.²⁵ In November 2016, South Africa joined the 54-member African group in the UN General Assembly in a call to suspend the work of the first U.N. independent investigator appointed to protect LGBTI people from violence and discrimination.²⁶

The vast gulf between policy and practice in South Africa suggests limitations inherent in a top-down approach to promoting LGBTI rights by way of policy and law. Given the need to address broad respect for sexual minorities in Africa, why then are so many human rights interventions geared to government decision makers, and so few on directly engaging public attitudes and perceptions?

IV. Traditional Human Rights Documentation and Advocacy

The traditional approach to human rights monitoring and documentation, as pioneered by organizations like Human Rights Watch and Amnesty International in the early days of the global human rights movement, follows a familiar formula of monitoring, documentation, and advocacy:

- Human Rights Defenders (HRDs) collect evidence of abuses in the form of testimony from survivors, witnesses, and perpetrators of abuses in accord with structured methodology and against high standards of objectivity, accuracy, and impartiality;
- Research findings are synthesized in publications that vary in format and scope but typically feature documented cases that demonstrate patterns of violations and exposes the perpetrators, institutions, and policies responsible;
- Public reporting on rights violations is deployed as part of lobbying and campaign efforts designed to “name and shame” governments into changing laws, policies and practices in rights-friendly directions.

The theory of change underlying this traditional paradigm is top-down: reform discriminatory and abusive laws and policies, and social and cultural change will follow. While cultural change is difficult to measure, the pressure politics that are part and parcel of this practice have been successful in shifting government policy and practice in support of LGBTI rights. This is notably true in countries like Malawi, where former President Joyce Banda instituted an unofficial

25 Author interviews, African delegate to CSW60, New York, 23 March 2016 and 24 March 2016.

26 Michelle Nichols, “African states bid to stop work of U.N. gay rights investigator”, *Reuters*, 4 November 2016. Available from <http://www.reuters.com/article/us-un-rights-lgbt-idUSKBN-12Z2OK>. Accessed 4 November 2016.

moratorium on the enforcement of sodomy laws in 2012, a policy that has continued under Malawi's current president, Peter Mutharika.²⁷

In Phase III of the GEF project two LGBTI rights organizations based in Lilongwe, the Centre for Human Rights and Rehabilitation (CHRR) and the Centre for the Development of People (CEDEP), worked together to document cases of arbitrary arrest that ran contrary to this standing policy; in December 2014 they launched a jointly written report setting forth their findings.²⁸ Subsequent meetings between CHRR and CEDEP with Malawi's Inspector General of the Police (IGP) resulted in a government policy, as a CHRR activist recalled: "The IGP told us, with all of the police commissioners looking on, that if we encountered any abuses of any kind against LGBTI people, we should not go to the desk officers at the police stations with our complaints—we should go straight to the commissioners."²⁹

The inspector general's commitment was tested in March 2016 in Mangochi, a socially conservative, predominantly Muslim district in southern Malawi, when a gay man was violently attacked for reasons related to his sexual orientation. After the case was brought to the attention of the police commissioner in Mangochi, two assailants were arrested, charged with assault, put on trial, convicted, and compelled to pay restitution to the victim. The police commissioner further ordered officers to provide proactive protection to LGBTI community members going forward.³⁰

Some Malawian human rights activists believe that Malawi is on the road to reforming its sodomy laws by way of the courts. But what can be expected of traditional human rights tools and strategies, tailored as they are to legislative, judicial, and executive organs of state, in a country like Zimbabwe, where President Robert Mugabe refers to homosexuals as "pigs" and "dogs" and has threatened to deport diplomats who raise LGBTI rights?³¹ In the assessment

27 Malawi's Justice Minister confirmed that such laws would not be enforced pending a High Court review of their constitutionality. "Malawi 'suspends' anti-homosexual laws", *BBC News*, 21 December 2014. Available from <http://www.bbc.com/news/world-africa-35151341>. Accessed 4 September 2016.

28 Centre for the Development of People and Centre for Human Rights and Rehabilitation, *Human Rights Violations on the Basis of Real or Perceived Sexual Orientation and Gender Identity in Malawi: 2014 Report* (Lilongwe, Malawi, 2014). Available from http://iranti-org.co.za/content/Africa_by_country/Malawi/2014_CEDEP_Human_Rights_violations_report.pdf. Accessed 4 September 2016.

29 Author telephone interview, 14 July 2016.

30 Author telephone and e-mail communication, 13 March 2016.

31 Peta Thornycroft, "Robert Mugabe says he prefers Chinese aid because Beijing does not force him to accept homosexuality", *Telegraph*, 31 August 2014. Available from <http://www.telegraph.co.uk/news/worldnews/africaandindianocean/zimbabwe/11066454/Robert-Mugabe-says-he-prefers-Chinese-aid-because-Beijing-does-not-force-him-to-accept-homosexuality.html>.

of the coordinator of Voice of the Voiceless (VOVO), a feminist collective led by and for lesbian, bisexual and transgendered (LBT) individuals in Bulawayo, Zimbabwe, social change efforts are best directed elsewhere: “We skip the institutions,” he said. “No state apparatus. We’re not looking for policy change; we’re looking for policy-maker change. So, we start with the people.”³²

In an influential article published in May 2016, a group of African LGBTI activists described widespread dissatisfaction with the current state of LGBTI organizing and a sense that the impressive growth in the numbers and capacities of organizations promoting LGBTI rights brought little in the way of impact on the everyday lives of African LGBTI individuals. The authors described a disconnect between grassroots realities for sexual minorities and the needs of professional activism that is driven, in part, by “the predominance of donor-driven agendas focusing on the promotion of legal and policy reforms through formal, bureaucratic interactions with state agencies.”³³

Traditional advocacy channels are impeded by political and social realities that prevail across much of Africa. Even if LGBTI-friendly laws were to pass by force or by fluke, any impact on LGBTI communities would depend on an open society where civil servants honour and enforce laws and policies they might not agree with. While it is abundantly clear that traditional advocacy brings about change and that donors should continue to invest in such modalities, there is at the same time a need for complementary methods that are better suited to marshalling influence from the bottom-up.

V. Emergent Human Rights Documentation and Advocacy

The widespread availability of the mobile phone, the proliferation of mobile networks, and the vast popularity of social media have conspired to lower the barrier to entry into human rights work.³⁴ Citizen activists in West Africa use mobile phones to capture violent abuses and broadcast video clips on social media sites to expose rights violations.³⁵ Crowdsourcing platforms such as

32 Author interview, Durban, South Africa, 13 July 2016.

33 Liesl Theron, John McAllister and Mariam Armisen, “Where do we go from here? A call for critical reflection on queer/LGBTIA+ activism in Africa”, *Pambazuka News*, 12 May 2016. Available from <http://www.pambazuka.org/gender-minorities/where-do-we-go-here>. Accessed 19 August 2016. LGBTIA+ stands for Lesbian, Gay, Transgender, Intersex, Asexual, and other sexualities not encompassed by the acronym.

34 One recent study found a ten-fold increase in the rate of mobile phone ownership in seven African countries since 2002. Pew Research Center, *Cell Phones in Africa: Communication Life-line*, 15 April 2015. Available from <http://www.pewglobal.org/files/2015/04/Pew-Research-Center-Africa-Cell-Phone-Report-FINAL-April-15-2015.pdf>.

35 Dionne Searcy and Jaime Yaya Barry, “Inspired by US, West Africans Wield Smartphones to Fight Police Abuse”, *New York Times*, 16 September 2016. Available from <http://www.nytimes.com/2016/09/17/world/africa/police-abuse-videos-west-africa.html>.

Ushahidi, developed during post-election violence in Kenya in 2008, have made it easy for citizens to participate in human rights monitoring. A YouTube video posted in 2016 by a pastor in Zimbabwe inspired the largest anti-government protests since independence.³⁶

Phase IV of the GEF project sought to answer questions about how to involve community members as producers and consumers of advocacy content for traditional government targets but also for service providers at the peripheries of the state and would-be beneficiaries in marginalized communities. Iranti-org trained partner organizations in digital media and storytelling through its African Queer Media Makers Network (AQMMN), an initiative that incorporates movement building as a fundamental component of capacity building.³⁷ With support from Iranti-org, project participants collected data in digital form from LGBTI communities and produced digital video products for use in awareness-raising.

A. Participatory Fact-Finding

Participatory fact-finding formalizes the process of integrating community members with human rights documentation tools and techniques by actively encouraging self-reporting by survivors of rights abuses. The format allows individuals who would typically be the subjects of human rights investigations to control their own narratives, maximizing the moral and emotional truth that only survivors of abuses themselves can articulate.

A Malawian activist explained how self-reported data is collected: “We give them the phone, and later on they would bring the recording back to us. We tell them, ‘Be free. Tell us anything you want. Do the recording, you can edit, and when you feel comfortable that this is what you want to share, you bring the phone back to us’.” Trusted health care workers are then asked to review the audio and video clips and give feedback to better tailor the messages.³⁸

Participatory data collection can be a means for empowering those affected by abuses to advocate for their change. These approaches to human rights investigation may move the practice of human rights fact-finding toward a model in which local human rights investigation plays a key role in community mobilization.³⁹

36 Ben Kirby, “Zimbabwe pastor’s social media movement rattles Robert Mugabe”, CNN, 16 August 2016. Available at <http://www.cnn.com/2016/08/16/world/zimbabwe-pastor-mawarire/>.

37 A training workshop led by Iranti-org in March 2016 in Lilongwe resulted in the establishment of Transgender, Intersex and Lesbians of Malawi (TILMA), the country’s first civil society organization led by transgender people. Author telephone interview, 13 March 2016.

38 Author telephone interview, 7 September 2016.

39 Molly Land, “Democratizing Human Rights Fact-Finding”, in *The Transformation of Human Rights Fact-Finding*, Philip Alston & Sarah Knuckey, eds. (Oxford, Oxford University Press, 2016).

B. Digital Storytelling

Digital storytelling via short, first-person digital videos that document lived experiences of target communities, has emerged as a data stream that can combat discrimination in ways that public policy itself cannot. A video clip that conveys the inherent humanity of a survivor has the potential to elicit empathy that can be channelled into policy at any level, from a district clinic to the Ministry of Health. The same clip might be used to raise awareness in LGBTI communities or in the wider society.

The idea that personal stories can move people deeply and inspire compassion is an idea supported by social science research. Narratives in fact-finding can represent human rights abstractions and the reality of human rights abuses in ways that may not be effectively captured otherwise.⁴⁰ One study extended the work on perspective-taking into the domain of stereotypes and prejudice in interacting with members of minority groups.⁴¹ In the context of the struggle to promote and protect the rights of LGBTI communities, the “fact” of a survivor’s testimony might be that of her basic humanity, a message that is equally well suited to decision makers, service providers, and members of the public.

Emergent documentation practices lend themselves to a range of outputs capable of raising awareness, from documentaries to buzzy Instagram posts. For its Phase IV output, Sexual Rights Center (SRC), based in Bulawayo, Zimbabwe, produced a campaign video “We are the Epidemic”, to convey the tragedy of rights violations in the context of HIV/AIDS as well as the humanity of survivors.

“We are the Epidemic” opens with two community members, their voices distorted with audio filters, their faces half hidden in shadow, lying head-to-shoulder and ear-to-ear in the grass. A voice raps, “Running out of time/I tip the hour glass/I’m a citizen/Why I gotta’ be the outcast?” In four-and-a-half-minutes of quick cuts between settings and subjects, a transman recounts the trauma of visiting a clinic while pregnant and being ridiculed, alternating between English and Ndebele; three people stand on the banks of a river, silhouetted by first light, laughing; community members holding placards up to the camera: “I am also human. Love me as I am. Love conquers all”.

40 Shreya Atrey, “The Danger of a Single Story: Introducing Intersectionality in Fact-Finding”, in *The Transformation of Human Rights Fact-Finding*, Philip Alston & Sarah Knuckey, eds. (Oxford, Oxford University Press, 2016).

41 Adam Galinsky and Gordon Moskowitz, “Perspective-taking: Decreasing Stereotype Expression, Stereotype Accessibility and In-Group Favoritism”, *Journal of Personality and Social Psychology*, vol. 78, No. 4 (April 2000) pp. 708-724.

The visual medium of digital storytelling brings with it an elevated risk that breaches of confidentiality may expose survivors to further abuses.⁴² HRDs gathering video testimonials for the GEF project took pains to go through an exhaustive consent session to ensure that risks are accounted for and make use of secure apps that have been developed to help attenuate the risks of appearing in activist videos, including YouTube's Custom Blurring tool, which allows content creators to blur any object in a video, even as it moves,⁴³ and ObscuraCam, an open-source anonymizer that automatically blurs the identities of subjects with a variety of filters through quick cuts between settings and subjects, with some plainly recognizable, others hidden in shadow.⁴⁴

A Zambian activist reflected on the risks: "Video can either destroy or create... If one is exposed through video, it can increase discrimination for them and at the same time reduce discrimination because you are raising awareness."⁴⁵

VI. Use Case for Health Care Worker Inclusivity Training

Even as participants in Phase IV of the GEF project pursued their respective research and advocacy agendas related to treatment HIV/AIDS access for sexual minorities, all six converged around the need to inform policies designed to provide affirming, stigma-free health care in government health clinics in their respective countries.⁴⁶ Findings from partner field research in all three target countries revealed that LGBTI people reported limited cultural competency on the part of health care workers, especially at government health clinics, and research subjects reported that this discouraged them from seeking HIV/AIDS prevention, treatment and care services.⁴⁷

An activist at SRC in Zimbabwe explained the challenges: "A transman is pregnant, has to get an abortion, there's lots of trauma, and he has to go for psycho-social support from a health care provider who knows nothing about the issues."⁴⁸

42 Aline C. Gubrium, Amy L. Hill, and Sarah Flicker, "A Situated Practice of Ethics for Participatory Visual and Digital Methods in Public Health Research and Practice: A Focus on Digital Storytelling", *American Journal of Public Health*, vol, 104, No. 9, September 2014. Available from <http://ajph.aphapublications.org.ucsf.idm.oclc.org/doi/abs/10.2105/AJPH.2013.301310>.

43 YouTube Creator Blog, "Blur moving objects in your video with the new Custom blurring tool on YouTube Thursday", 25 February 2016. Available from <https://youtube-creators.googleblog.com/2016/02/blur-moving-objects-in-your-video-with.html>.

44 Available from <https://guardianproject.info/apps/obscuracam/>.

45 Author telephone interview, 22 August, 2016.

46 Author face-to-face interviews with project participants, Durban, South Africa, 17 July 2016.

47 Author telephone and Skype interviews with project participants, September and October 2016.

48 Author interview, Johannesburg, South Africa, 25 October 2015.

SRC's strategy is to use "We Are the Epidemic" to effect change in attitudes among health care workers with respect to LGBTI patients in a direct-to-decision-maker context, meaning that video would be shown directly to advocacy targets—as opposed to a passive broadcast over social media—so that they can virtually witness human rights violations or meet survivors.⁴⁹ This type of advocacy is modelled after the "smart narrowcasting" form developed by WITNESS, a human rights video advocacy and training organization based in the United States.⁵⁰ Speaking about the campaign video, an SRC activist observed, "In terms of advocacy, people have to relate to the person. It does strike a chord when a health care worker can see video testimony of issues they have been through."⁵¹

Healthcare worker sensitivity training interventions designed to improve providers' cultural competency has been associated with increased uptake of HIV/AIDS prevention, treatment and care among sexual minorities in Cameroon.⁵² Partner outputs from Phase IV of the GEF project that incorporate the conventions of participatory fact-finding, digital storytelling, and traditional fact-finding, can inform inclusivity training for health care providers, either as part of government-sponsored initiatives or as part of partner organizations' programming.

In one study on global health education training, a frequently cited best practice was the inclusion of interactive material, including audio-visual inputs, which was found to improve learning outcomes.⁵³ Blending audio-visual material with text is more effective as a training modality than text alone.⁵⁴ Another study found that improving provider cultural and clinical competency among health care workers, combined with a broader stigma-reduction intervention

49 Meg McLagan, "Making Human Rights Claims Public", *American Anthropologist*, vol. 108 (2006). Pp. 191–195.

50 Sam Gregory, "Cameras Everywhere: Ubiquitous Video Documentation of Human Rights, New Forms of Video Advocacy, and Consideration of Safety, Security, Dignity and Consent", in *Video Vortex? Moving Images Beyond YouTube*, (Institute of Network Cultures, Amsterdam, 2011).

51 Author telephone interview, 11 May 2016.

52 Charles W. Cange and others, "Influence of stigma and homophobia on mental health and on the uptake of HIV/sexually transmissible infection services for Cameroonian men who have sex with men", *Sexual Health*, vol. 12, No. 4 (29 June 2015). Available from <http://dx.doi.org/ucsf.idm.oclc.org/10.1071/SH15001>.

53 "New Digital Media Content and Delivery: Revolutionising Global Health Education and Training", (iHeed Institute, Cork, Ireland, 2013).

54 Spyridon Marinopolous, "Effectiveness of continuing medical education", Evidence Report/Technology Assessment, No. 149, (Maryland, Agency for Healthcare Research and Quality, January 2007). Available from <http://www.ncbi.nlm.nih.gov/pubmed/17764217>.

for healthcare, may increase the uptake of HIV prevention, treatment, and care among sexual minorities.⁵⁵

VII. Conclusion

In the context of the struggle to promote the human rights of LGBTI communities in Sub-Saharan Africa, this paper considers the limitations of traditional strategies designed primarily to bring about law reform and policy change at the level of the central government. Emergent human rights documentation practices can serve as engines of change by engaging attitudes and perceptions toward sexual minorities across multiple sectors, including central government decision makers but also including peripheral state agents such as service providers and members of the broader body politic. Combined, traditional and emergent practices are capable of driving change that is at the same time top-down and bottom-up.

Emergent approaches to rights promotion for sexual minorities are particularly important in regressive country contexts where state actors may be actively hostile to LGBTI concerns. Such practices, and the inclusive messages they promote, are often undergirded by ICT tools that can democratize the human rights movement by involving survivors in data collection efforts, and by documentation conventions such as participatory fact-finding and digital storytelling that can serve as exponents of increased respect for sexual minorities by emphasizing the lived experience of survivors and conveying evidence of their basic humanity to a diverse array of targets.

This argument is framed by the experiences of LGBTI activists working to promote inclusive access to HIV/AIDS care, treatment, and services for sexual minorities in three African countries. By empowering LGBTI organizations to target not only government decision makers but also peripheral state agents such as health care workers with effective advocacy messages, emergent human rights documentation and advocacy practices contribute to inclusive clinical environments and improved health outcomes for sexual minorities. Taken together, such efforts can address social exclusion for LGBTI people in Africa and their ability to participate in economic activities, thereby contributing to the realization of the goals articulated in the 2030 Agenda for Sustainable Development.

55 T. Lane and others, "They see you as a different thing: The experiences of men who have sex with men with healthcare workers in South African township communities", *Sexually Transmitted Infections*, vol. 84 (2008).

VIII. References

- Adam Galinsky and Gordon Moskowitz, "Perspective-taking: Decreasing Stereotype Expression, Stereotype Accessibility and In-Group Favoritism", *Journal of Personality and Social Psychology*, vol. 78, No. 4 (April 2000).
- Aline C. Gubrium, Amy L. Hill, and Sarah Flicker, "A Situated Practice of Ethics for Participatory Visual and Digital Methods in Public Health Research and Practice: A Focus on Digital Storytelling", *American Journal of Public Health*, vol. 104, No. 9, September 2014.
- Andrew Park, *A Development Agenda for Sexual and Gender Minorities* (Los Angeles, The Williams Institute, 2016).
- Barbara Crossette, "No Room for LGBT Rights in the New UN Development Goals," *PassBlue*, 17 May 2015.
- Ben Kirby, "Zimbabwe pastor's social media movement rattles Robert Mugabe", CNN, 16 August 2016.
- Centre for the Development of People and Centre for Human Rights and Rehabilitation, *Human Rights Violations on the Basis of Real or Perceived Sexual Orientation and Gender Identity in Malawi: 2014 Report* (Lilongwe, Malawi, 2014).
- Charles W. Cange and others, "Influence of stigma and homophobia on mental health and on the uptake of HIV/sexually transmissible infection services for Cameroonian men who have sex with men", *Sexual Health*, vol. 12, No. 4 (29 June 2015).
- David Smith, "Chad becomes 37th African state to seek ban on homosexuality", *Guardian*, 22 September 2014.
- Didiri Collective, *Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Human Rights in Southern Africa: A Contemporary Literature Review*, December 2014.
- Dionne Searcy and Jaime Yaya Barry, "Inspired by US, West Africans Wield Smartphones to Fight Police Abuse", *New York Times*, 16 September 2016.
- Elizabeth Mills, *Leave no one behind: Gender, sexuality and the sustainable development goals*, (Brighton, United Kingdom, Institute of Development Studies, October 2015).
- Emilie M. Hafner-Burton and Kiyoteru Tsutsui, "Justice Lost! The Failure of International Human Rights Law to Matter Where Needed Most", *Journal of Peace Research*, vol. 44, No. 4 (2007).
- Freedom House, *Freedom in the World 2016*, 27 January 2016.
- Heather Fay, Gift Trapence and others, "Stigma, Health Care Access, and HIV Knowledge Among Men Who Have Sex with Men in Malawi, Namibia, and Botswana", *AIDS and Behavior*, vol. 15, No. 6 (August 2011).

- International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA), *State Sponsored Homophobia 2016: A world survey of sexual orientation laws: criminalization, protection and recognition*, (Geneva, ILGA, 2016).
- Jim Yong Kim, “The high costs of institutional discrimination”, *Washington Post*, 27 February 2014.
- Lee Badgett, “The Economic Cost of Homophobia and the Exclusion of LGBT People: A Case Study of India”, Unpublished presentation by SOGI Sexual Minorities and Development and World Bank. Accessed 2 November 2016.
- Liesl Theron, John McAllister and Mariam Armisen, “Where do we go from here? A call for critical reflection on queer/LGBTIA+ activism in Africa”, *Pambazuka News*, 12 May 2016.
- “Malawi ‘suspends’ anti-homosexual laws”, *BBC News*, 21 December 2014.
- Man Charurat and others, “Uptake of Treatment as Prevention for HIV and Continuum of Care among HIV-Positive Men Who Have Sex with Men in Nigeria”, *Journal of Acquired Immune Deficiency Syndromes*, vol. 68, No. 2 (1 March 2015).
- Marc Hooghe and Cecil Meeusen, “Is Same-Sex Marriage Legislation Related to Attitudes Toward Homosexuality? Trends in Tolerance of Homosexuality in European Countries Between 2002 and 2010”, *Sexuality Research and Social Policy*, vol. 10, No. 4, December 2013.
- Meg McLagan, “Making Human Rights Claims Public”, *American Anthropologist*, vol. 108 (2006). Pp. 191–195.
- Michelle Nichols, “African states bid to stop work of U.N. gay rights investigator”, *Reuters*, 4 November 2016.
- Molly Land, “Democratizing Human Rights Fact-Finding”, in *The Transformation of Human Rights Fact-Finding*, Philip Alston & Sarah Knuckey, eds. (Oxford, Oxford University Press, 2016).
- “New Digital Media Content and Delivery: Revolutionising Global Health Education and Training”, (iHeed Institute, Cork, Ireland, 2013).
- Norimitsu Orishi, “U.S. Support of Gay Rights in Africa May Have Done More Harm Than Good”, *New York Times*, 20 December 2015.
- Oluwaseun Odumosu and others, “In the Picture: A situational analysis of LGBTI health and rights in Southern Africa”, (COC Nederland, Amsterdam, 2015)
- Paul Semugoma and others, “The irony of homophobia in Africa”, *The Lancet*, 20 July 2012.
- Peta Thornycroft, “Robert Mugabe says he prefers Chinese aid because Beijing does not force him to accept homosexuality”, *Telegraph*, 31 August 2014.
- Pew Research Center, *Cell Phones in Africa: Communication Lifeline*, 15 April 2015.

- Roderick Brown, “Corrective Rape in South Africa: A Continuing Plight Despite an International Human Rights Response”, *Annual Survey of International & Comparative Law*, vol. 1, No. 1 (2012).
- Sam Gregory, “Cameras Everywhere: Ubiquitous Video Documentation of Human Rights, New Forms of Video Advocacy, and Consideration of Safety, Security, Dignity and Consent”, in *Video Vortex? Moving Images Beyond YouTube*, (Institute of Network Cultures, Amsterdam, 2011).
- Shauna Stahlman and others, “The Prevalence of Sexual Behavior Stigma Affecting Gay Men and Other Men Who Have Sex with Men Across Sub-Saharan Africa and in the United States”, *Journal of Medical and Internet Research Public Health and Surveillance*, vol. 2, No. 2 (July 2016).
- Shreya Atrey, “The Danger of a Single Story: Introducing Intersectionality in Fact-Finding”, in *The Transformation of Human Rights Fact-Finding*, Philip Alston & Sarah Knuckey, eds. (Oxford, Oxford University Press, 2016).
- Spyridon Marinopolous, “Effectiveness of continuing medical education”, Evidence Report/Technology Assessment, No. 149, (Maryland, Agency for Healthcare Research and Quality, January 2007).
- Stella Nyanzi and Andrew Karamagi, “The social-political dynamics of the anti-homosexuality legislation in Uganda”, *Agenda*, vol. 29, No. 1, 24 March 2015.
- Stonewall International, *The Sustainable Development Goals and LGBT Inclusion*, 28 January 2016.
- Susie Jolly et al, *Poverty and Sexuality: What are the Connections? Overview and Literature Review* (Stockholm, Swedish International Development Cooperation Agency, 2010).
- “The Global Divide on Homosexuality: Greater Acceptance in More Secular and Affluent Countries”, Pew Research Center, 4 June 2013.
- T. Lane and others, “They see you as a different thing: The experiences of men who have sex with men with healthcare workers in South African township communities”, *Sexually Transmitted Infections*, v+A2ol. 84 (2008).
- United States, Department of State, *Global Equality Fund*. Accessed 14 August 2016.
- YouTube Creator Blog, “Blur moving objects in your video with the new Custom blurring tool on YouTube. Accessed 1 August 2016.

Libertad de expresión, participación ciudadana y los Objetivos de Desarrollo Sostenible en Venezuela

Mariateresa Garrido Villareal¹ & Andrea Isabel Garrido Villareal²

Resumen

En Venezuela las limitaciones a la libertad de expresión y la disponibilidad de tecnologías de comunicación a precios asequibles han impulsado la utilización de medios alternativos para buscar y diseminar información. Hoy en día, venezolanos obtienen y divulgan información a través de diversas plataformas digitales, fomentando así el ejercicio de la libertad de expresión y la participación ciudadana. Siendo que el derecho a la información es un requisito indispensable para alcanzar los objetivos de desarrollo sostenible (ODS) propuestos en la agenda 2030, y las tecnologías de comunicación juegan un rol fundamental para alcanzarlas, este artículo propone el fomento del periodismo ciudadano como un mecanismo adecuado para alcanzar el ODS16. Para ello discute el marco legal aplicable en el contexto venezolano y la relevancia del ciudadano como fuente de información. Adicionalmente, presenta ejemplos de periodismo ciudadano que han favorecido la participación ciudadana en Venezuela, y que pueden ser utilizados como modelos a seguir en otros países.

Palabras clave: periodismo ciudadano, libertad de expresión, participación ciudadana, Venezuela.

I. Introducción

Hace un año la Asamblea General de las Naciones Unidas adoptó la Agenda 2030, un plan diseñado para transformar el mundo. A través de los objetivos propuestos los países deben promover el respeto de los derechos humanos; de allí que los objetivos estén estrechamente vinculados con los aspectos económicos, sociales, y ambientales necesarios para garantizar el pleno ejercicio de todos estos derechos.³

Para lograr estos objetivos los Estados deben desarrollar planes nacionales en los que se tomen en cuenta las condiciones actuales del país y cuáles son las formas más apropiadas para lograr el tan anhelado desarrollo sostenible. Sin embargo, es necesario que se aborden los problemas de una forma integral a fin de garantizar la paz y la seguridad según lo establecido en el objetivo 16 (promover

1 Candidata a Doctorado en la Universidad para la Paz y el presente artículo forma parte de su investigación.

2 Coordinadora General Fundación Comunicas Venezuela.

3 A/RES/70/1. Preámbulo.

sociedades pacíficas e inclusivas para el desarrollo sostenible, facilitar el acceso a la justicia para todos y crear instituciones eficaces, responsables e inclusivas a todos los niveles). Para los venezolanos este debe ser uno de los principales objetivos a alcanzar.

Hoy en día Venezuela está inmersa en un conflicto que la aleja del cumplimiento de este objetivo y que requiere la transformación de la sociedad hacia una más inclusiva y tolerante.⁴ Para ello es necesario que los ciudadanos participen en la identificación de los problemas, las soluciones, y en su implementación. De hecho, gracias a la disponibilidad de diversas tecnologías de información y al ejercicio de la libertad de expresión, millones de venezolanos lo están haciendo. Este artículo analiza algunos de los ejemplos de participación ciudadana que pueden ser utilizados como modelo en el desarrollo de planes diseñados para alcanzar este objetivo en Venezuela, y en otros lugares del mundo.

A fin de identificar cómo los venezolanos están ejerciendo su derecho a la libertad de expresión y las buenas prácticas de participación ciudadana, utilizamos una metodología mixta en la que se utiliza el método legal y el método de observación directa no estructurada. En la primera parte presentamos el marco legal de promoción y protección a la libertad de expresión y la participación ciudadana en Venezuela. Siguiendo el método legal, en primer lugar, analizamos las normas internacionales y las leyes internas a fin de determinar cuál es la base jurídica de estos derechos.

Luego tomando en consideración la participación directa de las autoras con el fenómeno bajo estudio, se discute la influencia que ha tenido el uso del Internet y las redes sociales en el ejercicio de los mismos; y cómo éstas tecnologías deben ser utilizadas para la promoción de una sociedad más pacífica e inclusiva. Seguidamente analizamos la importancia del ciudadano como fuente informativa. Esta sección se enfoca en la utilización de ejemplos de periodismo ciudadano y su rol en los medios de comunicación digital en Venezuela. Por último discutimos la influencia del periodismo ciudadano en la comunicación local y en la adopción de planes en pro del desarrollo.

II. Libertad de expresión y participación ciudadana: marco legal venezolano

El objetivo 16.7 indica que los estados deben garantizar la adopción de decisiones inclusivas, participativas y representativas a todos los niveles, pero para lograrlo es necesario analizar los derechos humanos que sirven de base

4 Más información disponible en: <http://www.elespectador.com/noticias/elmundo/cinco-hechos-entender-pasa-venezuela-articulo-663399>.

para este objetivo. La participación ciudadana depende fundamentalmente del ejercicio de 2 derechos: el derecho a la libertad de expresión y el derecho a la participación política. Sólo cuando las personas tienen acceso a la información y pueden discutir sus ideas con los demás, es cuando se pueden adoptar decisiones representativas.

Estos derechos se encuentran establecidos en diferentes instrumentos internacionales y nacionales. A escala universal, se debe indicar que Venezuela ratificó el Pacto Internacional de Derechos Civiles y Políticos el 10 de mayo de 1978, en consecuencia, está obligada a tomar todas las medidas que sean necesarias para promover y garantizar el ejercicio del derecho a la libertad de expresión y la participación ciudadana.⁵ Mediante la ratificación de este tratado el estado venezolano se comprometió a adoptar las leyes internas requeridas para garantizar que todas las personas bajo su jurisdicción puedan ejercer estos derechos, sin que exista ningún tipo de distinción basada en cuestiones de raza, color, sexo, idioma, religión, opinión política o de otra índole, origen nacional o social, posición económica, nacimiento o cualquier otra condición social, según lo establecido en el artículo 2 del Pacto.

A nivel regional, Venezuela está obligada a respetar los derechos establecidos en la Declaración Americana de los Derechos y Deberes del Hombre. Actualmente este instrumento es considerado fuente de derecho, por lo que sus disposiciones deben ser observadas por todos los países miembros de la Organización de Estados Americanos (OEA). De hecho, este documento contiene el catálogo de derechos que son evaluados por la Comisión Interamericana de Derechos

5 **Artículo 19:**

1. Nadie podrá ser molestado a causa de sus opiniones.
 2. Toda persona tiene derecho a la libertad de expresión; este derecho comprende la libertad de buscar, recibir y difundir informaciones e ideas de toda índole, sin consideración de fronteras, ya sea oralmente, por escrito o en forma impresa o artística, o por cualquier otro procedimiento de su elección.
 3. El ejercicio del derecho previsto en el párrafo 2 de este artículo entraña deberes y responsabilidades especiales. Por consiguiente, puede estar sujeto a ciertas restricciones, que deberán, sin embargo, estar expresamente fijadas por la ley y ser necesarias para:
 - a) Asegurar el respeto a los derechos o a la reputación de los demás;
 - b) La protección de la seguridad nacional, el orden público o la salud o la moral públicas.
- Artículo 25:** Todos los ciudadanos gozarán, sin ninguna de las distinciones mencionadas en el artículo 2, y sin restricciones indebidas, de los siguientes derechos y oportunidades:
- a) Participar en la dirección de los asuntos públicos, directamente o por medio de representantes libremente elegidos;
 - b) Votar y ser elegidos en elecciones periódicas, auténticas, realizadas por sufragio universal e igual y por voto secreto que garantice la libre expresión de la voluntad de los electores;
 - c) Tener acceso, en condiciones generales de igualdad, a las funciones públicas de su país.

Humanos (CIDH) respecto de los casos recibidos que involucren la violación de derechos humanos en Venezuela.⁶

Tomando en consideración estas obligaciones, la constitución de Venezuela (CRBV), adoptada en diciembre de 1999, protege bajo el Título III estos derechos de conformidad con lo establecido en los ya mencionados instrumentos internacionales. El artículo 57 constitucional contiene las garantías de protección básicas del derecho a la libertad de expresión, y está complementado por las disposiciones aplicables respecto al ejercicio del derecho al acceso a la información pública (artículo 28), la inviolabilidad de las comunicaciones privadas en todas sus formas (artículo 48), y el derecho a la información oportuna, veraz, e imparcial (artículo 58).

Para hacer cumplir estas garantías constitucionales, el artículo 51 establece el derecho a presentar peticiones ante las autoridades públicas competentes y a obtener una oportuna y adecuada respuesta. Inclusive de forma excepcional, el artículo 27 constitucional garantiza el ejercicio de la acción de amparo. Este procedimiento puede ser iniciado por cualquier persona, frente a la autoridad judicial competente, a fin de restablecer inmediatamente la situación jurídica infringida o la situación que más se asemeje a ella. Así mismo, el artículo 31 garantiza el derecho de toda persona a dirigir peticiones o quejas ante los órganos internacionales competentes, incluyendo el Consejo de Derechos Humanos de las Naciones Unidas, y la CIDH.

Este marco legal favorece el cumplimiento del objetivo 16.7; sin embargo, no es suficiente para garantizar la transformación de la sociedad hacia una más pacífica e inclusiva. Para ello es necesario que los ciudadanos participen de forma activa y que se creen los mecanismos necesarios para acceder a la información pública.

La libertad de expresión es un derecho complejo porque requiere la protección simultánea del derecho a diseminar, recibir y buscar información. En consecuencia, para que los ciudadanos puedan participar en asuntos públicos tienen que poder ejercer su derecho al acceso a la información pública y el

6 Venezuela es un estado miembro de la OEA desde el 29 de Diciembre de 1951. Los artículos de la Declaración que deben ser observados son los siguientes:

Artículo IV. Toda persona tiene derecho a la libertad de investigación, de opinión y de expresión y difusión del pensamiento por cualquier medio.

Artículo XX. Toda persona, legalmente capacitada, tiene el derecho de tomar parte en el gobierno de su país, directamente o por medio de sus representantes, y de participar en las elecciones populares, que serán de voto secreto, genuinas, periódicas y libres.

Sobre el valor jurídico de la Declaración ver: Comisión Interamericana de Derechos Humanos, documento OAS/Ser.L/V/II.152 Doc. 21, párrafo 14; Corte Interamericana de Derechos Humanos, Opinión Consultiva OC-10/89, párrafo 42.

derecho a diseminarla. En este sentido, la CIDH sostiene que la protección de estos derechos es fundamental para la “consolidación, operación, y preservación de los sistemas democráticos”⁷ y que el acceso a la información pública es un prerrequisito para demandar y exigir otros derechos humanos, especialmente aquellos que garantizan la participación en los asuntos públicos.⁸ Hoy en día Venezuela no cuenta con una ley que regule esta materia, ni con una institución que procese este tipo de peticiones, lo que impacta negativamente la participación ciudadana y el ejercicio de la libertad de expresión.

A pesar de lo anterior, los venezolanos han encontrado diversas formas de poner en práctica estos derechos. Tomando en consideración que la libertad de expresión puede ser ejercida a través de cualquier medio, una de las modalidades de participación más comunes es la diseminación de información a través de redes sociales, blogs, y páginas web.⁹

En Venezuela, para junio de 2016 la tasa de penetración del Internet se ubicó en aproximadamente 62 por ciento. La mayoría de los usuarios acceden a la web desde teléfonos móviles, lo que ha favorecido que los venezolanos constantemente publiquen en sus redes sociales información relacionada con los eventos que están presenciando. Este uso ha dado lugar al nacimiento de diferentes iniciativas de participación ciudadana relacionadas con la diseminación de información., y que son el objeto de estudio de la siguiente sección.¹⁰

III. Las personas como fuente de información

Contexto actual de los medios de comunicación tradicionales en Venezuela

Desde la creación de las redes sociales las personas le han dado un nuevo uso a Internet, ejerciendo el derecho a la libertad de expresión y potenciando una de sus aristas: la difusión de información. Esta tendencia incluye a las instituciones gubernamentales que se han unido a la conversación en estos medios; la participación activa de representantes del Estado en redes sociales otorga a los ciudadanos la posibilidad de dirigir sus mensajes de manera directa, y usualmente, mediante el uso de dispositivos móviles con acceso a Internet.

7 Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 13, Capítulo IV, párrafo 1.

8 Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 48/15, Capítulo III, párrafos 13-17.

9 CCPR/C/GC/34, párrafo 12; A/66/290, párrafo 10; Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 50.

10 Internet World Stats. Disponible en: <http://www.internetworldstats.com/south.htm#ve>; Stats Monkey. “Mobile Facebook, Twitter, Social Media Usage Statistics in Venezuela”. Disponible en: <https://www.statsmonkey.com/table/21499-venezuela-mobile-social-media-usage-statistics-2015.php>.

En la última década el Estado venezolano ha dominado el ámbito comunicacional a través de la compra-venta de medios, la restricción del acceso al papel prensa, el bloqueo de páginas web en el país, la no renovación de concesiones para el uso del espacio radioeléctrico (caso RCTV), y la creación de nuevas emisoras de radio, canales de televisión y periódicos con una línea editorial favorable al gobierno.¹¹ Estas acciones responden a una estrategia denominada “Hegemonía Comunicacional” y definida en 2007 por el entonces ministro de comunicaciones, Andrés Izarra, como una vía

“...para el nuevo panorama estratégico que se plantea, la lucha que cae en el campo ideológico tiene que ver con una batalla de ideas por el corazón y la mente de la gente. Hay que elaborar un plan y el que nosotros proponemos es que sea hacia la hegemonía comunicacional e informacional del Estado”.¹²

En consecuencia, durante los períodos presidenciales de Hugo Chávez y el gobierno de Nicolás Maduro, esta hegemonía se ha hecho tangible; uno de los últimos informes de gestión de la Comisión Nacional de Telecomunicaciones (Conatel) muestra que en 12 años (1998 – 2010), la cantidad de medios públicos aumentó un 173 por ciento (sin considerar a los medios comunitarios), mientras que los privados crecieron en un 28,7 por ciento.¹³

Progresivamente y hasta el año 2016, el Gobierno ha procedido al cierre de medios de comunicación independientes, ha sacado del aire circuitos completos de emisoras y comprado a través de testaferros, los periódicos y canales que mantenían una línea editorial crítica a la gestión gubernamental. Adicionalmente, ha utilizado el hostigamiento judicial con sentencias que prohíben la publicación de información “sensible” en los medios de comunicación social como medida de control del tipo de información que es diseminada. De hecho, el Presidente solicitó a la Fiscalía General que evaluara “medidas especiales (...) junto al poder Judicial para nosotros castigar la guerra psicológica que ejercen la prensa escrita, la televisión y la radio contra la seguridad alimentaria del pueblo y la vida económica en la nación”.¹⁴

11 Corte IDH. Caso Ríos y otros Vs. Venezuela. Excepciones Preliminares, Fondo, Reparaciones y Costas. Sentencia de 28 de enero de 2009. Serie C No. 194. Comisión Interamericana de Derechos Humanos, nota 6, Capítulo III, párrafos 1129-1252.

12 El Universal, “*El periodismo oficial*”, 09 de agosto de 2009, recuperado el 11 de octubre de 2013 en <http://goo.gl/iSi8ZL>.

13 Andrea Garrido, “Monopolización de los medios en Venezuela”. Disponible en http://andregarrido.com.ve/monopolizacion-medios-comunicacion-venezuela/#_ftn1.

14 Ibidem.

Los medios impresos enfrentan otros obstáculos, desde el año 2012 periódicos y revistas afrontan serios inconvenientes para obtener materia prima como papel, tintas y planchas para las rotativas. En un marco de control de cambio y restricción de compras en divisas, el Gobierno calificó estos ítems como “no prioritarios” para la importación; y como no son producidos en Venezuela, estos rubros deben importarse a una tasa de cambio elevada y cumpliendo con un proceso que controla el Estado. Por eso, desde el año 2013 los periódicos independientes y de oposición han denunciado que ésta situación afecta el tiraje y número de páginas de los principales diarios nacionales y regionales.¹⁵

La reducción del espacio en la prensa nacional limita la publicación de ciertos contenidos. Periódicos de circulación nacional como El Nacional y Tal Cual han tenido que reducir sus ediciones a menos de la mitad del número de páginas, e incluso el diario más antiguo del país, El Carabobeño, en marzo de 2016 y tras 85 años de publicación ininterrumpida tuvo que eliminar su edición impresa por una sola razón: “No hay papel prensa. La empresa socialista que monopoliza la venta de este rubro vital para la circulación de los medios de comunicación, el Complejo Editorial Alfredo Maneiro, no vende la materia prima desde hace un año”.¹⁶

Por otra parte, el acceso a la información pública es muy restringido en Venezuela; a pesar de que la CRBV protege este derecho en sus artículos 51 y 58, entre los años 2011 y 2014 el 85 por ciento de peticiones de información a organismos públicos hechas por la ONG Espacio Público, no fueron respondidas. El 15 por ciento restante brindaron información que “suele ser desactualizada, incompleta e impertinente con respecto a los temas de mayor interés”.¹⁷

La Alianza Regional por la Libre Expresión e Información plantea en su informe Saber Más VII que en Venezuela “se evidencia un grave retroceso en materia de Transparencia, Divulgación y acceso a la información pública en los fallos judiciales por cuanto la mayoría de las acciones han sido declaradas inadmisibles o sin lugar”¹⁸. Además el Capítulo Venezuela de la ONG Transparencia internacional, asegura que “En Venezuela no hay acceso a la información pública,

15 Andrea Garrido, “Sin papel no hay prensa”, 2014. Disponible en <http://andreagarrido.com.ve/la-escasez-papel-prensa/>.

16 El Informador, “El comunicado de El Carabobeño por su cierre ante la falta de papel”. Disponible en <http://www.elinformador.com.ve/2016/03/11/el-comunicado-de-el-carabobeno-por-su-cierre-ante-la-falta-de-papel/>.

17 Espacio Público, “Situación del Acceso a la Información Pública en Venezuela 2014”. Disponible en <http://espaciopublico.org/datos-e-inv/publicaciones/#>.

18 Alianza Regional por la Libre Expresión e Información, “Saber más VIII: Una década de Acceso a la Información en las Américas”, 2016, pág. 141. Disponible en <http://www.alianzaregional.net/contenidos/saber-mas/>.

y esa opacidad ha contribuido a la violación de Derechos, al abuso de lo público, a promover y esconder la corrupción, generar ineficiencia y una impunidad en aumento”.¹⁹

Debido a las restricciones a los medios tradicionales, en los últimos seis años han proliferado los medios de comunicación web, las plataformas periodísticas y audiovisuales han encontrado en Internet un espacio para difundir información sin estar atados a una línea editorial gubernamental y valiéndose de diferentes vías para obtener ingresos. Sin embargo, los recursos para la cobertura local e inmediata de los hechos noticiosos, son escasos; desde el punto de vista periodístico, no es funcional ni rentable tener a un reportero en cada urbanización esperando que surja una noticia; por consiguiente, toda información veraz y oportuna que puedan ofrecer los ciudadanos, es valiosa.

Medios digitales y Periodistas Ciudadanos en la actualidad

Gracias al uso de tecnologías móviles las personas generan contenido público y diverso que muestra lo que está sucediendo en su entorno. En Venezuela el 39 por ciento de los usuarios de Internet se conectan a través de dispositivos móviles (año 2015), cifra que ha registrado un aumento progresivo, considerando que en 2012 este grupo era el 17 por ciento según informes de la firma de investigación Tendencias Digitales.²⁰

En el día a día, las personas que se encuentran en el lugar donde se desarrolla una noticia son la fuente primaria de información. La inmediatez de la difusión y la confirmación automática de la veracidad de lo ocurrido a través de contenidos audiovisuales, ha jugado un rol importante para el surgimiento del periodismo ciudadano. Por eso las grandes empresas de noticias utilizan cada vez más estas publicaciones como fuentes, insertando en sus portales contenidos de Twitter o de Facebook.

Desde la creación de Twitter en el año 2006, los venezolanos han utilizado esta plataforma para satisfacer sus necesidades informativas. El uso de esta herramienta no se limita al consumo de información, sino que incluye actividades relacionadas con la difusión de noticias que los usuarios consideren relevantes; por lo tanto, Twitter no sólo beneficia a las personas naturales, también a los medios de comunicación tradicionales y a los entes gubernamentales, ya que

19 Transparencia Venezuela, “Venezuela sigue en deuda con la Ley de Acceso a la Información Pública”. Disponible en <https://transparencia.org.ve/project/venezuela-sigue-en-deuda-con-la-ley-de-acceso-a-la-informacion-publica/>.

20 Clelia Santambrogio “Foro Tendencias Digitales 2015: Venezuela tiene el ancho de banda más bajo de los países de Latinoamérica”, 29 de septiembre de 2015. Disponible en <http://www.cvv.com.ve/venezuela-se-estanco-53-de-penetracion-en-internet-y-ancho-de-banda-mas-bajo-de-la-region>.

la información que publican los ciudadanos es utilizada para generar noticias, políticas públicas, o para identificar problemas.

En consecuencia, la tarea que hace 15 años correspondía principalmente a los periodistas formados académicamente y empleados por algún periódico, televisión o emisora de radio, se ha convertido en una posibilidad para todos y todas. Ahora las personas pueden difundir datos, hechos, y sus intereses fácilmente. Además, gracias a Internet y a las redes sociales se facilita la organización de los ciudadanos en torno a un interés común para exigir la promoción y el cumplimiento de sus derechos, y para proponer políticas públicas que generen un cambio positivo para la sociedad.²¹

Un estudio realizado por la encuestadora Datanálisis para la ONG venezolana Espacio Público, indicó que Internet es el tercer medio más utilizado en el país para buscar noticias, con un uso diario entre 30 minutos y dos horas en las redes sociales y portales web para conseguir esta información. Lo que explica porque los comentarios noticiosos sobre el acontecer diario en Venezuela son muy comunes.²²

En este mismo sentido, el reporte de penetración de Internet en Venezuela para 2016 de Tendencias Digitales, indica que el 85 por ciento de las personas con acceso a la red, utilizan su conexión para leer noticias, la tercera acción más frecuente en la web, y el 78 por ciento para hacer uso de las redes sociales. De hecho, en el informe publicado en el 2015 se asegura que el 70 por ciento de las personas con acceso a Internet en Venezuela utilizan Twitter, y el 90 por ciento utilizan Facebook. Sin embargo, dada la inmediatez de las publicaciones y la organización sencilla por etiquetas y tendencias, Twitter se ha convertido en una fuente de información importante para los ciudadanos y para los medios de comunicación social.²³

21 Con esta afirmación no pretendemos desconocer otras iniciativas que se encuentran dentro del marco del periodismo comunitario. Sin embargo, en Venezuela este tipo de periodismo se limita el uso de medios tradicionales de comunicación (TV, radio, periódicos, revistas, etc.) y por ese motivo no son parte del análisis de este artículo, sin embargo, para más información sobre este punto ver: Orlando Villalobos Finol, “Los medios comunitarios en Venezuela: presencia, conflictos y retos actuales”, *Comunicación*, No. 156 (2011). Disponible en: http://gumilla.org/biblioteca/bases/biblio/texto/COM2011156_39-45.pdf.

22 Paola Nalvarte, “Consumo de noticias en redes sociales crece en Venezuela ante restricciones a los medios tradicionales”, 10 de junio de 2016. Disponible en <https://knightcenter.utexas.edu/es/blog/00-17189-consumo-de-noticias-en-redes-sociales-crece-en-venezuela-ante-restricciones-los-medios>.

23 Tendencias Digitales, *Penetración y usos de internet en Venezuela. Reporte 2016*. Disponible en http://tendenciasdigitales.com/webnew/wp-content/uploads/2016/09/Reporte_Penetracion_vzla_2016.pdf; Clelia Santambrogio, “Foro Tendencias Digitales 2015: Venezuela tiene el ancho de banda más bajo de los países de Latinoamérica”, 29 de septiembre de 2015. Disponible en <http://www.cwv.com.ve/venezuela-se-estanco-53-de-penetracion-en-internet-y-ancho-de-banda-mas-bajo-de-la-region/>.

Por otra parte, la censura en Venezuela se ha hecho común en los últimos años, sobre todo en los medios de comunicación tradicionales. El registro de Espacio Público, ONG especializada en el monitoreo de la situación del derecho a la libertad de expresión en Venezuela, indica que la censura ha sido uno de los principales tipos de violaciones de este derecho en los últimos años, representando el 27,18 por ciento, 25,04 por ciento y 16,46 por ciento de los casos en los años 2013, 2014 y 2015 respectivamente.²⁴

Estas restricciones causan un impacto negativo en la información disponible a las personas, hechos noticiosos como protestas del sector opositor al gobierno, actos políticos que no sean del partido oficialista, conflictos sociales como saqueos o linchamientos; no tienen espacio en la televisión nacional, en los periódicos, y cada vez menos minutos en la radio.

Es así como las personas han encontrado en las redes sociales una oportunidad para mostrar aquello que no reflejan los canales de noticias, y para conocer qué sucede en el país. Los periodistas ciudadanos envían desde sus perfiles información sensible referente a saqueos, linchamientos, escasez de productos básicos, escasez de medicinas y hechos delictivos, apoyando la veracidad de sus declaraciones con contenido audiovisual que se vuelve viral en la web. Pero también muestran qué sucede en su entorno: problemas de tráfico, fallas con los servicios básicos, deterioro del asfalto e incluso casos de posible corrupción de las autoridades locales.

Un caso ícono que ejemplifica este hecho en Venezuela, es la reconstrucción del asesinato de Bassil Da Costa y Juan “Juancho” Montoya, hecha por el equipo de redacción del periódico Últimas Noticias a partir de videos y fotografías publicados en las redes sociales por las personas que viven en los alrededores del lugar de los hechos. La investigación, que puede verse a través de YouTube, logró identificar a los responsables del suceso, así como revelar quiénes fueron los autores intelectuales; sin embargo, actualmente el video no está disponible en el portal web de este diario debido al cambio editorial tras su venta a representantes del Gobierno.²⁵

24 Espacio Público, “Informe sobre la Situación del Derecho a la Libertad de Expresión en Venezuela.” Años 2013, 2014 y 2015. Disponibles en <http://espaciopublico.org/informes/>; Tribunal Supremo de Justicia de Venezuela, Sala Constitucional, Expediente N° 16-0360, 8 de junio de 2016. Disponible en: <http://www.tsj.gob.ve/-/tsj-condena-linchamientos-por-contrariar-la-convivencia-social-la-condicion-humana-y-el-estado-de-derecho>.

25 Video disponible en <https://www.youtube.com/watch?v=gjgKH7xqPJQ>.

Periodista ciudadano

En todas partes del mundo ciudadanos están utilizando las redes sociales y otras plataformas basadas en el Internet con fines comunicacionales, y Venezuela no es la excepción. La disponibilidad de tecnologías de comunicación a precios relativamente económicos, que permiten la disseminación de información de forma veloz y masiva, y la posibilidad de evitar la desinformación causada por la imposición de diversas restricciones al ejercicio del derecho a la libertad de expresión, han propiciado la aparición de los periodistas ciudadanos.

Un periodista ciudadano es una persona que, sin tener una formación profesional en periodismo, produce y comunica información mediante el uso de plataformas basadas en el Internet, tales como blogs, páginas webs, mails, y/o redes sociales. Esta información puede ser compilada mediante el uso de diferentes métodos (observación, entrevistas, grabación de videos, fotografías), analizada y verificada a fin de comprobar su veracidad. Quienes practican esta forma de periodismo suelen hacerlo de forma momentánea debido a que no reciben un pago formal por la elaboración de sus reportes. Adicionalmente, a diferencia de las noticias elaboradas por periodistas que trabajan para un medio de comunicación, las noticias publicadas por periodistas ciudadanos no pasan por proceso editorial, y normalmente se refieren a eventos o situaciones hiper-locales.²⁶

Debido a que los periodistas ciudadanos no tienen el apoyo de un medio tradicional, los recursos económicos con los que cuentan son limitados. De igual forma, como tienen dificultades para acceder a fuentes oficiales de información suelen utilizar la información publicada por otros usuarios o por otros actores locales, como por ejemplo miembros de las asociaciones de vecinos o dueños de pequeños establecimientos comerciales. Por estos motivos hay quienes usan estos argumentos para desacreditar el trabajo realizado por los periodistas ciudadanos, sin embargo, los beneficios de esta forma de periodismo son innumerables.²⁷

En países con poca transparencia, los periodistas ciudadanos son claves para conocer casos de corrupción y tener un medio de comunicación que difunda la información que envían, los empodera y los protege gracias al resguardo de la fuente periodística. Mientras que en lugares en los que los medios tradicionales

26 Mariateresa Garrido V. "The protection of Citizen Journalists during Armed Conflicts" en *Journalism Under Assault*. Ulla Carlson, ed. (Gothenburg: NORDICOM, 2017), pág. 1.

27 Para conocer más sobre este debate ver: J. Kelly, *Red Kayaks and Hidden Gold: The Rise, Challenges and Value of Citizen Journalism*. (Oxford, Reuters Institute for the Study of Journalism, University of Oxford, 2009); S. Reese y J. Dai, "Citizen Journalism in the Global News Arena: China's New Media Critics", en *Citizen Journalism: Global Perspectives*, S. Allan y E. Thorsen, eds. (New York, Peter Lang Publishing, 2009); Z. Reich. "How Citizens Create News Stories". *Journalism Studies*, vol. 9, No.5, 2008.

de comunicación no pueden acceder, los reportes de estos periodistas constituyen la única fuente de información de cuestiones locales.

Si bien es cierto que la veracidad de la información publicada por estos periodistas puede ser cuestionada, es indudable que los periodistas ciudadanos pueden aportar información valiosa para el análisis de problemas locales. El hecho de que la opinión pública se centre en un tema de interés en una zona geográfica pequeña, debe llamar la atención de las autoridades del gobierno. Los funcionarios son empleados públicos al servicio de la gente, por lo que deben abocarse a solucionar los problemas que afectan al ciudadano común y promover el desarrollo. Más aún, cuando en muchas zonas de una ciudad las personas difunden información sobre problemáticas similares (por ejemplo, la calidad del agua), es posible mapear el problema, identificar las áreas de riesgo para que las autoridades tomen parte e investiguen los hechos. De ahí, la participación ciudadana puede convertirse en organización, de cara a originar propuestas que sean escuchadas durante la toma de decisiones sobre la adopción de cambios en las políticas públicas.

En Venezuela existen diversas iniciativas locales que fomentan el periodismo ciudadano, sin embargo, dada la participación directa de las autoras en la Fundación Comunicas, las siguientes secciones presentan ejemplos de esta organización que demuestran cómo el uso de medios de comunicación digital favorece la participación ciudadana a través de la diseminación de noticias publicadas a través de redes sociales.

IV. Comunicas, del tweet a la noticia

La Fundación Comunicas nació como una asociación civil en el año 2009, con el objetivo de que los ciudadanos participaran en un medio de comunicación local, compartiendo noticias, problemas y soluciones para la vida en las comunidades residenciales; hoy en día cuentan con más de 60 portales web de noticias para las urbanizaciones y 90 cuentas de Twitter de noticias hiper-locales.

Esta Fundación le ha dado la posibilidad al ciudadano de que su voz sea escuchada y que sus demandas sociales sean publicadas en un medio de comunicación; el carácter hiper-local permite visibilizar los problemas diarios del ciudadano en la base de la sociedad, ya que los medios de cobertura nacional no le dan espacio a estas informaciones por su poca relevancia en comparación con hechos de interés de todo el país.

Los temas que abarcan las noticias son diversos, y responden a la necesidad del ciudadano; incluyendo, problemas en el asfalto público, calidad del agua, escasez de productos básicos, uso de los espacios públicos, fallas en los

servicios, rendición de cuentas de las autoridades locales, entre otros. De esta forma, Comunicas ha potenciado la capacidad de organización de los ciudadanos en torno a temas de interés común.

El proyecto piloto —El Curumeño— se realizó en la Urbanización Cumbres de Curumo, ubicada en el Municipio Baruta de la Ciudad de Caracas, y sirve a una comunidad de aproximadamente 9500 electores. Es un medio de comunicación hiper-local que se alimenta de la información que envían los vecinos y para inicios de octubre de 2016 cuenta con 937 noticias publicadas, 13 ediciones audiovisuales de noticieros, 2500 visitas mensuales en promedio a su página web, y 6153 usuarios de Twitter.

En el año 2012 el medio promovió la organización de los ciudadanos para realizar una protesta ecológica en contra de la construcción de un conjunto residencial que impactaría negativamente a la urbanización por la tala de árboles, contaminación por el uso de vehículos y problemas en la administración de servicios básicos, entre otros. Progresivamente, Comunicas El Curumeño apoyó a los ciudadanos para la organización de otras demostraciones públicas e incluso fue clave para el periodo de manifestaciones de abril a mayo de 2014, en el que la urbanización Cumbres de Curumo tuvo relevancia por tener uno de los accesos a las residencias militares de Fuerte Tiuna.²⁸

Entre otros logros, los periodistas ciudadanos se sirvieron del medio para manifestar su desacuerdo ante la falta de convocatoria de elecciones de las autoridades locales. Después de reiteradas exigencias durante dos años, la Asociación de Vecinos (organización civil que representa a los habitantes de la urbanización) convocó a elecciones para una nueva junta. Luego de 5 años sin celebrar los comicios, que debían realizarse cada dos años, se logró un cambio de directiva por votación popular, y quienes tenían 15 años ocupando los cargos de representación ciudadana y manejando los recursos de la urbanización, fueron destituidos.²⁹

Una de las quejas constantes publicada por El Curumeño está relacionada con el Supermercado Unicasa, el único de la urbanización. La escasez de productos básicos y la regulación de la venta de los mismos generaron que personas de otras comunidades empezaran a ir a ese mercado para buscar estos víveres;

28 Fundación Comunicas, El Curumeño, “En video resumen de la protesta ecológica”, 28 de junio de 2012. Disponible en: <http://cumbresdecurumo.comunicas.org/2012/en-video-resumen-de-la-protesta-ecologica/>.

29 Fundación Comunicas, El Curumeño, “Al fin anuncian elecciones en Apruce”, 1 de septiembre de 2015. Disponible en: <http://cumbresdecurumo.comunicas.org/2015/al-fin-anuncian-elecciones-en-apruce/>.

por consiguiente, el establecimiento presenta largas filas de espera para hacer compras.³⁰ Con foráneos ocupando los espacios públicos de la urbanización, los vecinos a través de las redes sociales reclamaban por la desorganización, el ruido y la basura que dejaban en las áreas comunes. Comunicas empezó a reflejar estos reclamos en El Curumeño y posteriormente recibió denuncias sobre venta ilegal de productos, involucrando al personal del Supermercado. Todas las noticias mostraban información enviada por las personas a través de Twitter, y la presión de la opinión pública logró que la Asociación de Vecinos iniciara conversaciones con los representantes del supermercado y buscaran soluciones en conjunto para solventar la situación; entre las medidas aplicadas, fue despedido un vigilante del establecimiento que estaba involucrado con la venta irregular de productos.

Meses después, en enero de 2016, una fuente que solicitó el anonimato envió a la redacción un video donde se veía a militares cargando bultos de productos regulados en una camioneta rotulada con imágenes del partido de gobierno. El material audiovisual fue divulgado por El Curumeño, y se viralizó rápidamente. A pesar de que ningún funcionario público respondió ante el video o las acusaciones, en agosto del mismo año el gerente del supermercado fue detenido por las autoridades, acusado de retener productos de primera necesidad en el establecimiento.³¹

V. Participación y organización ciudadana para la exigencia de los derechos

El ejemplo de Comunicas El Curumeño muestra cómo disponer de un medio de comunicación en el que se puede divulgar información relacionada con los intereses de un grupo puede tener un impacto positivo en la sociedad. La publicación de información local beneficia a la comunidad y potencia el ejercicio de la libertad de expresión, incentivando al ciudadano a ser un sujeto activo en la generación de noticias. En consecuencia, mientras haya más datos sobre un tema relevante, hay más incentivos y posibilidades para que la sociedad participe, y se organice en torno al mismo interés.

En este sentido otro caso exitoso involucra la recopilación de denuncias sobre hechos de inseguridad en la urbanización y la instalación de “Mesas de Seguridad”. Esta iniciativa surgió en el Municipio Baruta del Estado Miranda, en Venezuela, tras el asesinato de un vecino en la urbanización Santa Fe en

30 El sistema de ventas de productos regulados establecido por el Gobierno Nacional, plantea que cada persona, según el número terminal de su identificación, puede comprar la cantidad fijada de cada ítem dos veces por semana; por ejemplo, dos kilos de harina de maíz precocida por persona, 12 rollos de papel higiénico, dos litros de aceite, dos kilogramos de pasta o de arroz, entre otros productos.

31 Noticia y video disponible en: <http://cumbresdecurumo.comunicas.org/2016/video-empleados-miembros-del-psuv-y-militares-son-responsables-de-la-escasez/>.

noviembre de 2014. Ante el riesgo de ser víctimas de este y otros tipos de crímenes (robos, secuestros), los vecinos decidieron organizarse y con ayuda de la policía y de la Alcaldía, lograron idear una red de ciudadanos que reciben denuncias sobre hechos delictivos y, tras el análisis y mapeo, generan acciones policiales en la zona. La mejora fue significativa, en el 2016 el plan está siendo aplicado en todas las urbanizaciones del municipio.

El plan funciona a través de ciudadanos que voluntariamente reciben denuncias de los hechos delictivos en la zona asignada; según lo analizado, emiten recomendaciones a los vecinos, organizan los datos y los envían a la Policía. Tras un mapeo de todos los datos, el cuerpo de seguridad elabora planes más efectivos para disminuir el índice delictivo en la comunidad.³²

La participación ciudadana se manifiesta de diferentes formas, sin embargo, la que tiene un impacto directo en la vida de las personas usualmente se relaciona con la identificación de soluciones para problemas en las urbanizaciones o zonas residenciales donde la población desarrolla sus actividades cotidianas. Allí donde las personas viven su día a día, en los espacios donde conviven y pasan la mayoría de su tiempo, es donde deben empezar a originarse los cambios de manera que respondan a las necesidades de todos.

Sin importar el nivel socioeconómico, racial o educativo, es en las comunidades residenciales donde las personas viven los retos y problemas que más les afectan. En la medida que se tome en cuenta la voz de estos ciudadanos, será posible que las decisiones y políticas gubernamentales sean más inclusivas y participativas. La alianza entre ciudadanos y gobierno puede generar políticas públicas efectivas y beneficiosas para las personas. En consecuencia, es necesario incentivar a las personas a convertirse en periodistas ciudadanos, no sólo porque son fuentes de información valiosa y confiable que expone las necesidades de la gente, sino también porque fomentan la participación ciudadana e impulsan cambios de políticas gubernamentales de manera inclusiva.

En América Latina y en los países donde los medios de comunicación tradicionales son censurados, el periodismo ciudadano representa una ventana abierta a la información y a la difusión de hechos y datos que lleven a la opinión pública temas sociales relevantes. Igualmente, gracias al ejercicio del derecho al acceso a la información pública cualquier persona que posea información que deba ser conocida por la mayoría puede publicarla. Estas situaciones pueden producir cambios legislativos, propiciar la transparencia en las instituciones públicas, disminuir la corrupción, y en consecuencia favorecer el desarrollo del país.

32 Más información sobre las Mesas de Seguridad disponible en: <http://confirmado.com.ve/concejal-hector-urgelles-quiere-llevar-plan-de-seguridad-de-santa-fe-a-toda-baruta/>.

Ningún pueblo puede evolucionar política y socialmente sin tener una visión clara de lo que sucede, ni puede tomar decisiones asertivas si no conoce toda la información que requiere el tema. Por ejemplo, ¿cómo decidir por cuál candidatura votar si no se conoce la trayectoria de los candidatos? ¿Cómo saber si un funcionario ha estado inmerso en corrupción si no rinde cuentas de su gestión? Es allí donde el periodismo ciudadano, trasladado a las instancias gubernamentales, puede ser la clave para la transformación de la sociedad de acuerdo a lo planteado por el objetivo 16.

VI. Conclusiones

Para alcanzar los ODS es necesario que se desarrollen mecanismos formales y directos para que la información generada por los periodistas ciudadanos, sea tomada en cuenta por los gobiernos. Contar con un marco legal adecuado es imprescindible. Los estados deben adoptar las leyes que garanticen el ejercicio de la libertad de expresión y la participación ciudadana, las cuales deben incluir mecanismos de acceso a la información pública y a los medios de comunicación. En el caso venezolano la constitución garantiza estos derechos, sin embargo, no es suficiente. El hecho de no contar con leyes que determinen el procedimiento para solicitar información o el acceso a los medios digitales impacta negativamente el ejercicio de estos derechos humanos.

Actualmente las plataformas basadas en el Internet presentan innumerables opciones para transformar la sociedad y llenar los vacíos legales. En particular las redes sociales se han convertido en medios de comunicación entre los ciudadanos, las autoridades y las instituciones públicas. Las críticas presentadas a través de estos medios deben ser tomadas en cuenta por los organismos del estado, ya que favorecen el respeto e indirectamente promueven la paz. El caso de El Curumeño es un ejemplo de cómo los ciudadanos pueden ser promotores del cambio y de una cultura de paz. Mientras existan más medios de comunicación ciudadana hay más probabilidades de lograr los ODS.

La responsabilidad de exponer al público casos de corrupción o irregularidades dentro de la administración pública es compartida. Cada persona debe ser capaz de defender y exigir que las leyes sean respetadas; incluyendo las normativas hiper-locales adoptadas por comunidades residenciales, hasta las leyes nacionales aplicables a las instituciones gubernamentales. Por eso los periodistas profesionales, quienes trabajan en la televisión, la radio, o la prensa, no pueden ser los únicos responsables.

Las plataformas basadas en el Internet facilitan la posibilidad de tener sociedades más informadas, más críticas y más propositivas. El empoderamiento del ciudadano depende de varios factores, por eso se requieren planes educativos que fomenten la participación, y el acceso a las herramientas necesarias para el ejercicio de la libertad de expresión, de manera tal que la documentación de violaciones a los derechos humanos sea más común y efectiva, y permita la elaboración e implementación de políticas públicas que fomenten el desarrollo.

En Venezuela se ha demostrado que en la medida en que se instauran mecanismos formales de comunicación entre las autoridades públicas y los ciudadanos, las posibilidades de hacer contraloría social aumentan. Por eso podemos afirmar que el desarrollo de las naciones depende de que los ciudadanos puedan revisar, controlar y cuestionar abiertamente la aprobación de presupuestos, contratos, agendas y demás temas que involucren el uso del dinero público. En consecuencia, este tipo de información deber ser accesible y completa, para garantizar la transparencia y promover la contraloría. En Venezuela ésta es un área que todavía debe ser desarrollada para cumplir los objetivos propuestos.

VII. Referencias

A/66/290.

A/RES/70/1.

CCPR/C/GC/34.

Clelia Santambrogio “Foro Tendencias Digitales 2015: Venezuela tiene el ancho de banda más bajo de los países de Latinoamérica”, 29 de septiembre de 2015. Disponible en <http://www.cwv.com.ve/venezuela-se-estanco-53-de-penetracion-en-internet-y-ancho-de-banda-mas-bajo-de-la-region>.

Comisión Interamericana de Derechos Humanos, documento OAS/Ser.L/V/II.152 Doc. 21.

Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 48/15.

Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 13.

Comisión Interamericana de Derechos Humanos, documento OEA/Ser.L/V/II. Doc. 50.

Corte Interamericana de Derechos Humanos, Opinión Consultiva OC-10/89.

Corte IDH. Caso Ríos y otros Vs. Venezuela. Excepciones Preliminares, Fondo, Reparaciones y Costas. Sentencia de 28 de enero de 2009. Serie C No. 194.

Fundación Comunicas, El Curumeño, “Al fin anuncian elecciones en Aprucc”, 1 de septiembre de 2015. Disponible en: <http://cumbresdecurumo.comunicas.org/2015/al-fin-anuncian-elecciones-en-aprucc/>.

Fundación Comunicas, El Curumeño, “En video resumen de la protesta ecológica”, 28 de junio de 2012. Disponible en: <http://cumbresdecurumo.comunicas.org/2012/en-video-resumen-de-la-protesta-ecologica/>.

Internet World Stats. Disponible en: <http://www.internetworldstats.com/south.htm#ve>.

J. Kelly, *Red Kayaks and Hidden Gold: the rise, challenges and value of citizen journalism*. (Oxford: Reuters Institute for the Study of Journalism. University of Oxford, 2009).

Espacio Público, *Situación del Acceso a la Información Pública en Venezuela 2014*. Disponible en <http://espaciopublico.org/datos-e-inv/publicaciones/#>.

- Mariateresa Garrido V. “The protection of Citizen Journalists during Armed Conflicts” en *International Conference on Safety of Journalists* Ulla Carlson, ed. (Helsinki, Finlandia: NORDICOM, 2017).
- Orlando Villalobos Finol, “Los medios comunitarios en Venezuela: presencia, conflictos y retos actuales”, *Comunicación*, No. 156 (2011). Disponible en: http://gumilla.org/biblioteca/bases/biblo/texto/COM2011156_39-45.pdf.
- Paola Nalvarte, “Consumo de noticias en redes sociales crece en Venezuela ante restricciones a los medios tradicionales”, 10 de junio de 2016. Disponible en <https://knightcenter.utexas.edu/es/blog/00-17189-consumo-de-noticias-en-redes-sociales-crece-en-venezuela-ante-restricciones-los-medios>.
- S. Reese, y J. Dai, “Citizen Journalism in the Global News Arena: China’s New Media Critics” en *Citizen Journalism: Global Perspectives* S. Allan, y E. Thorsen, eds. (New York: Peter Lang Publishing, 2009).
- Stats Monkey. Mobile Facebook, Twitter, Social Media Usage Statistics in Venezuela. Disponible en: <https://www.statsmonkey.com/table/21499-venezuela-mobile-social-media-usage-statistics-2015.php>.
- Tendencias Digitales, *Penetración y usos de internet en Venezuela. Reporte 2016*. Disponible en http://tendenciasdigitales.com/webnew/wp-content/uploads/2016/09/Reporte_Penetracion_vzla_2016.pdf.
- Tribunal Supremo de Justicia de Venezuela, Sala Constitucional, Expediente N° 16-0360, 8 de junio de 2016. Disponible en: <http://www.tsj.gob.ve/-/tsj-condena-linchamientos-por-contrariar-la-convivencia-social-la-condicion-humana-y-el-estado-de-derecho>.
- Z. Reich. “How Citizens Create News Stories”. *Journalism Studies*, 9(5), 2008.

Technology and Human Rights: Revisiting the Role of ICT in Bridging Gender Inequality in Sub-Saharan Africa

Nnenna Ajufo ¹

Abstract

In the words of the provisions of Article 27 of the Universal Declaration on Human Rights,² everyone has the right to participate, enjoy and share in scientific advancement and its benefit. However, millions of women are excluded from access to information and communication technologies (ICT), particularly in Sub-Saharan Africa where society is still bound in chains of traditional and cultural beliefs, thus deepening the gender divide that already exists between men and women. Women who lack access to ICT are extremely marginalized from contemporary societal development. The gender dimension is considered in the Sustainable Development Goal 5 (SDG) which looks to combat inequalities, realize human rights for all and achieve gender equality and the empowerment of women by the year 2030. To do it, one of the targets is to enhance the use of enabling technologies, in particular ICT, to promote women's empowerment. This article discusses the human rights dimensions of bridging the gender digital divide as implicit in the international human rights framework. It focuses on the two-fold need to bridge gender inequality, as well as bridging the ICT gender divide in terms of inequalities related to ICT access between men and women in the Sub-Saharan African region. The article considers the role that ICT can realistically be expected to play in improving the level of living and quality of life of these women. Lastly, it identifies and discusses ways to use ICT proactively and effectively to promote gender equality and the empowerment of African women within a human rights framework, towards achieving SDG 5.

Keywords: ICT, Human Rights, Gender, Equality, Sub-Saharan Africa.

I. Introduction

The term commonly used to cover the range of technologies relevant to the transfer of information and communication, in particular computers, digital electronics, and telecommunications is information and communications technologies (ICT).³ It relates to devices that receive, transmit, manipulate,

1 Law lecturer at Baze University, Abuja, Nigeria.

2 Resolution 217 A (III).

3 David Crystal, *The Cambridge Encyclopaedia*, 2nd ed. (Cambridge, Cambridge University Press, 2003), p. 564.

store or retrieve information electronically, including: computers and network hardware and software, satellite systems, televisions, phones, radios, pagers, audio visual equipment, the information content of these technical systems as well as the various services and applications associated with them, such as the Internet. These technologies enable electronic production and consumption of increasingly vast quantities of information and are relevant to the transfer of information and communications.⁴ These technologies according to Gunton, can be separated into two main categories; those which process information, such as computer systems and those which disseminate information, such as telecommunication systems all related to economic, social, scientific, cultural and political applications in the society.⁵

The vivid question is whether ICT will enhance the possibilities for Sub-Saharan African women to leapfrog into stages of gender equality, so that they can catch up with their male counterparts in all spheres of societal participation.⁶ The answer is that the dynamics of ICT in contemporary society are so insurmountable that it becomes almost impossible to enumerate and hence address that question.

With the emergence of ICT, societal barriers are being broken. Little wonder why authors like Castells constantly posit an indissoluble relationship between ICT and development and suggest that nations whose citizens are marginalized from access to ICT are suffering a severe case of apartheid.⁷ Birkinshaw proposes that ICT are very fundamental because there is scarcely a human activity in which ICT are not found.⁸ Additionally, it has also been emphasised that it was only through ICT that the prophecy of globalization has become reality, for it is ICT that made globalization technologically possible so that people can now live in a borderless world.⁹ Feather indicates that ICT are the revolution that drove society into the present millennium because they are fundamental and central to the human experience.¹⁰

4 Robin Mansell, "Communication by design?" in *Communication by Design: The Politics of Information and Communication Technologies*, Robin Mansell and Rogers Silverstone, eds. (Oxford, Oxford University Press, 1996), p. 35.

5 Tony Gunton, *A Dictionary of Information Technology and Computer Science*, 2nd ed. (Oxford, Blackwell, 1993), p. 150.

6 Christian Fuchs, *Internet and Society: Social Theory in the Information Age* (London, Routledge, 2008), p. 220.

7 Manuel Castells, *End of Millennium*, 2nd ed. (Cambridge, Blackwell Publishers, 2000), pp. 92-95.

8 Patrick Birkinshaw, *Freedom of information: The Law, The Practice and The Ideal* (London, Butterworths, 1996) p. 9.

9 Robert Hassan, *The information Society* (Cambridge, Polity, 2008), pp. 25-26.

10 John Feather, *The Information Society: A Study of Continuity and Change*, 6th ed. (London, Facet Publishing, 2013), p. xiv.

It has become a norm to measure development through access to ICT.¹¹ It can rightly be submitted that this is based on the premise that countries whose citizens have access to ICT are open to vast arrays of information necessary for economic, social, political and global inclusion, which in turn creates development. Predicting the future, the United Nations Development Programme (UNDP) in 1999 stated that “the ICT industry could provide entry points for developing countries into producing for the knowledge-intensive economy.”¹² Marx also considers technologies like ICT as an unalloyed blessing for man and society, the motor of all societal progress and the solution to most of the social problems evident in society.¹³ He argues that these technologies also help in liberating individuals from the clutches of factors related to underdevelopment, hence, becoming the source of permanent prosperity and the promise of utopia for society.¹⁴

Actually, ICT have been entwined with major changes and advancements in societal development.¹⁵ Before the adoption of the Sustainable Development Goals (SDGs), the UN reaffirmed that ICT are powerful tools to foster development. The UN General Assembly noted that ICT are powerful tools to contribute to the realization of the Millennium Development Goals (MDGs),¹⁶ and in 2015, the UN reemphasized that “increased ICT connectivity, innovation and access have played a critical role in enabling progress in the MDGs.”¹⁷ Goal 3 of the MDGs was to promote gender equality and empower women.¹⁸ The recently adopted 2030 Agenda for Sustainable Development provides in its target 9(c) to “significantly increase access to ICT and strive to provide universal

11 One of the statistics the World Bank employs to measure development is access to ICTs in countries. See for instance: World Bank <http://wdi.worldbank.org/table/5.12>.

12 United Nations Development Programme, *Human Development Report 1999* (Oxford, New York, 1999), p. 57.

13 Leo Marx, “Does Improved Technology Mean Progress?” in *Technology and the Future*, Albert Teich, ed. (Belmont, Thompson Wadsworth, 2006), p. 94.

14 Ibidem.

15 Robin Mansell and others, *The Oxford Handbook of Information and Communications Technology* (Oxford, Oxford, 2007), p. 1.

16 United Nations, “High-level plenary meeting on the millennium development goals”, 12 November 2010. See Goal 8 of the conference paper, 12 September 2016. Available from http://www.un.org/en/mdg/summit2010/pdf/HLPM%202010_CRP_Side%20events.pdf.

17 United Nations General Assembly, “Overall preview of the implementation of World Summit on Information Society (WSIS) outcomes: Draft outcome document 4 November 2015”, 12 September 2016. Available from <http://workspace.unpan.org/sites/Internet/Documents/UN-PAN95572.pdf>.

18 United Nations “Millennium development goals”, 12 September 2016. Available from <http://www.un.org/millenniumgoals/>.

and affordable access to internet in LDC's by 2020".¹⁹ Most importantly, target 5 encapsulates the discourse of this article by noting in 5(1) that it is a target to "end all forms of discrimination against all women and girls everywhere"²⁰ and target 5(6)(b) concludes the matter in providing another target which is "to enhance the use of enabling technologies, in particular ICT, to promote women's empowerment"²¹ ICT has become one of the main drivers of growth, and the importance of ICT to the economic and social development of both men and women explains the priority of bridging the gender ICT divide.²²

Therefore, this article discusses the human rights dimensions of bridging the gender digital divide as implicit in the international human rights framework. It focuses on the two-fold need to bridge gender inequality, as well as bridging the information and communications technologies gender divide in terms of inequalities related to ICT access between men and women in the Sub-Saharan African region. The article considers the role that ICT can realistically be expected to play in improving the level of living and quality of life of these women. Lastly, it identifies and discusses ways to use ICT proactively and effectively to promote gender equality and the empowerment of African women within a human rights framework.

II. The ICT Gender Divide

The digital divide refers to situations where there is a marked gap, or perceived gap, between those who have and do not have access to ICT and between those who have and do not have the ability to use those tools.²³ The digital divide also refers to the information, infrastructure and knowledge gap that exists between the industrialized countries and developing countries in terms of ICT. It is the disconnection between the "haves" and "have-nots" of access to ICT resources that contribute to social and economic development.²⁴

19 United Nations "The sustainable development goals 2015-2030", 12 September 2016. Available from <http://una-gp.org/the-sustainable-development-goals-2015-2030/>.

20 Ibidem.

21 Ibidem.

22 Ibidem.

23 Erwin Alampay "Beyond Access to ICTs: Measuring capabilities in the information society using ICT", *International Journal of Education and Development*, vol. 2, No. 3 (2006), pp. 1-16. Herman Tavani, *Ethics and Technology: Ethical issues in an age of Information and communication Technology*, 2nd ed. (USA, Wiley, 2007), p. 296.

24 Audrey Selian, *ICTs in Support of Human Rights, Democracy and Good Governance* (Geneva, International Telecommunications Union, 2002) p. 5. Available from <https://www.itu.int/osg/spu/wsis-themes/humanrights/ICTs%20and%20HR.pdf>.

The Organisation for Economic Co-operation and Development (OECD) argues that the divide is not just about computers per se but about access to the world of information and communication.²⁵ Similarly, Warschauer holds that meaningful access to ICT comprises far more than merely providing computers and Internet connections; rather, it encompasses physical, digital, human, and social resources and relationships. Moreover, content, language, literacy, education, and community and institutional structures must all be taken into account if meaningful access to ICT is to be provided.²⁶

The ICT divide has segmented society as well as nations into those who are able to take advantage of the new ICT opportunities and those who cannot. In Castells' words, the differentiation between the ICT-haves and have-nots "adds a fundamental cleavage to existing sources of inequality and social exclusion in a complex interaction that appears to increase the gap between the promise of the ICT age and its bleak reality for many people around the world."²⁷ Tapscott agrees that the most widely feared prediction surrounding the ICT revolution is that it will splinter society into a race of information haves and have-nots, knowers and know-nots, doers and do-nots, hold the promise of improving the lives of citizens but also the threat of further dividing us,²⁸ deepening the already existing inequality gap between men and women.

There is a general tendency to measure ICT divide through the economic and development gap between the more industrialised nations and the developing countries; yet, this model still does not monitor the variation in the amounts and functions of ICT resources for different groups of people. Although the developing nations, particularly Sub-Saharan African countries, suffer the ICT divide, most gaps exist in these countries for other reasons. ICT development and use in Africa is also affected by social and cultural contexts, including inequality in the lines of gender.²⁹

Castell indicates that there are considerable differences in access to ICT for various social groups in various countries.³⁰ He based his analysis on different

25 Organisation for Economic Co-operation and Development, *Learning to Bridge the Digital Divide. Education and Skills* (Paris, Centre for Educational Research and Innovation, 2000), p. 64.

26 Mark Warschauer, *Technology and Social Inclusion: Rethinking the Digital Divide* (Massachusetts, Massachusetts Institute of Technology, 2003), p. 6.

27 Manuel Castells, *The Internet Galaxy: Reflections on the Internet, Business, and Society* (New York, Oxford, 2001), p. 247.

28 Don Tapscott, *Growing up Digital: The Rise of the Net Generation* (New York, McGraw-Hill, 1998), p. 255.

29 Castells, *Internet Galaxy...*, supra note 27, p. 248.

30 Ibidem.

social categories including income, race, gender, and age; which he termed the “dynamics of differential access”.³¹ According to Loader and Keeble, the ICT divide does not just suggest binary divides between the information rich and the information poor; in reality, the picture is complicated by social and cultural differences arising from considerations like sexuality and gender which in-turn mediate how people relate to ICT.³²

Gender is central to the understanding of ICT in all countries and the changes witnessed in global economy caused by the advent of ICT are both impacted on and are influenced by gender identities and roles.³³ People’s lives are affected by the use of ICT, yet there is also a widening gender digital divide that puts societies at risk of facing more of the negative aspects associated with the existing gender inequality.³⁴

The ICT gender divide was first identified in 1995 by the Gender Working Group (GWC) of the United Nations Commission on Science and Technology for Development (UNCSTD) in a research conducted in preparation for the Fourth World Conference on Women. The Commission identified significant gender differences in levels of access to, control of and advantages accruing from a wide range of technological developments.³⁵ It concluded that

“the information revolution appeared to be by-passing women; that information society literature was silent on gender issues, and that neither research nor practical projects in the information technology field had addressed the specific circumstances of women”.³⁶

The Beijing Declaration and Platform for Action³⁷ adopted at the Fourth World Conference on Women in 1995 also drew attention to ICT and their impact to women empowerment. The Declaration called for the empowerment of women

31 Ibidem.

32 Brian Loader and Leigh Keeble, *Challenging the Digital Divide?: A Literature Review of Community Informatics Initiatives* (York, Joseph Rowntree Foundation, 2004), p. 29.

33 Hazel Gillard and others, “Missing Women: Gender, ICTs, and the Shaping of the Global Economy”, *Information Technology for Development*, vol. 1, No. 4 (2008), pp. 262-279.

34 United Nations Division for the Advancement of Women “Gender equality and empowerment of women through ICT” (Paris, 2005) p. 7, 12 September 2016. Available from <http://www.un.org/womenwatch/daw/public/w2000-09.05-ict-e.pdf>.

35 Gender Working Group of the United Nations Commission on Science and Technology, *Missing Links: Gender Equity in Science and Technology for Development* (IDRC/ITDG Publishing/UNIFEM, 1995).

36 Natasha Primo, *Gender Issues in the Information Society* (UNESCO Publication for the World Summit on the Information Society, 2003), p. 11.

37 United Nations “The Beijing Declaration and Platform for Action” Beijing, 4-15 September 1995, Adopted at the Fourth World Conference of Women, 12 September 2016. Available from http://www.unwomen.org/~~/media/headquarters/attachments/sections/csw/pfa_e_final_web.pdf.

through enhancing their skills, knowledge, access to and use of information technologies which will in turn strengthen their ability to combat negative portrayals of women internationally.³⁸ It also included a strategic objective to “increase the participation and access of women to expression and decision-making in and through the media and new technologies of communication”.³⁹

Women have not been included in important decisions about ICT policies and until date, have not participated to the same degree as men in the use of ICT. There is a high rate of low participation of women in access and use of ICT, especially in rural areas of Sub-Saharan Africa. ICT enabled services are out of reach for many of those women. Alampay states that “given that social and cultural contexts affect ICT development and use, ICT are never gender neutral”,⁴⁰ and because of social and cultural norms which already create inhibitions and gender inequality in many societies, access to ICT is also affected, with men having more opportunities than women.

In this regard, Kirkup suggests that ICT have also contributed to the production of gender differences that are experienced differently by men and women.⁴¹ Kirkup asked the question, “are women really getting their hands on ICT, or simply being positioned as consumers as well as the consumed?” and argues that presently, ICT are only fashioned towards shopping for women, hence placing them as consumers, and that they are fashioned towards sexual contents for men; and in consequence, women became the consumed product. For those reasons, she concludes that women are “getting their hands on ICT” but less enough to challenge the ICT divide in the dimension of gender.⁴²

Additionally, Elnaggar agrees that there exists a traditionally male dominated ICT sector, heightened by unequal access to training, lack of language content, and the lack of awareness and policy advocacy, among others.⁴³ Therefore, despite the giant strides in ICT and the global and far-reaching effects of its spread, women are still at a high risk of marginalization from today’s ICT based society.

38 Ibid, Strategic Objective J, para. 237.

39 Ibidem.

40 Alampay, *Beyond access to ICTs...* supra note 23, p. 9.

41 Gill Kirkup, “Getting our hands on it: Gendered inequality in access to information and communications technologies”, in *Access Denied in the Information Age*, Stephen Lax, ed. (New York, Palgrave Macmillan, 2001), p. 46.

42 Ibidem.

43 Ayman Elnaggar, “Towards gender equal access to ICT”, *Information Technology for Development*, vol. 14, No.1 (2008), pp. 280-293.

It is also pertinent to emphasize that the ICT divide is mainly concerned with the poorest segments of a population and poorer societies.⁴⁴ The poorer a person is, the more difficult it is to access material needs such as food, clothing and housing, how much more ICT. It is general knowledge that many Sub-Saharan African countries account for the developing as well as poorer nations. Actually, statistics show that this region suffers the ICT divide more than other regions of the world because their governments and citizens can hardly afford ICT.⁴⁵ What is exemplary in focusing on ICT access for Sub-Saharan African women is the fact that the ICT divide is more concentrated in many parts of Sub-Saharan Africa where women are also the poorer of both genders.

In 2015 the International Telecommunications Union (ITU) recorded an unexpected growth in ICT access and connectivity. ITU recorded more than 7 billion cellular subscriptions, which is a huge increase from the less than 1 billion people in the year 2000 who had mobile cellular subscriptions worldwide.⁴⁶ Globally mobile broadband penetration reached 47 per cent in 2015, which as ITU noted, is a value that has increased 12 times since 2007. Yet, despite the tremendous growth in ICT usage, the entire Sub-Sahara Africa still lags far behind the rest of the world. Countries are not connected to each other, and even within their borders there are still wide disparities between urban centres and rural areas, and between men and women.⁴⁷

It has been noted that Sub-Saharan African countries record the highest growth rates for mobile phone subscription ranging from 50 to 400 per cent over the last three years, but still remain at the bottom of the pile when it comes to mobile phone use, fixed-line telephones and internet access, with barely 5 per cent of households having fixed-line telephones and less than 4 per cent of Sub-Saharan Africans having access to the Internet.⁴⁸ The World Bank 2015 report of ICT access per country, showed that many Sub-Saharan African countries still remained at the bottom, pointing to a still deepening ICT divide. The statistics

44 Castells, *Internet Galaxy*... supra note 27, p. 254.

45 Amartya Sen, *Development as Freedom* (New York, Knopf, 1999), p. 99; See also various World Bank Index on Development for instance World Bank "Development indicators", 16 September 2016. Available from <http://wdi.worldbank.org/table/5.12>.

46 See United Nations Population Fund, 12 September 2016. Available from <http://www.unfpa.org/news/world-population-reach-7-billion-31-october>.

47 Jones Killimbe, "Connecting Africa" in *Connect Africa: The Countdown to 2015*, Connect the World Series, vol.1 (Geneva, International Telecommunications Union, 2007), p. 40.

48 Jay Naidoo, "Revolutionizing ICT" in *Connect Africa: The Countdown to 2015*, Connect the World Series (Geneva, International Telecommunications Union, 2007), p. 55.

for television access reported that Sub-Saharan Africa had a mere 25 per cent.⁴⁹ The same report also analysed the statistics of households with a computer and the entire Sub-Saharan African populace had only 8.8 per cent and, the percentage of the population using Internet for the entire Sub-Saharan Africa was 16.9 per cent.⁵⁰ According to INTEL, the ICT gender gap varies from region to region, but is particularly high in sub-Saharan Africa, where there are twice as many men as women on the Internet.⁵¹ A World Wide Web foundation study based on a survey of thousands of poor urban men and women across developing countries that included some Sub-Saharan African countries, found that women are still nearly 50 per cent less likely to access ICT (i.e the Internet) than men in the same communities, with Internet use reported by just 37 per cent of the women surveyed.⁵² The study conducted of the gender ICT divide in some Sub-Saharan African countries including Cameroon, Nigeria, Kenya, Mozambique and Uganda pointed again to the existing gender divide. Cameroon accounted for a difference of minus (-) 25 per cent of their entire women population having access to ICT when compared with men who had access, Nigeria was minus (-) 83 per cent, Uganda was minus (-) 190 per cent, Mozambique minus (-) 79 per cent and Kenya was minus (-) 185 per cent.

“Poverty is not simply the consequence of lack of resources. Some people are unable to access existing resources because of who they are, what they believe or because of their gender.”⁵³ For that reason, most poor women in Sub-Saharan African countries are further removed from access to ICT than the men whose poverty they share.⁵⁴ It has been emphasized that men are twice more likely to have access to the Internet than their female counterpart. According to an Intel report on “Women and the Web”, “on average across the developing world, nearly 25 per cent fewer women than men have access to the Internet, and the gender

49 World Bank, “Development indicators”, 12 September 2016. Available from <http://wdi.worldbank.org/table/5.12>

50 Ibidem.

51 Intel, “Women and the web” report, January 2013”, 27 November 2016. Available from <http://www.intel.com/content/www/us/en/technology-in-education/programs-for-women-and-girls.html?wapkw=women%20and%20girls>.

52 World Wide Web Foundation, “Women’s rights online: Translating access into empowerment”, *Global Report: October 2015*, 27 November 2016. Available from <http://webfoundation.org/docs/2015/10/womens-rights-online21102015.pdf>.

53 Department for International Development, “Realising human rights for poor people: Strategies for achieving the international development targets” (DFID, London, October 2000), 12 September 2016. Available from http://www2.ohchr.org/english/issues/development/docs/human_rights_tsp.pdf.

54 Nancy Hafkin and Nancy Taggart, “Gender, information technology and developing countries: An analytic study 2001”, 12 September 2016. Available from http://pdf.usaid.gov/pdf_docs/Pnacm871.pdf.

digital gap soars to nearly 45 per cent in regions like sub-Saharan Africa”.⁵⁵

The educational imbalance also relates to the ICT divide to a measurable extent. Educated individuals have greater levels of access to ICT unlike uneducated individuals.⁵⁶ The fact that so many women in parts of Africa do not have opportunities to access education must be considered. ICT competencies are underpinned by levels of basic literacy in reading and writing, and other multimedia and digital literacy forms which requires skills, for which just being able to read and write is not enough literacy to being able to put these skills to daily use. Hamelink agrees that access to the global ICT networked society is mainly available to those with good education and with sufficient disposable income.⁵⁷ However, according to Watkins’ report on education, the majority of children deprived of education are female, and the majority of adults unable to read are female.⁵⁸ Again, many African women are not digitally literate, and becoming digitally literate entails the skills which are similar to conventional forms of achieving literacy, of which many women still do not have access to. This affects how women can effectively access ICT. Study reveals that in many Sub-Saharan African countries, among individuals with at least secondary education, the gender ICT gap is 35 per cent, but among those with only primary education, it skyrockets to 100 per cent and almost 10 times as many men who have access to ICT among those with no formal schooling experience.⁵⁹

It is a reality that in some populations or regions, particularly in rural Sub-Saharan African areas, people are sceptical about ICT because of diabolical, cultural and social concerns. While some concerns are based on cultural stereotyping, superficial beliefs or myths, others may indeed be reality, for example the concerns of privacy and cybercrimes. Again, many African societies obviously believe ICT is a male affair, and the women themselves accept it based on the fact that they already conceive and accept themselves as inferior to men because of religious, traditional and cultural beliefs. Actually, many young women are reluctant to learn, because they doubt the relevance of ICT to their own lives, even though they believe that ICT is critically important to the future prosperity of society.⁶⁰

55 See Intel Corporation ““Women and the Web” 2012”, 12 September 2016, p.10. Available from http://dalberg.com/documents/Women_Web.pdf; See also International Telecommunications Union, *Measuring the Information Society*, 5th ed. (Geneva, ITU, 2013).

56 Manuel Castells, *Internet Galaxy...* supra note 27, p. 249.

57 Cees Hamelink, *The Ethics of Cyberspace* (London, Sage, 2002), p. 82.

58 Kevin Watkins, *The Oxfam Education Report* (Dorset, Oxfam, 2000), p. 3.

59 World Wide Web Foundation, *Women’s rights online...*, supra note 52.

60 Naomi Halewood and Charles Kenny, “Young people and ICTs in developing countries”, *Information Technology for Development*, vol. 14, No. 2 (2008), pp. 171 -177.

III. Human Rights, African Women and Access to ICT

The right of access to ICT can arguably be said to be written in the provisions of Article 27 of the Universal Declaration of Human Rights, which provides that “...everyone has the right to participate, enjoy and share in scientific advancement and its benefits”⁶¹ and article 15 of the International Covenant on Social, Economic and Cultural Rights, which provides that “State parties to the Covenant recognize everyone’s right to enjoy the benefits of scientific progress and its applications.”⁶² ICT have become extremely topical in contemporary discourse. Article 27 was arguably drafted with a foresight to include and accommodate future technological developments including ICT. Hence, the framework of international human rights law applies to ICT.⁶³

The digital age has made it prima facie that access to ICT is a prerequisite for inclusion in today’s increasingly technologically driven society, thus arguably inclined to the human rights understanding. Without effective access to ICT today, no society can boast of witnessing development. According to article 1 of the Declaration on the Right to Development, everyone has a right to development.⁶⁴ Everyone includes women and not men alone. The value of ICT to human rights and particularly the right to development cannot be overemphasized. As explained, access to ICT has become a yardstick for measuring development and underdevelopment and has been regarded as the electricity of the present age and the engine driving modern development.⁶⁵

The right of access to ICT can be said to be derivable from the right to freedom of expression guaranteed under article 19 of the International Covenant on Civil and Political Rights.⁶⁶ This norm was arguably drafted with a foresight to include and to accommodate future technological developments through which individuals can exercise their right.⁶⁷ Women need ICT for the same reasons as men; to access information of importance to their productive, reproductive and community roles and to obtain additional resources.

61 A/RES/217/A/III.

62 Resolution 2200A (XXI).

63 Organisation for Security and Co-Operation in Europe, “Freedom of expression and the Internet”, 15 December 2011. Available from <http://www.osce.org/fom/80723> (accessed 15/09/2016). See also A/66/290 Para 16, 15 September 2016. Available from <http://www.ohchr.org/documents/issues/opinion/a.66.290.pdf>.

64 Resolution 41/128, Article 1(1).

65 Manuel Castells, *End of Millennium...* supra note 7, p. 1.

66 Resolution 2200A (XXI), which states that: “Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art or through any other media of his choice.”

67 A/HRC/17/27 para. 21.

The framework of international human rights law is seemingly equally applicable to ICT,⁶⁸ which can enable women just like men, gain a stronger voice in their communities, their government and at the global level. Amidst other International and regional documents prohibiting gender discrimination and inequality, the equality of women to men, finds expression in the African Charter of Human and Peoples Right⁶⁹ and in the Protocol to the African Charter on Human and Peoples Rights;⁷⁰ which prohibit discrimination and protect the equal enjoyment of rights in all societal spheres.

However, notwithstanding those various international, regional and national laws prescribing gender equality, and apart from the fact that many Sub-Saharan African states have ratified several human rights instruments protecting women's human rights, culture and traditions, have not allowed these ratifications have full impact on the realisation of women's rights, needs and welfare. Most women are denied the equal enjoyment of their human rights in the same way as their male counterparts because of a lesser status ascribed to them under custom. They experience discrimination in many facets of societal development. They are more affected by poverty, illiteracy and other social factors that compound their discrimination and marginalization whilst still experiencing diverse resource inequalities.⁷¹

Providing women with access to ICT within the human rights framework is thus imperative. It has become generally agreed that international norms of non-discrimination and equality, which demand that, importantly, attention to be given to vulnerable and marginalised groups such as women, have become normative elements of the international human rights framework.⁷² The penetration of ICT have added a new branch of culture to the society; digital culture or e-culture, for which those who have no physical skills or usage access to these media also miss new opportunities for cultural, social, economic and political consumption and expression. The inability of so many African women to access ICT and participate in the information society also undermines the exercise of their economic, social and cultural rights and affects their participation in many aspects of society limiting their capacity to influence decision and policy making.⁷³

68 Ibidem.

69 Organisation of African Unity OAU Document CAB/LEG/67/3 rev.5, 21 *ILM* 58 (1982), See Arts 2,3, 18(3).

70 Adopted by the Second Ordinary Session of the Assembly of the African Union CAB,LEG/66.6 (11 July 2003) entered into force 25 November 2005.

71 Fareda Banda, "Understanding women's economic and social human rights", *East African Journal of Peace and Human Rights*, vol. 12, No.2 (2007), pp. 232-53, 237.

72 Manisuli Ssenyonjo, *Economic, Social and Cultural Rights in International Law* (Oxford and Portland, Hart Publishing, 2009), p. 248

73 Ibid., p. 245.

Gender equality has been a goal of the United Nations. With the declaration of the period 1976 to 1985 as the United Nations Decade for Women, the promulgation of the 1967 Declaration on the Elimination of Discrimination against Women and the 1979 Convention on the Elimination of all Forms of Discrimination against Women which attempts to secure equality of opportunities for women in the same way as men in all spheres of society. However, SDG 5 demonstrates that the United Nations is still striving to bridge gender inequality.⁷⁴

IV. Benefits of ICT for Women

Presently, ICT have reached mass diffusion, and the problem of particular groups of the population not having access has become an issue. It is believed that the rise of ICT and its limitless opportunities will positively impact gender equality.⁷⁵ It is also believed that the ICT innovations will make sure that marginalized Sub-Saharan African women are included in many facets of societal development and are given a voice.⁷⁶

In the past few decades, ICT have transformed the world with considerable differences in its consequences for people's lives.⁷⁷ While it can be argued that there is a risk that ICT may exacerbate the existing inequalities between women and men in creating new forms of inequality, yet, the benefits of ICT for closing the gap are immeasurable. When the gender dimensions of ICT in terms of access and use, capacity-building opportunities, employment and the potential for women empowerment are explicitly identified and addressed, ICT can be a powerful catalyst for political and social empowerment of women, and the promotion of gender equality, particularly in Sub-Saharan Africa.

For authors like Adams and McCrindle, one of the significant impacts of ICT is that the barriers between societies are reduced.⁷⁸ The barriers between both genders can also be reduced if ICT are employed effectively. In fact, ICT can become vital tools in ensuring that women are not excluded from contemporary societal development. Yet, till today, limited attention has been paid to developing opinions on how ICT shape women's lives.

Arguing for the positive impacts of ICT, Naidoo emphasizes that presently, a quiet revolution is happening in regions like Sub-Saharan Africa where ICT are

74 Rhona Smith, *Textbook on International Human Rights* (Oxford, Oxford University press, 2014), p. 372.

75 Jan Van Dijk, *The Deepening Divide. Inequality in the Information Society* (London, Sage publication, 2005), p. 1.

76 Naidoo, *Revolutionizing ICT...* supra note 48, p. 55.

77 Manuel Castells, *Internet Galaxy...* supra note 27, p. 275.

78 Andrew Adams and Racheal McCrindle, *Pandora's Box. Social and Professional issues of the Information Age* (West Sussex, Wiley, 2008), p. 13.

rapidly changing lives by providing vital education, health and other economic services.⁷⁹ The potential of ICT for reducing poverty and fostering growth for Sub-Saharan African women is immeasurable, as mobile telephones can provide market links for the farmers and entrepreneurs, the Internet will deliver vital knowledge to schools and hospitals, particularly in rural areas and computers will aid the improvement of public and private services targeted at women, and increase productivity and participation. By connecting people and places, ICT will play a vital role and hold enormous promise for the future of these women.⁸⁰ Their ability to access ICT and participate in social activities will enhance their participation in many aspects of society which will also impact their capacity to influence decision and policy making in society just like their male counterparts.

There is a vivid relationship between ICT, the empowerment of women and reduction of poverty because until there is creation of wealth, reduction of poverty cannot take place. ICT can help women in creating wealth in diverse ways. Van Dijk portrays the fact that ICT have generated economic competition in the society, which drives governments, employers, and (potential) employees.⁸¹ Governments presently think ICT are the crucial innovation of the current and future wave of economic development, thus Northern America, Europe and East Asia fight for leadership in the ICT driven development while developing countries are attempting to catch up in order to create access to ICT for at least sections of their populations.⁸² Employers on the other hand, assume they must be innovative and increase the effectiveness of their sectors by adopting ICT, or they will lose in competition, while employees, the unemployed, students and others want to improve their resume by becoming familiar with ICT. Of course, the command of ICT has become a necessary condition for an increasing number of jobs and not having basic ICT skills means exclusion from these jobs for women.

Statistics show that in Sub-Saharan Africa, the prices of ICT disproportionately affect women since they have less income than women in other parts of the world.⁸³ Ssenyonjo reiterates that over 60 per cent of Sub-Saharan African

79 Jay Naidoo, *Revolutionizing ICT...* supra note 48, p. 51.

80 Ban Ki-moon in "*Connect Africa: The Countdown to 2015*", Connect the World Series, vol. 1 (Geneva, International Telecommunications Union, 2007), p. 7.

81 Dijk, *The Deepening Divide...* supra note 75, p. 164.

82 Ibidem.

83 ITU/UNESCO "Doubling digital opportunities: Enhancing the inclusion of women and girls in the information society", 12 September 2016. Available from <http://www.broadbandcommission.org/Documents/working-groups/bb-doubling-digital-2013.pdf>.

family enterprises' employees without pay are women.⁸⁴ Women perform most of the chores at home without pay. It is customary that the woman undertakes all the chores at home, cook, clean, feed the family, raise the children and generally assume the duty of a house wife. "These work is unpaid, often little valued and not represented in national production statistics."⁸⁵ In several parts of Sub-Saharan Africa, women's opportunities and choices are restricted by the fact that they spend hours collecting and carrying water and firewood for their families.⁸⁶ Many spend time farming to provide food for the family. Without real access to technology, there is a limit to how and what women can contribute to society. ICT is so critical and better access to ICT and the ability to tap into their benefits will enable many African women become more competitive in society.

In many parts of Sub-Saharan Africa, especially in countries like Nigeria, there are numerous proactive measures, aimed at ensuring gender balanced participation in diverse areas of societal strata, especially in governance and employment, however such measures are particularly needed for ICT projects. A large number of women lack the access and requisite skills for use of ICT. There is a lack of awareness amongst governments and policy makers of the benefits of ICT for ensuring women empowerment and promoting gender equality.⁸⁷

There is a lack of policy interventions advocating and promoting access and usage of ICT by women, yet ICT can be a tool for women's economic empowerment. Income generated by for instance, telephone centres⁸⁸ or computer business centres⁸⁹ not only provide money for women, but enable them support their homes. ICT can be used for women networking and campaigning. ICT can be used as a medium to ensure advocacy campaigns against gender inequality, violence against women, domestic abuse and for pro-women initiatives. While ICT can deliver potentially useful information, such as market prices for women, ICT also offers women flexibility in time and space and can be of particular

84 Manisuli Ssenyonjo, *Economic, Social and Cultural Rights...* supra note 71, p. 248; See also United Nations, "Millennium development goals report" (New York, 2005), 12 September 2016, p. 16. Available from <http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Goals2005/English.pdf>.

85 Ibidem.

86 United Nations Development Programme, *Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis* (New York, UNDP, 2006) p. v, 12 September 2016. Available from <http://hdr.undp.org/en/reports/global/hdr2006/>.

87 Ibid., p. 2.

88 Telephone centres are typically found in Nigeria and other African countries where women can sit under umbrellas or booths offering cheaper phone calls to individuals who cannot afford their own personal cell phones.

89 Computer centres are business centres offering internet services, computer services such as typesetting, photocopying, scanning, lamination etc. to the public.

value to women who face social and cultural isolation, particularly Sub-Saharan African women.⁹⁰ ICT can be a tool for a positive social change for women and thus, a tool towards ensuring women empowerment and equality.

A discussion of the impact of ICT to women would be unending. An important question has been asked, is it really true that people and countries become excluded because they are disconnected from ICT based networks? Or rather, is it because of their connection that they become dependent on economies and cultures in which they have little chance of finding their own path of material well-being and cultural identity?⁹¹ Whatever the answer, Castells concludes that mere access to ICT alone would not solve the entire societal problems, but is a prerequisite for overcoming inequality (particularly gender inequality) in a society whose dominant impact, functions and social groups are increasingly organized around ICT networks.⁹² A society where "... not having access to ICT will substantially diminish the chances of participation in all relevant fields of society".⁹³ It is in the light of addressing problems of gender inequality in relation to ICT that a human rights framework becomes necessary.

V. Conclusion

While there is recognition of the potential of ICT as a tool for the promotion of gender equality and the empowerment of women, a "gender divide" is also in existence, reflected in the lower numbers of women accessing and using ICT compared with men.⁹⁴ This article focused on the two-fold need to address the gender divide and reduce ICT inequalities related to women in Africa, and the need to identify ways to use ICT proactively and effectively to promote gender equality and the empowerment of women to achieve SDG 5. Key strategies, policies and tools to address the gender digital divide in Sub-Saharan Africa are imperative.

In bridging this gender digital divide, we would realistically open up many opportunities for women to measure up to their male counterparts in Africa. It has become extremely imperative for governments, stakeholders and other policy makers to provide the necessary conditions to ensure women's access to ICT as well as ensuring their equal role as decision-makers and stakeholders

90 Nancy Hafkin and Nancy Taggart, *Gender, information technology and developing countries...* supra note 54, p. 6.

91 Manuel Castells, *Internet Galaxy...* supra note 27, p. 247.

92 Ibid. (Bracket added).

93 Jan Van Dijk, *The Deepening Divide...* supra note 75, p. 177.

94 United Nations Development programme, *Human Development Report...* supra note 86, p.3.

in all aspects related to the shaping of ICT policies in Africa.⁹⁵ In relation to planning, implementation and evaluation, there should be specific measures to strengthen female gender opportunities within ICT projects at various phases. It is imperative that gender issues are fully integrated into ICT policies and programme designs, to enable women benefit from ICT and their application.

As noted above, access to ICT is embedded in a complex array of factors encompassing physical, digital, human, and social resources and relationships. Literacy and education, and community and institutional structures must all be taken into account if meaningful access to ICT is to be provided for Sub-Saharan African women. Our socio-cultural environment is always important for achieving success in everything.⁹⁶ The conditions that women live in, vary from one African country to another and the way women are regarded in African countries is definitely different from how they are regarded in most developed countries. Of course, ICT alone cannot create gender equality, or ensure women empowerment, however, ICT have a significant role to play in paving the way for gender equality in Africa and women still have many challenges accessing and using ICT. The discourse of African women and ICT will also depend on the readiness of individuals to accept and welcome the use of ICT. To get the full benefits of ICT, women must have access to ICT, women should be able to use them, and women must have the ability to utilize the benefits, interact, earn and achieve benefits with resources provided by these technologies.

Governments should ensure user-trust through the regulation of the ICT world.⁹⁷ This is because one barrier to individuals freely accepting use of ICT is the dangerous and criminal uses of ICT. People are worried about invasion of privacy, identity theft, fraud and many other negative antecedents. Amusingly, some individuals think ICT are damaging to health or are leading causes of health problems like cancer, brain and eye sight damage. Thus, governments should as a responsibility ensure user-trust and work with ICT developers towards raising awareness, increasing usability and user-friendliness of ICT. Fear of change can always be related to human experience. However, unless these feelings are addressed, it may lead to an exacerbation of the situation, which may wreck the promises of ICT for women in Sub-Saharan Africa.⁹⁸ Thus, governments must

95 United Nations Development programme/United Nations Development Fund for Women, "Bridging the gender digital divide: A report on gender and ICT in Central and Eastern Europe and the Commonwealth of independent states", p. xi, 12 September 2016. Available from http://www.albacharia.ma/xmlui/bitstream/handle/123456789/30862/0626BridgingGenderDigitalDivide_eng.pdf?sequence=1.

96 Jan Goesaert, "E-Government: Do new technologies build a bridge between government and citizen", in *A Decade of Research at the Crossroads of Law and ICT*, Jos Dumortier, Franc Robben and Marc Taeymans, eds. (Brussels, Larcier, 2001), p. 94.

97 Jan Van Dijk, *The Deepening Divide...* supra note 75, p. 208.

98 Idem, pp. 276-277.

also through policies, education and the creation of awareness, work towards the increased acceptance of ICT amongst these women.⁹⁹

African governments should undertake substantial investment in ICT education for women because the use of ICT involves education and literacy. Women/girls are in need of education in Sub-Saharan Africa. Being literate will also impact their opportunities and provide them with the possibilities of the emergent ICT society. Without such intellectual capacities, these women may not genuinely access and benefit from ICT. Re-training and re-skilling them at all levels is critical for basic and sophisticated ICT skills so that working practices, effort and skills required to adopt ICT would be taken into account.¹⁰⁰ African states should focus on programs like digital literacy for the excluded women. States must also include ICT literacy skills in school curricular by ensuring that the educational curricular of all levels of education system in the state include the objectives of ICT education, awareness, literacy and access.

It is important that the women, particularly in rural African communities are made aware of the importance of participation in the use of ICT and in the networked society, particularly in terms of the information resources and skills they need. One important policy of the European Union is the creation of public awareness, organising programmes and promotion of ICT in general in Europe. A substantial fraction of the funds devoted generally to ICT in Europe do not go to technical infrastructures but to information campaigns, model projects and the development of ICT content and applications with a popular appeal.¹⁰¹ In adopting ICT policies or plans of action, African countries could also adopt such method with a special focus on the female gender.

It is also important that sex-disaggregated ICT statistics and measurement are improved. Over its next Medium-Term Strategy period (2014- 2021), UNESCO aims to determine, measure and assess sex-disaggregated data, and to undertake an inventory of policy instruments that affect gender equality in science, technology and innovation.¹⁰² This will be instructive in determining exactly how many Sub-Saharan women have access and serve as guideline for improving policies aimed at ensuring access.

99 Ibidem.

100 Sumit Roy, *Globalisation, ICT and Developing Nations. Challenges in the Information Age* (New Delhi, Sage publications, 2005), p. 218- 219.

101 Ibidem.

102 Rovani Sigamoney, "Harnessing ICTs for greater access to education for girls and women: STEM education at UNESCO", UNESCO Engineering Programme Natural Sciences Sector 2 May 2016 WSIS GWI Forum, ITU Geneva, Switzerland p. 48, 21, November 2016. Available from https://www.itu.int/net4/wsis/forum/2016/Content/AgendaFiles/document/a0fdaec2-2e5f-4611-94ac-079b98128916/GWI_WSIS_UNESCO_2016_main.pdf.

Finally, policies for access to ICT and information must not only be comprehensive but must cover disadvantaged groups like women, without a hierarchy of equality. Any departure from standards of equality in participation must be in a proportionate measure necessary to achieve only a legal aim.¹⁰³ The principle of equality between men and women and in all spheres of society is fundamental to the enjoyment of life and the realisation of self-dignity.¹⁰⁴ Sub-Saharan African states should therefore, as a matter of priority, realize that the obligation not to discriminate is immediate. With regard to their proposed ICT policy measures, they should take steps immediately to identify the most disadvantaged or excluded, which are women. Governments should also pay attention to women in making policies for ICT access, they are the ones most affected by the ICT exclusion. This is because an effective approach to ensuring ICT access based on human rights for women will be that which is non-discriminatory, equitable and socially inclusive.

In undertaking national strategies and policies for ICT, states should also tackle infrastructural inadequacies. ICT need basic infrastructures like electricity to function properly. Many Sub-Saharan African countries barely have constant electricity. Where women have limited or no access to electricity, good roads access, transportation, etc., access to and use of ICT will consequently be limited in its impact. It is therefore important to complement the provision of ICT facilities with the necessary infrastructure to build the capacities of women, as well as to enable them act on the benefits accessed through ICT.

Castells rightly posited that some individuals could say they want to be left out of the ICT civilization or that they have more crucial needs than ICT, but that the bad news is, if we do not care about ICT, ICT will definitely care about us, because the society is presently woven around these technologies.¹⁰⁵ The reality is that we are in an “ICT age” and operating in an “ICT society”. For as long as we live in the present society, in this present time and generation, every individual will have to deal with these technologies and the society it has carved. They have become the basic amenity for participation in today’s society. States, the international community, non-state actors, stakeholders and everyone concerned should as a matter of urgency look towards ensuring ICT access for women in the Sub-Saharan African region.

103 Bob Hepple, *Equality: The New Legal Framework* (Oxford, Hart Publishing, 2011), p. 24.

104 Committee of Economic Social and Cultural Rights, General Comment 16 on the Equal Rights of Men and Women to the Enjoyment of all Economic, Social and Cultural Rights (2005) UN Doc/c.12/2005/3 para 41.

105 Manuel Castells, *Internet Galaxy...* supra note 27, p. 282.

As our world continues to be changed by ICT every day, it is hoped that the digital divide that exists amongst the female gender can be bridged, thus opening entry points for gender equality and women empowerment in Africa. That someday, every woman/girl will freely, and as of choice have access to ICT and benefit from its positive impacts to our world. ICT have no gender restrictions. We can smash the existing gender stereotyping in Africa by ensuring access to ICT for African women, which can also work towards the eradication of the existing gender divide. Ensuring access to ICT for them is a challenge that has to be overcome, so that someday, probably in the near future, we can say that the realization of gender equality in Sub-Saharan Africa has finally become reality.

VI. References

- Albert Teich, ed. *Technology and the Future* (Belmont, Thompson Wadsworth, 2006).
- Amartya Sen, *Development as Freedom* (New York, Knopf, 1999).
- Andrea Bianchi, "Human Rights and the Magic of Jus Cogens", *European Journal of International Law*, vol.19, No.3 (2008), p. 491-508.
- Andrew Adams, Racheal McCrindle *Pandora's Box. Social and Professional issues of the Information Age* (West Sussex, Wiley, 2008).
- Audrey Selian, "ICTs in support of Human Rights, Democracy and good governance" (Geneva, International Telecommunications Union, August 2002).
- Ayman Elnaggar, "Towards Gender Equal Access to ICT", *Information Technology for Development*, vol. 14, No.1 (2008), p.280-293.
- Bob Hepple, *Equality. The New Legal Framework* (Oxford, Hart Publishing, 2011).
- Brian Loader, Leigh Keeble, *Challenging the Digital Divide? A literature review of community informatics initiatives* (York, Joseph Rowntree Foundation, 2004). Cees Hamelink, *The Ethics of Cyberspace* (London, Sage, 2002).
- Chrisanthi Avgerou, Geoff Walsham, eds. *Information Technology in Context: Studies from the Perspective of Developing Countries* (Aldershot, Ashgate, 2000).
- Christian Fuchs, "Internet and Society". *Social Theory in the Information Age* (London, Routledge, 2008).
- Christopher Weeramantry, *Justice without Frontiers; Furthering Human Rights* (Netherlands, Kluwer Law International, 1997).
- International telecommunications Union, *Connect Africa: The Countdown to 2015, Connect the World Series* (Geneva, International Telecommunications Union, 2007).
- David Crystal, ed. *The Cambridge Encyclopaedia*, 2nd ed. (Cambridge, Cambridge University Press, 2003).
- Don Tapscott, *Growing up Digital. The Rise of the Net Generation* (New York, McGraw-Hill, 1998).

- Erwin Alampay, “Beyond Access to ICTs; Measuring Capabilities in the Information Society using ICT” *International Journal of Education and Development*, vol. 2, No. 3 (2006), pp. 1-16.
- Fareda Banda, “Understanding Women’s Economic and Social Human Rights”, *East African Journal of Peace and Human Rights*, vol. 12, No.2 (2007), pp. 232-53.
- Hazel Gillard, Debra Howcroft, Natalie Milev and Helen Richardson, “Missing Women”: Gender, ICTs, and the Shaping of the Global Economy”, *Information Technology for Development*, vol. 1, No. 4 (2008), pp. 262-279.
- Herman Tavani, *Ethics and Technology: Ethical issues in an age of Information and communication Technology*, 2nd ed. (USA, Wiley, 2007).
- Jan Van Dijk, *The deepening Divide. Inequality in the Information Society* (London, Sage publication, 2005).
- John Feather, *The Information Society. A Study of Continuity and Change*, 6th ed. (London, Facet Publishing, 2013).
- Jos Dumortier, Franc Robben and Marc Taeymans, eds. *A Decade of Research at the Crossroads of Law and ICT* (Brussels, Larcier, 2001).
- Kevin Watkins, *The Oxfam Education Report* (Dorset, Oxfam, 2000).
- Manisuli Ssenyonjo, *Economic, Social and Cultural Rights in International Law* (Oxford, Hart Publishing, 2009).
- Manuel Castells, *End of Millennium*, 2nd ed. (Cambridge, Blackwell Publishers, 2000).
- Manuel Catells, *The Internet Galaxy: Reflections on the Internet, Business, and Society* (New York, Oxford, 2001).
- Mark Warschauer, *Technology and Social Inclusion: Rethinking the Digital Divide* (Massachusetts, Massachusetts Institute of Technology, 2003).
- Michael Okwusi, “Problems Associated with the Utilization of Information and Communication Technologies among Farmers in Southeast Agro Ecological Zone of Nigeria”, *Journal of Agriculture and Social Research*, vol.10, No.2 (2010), pp.48-53.

- Naomi Halewood, Charles Kenny, “Young People and ICTs in Developing Countries”, *Information Technology for Development*, vol. 14, No. 2 (2008) pp. 171 -177.
- Natasha Primo, *Gender Issues in the Information Society* (UNESCO Publication for the World Summit on the Information Society, 2003).
- Organisation for Economic Co-operation and Development, *Learning to Bridge the Digital Divide. Education and Skills* (Paris, Centre for Educational Research and Innovation, 2000).
- Patrick Birkinshaw, *Freedom of information. The Law, The Practice and The Ideal* (London, Butterworths, 1996).
- Rhona Smith, *Textbook on International Human Rights* (Oxford, Oxford University press, 2014).
- Robert Hassan, *The information Society* (Cambridge, Polity, 2008).
- Robin Mansell, Chrisanthi Aygerou, Danny Quah and Roger Silverstone, *The Oxford Handbook of Information and Communications Technology* (Oxford, Oxford, 2007).
- Robin Mansell and Rogers Silverstone, eds. *Communication by design. The politics of Information and Communication Technologies* (Oxford, Oxford University Press, 1996).
- Stephen Lax, ed. *Access Denied in the information age* (New York, Palgrave Macmillan, 2001).
- Sumit Roy, *Globalisation, ICT and Developing Nations. Challenges in the Information Age* (New Delhi, Sage publications, 2005).
- Tony Gunton, *A dictionary of Information Technology and Computer Science*, 2nd ed. (Oxford, Blackwell, 1993).
- Wouter Vandenhoe, *Non-Discrimination and Equality in the View of the UN Human Rights Treaty Bodies* (Oxford, Intersentia, 2005).
- Department for International Development, “Realising human rights for poor people. Strategies for achieving the international development targets” (DFID, London, October 2000).
- Gender Working Group of the United Nations Commission on Science and Technology, “Missing Links: Gender Equity in Science and Technology for Development” (IDRC/ITDG Publishing/UNIFEM 1995).

- United Nations Development Programme, *Human Development Report 1995: Gender and Human Development* (Oxford, New York, 1995).
- United Nations Development Programme, *Human Development Report 1999* (New York, UNDP, 1999).
- United Nations Development Programme, *Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis*. (New York, UNDP, 2006).
- United Nations Development programme/UNIFEM. *Bridging the Gender Digital Divide: A Report on Gender and ICT in Central and Eastern Europe and the Commonwealth of Independent States* (2004).
- United Nations Division for the Advancement of Women, *Gender Equality and Empowerment of Women through ICT* (Paris, September 2005).
- United Nations General Assembly, *Overall Preview of the Implementation of World Summit on Information Society (WSIS) Outcomes. Draft Outcome Document*. (2015).

Mujeres, derechos humanos y Web 2.0 en el sureste de México

Dora Elia Ramos Muñoz¹ & Ramón Abraham Mena Farrera²

Resumen

Este artículo analiza la inclusión de mujeres en la Web 2.0 en sureste de México, sus implicaciones para el ejercicio de algunos derechos humanos y con cumplimiento de los Objetivos de Desarrollo Sostenible de la Agenda Mundial 2030. En particular, con los numerales cuatro (educación inclusiva y equitativa de calidad), cinco (igualdad de género y empoderamiento de mujeres y niñas) y ocho (trabajo y crecimiento económico). Se explica cómo la Web 2.0 abre la participación de las mujeres en el desarrollo de software y economía de compartir. Las conclusiones presentan 1) las interacciones en diferentes niveles sociotécnicos en la Web 2.0, identificando las oportunidades para que las mujeres disminuyan las restricciones —reales o simbólicas— ante la discriminación, la violencia y la falta de libertad; 2) una revisión de la estrategia digital en México para resolver algunas demandas sobre el cumplimiento de derechos humanos de segunda generación (económicos, sociales y culturales), pero sobre todo de cuarta y quinta generación (derechos digitales) y 3) los retos de los destinatarios de los derechos para transformar y actualizar la estrategia digital para el cumplimiento de dichos derechos.

Palabras clave: tecnologías de la información y comunicación, trabajo femenino, desigualdad, Internet, inserción laboral.

I. Introducción

El capítulo analiza la presencia de mujeres del sureste de México como usuarias y programadoras en la Web 2.0 y las implicaciones de su inclusión laboral y educativa en contextos regionales con economías emergentes basadas en Tecnologías de Información y Comunicación (TIC). Se usa la perspectiva multinivel³ para estudiar el sistema sociotécnico de la Web 2.0 y se describen

- 1 Doctora en Ecología y Desarrollo Sustentable (Ecosur 2002), con formación de Ingeniera Industrial (ITESM 1989). Investigadora del departamento de Sociedad y Cultura (Ecosur, Villahermosa).
- 2 Doctor en Ciencias Sociales y Humanísticas (CESMECA y Universidad de Alicante 2013). Técnico Académico Titular adscrito al departamento de Sociedad y Cultura, en el Grupo Académico Estudios de Género de El Colegio de la Frontera Sur (Ecosur).
- 3 Frank W. Geels y Johan Schot. Typology of Sociotechnical Transition Pathways. Research Policy, vol. 36, No. 3 (2007).

las prácticas de algunas mujeres jóvenes (de 15 a 29 años) en esta actividad. La hipótesis es que las TIC pueden contribuir a mejorar la condición de trabajo y derechos de más de 1.3 millones de mujeres jóvenes que viven en tres estados federales del sureste de México (Chiapas, Tabasco y Yucatán), la región más pobre de México,⁴ e interesa mostrar ¿cómo las titulares de los derechos humanos usan las TICS ante la violencia laboral y la discriminación, factores claves para alcanzar la paz y la seguridad con dignidad?⁵ Considerando el supuesto de que las TIC son una herramienta de inclusión en el mercado laboral y que su uso permite desarrollar una conciencia social a nivel personal y colectivo, este texto documenta la manera en que las mujeres se benefician de su uso y por consecuencia el potencial de mejora en el ejercicio de sus derechos.

La Web 2.0, es hipertexto de Internet, al que se puede acceder por computadora o teléfono móvil, que permiten a los usuarios aportar contenido y conectarse con otros usuarios.⁶ Para la investigación, consideramos a Web 2.0 en dos sectores: quienes la utilizan como plataforma o desarrollo de economía del compartir (EC) y quienes desarrollan software (DS) para gestionar redes sociales o páginas web interactivas. Conocedores que cada nueva tecnología ofrece beneficios para algunos sectores de la sociedad mientras que otros resultan perjudicados, consideramos como la EC como una forma de intercambio a través de plataformas *online* que abarca una diversidad de actividades (habitación, servicios, movilidad, compañía) con y o sin fines de lucro que permiten compartir productos o servicios.⁷ El segundo sector, DS se define como el diseño y la implementación de sistemas digitales para la interactividad, almacenamiento, replicación y movilidad de la interacción económica cotidiana.⁸ En este último sector, las mujeres pueden asumir roles como empleadas de empresas de software, desarrolladoras o programadoras contratadas o *freelance*. En consecuencia, se intenta reconocer los impactos positivos de la EC en las dimensiones económica y social.

4 México, Consejo Nacional de Evaluación de la Política de Desarrollo Social. *Pobreza en México 2014* (México, 2015). Disponible en http://www.coneval.gob.mx/medicion/documents/pobreza-2014_CONEVAL_web.pdf; Enrique Dávila, Georgina Kessel y Santiago Levy. El sur también existe: un ensayo sobre el desarrollo regional de México. *Economía Mexicana. Nueva Época*, vol. XI, No. 2 (segundo semestre, 2002).

5 Angélica A. Evangelista, Rolando Tinoco y Esperanza Tuñón. Violencia institucional hacia las mujeres en la región sur de México. *LiminaR. Estudios Sociales y Humanísticos*, vol. 14, No. 2 (2016), p. 58.

6 Evan Carroll y John Romano (2011). *Your Digital Afterlife: When Facebook, Flickr and Twitter are your Estate, What's your Legacy?* (Berkeley, CA: New Readers, 2011). Disponible en <http://ptgmedia.pearsoncmg.com/images/9780321732286/samplepages/0321732286.pdf>.

7 Lizzie Richardson. Performing the Sharing Economy. *Geoforum*, No. 67 (2015).

8 Nancy K. Baym. *Personal Connections in the Digital Age* (Cambridge, Reino Unido; Malden, MA: Polity, 2010).

La Web 2.0 brinda oportunidades para reducir las diferencias de acceso a la información, tiene un potencial democratizador que brinda oportunidades para construir mercados menos desiguales y permite coordinar distintas iniciativas locales y mundiales.⁹ Desde esa postura, el capítulo brinda argumentos de como la Web 2.0, dinamizada por la estrategia digital de México, genera oportunidades al numeral ocho de los Objetivos Desarrollo Sostenible (ODS) de la Agenda Mundial 2030: “promoción del crecimiento económico sostenido, inclusivo y sostenible, el empleo pleno y productivo y el trabajo decente para todos”. Al revisar el caso de mujeres, el artículo muestra la relación entre el ODS numeral cinco “la igualdad entre los géneros y empoderar a todas las mujeres y las niñas” y el numeral cuatro, puesto que “garantiza una educación inclusiva, equitativa y de calidad y promover oportunidades de aprendizaje durante toda la vida para todos”. Abonando en una discusión de cómo se desarrollan los horizontes en las actividades educativas y económicas en América Latina.

II. Metodología

Para evaluar las interacciones entre las estructuras sociotécnicas de niveles múltiples que constituyen la sociedad entendemos el discurso como un conjunto de ideas, conceptos y categorías, relacionados con los fenómenos sociales y físicos, que son producidos y reproducidos a través de un conjunto identificable de prácticas.¹⁰

Utilizamos la perspectiva multinivel que considera tres niveles analíticos para comprender este tipo de interacciones sociotécnicas. El primero de ellos es el “paisaje”: un espacio de lenta modificación, con estructuras profundamente incrustadas en el tejido de la sociedad como la cultura, los valores sociales y el paradigma económico imperante. Algunos autores consideran el paisaje como un entorno exógeno, más allá de la influencia directa de los actores de los dos niveles posteriores.¹¹ El segundo nivel es el “régimen”, donde se establece el análisis de los sistemas sociotécnicos dominantes, lo que permite atender las necesidades de la sociedad incluyendo el consumo, la producción, los sistemas digitales de comunicaciones y el transporte. Algunas investigaciones se refieren a este segundo nivel de estructura como el espacio donde ocurre la “trayectoria

9 Alberto Chong, ed. (2011). *Conexiones del desarrollo. Impacto de las nuevas tecnologías de la información* (Washington, D.C.: Banco Interamericano de Desarrollo, 2011).

10 Maarten Hajer y Wytse Versteeg, Performing Governance through Networks. *European Political Science*, vol. 4, No. 3 (2005).

11 Geels y Schot, “*Typology of Sociotechnical Transition...*”, supra nota 3; Chris J. Martin. The Sharing Economy: A Pathway to Sustainability or a Nightmarish Form of Neoliberal Capitalism? *Ecological Economics*, No. 121 (2016).

tecnológica”.¹² El tercer nivel lo denominamos el “nicho”, que actúa como una “incubadora”, y que se considera como el espacio protector dentro del cual las innovaciones surgen y se desarrollan.¹³ Martin, Upham y Budd consideran que el nicho presenta a su vez dos niveles: el local, en el que las innovaciones se basan en un contexto específico, y el global, donde existe una red de intermediarios y se promueve aprendizaje social y la movilización de recursos en el nivel local.¹⁴

Esta perspectiva asume que las transformaciones sociotécnicas no ocurren en los artefactos tecnológicos o en la cultura, sino en ambos espacios, y se producen en tres caminos: a) en las nicho-innovaciones que acumulan impulsos internos a través de procesos de aprendizaje, de mejoras de precio/rendimiento y del apoyo de grupos poderosos; b) en los cambios en el nivel de paisaje, los cuales crean presión sobre el régimen, o c) en la desestabilización del régimen, que crea ventanas de oportunidad para la innovación del nicho (ver Figura 1).

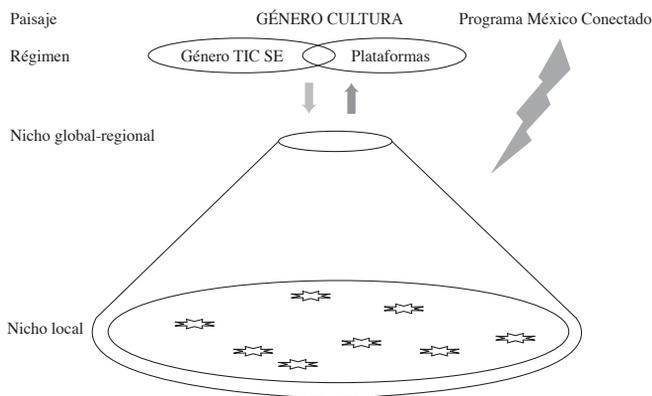


Figura 1: Perspectiva multinivel de transformaciones sociotécnicas. Fuente: Elaboración propia.

Al describir el régimen y el nicho se identifican las narrativas como las herramientas principales para entender las estrategias desplegadas por los actores locales y para comprender los nichos y regimenes globales.¹⁵ La narrativa de actores proporciona una base para entender cómo se relaciona el nicho local con el nicho global, con lo cual intentamos reformular perspectivas,

12 Martin, *The Sharing Economy...*, Supra nota 11.

13 Geels y Schot, *Typology of Sociotechnical Transition...*, Supra nota 3.

14 Chris J. Martin, Paul Upham y Leslie Budd, Commercial Orientation in Grassroots Social Innovation: Insights from the Sharing Economy. *Ecological Economics*, No. 118 (October 2015).

15 Frank W. Geels, The Multi-Level Perspective on Sustainability Transitions: Responses to Seven Criticisms. *Environmental Innovation and Societal Transitions*, vol. 1, No. 1 (2011).

modelos de acción social, y el régimen.¹⁶ Tales narrativas de empoderamiento buscan movilizar recursos dentro del nicho, difundir expectativas positivas del funcionamiento y poner de relieve las tensiones dentro del régimen.¹⁷

A. Métodos y análisis de los datos de la investigación

En la investigación se emplea la etnografía y se analizan los datos de entrevistas realizadas¹⁸ entre febrero y marzo de 2016 a seis actores (Sh), ocho desarrolladores de software (P) y cuatro participantes del régimen (R) (las claves aparecen en los testimonios) sobre cómo comparten su experiencia en el nicho económico. La información obtenida se relaciona con datos estadísticos sobre empleo y sobre la industria de software, y con información acerca de las plataformas digitales que dinamizan la economía digital que ilustran los rápidos cambios en los nichos. Se estableció la relación con los informantes a partir de un programador local con el que contactaron los investigadores. Las 18 entrevistas, una de ellas en línea, tuvieron una duración de entre 22 y 45 minutos, con una excepción, y todas fueron grabadas y transcritas. En los testimonios se incluyen las iniciales del estado federal en el que se realizaron. Las narrativas se importaron al programa de análisis cualitativo Nvivo y se codificaron para identificar los temas emergentes.

III. Marco conceptual

A. Economía del compartir

Belk indica que la Web 2.0 recrea un diálogo en el que se envía información desde las páginas y se construye una práctica sociotecnológica a partir del hipertexto, lo que contribuye con la idea del compartir. Esta idea es una parte integral de la sociedad y una característica definitoria de las redes sociales; asimismo, reúne gente en torno a fines comunes y simplifica el contacto digital.¹⁹ Por ello Belk, Martin y Richardson definen la EC como formas de intercambio a través de plataformas en línea en las que se ofrecen servicios o productos con o sin fines de lucro.²⁰

Las plataformas en línea gestionan la proximidad entre extraños y construyen medios para comunicar los productos o servicios a compartir, y lo hacen a nivel individual o comunitario. Es en esta gestión entre extraños en donde radica la innovación de las plataformas porque éstas permiten compartir mediante

16 Adrian Smith y Rob Raven, What is Protective Space? Reconsidering Niches in Transitions to Sustainability. *Research Policy*, vol. 41, No. 6 (2012).

17 Martin, *The Sharing Economy...*, Supra nota 11.

18 Todas las entrevistas cuentan con el consentimiento informado.

19 Russell Belk, Sharing versus Pseudo-Sharing in Web 2.0. *Anthropologist*, vol. 18, No. 1 (2014).

20 Ibidem; Martin. *The Sharing Economy...*, Supra nota 11; Richardson. *Performing the Sharing Economy*, Supra nota 7.

la creación de vínculos que se basan en la reputación que se construye en la plataforma *online*.²¹ De esta manera, la economía de intercambio y los sistemas de reputación hacen más seguras las transacciones entre extraños.

B. Desarrollo de software

Estudios sobre las TIC de los últimos 30 años indican que los hombres dominan este sector.²² Una explicación es que el DS requiere conocimientos de programación, asociada a las matemáticas; una materia en la que se asume que las mujeres no destacan. Esto conlleva a que las mujeres sean menos propensas a ejercer profesiones relacionadas con las TIC.²³ Investigadores indican que este es un tipo de violencia de género porque expulsa a las mujeres de las carreras técnicas.²⁴ Sin embargo, la Web 2.0 abre posibilidades para que quienes no poseen esta educación especializada puedan entrar en el mercado laboral mediante el uso de plantillas para el diseño de sitios web.

IV. Resultados y discusión

A. Paisaje

Para reflexionar acerca de las formas en que el uso de tecnología instrumental, en particular TIC, promueve el empoderamiento de las mujeres para la disminución de la brecha de género asociada con el acceso a Internet, nos apoyaremos en la perspectiva de género, que permite comprender los procesos de largo plazo en los que las diferencias entre hombres y mujeres han creado estructuras inequitativas profundamente enraizadas en la sociedad, las cuales se observan en la cultura organizacional, en los valores educativos y en la brecha económica que prevalece entre los géneros. Sabedores de lo anterior, el Internet ofrece posibilidades para un rápido cambio de paradigma económico entre quienes viven en la región del sureste mexicano, caracterizada por tener los indicadores más altos de rezago y carencias y la más intensa polarización entre municipios.²⁵

21 Belk, *Sharing versus Pseudo-Sharing...*, Supra nota 19.

22 Dawn Nafus, Patches don't Have Gender: What is not Open in Open Source Software. *New Media & Society*, vol. 14, No. 4 (2012); Suzanne Reimer. 'It's Just a Very Male Industry': Gender and Work in UK Design Agencies. *Gender, Place & Culture. A Journal of Feminist Geography*, vol. 23, No. 7 (2016); Elisabeth K. Kelan. 'I don't Know Why' - Accounting for the Scarcity of Women in ICT Work. *Women's Studies International Forum*, vol. 30, No. 6 (2007).

23 Laura Martha Razo Godínez, La inserción de las mujeres en las carreras de ingeniería y tecnología. *Perfiles Educativos*, vol. XXX, No. 212 (1989); Kelan. *I don't Know Why...* Supra nota 22.

24 Araceli Mingo y Hortensia Moreno, El ocioso intento de tapan el sol con un dedo: violencia de género en la universidad. *Perfiles Educativos*, vol. XXXVII, No. 148 (2015).

25 México Consejo Nacional de Población. Índice absoluto de marginación 2000-2010 (México, 2013). Disponible en <http://www.conapo.gob.mx/work/models/CONAPO/Resource/1755/1/images/01Capitulo.pdf>.

Sin duda los medios digitales pueden brindar mayores libertades y oportunidades para mostrar productos, trabajar en línea y acceder a información de mercados, lo que contribuye a reducir las dificultades existentes en la región, caracterizada también por una infraestructura deficiente y un limitado acceso a productos y recursos.²⁶ En este sentido, el acceso a Internet actúa como una fuerza de presión sobre el régimen económico existente y crea ventanas de oportunidades en la oferta de productos y servicios pudiendo abonar por la participación plena y efectiva de las mujeres y la igualdad de oportunidades de liderazgo en esta esfera económica.

Solo en México la participación de fuerza de trabajo femenina es del 43.4 por ciento,²⁷ uno de los porcentajes más bajos en América Latina, en donde la media es del 49 por ciento,²⁸ una explicación es que las mujeres mexicanas pasan el 46.2 por ciento de su tiempo en el trabajo doméstico, mientras que los hombres sólo destinan el 16.9 por ciento de su tiempo al hogar.²⁹ En el año 2015, la brecha en la actividad económica (el contar con empleo o un trabajo remunerado, o dedicarse exclusivamente al hogar) entre hombres y mujeres fue de 35.2 por ciento.³⁰ Esto se hace más evidente en el sector de los emprendedores en TIC, dominando en un 78 por ciento por hombres; situación que se agudiza al considerar que tan sólo un 16 por ciento de quienes fundan empresas son mujeres.³¹

En el ámbito de la educación superior la participación de las mujeres pasó del 17 por ciento en 1970, al 50 por ciento en 2011³² con lo cual se encamina a mejorar las condiciones de igualdad para las mujeres a una formación técnica, profesional y superior de calidad en los ámbitos universitarios. Sin embargo, equiparar el nivel de educación con las oportunidades de empleo para las mujeres no ha sido fácil.

26 Dávila, Kessel y Levy, *El sur también existe...* Supra nota 4.

27 México, INEGI, *Encuesta Nacional de Ocupación y Empleo (ENOE), población de 15 años y más de edad. Resultados del primer trimestre 2016* (México, 2016).

28 OIT. *Informe mundial sobre salarios 2014/2015: Salarios y desigualdad de ingresos* (Ginebra, 2015).

29 México, INEGI, *Encuesta Nacional sobre Uso del Tiempo 2014* (2014). Disponible en <http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/especiales/enut/enut2014/default.aspx>.

30 México, INEGI, *Mujeres y hombres en México 2015* (México, 2015).

31 Rodrigo Gallegos, Carlos Grandet, y Pavel Ramírez, *Los emprendedores de TIC en México* (México: Instituto Mexicano para la Competitividad, 2014).

32 Gina Zabłudovsky, Las mujeres en los ámbitos de poder económico y político de México. *Revista Mexicana de Ciencias Políticas y Sociales*, vol. 60, No. 223 (2015). Disponible en <http://www.redalyc.org/pdf/421/42132948003.pdf>.

Autoras como Lara y Sánchez, además de Quintanilla y Flores,³³ documentan las dificultades que enfrentan las mujeres cuando no tienen oportunidades de trabajar durante el embarazo o la licencia de maternidad. Adicionalmente, Zabludovsky considera que la cultura organizacional mexicana reproduce las características de lo “femenino” y lo “masculino”, y en consecuencia las mujeres ocupan solamente el 4.5 por ciento de las posiciones de dirección de empresas.³⁴

A pesar de que ha aumentado el número de mujeres en la educación superior, el paisaje de las TIC en México está dominado por hombres, creando reales obstáculos para aumentar la equidad en el número de personas con competencias necesarias, en particular técnicas y profesionales, para acceder al empleo, el trabajo decente y el emprendimiento. En la universidad el 50.6 por ciento de las mujeres estudia ciencias administrativas y sociales mientras que sólo el 13.5 por ciento lleva a cabo estudios sobre ingeniería y tecnología, en comparación con el 40.5 por ciento de los hombres.³⁵ Sin embargo, la brecha de género en el uso de los *smartphones* es pequeña ya que el 69.6 por ciento de las mujeres cuenta con dispositivos de este tipo, mientras que el 71.4 por ciento de los hombres lo tienen.³⁶ En resumen, en el contexto mexicano de las TIC las mujeres tienen una presencia menor, aunque son importantes usuarias de estas tecnologías.

Williams, Muller y Kilanski identifican otros temas relevantes como obstáculos para la igualdad: las condiciones culturales y las estructuras formales de ingresos.³⁷ Además, la participación de la población activa femenina mexicana (FLFP por sus siglas en inglés) experimenta un nuevo tipo de pobreza: los salarios reales bajaron desde 1995 y sus condiciones de trabajo, así como las pensiones y las prestaciones de desempleo que reciben, son más bajos que las de sus homólogos masculinos en un 21.5 por ciento.³⁸

33 Sara María Lara Flores y Kim Sánchez Saldaña, En búsqueda del control: enganche e industria de la migración en una zona productora de uva de mesa en México. *Asalariados Rurales en América Latina*, vol. 73 (2015); Martha Leticia Quintanilla y Terlin Jackeline Flores. Una estrategia para fortalecer las competencias para la era digital. *Revista UNAHINNOV@*, No. 3 (2016).

34 Zabludovsky, *Las mujeres en los ámbitos de poder...*, Supra nota 32.

35 México INEGI, *Mujeres y hombres en México 2015* (México, 2015).

36 Aline Moch y Estefanía Capdeville, “Adopción TIC: rompiendo la brecha de género” (Competitive Intelligence Unit, s.f.). Disponible en http://the-ciu.net/nwsltr/496_1Distro.html.

37 Christine L. Williams, Chandra Muller, y Kristine Kilanski, “Gendered Organizations in the New Economy”. *Gender & Society*, vol. 26, No. 4 (2012).

38 OIT, *Informe mundial sobre salarios 2014/2015: Salarios y desigualdad de ingresos* (Ginebra, 2015).

En este paisaje, el Gobierno mexicano en el año 2000 inició un conjunto de reformas estructurales cuyo objetivo es promover políticas orientadas al desarrollo que apoyen las actividades productivas, la creación de empleo decente, el emprendimiento, la creatividad y la innovación, y emitió normas para garantizar la equidad en los servicios de salud, educación, seguridad, alimentación y en el acceso a las TIC. Sin embargo, no ha favorecido el ejercicio de los derechos humanos de las mujeres,³⁹ sobre todo en el campo de los derechos laborales y promoción de un entorno de trabajo seguro y protegido en particular para las mujeres migrantes y las personas con empleos precarios.

El índice de desarrollo humano (IDH) en el sureste mexicano está por debajo de la media nacional. Chiapas es el estado con el IDH más bajo del país, 0.6794, Yucatán ocupa el lugar número 10 con 0.76 y Tabasco el número 13 con 0.77.⁴⁰ El IDH de las mujeres en todos los casos es inferior al de los hombres. La inequidad⁴¹ es común en el sureste mexicano, las mujeres son víctimas de violencia estructural.⁴²

Adicionalmente, en el sureste mexicano vive la población más joven y pobre del país. El 40 por ciento es menor de 29 años de edad y, en Chiapas el 75.3 por ciento vive en la pobreza, en Tabasco el 48 por ciento y el 46 por ciento en Yucatán.⁴³ Incluso el trabajo que existe y que se crea reporta bajos salarios; impidiendo la resolución de los problemas de desarticulación entre la educación y el trabajo, la falta de programas de emprendimiento y de trabajo formal, por tanto el nicho de oportunidad es mayúsculo para el cumplimiento de la meta de reducción sustancial de la proporción de jóvenes que no están empleados y no cursan estudios, ni reciben capacitación.

39 Evangelista, Tinoco y Tuñón, *Violencia institucional hacia las mujeres...*, Supra nota 5.

40 PNUD, *Informe Regional de Desarrollo Humano 2013-2014. Seguridad ciudadana con rostro humano: diagnóstico y propuestas para América Latina* (Nueva York, 2014).

41 Entendida como: “las estructuras y la discriminación interseccional, mecanismos que exacerban la vulnerabilidad de las mujeres, exponiéndolas a un mayor riesgo de violencia”. Rakin Ertürk. *Integration of the Human Rights of Women and the Gender Perspective: Violence Against Women. Report of the Special Rapporteur on Violence Against Women its Causes and Consequences, Yakin Ertürk. Addendum: Mission to Guatemala.* United Nations. *Economical and Social Council. Documento E/CN.4/2005/72/Add.3*, p. 8. Traducción propia.

42 Entendida como: “la sistemática exclusión de las mujeres del ejercicio de ciudadanía plena, intensificada por la violencia y el crimen organizado”. Evangelista, Tinoco y Tuñón. *Violencia institucional hacia las mujeres...*, Supra nota 5, p. 58.

43 Instituto Mexicano de la Juventud, *Diagnóstico de la situación de los jóvenes en México* (México, 2013).

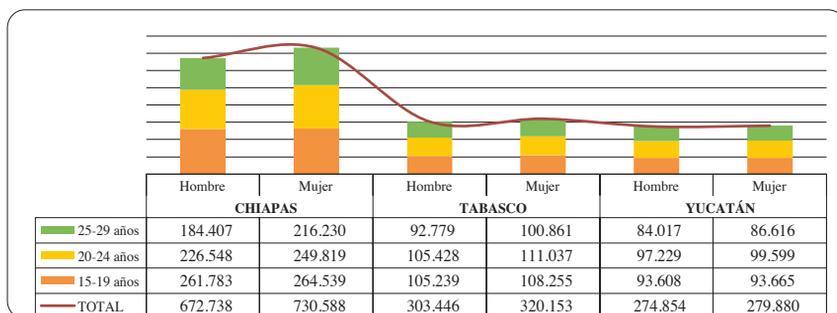


Figura 2: Población joven en los estados del sureste mexicano. Fuente: México, Instituto Nacional de Estadística y Geografía (INEGI). Tabulados de la Encuesta Intercensal 2015.

A partir de 2006 el Gobierno mexicano irrumpió en el paisaje digital del sureste al legislar sobre las TIC,⁴⁴ y mediante la creación del programa México Conectado con el claro objetivo de cambiar las estructuras en el sector para aumentar la productividad económica mediante la diversificación, la modernización tecnológica y la innovación, y provocar la atención en sectores de mayor valor añadido y uso intensivo de mano de obra. Estas iniciativas garantizan el ejercicio del derecho constitucional de acceso al servicio de banda ancha de Internet (artículo 6° de la Constitución). En 2013, cuando los cambios constitucionales fueron realizados, se creó un marco legal para la protección de los derechos de los usuarios, se obligó a obtener beneficios contra grupos de empresas que cuenten directa o indirectamente con una participación nacional mayor al 50 por ciento en los servicios de telecomunicación y se constituyó el Instituto Federal de Telecomunicaciones.⁴⁵

En el año 2014, en Chiapas, como resultado de un movimiento social que promovía los derechos digitales en México, se aprobó en el pleno del Congreso Local una reforma constitucional que garantiza el acceso a Internet como un derecho humano. Sin embargo, la falta de un sistema sociotécnico sólido provocó fallas en su implementación:

En la Constitución el Internet quedó como un derecho de todos los chiapanecos, es una ley... estábamos muy emocionados. Entonces

44 Karina Sánchez García, Sobre los derechos de las audiencias en México. *Comunicación y Sociedad*, No. 27, (Septiembre-Diciembre 2016), p. 103.

45 México. Decreto por el que se expiden la Ley Federal de Telecomunicaciones y Radiodifusión, y la Ley del Sistema Público de Radiodifusión del Estado Mexicano; y se reforman, adicionan y derogan diversas disposiciones en materia de telecomunicaciones y radiodifusión (2014). Disponible en http://www.dof.gob.mx/nota_detalle.php?codigo=5352323&fecha=14/07/2014.

llegamos a la parte donde [las organizaciones sociales] olvidamos poner en la ley que el presupuesto tenía que ser aprobado [risas], es la ley, pero sin presupuesto y... nadie se está moviendo (H, R, Chis2).

El programa México Conectado constituye una estrategia que busca que los ciudadanos ejerzan sus derechos humanos a través del desarrollo de redes de telecomunicaciones que ofrecen conectividad en sitios y espacios públicos en los tres ámbitos de gobierno. Este proyecto pretende que alumnos y profesores tengan acceso a banda ancha en escuelas y universidades; que médicos y funcionarios de salud tengan conectividad en clínicas y centros de salud, y que los ciudadanos accedan a Internet gratis en espacios públicos como bibliotecas o centros comunitarios. Para septiembre de 2016 el Gobierno reconoció que el programa daba acceso a Internet en 101,293 espacios físicos (nodos); en la Figura 3 se muestra que en cada nodo se podrían conectar 337 jóvenes en Chiapas, 191 en Yucatán y 116 en Tabasco. El programa constituyó una estrategia de desarrollo con distintas capacidades de conexión para todos, y se implementó de una forma más rápida en Tabasco que en Chiapas.

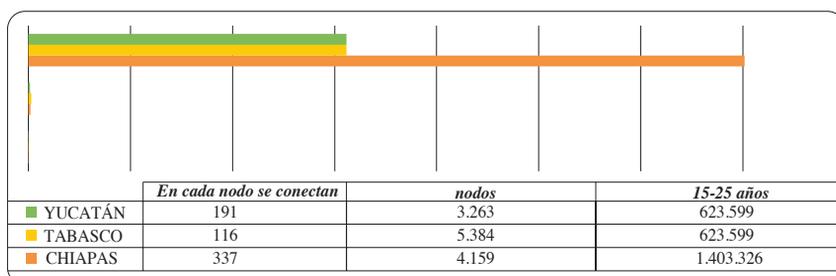


Figura 3: Acceso a internet per cápita en México Conectado (15 de Junio de 2016)

Fuente: México, INEGI. Tabulados de la Encuesta Intercensal 2015. Programa México Conectado.

B. Régimen

La situación nacional del paisaje muestra cuán difícil ha sido para las mujeres ingresar a las actividades económicas formales especialmente en el sureste del país. Estadísticas muestran que en los últimos 10 años la población activa femenina (FLFP) no ha incrementado. Yucatán está cerca de las tasas nacionales, mientras que Chiapas representa sólo la mitad de las tasas de Yucatán (ver Figura 4). Tabasco, por su parte, muestra un desempeño irregular, sin crecimiento constante. De acuerdo con el INEGI, la baja formación, la escasa organización cultural y el limitado acceso a las tecnologías son elementos que contribuyen a la baja inclusión de las mujeres en el mercado laboral.

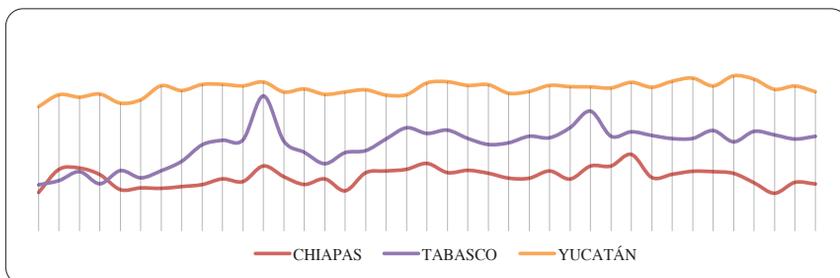


Figura 4: Porcentaje de participación de la población activa femenina (FLFP por sus siglas en inglés). Fuente: México, INEGI. Encuesta Nacional de Ocupación y Empleo (ENOE). Diciembre 2015.

Las empresas de DS son un sector modesto en México, y en el sureste existen apenas 118 (ver Figura 5). La mayoría de ellas son oficinas locales de empresas nacionales que ofrecen servicios a multinacionales (hoteles y empresas petroleras o de gas). Los puestos de programadores son los más populares en la región (ver Figura 6) y son un reflejo de los retos que enfrentan las mujeres en estos estados. El porcentaje más alto de ofertas de trabajo de este tipo se observa en Yucatán, con 40 vacantes, una cantidad pequeña si se compara con el número de egresados de estudios relacionados con las TIC: 7,452 en el ciclo 2012-2014, y de los cuales sólo el 34 por ciento son mujeres.

En cuanto a empresas especializadas en DS, hay apenas 115 en el sureste mexicano. El 3.95 por ciento de las empresas tecnológicas en Yucatán desarrollan software, el 1.73 por ciento en Tabasco y el 1.24 por ciento en Chiapas, porcentajes reducidos en comparación con la media nacional, que es del 7.03 por ciento (ver Figura 6).

Observamos también que el acceso móvil a Internet ha incrementado. En 2015, el 56.6 por ciento de la población utilizaba el teléfono móvil en Chiapas, el 71.5 por ciento en Tabasco y el 75.4 por ciento en Yucatán, aunque, como se indicó, con un pobre acceso a Internet. Esta tecnología facilita el desarrollo de aplicaciones y software.

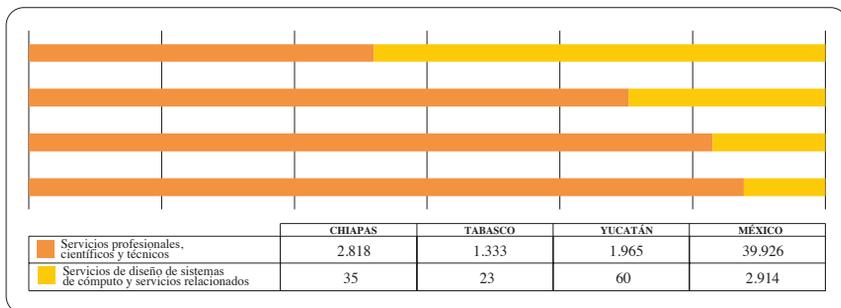


Figura 5: Relación de servicios de software y ciencia y tecnología en Yucatán, Tabasco y Chiapas. 2016. Fuente: México, INEGI. Directorio Estadístico Nacional de Unidades Económicas DENU. Mayo de 2016.

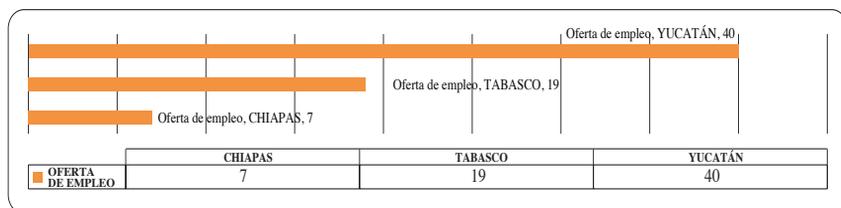


Figura 6: Oferta de empleo. Fuente: <http://www.Computrabajo.com.mx/> Marzo de 2016.

A pesar de que el número de mujeres graduadas en ingeniería informática ha aumentado a nivel nacional, en Chiapas se documenta una reducción del 12 por ciento (ver Figura 7). Posiblemente porque las TIC son un sector nuevo en el sureste, y según lo expresa Brumley, la existencia de los nuevos sectores no asegura salarios justos para las mujeres en estos nuevos espacios económicos⁴⁶, un reto permanente para que las estudiantes puedan matricularse en programas de estudios superiores, incluidos programas de formación profesional y programas técnicos, científicos, de ingeniería y de tecnología de la información y las comunicaciones en nuestras naciones.

46 Krista M. Brumley, 'Now, We Have the Same Rights as Men to Keep Our Jobs': Gendered Perceptions of Opportunity and Obstacles in a Mexican Workplace. *Gender, Work & Organization*, vol. 21, No. 3 (2014).

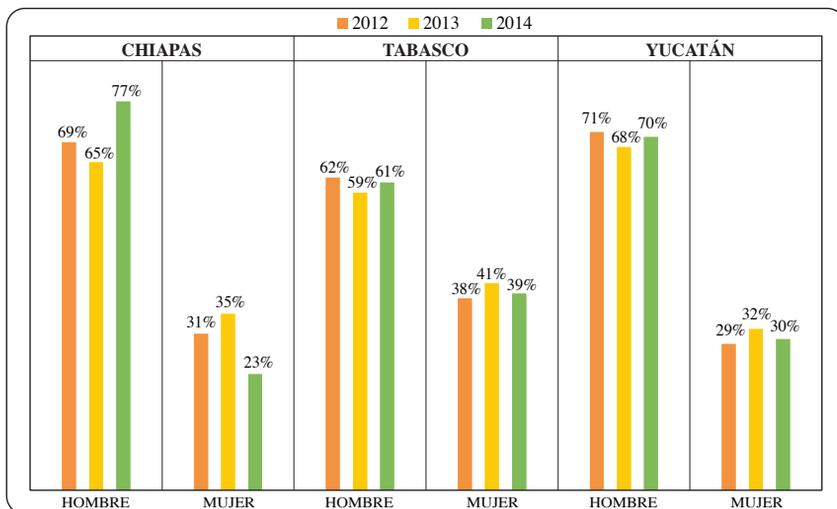


Figura 7: Graduados en TIC. Fuente: ANUIES. <http://www.ANUIES.mx/iinformacion-y-servicios/informacion-estadistica-de-educacion-superior/Anuario-estadistico-de-educacion-superior>. Marzo de 2016.

En 2016 la mayor empresa de telefonía móvil mexicana, América Móvil, comenzó a proporcionar acceso gratuito a Facebook, Twitter y WhatsApp, lo que ha aumentado la producción de contenidos locales y regionales, pero ha desalentado la programación. Aunado a esto, las universidades regionales no han integrado en sus planes de estudio la programación y la generación de contenidos digitales, y privilegian los procesos de certificaciones convencionales, a menudo sin lazos con la industria de DS local o nacional.⁴⁷ Las historias de tres personas entrevistadas proporcionan ejemplos de esta situación:

[En la universidad] sólo enseñan Windows [a los estudiantes] y sólo les enseñan cosas muy prácticas para el mercado de trabajo, para entrar en un engranaje capitalista... no muestran una gama más amplia, así que las instituciones educativas les están tomando en el camino, lo que para mí es muy triste, muy mal, soy muy pesimista del futuro (H, R, Chis1).

Las universidades estamos tarde [tecnológicamente hablando] y la única opción es abrir las mentes en nuestros estudiantes y buscar,

47 Carlos Javier Guel Martínez y María de Jesús Araiza Vázquez, Una reflexión sobre los factores determinantes del desarrollo de la industria del software en México. *Daena. International Journal of Good Conscience*, vol. 10, No. 3 (2015).

entrenar, probar nuevos programas... El problema es que los alumnos están siguiendo las opciones fáciles, sin estrés, y cuando tienen acceso [a Internet] no tienen un buen inglés o tiempo... El resultado es que nadie hace programación. Ni hombres o mujeres (M, R, Tab1).

Simplemente no podemos abrir acceso a Internet para los estudiantes; colapsan nuestros sistemas sólo en las descargas de películas y videos (H, R, Tab2).

Sin duda, en los últimos años el mercado de las telecomunicaciones ha brindado mayor acceso a Internet y desde el año 2016 se incentiva el uso de ciertas plataformas. Así, la navegación en Internet ocurre mediante móviles en el 60 por ciento de los casos, y desde este año se brinda libre acceso a algunas plataformas:

Slim [dueño de la mayor empresa de telefonía móvil en México] está rompiendo todo el tema de la neutralidad, con libre social networking [Twitter, Facebook y WhatsApp], internet se hará chiquitito, será muy triste, pero mucho va allí (H, R, Chis2).

En Chiapas las experiencias demuestran la importancia de los contenidos web:

[Internet] no es un derecho de los ciudadanos, es una herramienta para ejercer los derechos ciudadanos, y no sólo para ver porno (H, R, Chis2).

Mientras que en Yucatán es posible observar cómo una nueva puerta se abre:

Los mayas están teniendo buenas posibilidades... de desarrollar una forma diferente de programación. He visto empresas que contratan a mayas y lo van a seguir haciendo, esto ha sido una buena sorpresa (H, R, Yuc1).

En resumen, en el régimen se cuenta con: 1) universidades con lazos reducidos con las escasas empresas de DS, con pobre acceso a Internet, y que utilizan sistemas de software convencional, y 2) las condiciones gratuitas de las redes sociales incentivan su utilización, pero esto produce una clara baja en el desarrollo de conocimientos y de habilidades de programación por parte del alumnado.

C. Nicho

Facebook y Windows dominan en el contexto de las TIC en el sureste mexicano.⁴⁸ América Móvil, la compañía líder de venta de telefonía celular en México, ofrece planes de contratación en los que el acceso a las redes de Facebook, Twitter, WhatsApp y Spotify es ilimitado y su costo está incluido en el plan seleccionado por el usuario. Por otro lado, Windows ofrece a las universidades con las que firma soporte gratuito de software, certificaciones y tecnología, con lo que garantiza su monopolio a través de la creación de una relación de dependencia tecnológica para el crecimiento⁴⁹ con lo cual abren práctica, encaminadas a promover un turismo sostenible que cree puestos de trabajo y promueva la cultura y los productos locales, al mismo tiempo que crean estrategia para el empleo de los jóvenes.

Mujeres jóvenes, residentes en ciudades turísticas, utilizan la telefonía móvil para acceder a plataformas de intercambio global y así obtener beneficios económicos. Su uso reconfigura las dinámicas de comunicación que atienden la conciliación entre lo familiar y lo laboral, a través de la atención y resolución de tareas por medio del teléfono celular. En San Cristóbal de Las Casas y Tuxtla Gutiérrez en Chiapas, y en la ciudad de Mérida en Yucatán, Airbnb y Couchsurfing son las plataformas de servicios más comunes. Los datos disponibles de la plataforma Couchsurfing muestra mujeres y hombres participan en casi el mismo porcentaje (ver Tabla 1).

Tabla 1: Datos de sobre uso de Couchsurfing.

Fuente: Elaboración propia a partir de datos de www.couchsurfing.org, Marzo de 2016.

SAN CRISTÓBAL		TUXTLA GUTIÉRREZ		MÉRIDA	
Los anfitriones recibieron	104	Los anfitriones encontraron	107	Los anfitriones encontraron	253
MUJERES	HOMBRES	MUJERES	HOMBRES	MUJERES	HOMBRES
57	47	44	63	113	140
55%	45%	41%	59%	45%	55%

48 El reporte anual 2014 sobre los hábitos del internauta mexicano de la Asociación Mexicana de Internet reveló que el 77 por ciento de los usuarios de internet tiene al menos una cuenta en redes sociales, entre ellas Facebook y Twitter, mediante plataformas Windows. Emarketer, Facebook Dominates the Social Media Market in Mexico. YouTube also enjoys popularity and frequent visits (14 de Abril de 2016). Disponible en <https://www.emarketer.com/Article/Facebook-Dominates-Social-Media-Market-Mexico/1013828>.

49 Guel Martínez y Araiza Vázquez, *Una reflexión...*, Supra nota 47.

En tanto, el Consejo de Ciencia y Tecnología de Yucatán (CCTY) cuenta con el más exitoso proyecto de desarrollo de software en el sureste: INCUBATIC. A través de este proyecto, el CCTY apoyó en 2010 en Yucatán a 70 pequeñas empresas (las más exitosas en los rubros de mecatrónica, música y software) constituidas por estudiantes recién graduados que recibieron una beca y por pequeños empresarios que recibieron un porcentaje accionario de la compañía. A pesar de que el proyecto fue ampliado en 2012, fue ejecutado en Tabasco en el 2014 y no fue implementado en Chiapas.

INCUBATIC promovió 10 proyectos anuales, en cada uno de los cuales participaban entre dos y cinco personas, de las que sólo el 10 por ciento eran mujeres. El programa en Yucatán está vinculado con socios financieros, con empresarios nacionales y con universidades, y en 2016 los primeros beneficiarios serán los empresarios participantes.

En Tabasco, uno de los desarrollos locales vinculado con la EC es el sitio “Cambia tu tiempo”,⁵⁰ que comenzó a operar en el año 2015 como iniciativa del gobierno del estado. En septiembre de 2016 el sitio era gestionado por Facebook y Twitter. El programa fue diseñado por el gobierno estatal y coordinó a empresas locales. Es el primer ejemplo de un programa eficaz que refleja el compartir desde lo local, aunque es altamente dependiente de su financiador, no ha podido escalar a una App y, por tanto, su número de seguidores se ha estancado, logrando que para septiembre de 2016 la plataforma contaba con 6.000 usuarios y durante un año y medio ha presentado algunos problemas técnicos. La experiencia de los jóvenes que se emplean en estas novedosas áreas económicas nos permite observar una adaptación en la flexibilidad del empleo y del uso del tiempo libre.

Con más seguidores que el anterior existen los “grupos de ventas” en Facebook, en los que sus miembros intercambian productos y servicios. Por ejemplo, una joven explicó cómo estos “grupos de ventas” le ayudaban a crear una situación más segura para su trabajo, relacionado con masajes terapéuticos,⁵¹ lo que demuestra cómo las nuevas estrategias en la comunicación digital contribuyen a garantizar la seguridad de las mujeres jóvenes. No sólo las distingue de las trabajadoras sexuales que ofrecen sus servicios en la red, sino que también pueden comprobar la identidad de los clientes mediante números telefónicos e intercambio de mensajes. Adicionalmente, estas herramientas le permiten ofrecer sus servicios a un público más amplio.

50 Página web: <http://cambiatutiempo.mx/>.

51 (M, Sc, Chis).

Los “grupos de ventas” requieren de un trabajo arduo para conseguir ingresos. Una joven que comenzó con el intercambio de productos para bebés en 2013, en 2016 consiguió ingresos mensuales equivalentes a cuatro salarios mínimos. Ella intercambiaba productos y en su tiempo libre cuidaba bebés, mascotas y casas: “estoy en cerca de 20 plataformas”. Al principio iba a un ciber pero en la entrevista nos indicó que ahora hace todo por su celular.⁵² Aunque este ingreso no le reportaba ninguna seguridad social, le permitía vivir con su bebé de forma independiente.

Los “grupos de ventas” también actúan como espacios sociales. Por ejemplo “Mercado Libre Coleto” en Facebook es una alternativa de comercio local muy consultada por la población de San Cristóbal de Las Casas, en Chiapas. Es un espacio considerado como “el lavadero” (espacio de reunión), para “el chismerío” (práctica de comunicación informal), en donde la población local se entera de múltiples acontecimientos. En ella se puede acceder a información relacionada con el ánimo social, como los eventos que conducen a bloqueos de las carreteras, y las posiciones, razones y sinrazones que distintos actores deliberan sobre esos eventos. Más que el intercambio de productos o servicios, en la página se encuentra información local actual. A pesar de que en Chiapas el 27.9 por ciento de la población es indígena,⁵³ no hay muchos portales escritos en lenguas indígenas, como lo declaran los usuarios entrevistados en este estudio, quienes afirman, por ejemplo: “honestamente no, conozco gente que habla lenguas, porque también hablan español... casi todos ellos [indígenas] son los mismos [en Facebook], todos con los mismos seguidores”.⁵⁴

La presencia indígena en Internet se está consolidando principalmente a partir de YouTube. En el sureste se cuenta con cuatro universidades interculturales en las que se imparte una carrera de comunicación y “tienen un montón de producción de vídeo, un lote de producción, con presencia en las redes sociales, en Twitter, en YouTube mucho..., los chicos que conocí, indígenas, son todos hombres”.⁵⁵ Sin embargo, el nivel técnico para la programación no es una fortaleza entre los jóvenes de Chiapas o de Yucatán; por ejemplo, mientras que en Yucatán los programadores mayas desarrollan navegadores de Mozilla, en Chiapas “[los desarrolladores de Mozilla] estamos entrenando a las personas que nos

52 (M, Sh, Chis).

53 México, Instituto Nacional de Estadística y Geografía, Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH). México, 2015. Disponible en <http://www3.inegi.org.mx/contenidos/proyectos/enchogares/regulares/dutih/2015/tabulados/u2ed134.XLSX>.

54 (H, Sh, Chis).

55 (H, Pr, Yuc).

ayudan a traducir [en lenguas] y enseñándoles cómo usar la plataforma [pero no programación]”.⁵⁶

A la hora de explicar las diferencias entre hombres y mujeres en cuanto a programación, se encuentran respuestas como la siguiente: “tenemos las mismas capacidades que ambos podemos desarrollar en el curso de la vida. El factor es la escuela primaria y secundaria, motivan que dejemos el interés... pero no es que existan diferencias de capacidad, es sólo... el interés de entrar [en la ruta del programador]”.⁵⁷ También es importante el ambiente de trabajo: “Al llegar a un departamento de puros hombres, yo era la única mujer allí, empecé como secretaria [risas]. Sí, la verdad, fue duro... luego vinieron Leti y otra chica y fuimos tres”.⁵⁸ Las mujeres mencionadas iniciaron trabajando como secretarías y se convirtieron en programadoras, mientras que los hombres, excompañeros de universidad, iniciaron como programadores directamente.

V. Discusión

La estrategia digital mexicana, que inicia con dotar de acceso a Internet a un amplio sector de los ciudadanos, se concreta normativamente en las reformas constitucionales de 2013. La concreción del acceso a Internet como derecho humano cuenta ya con una estrategia operativa, el programa México Conectado, pero que se verá limitada por los recortes presupuestales.

Paralelamente, el aumento en el acceso a dispositivos móviles, y con ello al uso de las redes sociales por amplios sectores de la población mexicana, nos permite proyectar un cambio inobjetable en el proceso de modernización tecnológica en México en el siglo XXI.⁵⁹ Algunos autores sostienen que históricamente en México ha existido una brecha entre la adaptación, el aprendizaje y el desarrollo de tecnología mexicana, lo que nos hace pensar en que el reto será observar y analizar “el crecimiento contra el desarrollo”,⁶⁰ frase que explica lo que está sucediendo en la Web 2.0 en el sureste: el crecimiento está concentrado en el aumento del acceso y no en el desarrollo de contenidos o de plataformas locales.

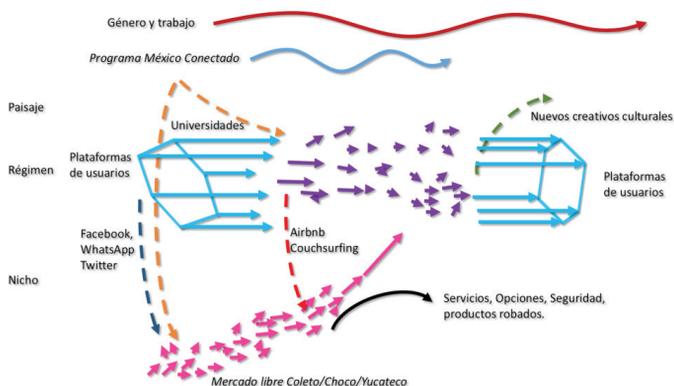
56 (M, Pr, Chis).

57 (H, Pr, Chis).

58 (M, Sh, Chis).

59 Paul Gootenberg. Technology and the Search for Progress in Modern Mexico by Edward Beatty (review). *Enterprise & Society*, vol. 17, No. 3 (septiembre 2016).

60 Idem., p. 693.



En la Figura 8, en la parte superior se esquematizan dos transformaciones de paisaje, una con lentos cambios (género y trabajo), otra que ha irrumpido México Conectado, ambas componen el paisaje sociodigital en el sureste. A nivel de régimen, en la parte media, representamos la inexistencia de compañías de software, las dificultades de las universidades que generan miles de egresadas, muchas de las cuales terminan insertándose no como DS sino en la EC como usuarias de plataformas gratuitas como Facebook, pero también en Couchsurfing, apoyándose en procesos económicos existentes (turismo), pero desde situaciones aún más precarias que los trabajos formales mal remunerados.

En la figura 8, en la parte inferior representamos los escasos nichos existentes. Si bien, hay ejemplos exitosos en Yucatán, como INCUBATIC, pero no se han podido replicarse en Chiapas y apenas lo han hecho en Tabasco. Sin embargo, existen miles de experiencias cotidianas sobre intercambios que hablan de una dinámica que puede ser exitosa. Por ejemplo, los intercambios de “Comparte tu tiempo” y los “mercados virtuales” de Facebook muestran el potencial de la EC.

Dos resultados inesperados de la extensión de Internet en México y el sureste, es que se utiliza para tareas escolares y entretenimiento, (y en tercer lugar para trabajo) y que hay poca generación de contenido local.⁶¹ Así que existe un potencial de crecimiento para ofertar por EC contenidos culturales como el idioma, la danza, la cocina y educativos como las ciencias; usando la gratuidad de la plataformas Facebook, YouTube y WhatsApp. Pero también conviene resaltar que hay una grave desconexión en cuanto al DS local, por lo que autores⁶² ya lo han identificado como un problema estructural de las carreras de ingeniería en universidades que debe ser remediado urgentemente.

61 Freedom House. *Freedom on the Net 2015. México.*

62 Guel Martínez y Araiza Vázquez, *Una reflexión...*, Supra nota 47.

VI. Conclusiones

Apenas en 2011 la Asamblea General de la ONU declaró el acceso a Internet como un derecho humano porque “la única y cambiante naturaleza de Internet no sólo permite a los individuos ejercer su derecho de opinión y expresión, sino que también forma parte de sus derechos humanos y promueve el progreso de la sociedad en su conjunto”.⁶³ Este documento ilustra un ejemplo del acceso a Internet, para promover el empoderamiento de las mujeres, la participación plena y efectiva de las mujeres y la igualdad de oportunidades de liderazgo en esta esfera económica, todos ODS. Este artículo ofrece evidencias de las reformas estructurales deben 1) incidir mayormente en condiciones de igualdad para las mujeres a una formación técnica, profesional y superior de calidad en los ámbitos universitarios, 2) diseñar oportunidades de espacios nichos (p.e. turismo) para aumentar la equidad en el número personas con competencias necesarias, en particular técnicas y profesionales, para acceder al empleo, el trabajo decente y el emprendimiento.

En general, el progreso de la sociedad en el marco de los derechos humanos, confiere a Internet una serie de posibilidades normativas sin precedentes y concretas en estrategias digitales que posibiliten cambios en el campo de los derechos laborales, la reducción sustancial de la proporción de jóvenes que no están empleados y no cursan estudios, ni reciben capacitación. Las nuevas formas de trabajo sobre Web 2.0 son una opción real para el aumento de la productividad económica mediante la diversificación, la modernización tecnológica y la innovación, pero lo será más si por ejemplo, puede incidir en la promoción de una industria turística sostenible que cree puestos de trabajo y promueva la cultura, capacitación y los productos locales.

En este artículo se analizan los datos confiables de los institutos de estadística del Gobierno mexicano y testimonios para describir los retos que enfrenta la población joven en el sureste en materia autoempleo (EC), relaciones equitativas de género y DS. Por último, contamos con evidencia sobre desarrollo de aplicaciones locales de software con un enorme potencial para el autoempleo, la EC y la creación de empresas de software. Sin embargo, ese nicho debe fortalecerse para constituir una oferta real de empleo para los programadores, a partir de la demanda de los usuarios p.e. productos entretenimiento o capacitación.

63 Frank La Rue, *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression*. United Nations. General Assembly. Documento A/HRC/17/27 (16 de Mayo de 2011). Traducción propia.

VII. Referencias

- Adrian Smith y Rob Raven, What is Protective Space? Reconsidering Niches in Transitions to Sustainability. *Research Policy*, vol. 41, No. 6 (2012).
- Alberto Chong, ed., *Conexiones del desarrollo. Impacto de las nuevas tecnologías de la información*. Washington, D.C.: Banco Interamericano de Desarrollo, 2011.
- Aline Moch y Estefanía Capdeville, “Adopción TIC: rompiendo la brecha de género”. S.I.: Competitive Intelligence Unit, s.f. Disponible en http://the-ciu.net/nwsltr/496_1Distro.html.
- Angélica A. Evangelista, Rolando Tinoco, y Esperanza Tuñón. Violencia institucional hacia las mujeres en la región sur de México. *LiminaR. Estudios Sociales y Humanísticos*, vol. 14, No. 2 (2016).
- Araceli Mingo y Hortensia Moreno, El ocioso intento de tapar el sol con un dedo: violencia de género en la universidad. *Perfiles Educativos*, vol. XXXVII, No. 148 (2015).
- Asociación Mexicana de Internet. *Reporte anual 2014 sobre los hábitos del internauta mexicano*. México, 2014.
- Chris J. Martin, Paul Upham y Leslie Budd, Commercial Orientation in Grassroots Social Innovation: Insights from the Sharing Economy. *Ecological Economics*, No. 118 (Octubre 2015).
- Chris J. Martin, The Sharing Economy: A Pathway to Sustainability or a Nightmarish Form of Neoliberal Capitalism? *Ecological Economics*, No. 121 (2016).
- Christine L. Williams, Chandra Muller y Kristine Kilanski, “Gendered Organizations in the New Economy”. *Gender & Society*, vol. 26, No. 4 (2012).
- Claudia Juárez Escalona, “SCT reduce meta sexenal en México Conectado”. *El Economista*, 11 de Noviembre de 2016. Disponible en <http://eleconomista.com.mx/industrias/2016/09/06/sct-reduce-meta-sexenal-mexico-conectado>.
- Claudia Serrano y Dagmar Raczynski, *Derechos sociales básicos, superación de la pobreza y protección social ante la vulnerabilidad*. Santiago de Chile: Asesorías para el Desarrollo, 2003. Disponible en http://www.asesoriasparaeldesarrollo.cl/secciones/areas_de_trabajo/politicas_sociales.html.

- Dawn Nafus, Patches don't Have Gender: What is not Open in Open Source Software. *New Media & Society*, vol. 14, No. 4 (2012).
- Edward Beatty, *Technology and the Search for Progress in Modern Mexico* (California: University of California Press, 2015).
- Elisabeth K. Kelan, 'I don't Know Why' - Accounting for the Scarcity of Women in ICT Work. *Women's Studies International Forum*, vol. 30, No. 6 (2007).
- Emarketer. Facebook Dominates the Social Media Market in Mexico. YouTube also enjoys popularity and frequent visits. 14 de Abril de 2016. Disponible en <https://www.emarketer.com/Article/Facebook-Dominates-Social-Media-Market-Mexico/1013828>.
- Enrique Dávila, Georgina Kessel, y Santiago Levy, El sur también existe: un ensayo sobre el desarrollo regional de México. *Economía Mexicana. Nueva Época*, vol. XI, No. 2 (segundo semestre 2002).
- Evan Carroll y John Romano, *Your Digital Afterlife: When Facebook, Flickr and Twitter are your Estate, What's your Legacy?* (Berkeley, CA: New Readers, 2011). Disponible en <http://ptgmedia.pearsoncmg.com/images/9780321732286/samplepages/0321732286.pdf>.
- Eyal Ert, Aliza Fleischer y Nathan Magen, Trust and Reputation in the Sharing Economy: The Role of Personal Photos in Airbnb. *Tourism Management*, No. 55 (Agosto 2016).
- Frank La Rue, *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression*. United Nations. General Assembly, 2011. Documento A/HRC/17/27.
- Frank W. Geels, Ontologies, Socio-Technical Transitions (to Sustainability), and the Multi-Level Perspective. *Research Policy*, vol. 39, No. 4 (2010).
- Frank W. Geels, The Multi-Level Perspective on Sustainability Transitions: Responses to Seven Criticisms. *Environmental Innovation and Societal Transitions*, vol. 1, No. 1 (2011).
- Frank W. Geels y Johan Schot, Typology of Sociotechnical Transition Pathways. *Research Policy*, vol. 36, No. 3 (2007).
- Freedom House, *Freedom on the Net 2015. México*. Washington, D.C., 2015. Disponible en https://freedomhouse.org/sites/default/files/resources/FOTN%202015_Mexico.pdf.

- Gina Zabludovsky, Las mujeres en los ámbitos de poder económico y político de México. *Revista Mexicana de Ciencias Políticas y Sociales*, vol. 60, No. 223 (2015). Disponible en <http://www.redalyc.org/pdf/421/42132948003.pdf>.
- Guel Martínez, Carlos Javier y María de Jesús Araiza Vázquez, Una reflexión sobre los factores determinantes del desarrollo de la industria del software en México. *Daena. International Journal of Good Conscience*, vol. 10, No. 3 (2015).
- Japhy Wilson, Colonising Space: The New Economic Geography in Theory and Practice. *New Political Economy*, vol. 16, No. 3 (2011).
- Karina Sánchez García, Sobre los derechos de las audiencias en México. *Comunicación y Sociedad*, No. 27 (Septiembre-Diciembre 2016).
- Krista M. Brumley, ‘Now, We Have the Same Rights as Men to Keep Our Jobs’: Gendered Perceptions of Opportunity and Obstacles in a Mexican Workplace. *Gender, Work & Organization*, vol. 21, No. 3 (2014).
- Lara Flores, Sara María y Kim Sánchez Saldaña, En búsqueda del control: enganche e industria de la migración en una zona productora de uva de mesa en México1. *Asalariados Rurales en América Latina*, vol. 73 (2015).
- Laura Martha Razo Godínez, La inserción de las mujeres en las carreras de ingeniería y tecnología. *Perfiles Educativos*, vol. XXX, No. 212 (1989).
- Lizzie Richardson, Performing the Sharing Economy. *Geoforum*, No. 67 (2015).
- Maarten Hajer y Wytse Versteeg, Performing Governance through Networks. *European Political Science*, vol. 4, No. 3 (2005).
- María José Pola Tellechea, “Taxistas realizan caravana contra pirataje y servicio de Uber en Tabasco”. *Presente Diario del Sureste*, 26 de septiembre de 2016. Disponible en http://www.diariopresente.com.mx/noticia/lcapital/162857/taxistas-realizan-caravana-contra-pirataje-servicio-uber-tabasco/_
- Martha Leticia Quintanilla y Terlin Jackeline Flores, Una estrategia para fortalecer las competencias para la era digital. *Revista UNAHINNOV@*, No. 3 (2016).
- Manuel Castells, La ciudad de la nueva economía. *Papeles de Población*, vol. 7, No 27 (Enero-Marzo 2000).

- México, Consejo Nacional de Evaluación de la Política de Desarrollo Social, *Pobreza en México 2014*. México, 2015. Disponible en http://www.coneval.gob.mx/medicion/documents/pobreza_2014_CONEVAL_web.pdf.
- México, Consejo Nacional de Población, Índice absoluto de marginación 2000-2010. México, 2013. Disponible en <http://www.conapo.gob.mx/work/models/CONAPO/Resource/1755/1/images/01Capitulo.pdf>.
- México, Decreto por el que se expiden la Ley Federal de Telecomunicaciones y Radiodifusión, y la Ley del Sistema Público de Radiodifusión del Estado Mexicano; y se reforman, adicionan y derogan diversas disposiciones en materia de telecomunicaciones y radiodifusión (2014). Disponible en http://www.dof.gob.mx/nota_detalle.php?codigo=5352323&fecha=14/07/2014.
- México, Instituto Mexicano de la Juventud, *Diagnóstico de la situación de los jóvenes en México*. México, 2013.
- México, Instituto Nacional de Estadística y Geografía, *Encuesta Nacional de Ocupación y Empleo (ENOE), población de 15 años y más de edad. Resultados del primer trimestre 2016*. México, 2016.
- México, Instituto Nacional de Estadística y Geografía, *Encuesta Nacional sobre Disponibilidad y Uso de Tecnologías de la Información en los Hogares (ENDUTIH)*. México, 2015. Disponible en <http://www3.inegi.org.mx/contenidos/proyectos/enchogares/regulares/dutih/2015/tabulados/u2ed134.XLSX>.
- México, Instituto Nacional de Estadística y Geografía, *Encuesta Nacional sobre Uso del Tiempo 2014*. México, 2014. Disponible en <http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/hogares/especiales/enut/enut2014/default.aspx>.
- México, Instituto Nacional de Estadística y Geografía, *Directorio Estadístico Nacional de Unidades Económicas DENUÉ*. Mayo de 2016. México, 2016.
- México, Instituto Nacional de Estadística y Geografía, *Mujeres y hombres en México 2015*. México, 2015.
- Nancy K. Baym, *Personal Connections in the Digital Age* (Cambridge, Reino Unido; Malden, MA: Polity, 2010).
- Nicolás Lucas y Angélica Pineda, “Uber exprime a sus socios para ser el líder”. *El Economista*, 11 de noviembre de 2016. Disponible en <http://eleconomista.com.mx/tecnociencia/2016/03/12/uber-exprime-sus-socios-ser-lider>.

- OIT (Organización Internacional del Trabajo), *Informe mundial sobre salarios 2014/2015: Salarios y desigualdad de ingresos*. Ginebra, 2015.
- Olivier Thévenon, Drivers of Female Labour Force Participation in the OECD. OECD Social, Employment and Migration Working Papers, No. 145 (2013).
- Paul Gootenberg, Technology and the Search for Progress in Modern Mexico by Edward Beatty (review). *Enterprise & Society*, vol. 17, No. 3 (Septiembre 2016).
- PNUD, *Informe Regional de Desarrollo Humano 2013-2014. Seguridad ciudadana con rostro humano: diagnóstico y propuestas para América Latina*. Nueva York, 2014.
- Rakin Ertürk, Integration of the Human Rights of Women and the Gender Perspective: Violence Against Women. Report of the Special Rapporteur on Violence Against Women its Causes and Consequences, Yakin Ertürk. Addendum: Mission to Guatemala. United Nations. Economical and Social Council, 2005. Documento E/CN.4/2005/72/Add.3.
- Rodrigo Gallegos, Carlos Grandet y Pavel Ramírez, *Los emprendedores de TIC en México*. México: Instituto Mexicano para la Competitividad, 2014.
- Russell Belk, Sharing versus Pseudo-Sharing in Web 2.0. *Anthropologist*, vol. 18, No. 1 (2014).
- Suzanne Reimer, 'It's Just a Very Male Industry': Gender and Work in UK Design Agencies. *Gender, Place & Culture. A Journal of Feminist Geography*, vol. 23, No. 7 (2016).

Progress and peril: the role of ICT companies in promoting and curtailing human rights

Priya Kumar¹, Revati Prasad² & Nathalie Maréchal³

Abstract

The 2030 Agenda for Sustainable Development highlights the centrality of information and communications technology (ICT) to 21st century development. Tools like e-learning, “smart infrastructure,” service delivery databases, and mobile devices hold great potential to help meet the Sustainable Development Goals (SDGs) through partnerships between national governments and private companies. Any strategy for the use of ICTs to promote human rights and development must acknowledge that private entities develop most ICTs. Such companies help people access information, conduct business, and connect with others, but their role as gatekeepers also makes them choke points, particularly related to freedom of expression and privacy. Although ICT companies have taken steps to provide greater insight about how their actions affect human rights, far more transparency is needed hold these companies to account. If the SDGs are to “realize human rights for all,” it is imperative that ICT for development (ICT4D) projects take steps to mitigate the risks that come from using ICTs. These technologies pose particular threats to privacy and freedom of expression, which jeopardizes people’s ability to advocate for human rights more broadly without fear of reprisal. This article outlines the human rights risks of increased use of ICTs and offers a framework for private sector and government actors to mitigate them. While acknowledging the real and potential benefits of increased ICT use in advancing development and human rights, the article provides examples of threats to human rights that stem from the policies and practices of ICT companies. It concludes with specific recommendations for companies and guidance for governments that seek to influence the private sector in this regard. Notably, it calls for governments and donors to exercise due diligence in evaluating companies’ commitment to human rights when choosing private sector partners for ICT4D projects.

Keywords: information and communications technology; human rights; freedom of expression; privacy; private sector.

1 College of Information Studies, University of Maryland.

2 Annenberg School for Communication, University of Pennsylvania.

3 Annenberg School for Communication and Journalism, University of Southern California.

I. Introduction

The 2030 Agenda for Sustainable Development sets forth an ambitious plan to profoundly improve the lives of people around the world. By including an explicit call to “realize the human rights of all”, the Agenda foregrounds a rights-based approach to development. Each of the 17 Sustainable Development Goals (SDGs) corresponds to human rights enshrined in international law and treaties. For instance, Goal 2 (to end hunger) finds its human rights counterpart in the right to adequate food, and Goal 10 (to reduce inequality within and among countries, including promoting social, economic and political inclusion) draws upon the right to equality and non-discrimination and the right to participate in public affairs.⁴

The 2030 Agenda highlights the centrality of information and communications technology (ICT) to serve as a catalyst in enacting this vision of development. Goal 17 directly references ICT’s ability to overcome the digital divide and spur knowledge economies. Other goals, including those aimed at education (Goal 4), gender balance (Goal 5) and “smart infrastructure” (Goal 9), also acknowledge ICTs, from mobile devices to e-learning, as powerful tools to help meet the SDGs. National governments will lead the implementation of the SDGs in partnership with private enterprise; indeed, the 2030 Agenda calls upon the private sector to support and amplify these efforts.

The 2030 Agenda employs an instrumental view of ICTs and the private sector; they are a means to the end of sustainable development. In this formulation, businesses drive economic growth, and ICTs are tools to accelerate and magnify reach and impact. The Agenda does consider the rights implications of the private sector in terms of labour and environmental impact, but it does not take into account how technology companies themselves can secure or subvert people’s human rights, specifically the critical rights to freedom of expression and privacy. The exercise of these two rights is the cornerstone of civil society; lacking them, individuals cannot advocate for their human rights (or those of others) without fear of reprisal. While universal, these rights are not absolute; governments can and do balance these rights with other interests in accordance with international human rights law.⁵ However, not all such limitations are compatible with human rights, and this article provides examples of cases where ICT companies unduly violate the rights to free expression, privacy, or both.

This article focuses on the intersection of the ICT sector and human rights. It begins by examining the critical role that policies and practices of ICT companies

4 A/RES/217 (III) A Articles 25, 2, 21.

5 A detailed legal analysis of the limitations of these rights falls beyond the scope of this article.

play in either advancing or hindering human rights, whether these policies and practices were developed of a company's own accord or in response to national laws. These companies have the greatest impact on the right to information and expression, as articulated in Article 19 of the Universal Declaration of Human Rights (UDHR), and on the right to privacy, as presented in Article 12. This article provides examples of how company actions can curtail, rather than respect, these rights. Because this action disproportionately affects vulnerable and marginalized populations, this article also addresses the UDHR's Article 2, the right to equality and non-discrimination, and Article 21, the right to participate in public affairs.

It then describes several norms-based frameworks to foster greater accountability among ICT companies to respect human rights. The rule of law is, of course, an essential component of human rights promotion, yet it is often insufficient. This is particularly true in the ICT sector, where technology and practice tend to move faster than the law. Moreover, smaller and less-developed countries often struggle to enforce laws that aim to regulate wealthy and powerful multinational corporations, and all too frequently laws directly compel ICT companies to violate or facilitate the violation of human rights.⁶ The last section of this article offers recommendations for companies and for governments who seek to push companies to better respect their users' human rights. The conclusion connects these recommendations directly to the SDGs.

II. How ICT Companies Can Put Human Rights at Risk

In June 2016, the UN Human Rights Council recognized the global and open Internet as a driving force towards development and asserted that the "same rights that people have offline must also be protected online".⁷ It acknowledged the importance of the Internet in meeting the SDGs and explicitly emphasized the need to protect freedom of expression and privacy rights in the march toward a more digitally connected world.

The council also highlighted the critical role of companies in ensuring that people can exercise these rights. Private-sector entities typically own and operate the infrastructure that enables digital communication. For-profit ICT companies, which include Internet service providers, search engines, social media sites, blogging platforms, and cloud computing services, exercise immense power over the global flow of information.

6 Rebecca MacKinnon and others, *Fostering freedom online: The role of Internet intermediaries* (Paris, France, UNESCO, 2014).

7 A/HRC/32/L.20, para. 1.

These Internet intermediaries, or “third-party platforms that mediate between digital content and the humans who contribute and access this content”, serve as gatekeepers to the online world, and consequently can also act as choke points.⁸ Heralded as “liberation technologies”⁹ for their ability to open new spaces for expression and interaction, they can also serve as critical points of control where state actors can surveil or censor communication and suppress the rights of people across the globe.¹⁰

Despite their border-spanning character, ICT companies are often bound by the laws of the countries in which they operate.¹¹ For instance, Google blocks access to Nazi content in Germany and Austria pursuant to those countries’ hate crime laws. However, companies may also contest the legality of government requests. Apple’s resistance to decrypt an iPhone in response to a court order obtained by the US Federal Bureau of Investigation is only one such example.¹²

Internet intermediaries make public policy through decisions about what they do and do not permit on their platforms. For example, Facebook’s community standards prohibit hate speech, but permit “humour, satire, or social commentary related to these topics”.¹³ Facebook establishes these rules and determines how to enforce them, and users have no mechanism to appeal if the company removes

-
- 8 Laura DeNardis, *The global war for Internet governance* (New Haven, Connecticut, Yale University Press, 2015), p. 154.
 - 9 Jon Diamond, “Liberation technology”, *Journal of Democracy*, vol. 21, No. 3 (2010); John Postill, “Freedom technologists and the new protest movements: A theory of protest formulas”, *Convergence: The International Journal of Research into New Media Technologies*, vol. 20, No. 4 (2014) doi:10.1177/1354856514541350.
 - 10 Ronald Deibert, *Black code: Inside the battle for cyberspace* (Toronto, Canada: McClelland & Stewart, 2013); Laura DeNardis, *The global war*, supra note 8; Rebecca MacKinnon, *Consent of the networked: The world-wide struggle for Internet freedom* (New York City, New York: Basic Books, 2012); Evgeny Morozov, *The net delusion: The dark side of Internet freedom* (New York City, Public Affairs, 2011).
 - 11 Bertrand de La Chapelle and Paul Fehlinger, “Jurisdiction on the Internet: From legal arms race to transnational cooperation”, *Global Commission on Internet Governance Paper Series*, No. 28 (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, April 2016). Available from <https://www.cigionline.org/publications/jurisdiction-internet-legal-arms-race-transnational-cooperation>; Milton Mueller, *Networks and states: The global politics of Internet governance* (Boston, Massachusetts: The MIT Press, 2010).
 - 12 Eric Lichtblau, “In Apple debate on digital privacy and the iPhone, questions still remain”, *New York Times*, 28 March 2016. Available from http://www.nytimes.com/2016/03/29/us/politics/in-apple-debate-on-digital-privacy-and-the-iphone-questions-still-remain.html?_r=0.
 - 13 Facebook defines hate speech as including, “content that directly attacks people based on their: race, ethnicity, national origin, religious affiliation, sexual orientation, sex, gender, or gender identity, or serious disabilities or diseases”. See Facebook, “Encouraging respectful behavior: Hate speech”, 4 November 2016. Available from <https://www.facebook.com/communitystandards/#>.

their content.¹⁴ Such “sovereigns of cyberspace” shape online discourse through their terms of service and privacy policies, to which users must agree.¹⁵ As intermediaries, these companies facilitate the flow of information, knowledge, and personal data, which means that people increasingly depend on these companies as they exercise their human rights.

Moreover, the SDGs call for gender equality and implicitly acknowledge the need to reduce discrimination that can prevent marginalized populations from fully enjoying their rights.¹⁶ While ICTs can support these goals, such efforts must confront the fact that discrimination and inequality occur online as well. Internet access remains gendered and inhibits women from being able to enjoy the many positive effects of the Internet.¹⁷ Women who are online often experience the Web as an unsafe space, from women in Pakistan facing blackmail over doctored photos¹⁸ to prominent feminist bloggers like Anita Sarkeesian and Jessica Valenti enduring hate speech and threats of violence.¹⁹

Internet intermediaries like Facebook and Twitter have become arbiters that must balance the expressive liberty of some users with the need to protect others from harm. These companies have faced criticism for their response to threats against women. One study on technology-related violence against women found that ICT companies hesitate to address the issue until it garners media attention, and that their responses fail to consider the experiences of non-Western women.²⁰ Vague definitions of terms such as “harassment” or “vulnerable individual” leave users wondering how policies apply in specific cultural contexts. For example, Facebook lacked mechanisms to evaluate hate speech in Urdu or Pashto, let

14 Facebook, “I believe my content was removed in error”, 4 November 2016. Available from <https://www.facebook.com/help/780814295267977>.

15 Rebecca Mackinnon, *Consent of the networked...* supra note 10, p. 114.

16 A/RES/70/1.

17 International Telecommunication Union and United Nations Educational, Scientific and Cultural Organization, *Doubling digital opportunities: Enhancing the inclusion of women & girls in the information society: A report by the Broadband Commission Working Group on Broadband and Gender* (Geneva, Switzerland, 2013). Available from <http://www.broadbandcommission.org/documents/working-groups/bb-doubling-digital-2013.pdf>.

18 Simon Parkin, “Pakistan’s troll problem”, *New Yorker*, 28 June 2016. Available from <http://www.newyorker.com/tech/elements/pakistans-troll-problem>.

19 Jessica Valenti, “Anita Sarkeesian interview: ‘The word “Troll” feels too childish. This is abuse.’” *Guardian*, 29 August 2015. Available from <https://www.theguardian.com/technology/2015/aug/29/anita-sarkeesian-gamergate-interview-jessica-valenti>; Lyz Lenz, “Inside the psyche of a troll who threatens a child.” *Daily Dot*, 3 August 2016. Available from <http://www.dailydot.com/irl/jessica-valenti-online-threats/>.

20 Carly Nyst, “Internet intermediaries and violence against women: Online executive summary and findings”, *End Violence: Women’s Rights and Safety Online* (Association for Progressive Communications, 2014). Available from <http://www.genderit.org/sites/default/upload/flow-cnyst-summary-formatted.pdf>.

alone respond to it.²¹ In a leaked staff memo, Twitter’s CEO acknowledged the company’s struggle to counter abuse and harassment on its platform.²² Technologically mediated violence against women inhibits women’s ability to speak freely, fully participate online, and engage socially and politically.

The digital space is also fraught for minorities such as the LGBT community. Online spaces can provide a platform for identity exploration and expression,²³ but DeNardis and Hackl show how these spaces can serve as “control points over LGBT speech, identity expression, and community formation”.²⁴ They document instances where rules established in proprietary digital systems impact LGBT issues; for example, Nintendo’s real-life simulation game Tomodachi Life did not allow same-sex relationships. Facebook’s real name or “authentic identity” requirement has resulted in the termination of several drag queens’ accounts, limiting these users’ ability to navigate a multi-faceted identity and manage their professional and personal relationships online.²⁵

While gaming or social media platforms can make technical and design decisions that limit LGBT users from expressing their identity, the data such platforms collect can also expose users to significant harm. For example, Egyptian activists raised concerns that police used the dating app Grindr to track down and arrest gay men on charges of debauchery and indecency. Grindr ultimately changed its default settings to hide the distance of users in countries such as Russia, Egypt, and Saudi Arabia, which have strong anti-LGBT laws.²⁶

Beyond affecting marginalized populations, ICT companies can be conscripted to serve as blunt political weapons that undermine the political and civil rights of citizens *en masse*. During political turmoil, governments increasingly order ICT companies to block specific applications or shut down entire communications networks. The digital rights organization Access Now recorded at least 15

21 Simon Parkin, *Pakistan’s troll...* supra note 18.

22 Charlie Warzel, “A honeypot for assholes”: Inside Twitter’s 10-year failure to stop harassment”, *Buzzfeed*, 11 August 2016. Available from https://www.buzzfeed.com/charliewarzel/a-honeypot-for-assholes-inside-twitters-10-year-failure-to-s?utm_term=.qgYzVJ4BL#.rrZWe6GEI.

23 Mary L. Gray, “Negotiating identities/queering desires: Coming out online and the remediation of the coming-out story”, *Journal of Computer-Mediated Communication*, vol. 14, No. 4 (2009), doi:10.1111/j.1083-6101.2009.01485.x.

24 Laura DeNardis and Andrea M. Hackl, “Internet control points as LGBT rights mediation”, *Information, Communication & Society*, vol. 19 No. 6 (2016), doi:10.1080/1369118X.2016.1153123, p. 753.

25 Jessa Lingel and Adam Golub. “In face on Facebook: Brooklyn’s drag community and socio-technical practices of online communication”, *Journal of Computer-Mediated Communication*, vol. 20, No. 5 (2015), doi:10.1111/jcc4.12125.

26 Laura DeNardis and Andrea Hackl, *Internet control...* supra note 24.

Internet shutdowns around the world in 2015, and it recorded 51 shutdowns in the first 10 months of 2016.²⁷ The UN Human Rights Council has condemned network shutdowns that violate international human rights law.²⁸

While many shutdowns coincide with elections or political protests, governments have deployed the tactic for far more quotidian reasons. The Algerian government acknowledged that it blocked access to Facebook, Twitter, and other social media sites to prevent high school students from cheating during national exams,²⁹ and leaders in the Indian state of Jammu and Kashmir shut down Internet service before a local wrestling match.³⁰ Not only do such actions restrict citizens' ability to communicate and participate politically, as Goal 16.7 aims to ensure, but they also offer a cover of darkness for further human rights violations.

Governments often adopt a more targeted approach to restricting speech online by blocking and removing online content. States can request ICT companies to remove content to comply with laws against defamation, blasphemy, pornography, or state secrets. Such requests can also silence political opposition. Restrictive intermediary liability laws that hold ICT companies liable for their users' online activities, such as those in China, incentivize companies to proactively monitor and remove content on their platforms. One study of Weibo, China's most popular microblogging service found approximately 16 percent of all messages was deleted.³¹

These "arbiters of online expressive liberty"³² can censor content when governments compel them; they can also remove or block content that violates their own policies. Users whose actions do not align with the policies of such dominant ICT companies as Google, Apple, or Facebook have few, if any alternatives. For example, Google and Apple hold a duopoly over mobile operating systems and the app stores through which most mobile users download software. Most Google Android users install applications through the Google Play Store, and Apple iOS users must go through Apple's App Store. Each company retains discretionary control over the third-party apps available

27 AccessNow, "#KeepItOn", 28 November 2016. Available from <https://www.accessnow.org/keepiton/>.

28 A/HRC/32/L.20, para. 10.

29 Patrick Markey, "Algeria blocks Facebook, Twitter to stop exam cheats: State media", *Reuters*, 19 June 2016. Available from <http://www.reuters.com/article/us-algeria-media-idUSKCN0Z50JX>.

30 Peerzada Ashiq, "Jammu goes offline ahead of controversial wrestling event", *Hindu*, 22 June 2016. Available from <http://www.thehindu.com/news/national/other-states/jammu-goes-offline-ahead-of-controversial-wrestling-event/article8756852.ece>.

31 David Bamman, Brendan O'Connor and Noah Smith, "Censorship and deletion practices in Chinese social media", *First Monday*, vol. 17, No. 3 (2012), dx.doi.org/10.5210/fm.v17i3.3943.

32 Laura DeNardis, *The global war...* supra note 8, p.157.

in its app store. Companies may decide to block an app for various reasons, for example, because it promotes violence or bigotry, or because it espouses unpopular speech.³³ While Google and Apple publicly state what is and is not permitted in the app store, neither publishes any information about how they evaluate apps or enforce their policies.

ICT companies hold a wealth of user information, and their policies regarding the management of such information directly affects users' rights. Many ICT companies generate revenue by collecting and aggregating information about their users and sharing it with advertisers. Such collection and sharing of data occurs under the auspices of online advertising, but it also facilitates government surveillance on and offline. For instance, people in India must provide official identification to use a cybercafé, and cybercafé operators must retain this information for a year.³⁴ These identification mechanisms put users' privacy at risk, and this loss of anonymity can impact their freedom of expression. Indeed, awareness of surveillance has demonstrable chilling effects on speech.³⁵

While privacy laws seek to mitigate the harm of such data collection, they often struggle to keep up with technology. Many laws hinge on the notion that if one can obscure or remove personal identifying information (PII), "there is no privacy harm."³⁶ Yet the proliferation of user information online means that seemingly innocuous data points can be aggregated and analysed in a way that identifies individual users, suggesting that laws focused on the removal of PII are ill-equipped to protect people's privacy.³⁷

III. How to Hold ICT Companies Accountable

Over the past decade, several accountability frameworks grounded in human rights norms and principles have arisen to address these concerns. While corporate social responsibility (CSR) emphasizes self-regulation among companies, the corporate accountability movement "implies both a measure of answerability (providing an account for measures undertaken) and enforceability (punishment

33 Ibidem.

34 Ibidem.

35 Elizabeth Stoycheff, "Under surveillance: Facebook online spiral of silence effects in the wake of NSA Internet monitoring", *Journalism and Mass Communication Quarterly*, vol. 93, No. 2 (2016).

36 Paul M. Schwartz and Daniel J. Solove, "The PII problem: Privacy and a new concept of personally identifiable information", *New York University Law Review*, vol. 86, (2011), p. 1816.

37 Paul Ohm, "Broken promises of privacy: Responding to the surprising failure of anonymization", *UCLA Law Review*, vol. 57, (2010).

or sanctions for poor performance or illegal conduct)”.³⁸ Entities of the UN have acknowledged that businesses face obligations related to human rights. Efforts like the Global Network Initiative and Ranking Digital Rights apply these obligations to ICT companies. These efforts help address “governance gaps” that arise when laws do not adequately protect human rights.³⁹

In June 2011, the UN Human Rights Council endorsed the Guiding Principles on Business and Human Rights,⁴⁰ which affirm that states have a duty to protect human rights, businesses have a duty to respect human rights, and both have an obligation to provide remedy for individuals whose human rights are violated. The Guiding Principles are a norms-based instrument to foster greater accountability among governments and businesses with regard to human rights. This approach has faced criticism because it lacks the legal force of a binding instrument like a treaty.⁴¹ The Guiding Principles by no means represent a complete solution to align corporate actions with human rights. But they do offer a structure through which companies can institutionalize efforts to respect human rights, and through which their efforts can be compared. To advance this work, the Office of the High Commissioner for Human Rights published an implementation guide for the principles.⁴² Six multinational companies are pilot testing a framework for reporting on their implementation of the Guiding Principles; others can self-report their progress to a publicly available database.⁴³

38 Peter Newell, “From responsibility to citizenship?: Corporate accountability for development”, *IDS Bulletin*, vol. 33, No. 2 (2002), p. 2. For more information, see Renginee G. Pillay, “The limits to self-regulation and voluntarism: From corporate social responsibility to corporate accountability”, *Amicus Curiae*, No. 99 (Autumn 2014) and Carmen Valor, “Corporate social responsibility and corporate citizenship: Towards corporate accountability”, *Business and Society Review*, vol. 110, No. 2 (2005).

39 For a discussion of these frameworks, see Rebecca MacKinnon, Nathalie Maréchal and Priya Kumar, “Corporate accountability for a free and open Internet”, *Global Commission on Internet Governance Paper Series* (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, December 2016). Available from <https://www.cigionline.org/publications/corporate-accountability-free-and-open-internet>.

40 A/HRC/RES/17/L.17/Rev.1, para. 1.

41 Penelope Simons, “International law’s invisible hand and the future of corporate accountability for violations of human rights”, *Journal of Human Rights and the Environment*, vol. 3, No. 1 (March 2012).

42 United Nations, Office of the High Commissioner on Human Rights, *Guiding principles on business and human rights: Implementing the United Nations “Respect, Protect and Remedy” framework*. (Geneva, Switzerland, 2011). Available from http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.

43 The companies are Unilever, Ericsson, H&M, Nestlé, Newmont, and Abn-Amro. Shift and Mazars. (2016). “UN guiding principles reporting framework”. Available from <http://www.ungpreporting.org/>.

With respect to the ICT industry, the European Commission sponsored the development of a guidebook on how ICT companies can implement the Guiding Principles.⁴⁴ In 2008, the Global Network Initiative (GNI) formed as a multi-stakeholder venue to protect and advance users' rights to free expression and privacy within the ICT industry. As discussed in the introduction, ICT companies play a unique role in facilitating these rights, which are essential for defending and promoting human rights more broadly. The GNI's mandate focuses on respect for human rights in the face of increasing government pressure to engage in censorship and surveillance.

Member companies agree to uphold the GNI Principles on Freedom of Expression and Privacy, which are based on international human rights standards.⁴⁵ They include commitments to narrowly interpret government requests for content restriction or access to user information, to consider human rights within decision-making frameworks, to engage with various types of stakeholders, and to provide transparency into their implementation of the principles. Every two years, an independent assessor vetted by the GNI board evaluates companies on their implementation of the principles, and the GNI board determines whether each company complies with the principles.

The GNI's multi-stakeholder approach means its decisions and actions are vetted by individuals who represent various perspectives and operate under different incentives. For example, investors, who seek to maximize their returns, want to ensure that companies manage risk appropriately, while those in civil society, who work to defend and advance human rights, want to ensure that companies address the concerns of marginalized users. The GNI's board includes representatives from companies, investment organizations, civil society, and academia, and thus its decisions represent consensus among various types of participants.

The GNI's company assessments are currently the only systematic audit framework that evaluates how ICT companies have met their human rights responsibilities. But their voluntary nature means the GNI on its own cannot hold

44 European Commission, *ICT sector guide on implementing the UN Guiding Principles on Business and Human Rights*. (Brussels, 2013). Available from https://ec.europa.eu/anti-trafficking/sites/antitrafficking/files/information_and_communication_technology_0.pdf.

45 For more information, see Global Network Initiative, *Principles* (November 6, 2016). Available from <http://globalnetworkinitiative.org/principles/index.php>.

the industry accountable; only member companies are assessed.⁴⁶ In addition, the GNI's focus on government actions related to censorship, surveillance, and access to user information addresses only one facet of the challenge to protect human rights online. It does not include the involvement of private entities, such as individuals or organizations focused on the removal of material that may infringe copyright, nor a company's own actions that can undermine or imperil users' freedom of expression or privacy, such as the conditions laid out in company terms of service or privacy policy documents.⁴⁷

As described earlier in this article, governments and ICT companies can act in ways that contravene human rights. While governments increasingly order telecommunications companies to shut down mobile and Internet access or request companies to restrict content and turn over user information, companies themselves also design product features and develop policies and processes that can put human rights at risk. Companies determine how they respond to reports of harassment on their platform, set policies for whether users can participate in the platform anonymously, establish the parameters for what content and actions are permitted on the platforms, and assign default settings on the platform. The technical features, design decisions, and policy choices embedded in ICTs also significantly affect users' security, a crucial consideration for high-risk users such as journalists, human rights defenders, or political dissidents.

Understanding the extent to which freedom of expression and privacy rights are protected online means navigating a complex ecosystem that includes companies, investors, governments, policymakers, civil society, advocates, and activists. To provide greater clarity on the role that companies play in this ecosystem, the Ranking Digital Rights (RDR) project developed a methodology to evaluate ICT companies and their public disclosure related to policies and practices that affect freedom of expression and privacy online.⁴⁸ In 2015, RDR released its inaugural Corporate Accountability Index, which evaluated sixteen of the world's largest Internet and telecommunications companies against 31

46 The five company members of GNI are: Facebook, Google, LinkedIn, Microsoft, and Yahoo. In February 2016, seven member companies from the Telecommunications Industry Dialogue, an industry organization that explores the role of telecommunications companies in respecting freedom of expression and privacy rights, joined GNI as observers. This gives them 12 months to understand GNI's operations and participate before deciding on full membership. For more information, see Global Network Initiative, "The Global Network Initiative and the Telecommunications Industry Dialogue join forces to advance freedom of expression and privacy", 1 February 2016. Available from <https://www.globalnetworkinitiative.org/news/global-network-initiative-and-telecommunications-industry-dialogue-join-forces-advance-freedom>.

47 Rebecca MacKinnon, Nathalie Maréchal, and Priya Kumar, *Corporate accountability...*, supra note 39.

48 The three authors of this article are current or past members of the RDR project team.

indicators. The project plans to publish the second edition of the index in 2017 and to release annually after that. By publicly evaluating companies against each other, RDR incentivizes companies to provide transparency into how their business processes affect users' free expression and privacy rights. This in turn gives investors, civil society, policymakers, and others baseline information they can use to hold companies accountable for their respect of these human rights.

The index methodology is based on international human rights standards, including the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the Guiding Principles and the GNI Principles. The methodology was developed in consultation with stakeholders from companies, investment organizations, civil society, and academia. The index report includes examples where laws and regulations in a company's headquarters country may hinder the company from performing well. This helps to clarify where advocacy campaigns and other types of pressure are best directed at companies, and where such efforts could be more effective when directed at policymakers and governments. The index methodology and raw data are publicly available for others to adapt and analyse.⁴⁹

ICT companies face increasing pressure from governments to act in ways that undermine, rather than protect, human rights. And where laws may not be barriers, companies frequently lack market or regulatory incentives to respect their users' human rights. The Guiding Principles, the GNI, and RDR exemplify innovative efforts to push companies to heed their human rights responsibilities. These efforts do not operate under the force of law or regulation; rather they harness the power of norms to promote accountability where the law has failed to do so. Their evaluations shed light on where companies stand, offer a roadmap on how they can improve, and instill an expectation of regular assessment to monitor company progress. This is not to say that legal and regulatory reform, litigation, or a binding treaty are unnecessary. Rather, norm-based accountability initiatives represent an avenue to effect incremental change while also fighting for human rights on other fronts.⁵⁰

49 For the 2017 index methodology, see Ranking Digital Rights, "2017 Indicators", 14 September 2016. Available from <https://rankingdigitalrights.org/2017-indicators/>. For the raw data from the 2015 index, see Ranking Digital Rights, "Download the data", 6 November 2016. Available from <https://rankingdigitalrights.org/index2015/download/>.

50 For more information about the challenges of pursuing a binding treaty on business and human rights, see John Gerard Ruggie, *Just business: Multinational corporations and human rights* (New York City, New York, W. W. Norton & Company, 2013).

IV. How ICT Companies Can Better Respect Human Rights

This article has described the human rights risks associated with ICTs and traced the development of global frameworks to hold ICT companies accountable for respecting human rights. SDG 9.c aims to significantly increase access to ICTs in the next 15 years. This section describes specific measures that ICT companies can take to ensure that this increased access does not compromise users' rights.⁵¹

A. Clearly communicate company policies to users

ICTs make it easier for users to communicate with each other across time and distance. However, companies should also communicate with their own users in a clear, accessible, and organized way, notably by improving their terms of service and privacy policies. These policies dictate what users can do on the platform and outline company practices regarding the collection, use, sharing, and retention of user information. Companies require users to agree to these terms; anyone who disagrees with them has little option but to avoid using the platform. While many policies take this to represent user consent, in practice, it creates the illusion of consent.⁵² Significant work remains to improve this process, but at an absolute minimum, companies should make their policies publicly available and provide translations in the languages commonly spoken by users. In addition, companies should provide users meaningful notice and documentation of changes to these policies.

Laws sometimes require companies to act in ways that put human rights at risk, for instance, by censoring speech or shutting down a network. Companies should explain, in a way that users can understand, what laws and regulations affect users' freedom of expression and privacy in the jurisdictions where they operate. These explanations should describe how companies comply with those laws and what that compliance means for users.

Companies should also clearly explain how they collect, use, share, and retain information from their users. Users should be able to understand what information about them the company collects; when and how it collects that information; whether the collection is optional; what information about users the company shares, with whom, and why; whether the sharing is optional; whether users can

51 Ranking Digital Rights, "2015 corporate accountability index", November 2015. Available from <https://rankingdigitalrights.org/index2015/assets/static/download/RDRindex2015report.pdf>

52 Emily Taylor, "The privatization of human rights: Illusions of consent, automation and neutrality", *Global Commission on Internet Governance Paper Series*, No. 24 (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, January 2016). Available from https://www.cigionline.org/sites/default/files/gcig_no24_web_2.pdf, p. 6.

access their own information; for how long the company retains information about users; and whether and how it destroys information after users delete their accounts or cancel their service.

B. Institutionalize human rights commitments throughout the company

Beyond making public commitments to respect users' rights, companies should also disclose evidence that they have institutionalized these commitments, for example by incorporating human rights into employee training and maintaining a whistle-blower program through which employees can report concerns related to how the company treats its users' freedom of expression and privacy rights. This bolsters confidence that companies will honour and implement such commitments even when leaders come and go.

One of the most meaningful steps companies can take is to regularly conduct human rights risk assessments (HRIAs) to determine how their products, services, and business operations affect freedom of expression and privacy. Such assessments are particularly salient when companies plan to enter new markets or appeal to new groups of users, as the human rights risks people face vary based on national and cultural context. The 2030 Agenda calls for all people, irrespective of age, gender, or any vulnerable or marginalized status, to participate fully in society, and an HRIA is one tool to help companies understand how to mitigate any risks that people from marginalized populations face when using their technologies.

While it would be counterproductive for companies to publish all details of their assessment processes and findings⁵³ several companies disclose information about the fact that they conduct assessments, as well as basic information about the scope, frequency, and use of these assessments. If business operations are not compatible with respect for human rights, companies may need to divest from certain markets. For example, the Swedish telecommunications operator TeliaSonera began conducting HRIAs in 2013 after controversies concerning its subsidiaries' involvement in political repression in Belarus and corruption scandals in Azerbaijan and Uzbekistan.⁵⁴ In 2015, TeliaSonera announced that it was exiting the Eurasian market. Since then, the company has made several

53 For example, the HRIA process often involves consultations with civil society organizations that have relevant expertise on human rights situations in a given country. Publicizing such contacts may put those organizations at risk.

54 Business & Human Rights Resource Centre, "NGO alleges TeliaSonera contributing to repression in Belarus", 16 September 2009. Available from <https://business-humanrights.org/en/ngo-alleges-teliasonera-contributing-to-repression-in-belarus>; Business & Human Rights Resource Centre, "NGO alleges TeliaSonera pulls out of Eurasia market because of corruption scandals in Azerbaijan & Uzbekistan; Company responds", 9 October 2015. Available from <https://business-humanrights.org/en/ngo-alleges-teliasonera-pulls-out-of-eurasia-market-because-of-corruption-scandals-in-azerbaijan-uzbekistan-company-responds>.

public statements supporting users' rights in relation to legal developments in Moldova and Tajikistan, and an Internet shutdown in Kazakhstan.⁵⁵ The company also committed to carrying out further HRIAs in Eurasia to integrate human rights in the divestment process and provide recommendations to the operating companies' current and future owners on how to manage and mitigate human rights impacts.⁵⁶

C. Provide transparency on the extent to which companies restrict content and release user information

Companies should improve transparency regarding all types of third-party requests they receive to restrict content or share user information. These include requests from government agencies, law enforcement, courts, private entities or individuals. For example, a private entity can request a website to remove content that infringes copyright, or a law enforcement agency can request access to real-time user information to police a social movement. Such transparency reporting on government requests for user information has already become a standard practice across the ICT industry. As of early 2016, 61 ICT companies had issued at least one transparency report disclosing a range of information about requests from governments, courts, and other entities to restrict content or share user information.⁵⁷ These reports may include the number of requests, how often companies comply, and the processes companies follow when deciding how to respond to requests.

Likewise, companies should also disclose meaningful information about the volume and nature of content and/or accounts that companies themselves restrict when enforcing their terms of service. While best practices regarding the optimal

55 Telia Company, "Respecting freedom of expression: Telia company view on new legislation in Moldova", 25 April 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/respecting-freedom-of-expression--telia-company-view-on-new-legislation-in-moldova/>; Telia Company, "Respecting freedom of expression: Information about and Telia company view on new legislation in Tajikistan", 8 June 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/respecting-freedom-of-expression--information-about-and-telia-company-view-on-new-legislation-in-tajikistan>; Telia Company, "Respecting freedom of expression: Recent major event as to service limitations in Kazakhstan, June 2016", 1 July 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/Respecting-Freedom-of-Expression-Recent-major-event-as-to-service-limitations/>.

56 TeliaSonera, "Human rights impact assessments: Focus on region Eurasia", 4 November 2016. Available from <http://annualreports.teliasonera.com/en/2015/sustainability-work/human-rights-impact/>.

57 These companies include Amazon, Apple, AT&T, Cisco, Deutsche Telekom, Facebook, Google, Kakao, LinkedIn, Microsoft, Naver, Orange, Rogers, Telenor, Teliasonera, Twitter, Vodafone, and Yahoo. See AccessNow, "Transparency reporting index", 4 November 2016. Available from <https://www.accessnow.org/transparency-reporting-index/>.

form of – and approach to – such disclosures are still emerging, companies should engage with stakeholders to determine what information related to terms of service enforcement would bolster trust and accountability.

D. Enable users to keep themselves secure

Companies should communicate basic information about account access, encryption of data in transit and at rest, and delivery of software security updates. They should also publish educational materials to help users mitigate security threats. As the SDGs encourage greater access to ICTs, these educational efforts will be vital to ensure that users understand the risks and vulnerabilities they face when adopting new technology. Companies should also work with external security researchers to discover vulnerabilities. In August 2016, researchers from the University of Toronto’s Citizen Lab and Lookout Security discovered a particularly insidious attack that allowed an adversary to turn a target’s iOS device into a roving bug. The attack, attributed to Israeli company NSO, relied on three distinct “zero-day” vulnerabilities⁵⁸ and has been used against a human rights defender in the United Arab Emirates, several journalists in Mexico, and potentially others. Apple developed and issued a security update within days of learning about it.⁵⁹

Companies that are serious about maximizing users’ security should enable users to fully encrypt their content in a way that companies themselves cannot access it. Such “end-to-end” or “zero-knowledge” encryption would help reassure users that their private communications are more secure against data breaches, interception, and sharing with third parties, and that such information can only be accessed by the desired recipients.

E. Provide grievance and remedy mechanisms for users

Under the Guiding Principles, companies and states share a duty to offer effective remedies to users whose rights have been violated. Grievance mechanisms and remedy processes should be more prominently available to users. Companies should more clearly indicate that they accept concerns related to potential or actual violations of freedom of expression and privacy as part of these processes. Beyond this, disclosure about how companies process complaints, along with

58 Written as either “zero-day” or “0-day,” this refers to a weakness in a software program that is unknown to the vendor and exploited by hackers before the vendor has a chance to issue a security patch. The term refers to the number of days (zero) that the vendor has had to develop a software update to defend against the attack.

59 Bill Marczak and John Scott-Railton, “The million dollar dissident: NSO group’s iPhone zero-days used against a UAE human rights defender. *Citizen Lab*, 24 August 2016. Available from <https://citizenlab.org/2016/08/million-dollar-dissident-iphone-zero-day-nso-group-uae/>.

general reporting on complaints and outcomes, would help stakeholders ensure that companies take grievance and remedy processes seriously. Marking a step in the right direction, Twitter created a Trust and Safety Council in February 2016 that includes dozens of civil society organizations and individuals to provide input on how the company can better balance its free expression values with the need to protect its users.⁶⁰

F. Engage with policymakers for changes that will help companies better respect users' rights

Finally, companies should advocate for legal and regulatory changes that support their ability to respect users' freedom of expression and privacy. The 2030 Agenda repeatedly calls upon national governments to reform legislation, and ICT companies can work with governments to address human rights and development goals simultaneously. For example, national legislation in several countries prevents companies from engaging in transparency reporting around government requests for user information. Companies should work with civil society advocates and responsible investors to convince national governments to enact legal and regulatory reform that maximizes users' freedom of expression and privacy. Governments in turn must evaluate these corporate advocacy appeals while remaining vigilant about regulatory capture and ensuring that their policies do not undermine competition or limit citizens' ability to access the free and open Internet.

V. How Governments Can Help ICT Companies Better Respect Users' Rights

Cohesive, nationally owned strategies are central to meeting the SDGs.⁶¹ Within this framework, governments can also help foster an ecosystem that supports, rather than challenges, Internet intermediaries' ability to respect human rights. Some operating environments lack fundamental governance tools such as respect for rule of law, an independent judiciary, and sufficient legal, policymaking, and technical capacity among civil servants. Improvement on those fronts would, of course, yield myriad benefits beyond greater respect for users' digital rights. For states that do have such governance structures in place, this section offers recommendations for ways that governments can advance users' digital rights.

A. Assess the human rights impacts of laws

As discussed above, the GNI and RDR standards expect companies to conduct impact assessments to evaluate how their business decisions, including those

60 Charlie Warzel, *A honeypot...* supra note 22.

61 A/RES/70/1.

about new products or features, affect human rights. Legislative bodies should conduct similar assessments on existing as well as proposed laws and regulations and revise those that imperil citizens' human rights.

For example, intermediary liability laws, which “formalize government expectations for how an intermediary must handle ‘third-party’ content or communications,” significantly affect the extent to which companies can promote or limit freedom of expression.⁶² Countries can adopt distinct intermediary liability regimes for different types of content. In the United States, Section 230 of the Communications Decency Act generally shields intermediaries from responsibility for the content their users post or share on their platforms, and from liability that stems from company decisions to remove content in accordance with their own terms. These protections mean that companies in the United States are not legally pressured to monitor the content on their services and are empowered to operate their business as they see fit (though human rights norms and standards emphasize that companies should be transparent about how they do so).

Intermediaries in the United States do not receive such broad immunity for content that may infringe copyright. The country’s Digital Millennium Copyright Act takes what is known as a “notice-and-takedown” approach to intermediary liability. Companies are generally not liable if they unknowingly host material that infringes copyright; however, if they receive notice alleging that content on their platform violates copyright, they can be held liable for letting it remain available. While the law enables individuals whose content is restricted to protest the removal, the law incentivizes companies “to remove content immediately after receiving notice, rather than investing resources to investigate the validity of the request and risk a lawsuit. Legitimate content can end up being censored as a consequence.”⁶³

Finally, countries including China and Thailand maintain strict intermediary liability regimes where intermediaries are responsible for content that appears on their platforms. Companies there can face serious consequences, ranging from fines to revocation of their operating license, if prohibited content appears on their platforms.⁶⁴ This threat incentivizes companies to proactively monitor and censor content on their platforms, posing obvious challenges to free expression rights. The Manila Principles on Intermediary Liability represent a globally

62 Rebecca MacKinnon and others, *Fostering freedom...* supra note 6, p. 39.

63 *Idem*, p. 42.

64 *Ibidem*.

accepted framework that calls for very limited liability for companies.⁶⁵ As a first step governments, can evaluate their own intermediary liability laws against these standards to identify areas where laws can change to better protect users' free expression rights.

Regarding privacy rights, governments can evaluate the extent to which any privacy or data protection laws adhere to such standards as the Organization for Economic Cooperation and Development (OECD) Privacy Guidelines⁶⁶ or the Code of Fair Information Practice first proposed by the then-US Department of Health, Education and Welfare.⁶⁷ In some countries, data retention laws mandate companies to store user information for a specific amount of time. Lengthy retention periods can pose security and surveillance risks to users. The more data companies keep, the more data is available for criminals, companies, governments, or other third parties to access. Governments should review the extent to any data retention regulations may pose a threat to human rights.

Governments should also evaluate any laws or regulations that can be interpreted as authorizing mass surveillance to ensure such laws adhere to the International Principles on the Application of Human Rights to Communications Surveillance.⁶⁸ These “necessary and proportionate” principles apply international human rights law to modern digital surveillance and articulate the circumstances in which surveillance, conducted within and beyond a state's borders, is permissible. The principles include a global legal analysis and an implementation guide with checklists and examples to help government officials operationalize the principles.

B. Provide transparency on requests for companies to restrict content or share user information

This article has referenced the transparency reports that many intermediaries publish to disclose the volume and nature of requests they receive to restrict content and/or release user information. While this reporting sheds light on the extent to which companies are compelled to act in ways that may undermine free expression and privacy, such a picture cannot be close to comprehensive

65 “Manila principles on intermediary liability”, 2016. Available from <https://www.manilaprinciples.org/>.

66 Organization for Economic Cooperation and Development, “The OECD privacy framework”, 2013. Available from <http://www.oecd.org/Internet/ieconomy/privacy-guidelines.htm>.

67 United States, Department of Health and Human Services, “Records, computers and the rights of citizens, 1 July 1973. Available from <https://aspe.hhs.gov/report/records-computers-and-rights-citizens>.

68 “International principles on the application of human rights to communications surveillance, 2013. Available from <https://necessaryandproportionate.org/>.

until governments provide the same level of transparency. The Freedom Online Coalition found the public increasingly expects such transparency, and that providing it can engender greater public trust in government activities related to law enforcement and national security.⁶⁹ The coalition's report provides examples of specific types of transparency from the governments of Australia, Sweden, the United Kingdom, and the United States.⁷⁰

VI. Conclusion

ICTs have changed people's lives worldwide, and they promise to be valuable tools in advancing the Sustainable Development Goals. However, many ICTs are provided by private companies that establish the rules by which their platforms operate, enforce those rules, and set the terms of any appeal mechanisms. This flies in the face of modern governance principles, which hold that such roles should fall under the purview of separate institutions. It also raises a number of concerns for human rights, many of which this article has described. Several accountability mechanisms have arisen to address these gaps in governance. As the standards set forth by these mechanisms become more widely implemented, the public will gain greater insight into the role that such companies play in human rights and will be better positioned to pressure them (and the governments that sometimes incentivize or even compel companies to take such actions) to maximize, not restrict, human rights. Awareness of the key role that ICT companies play is especially important in the context of the SDGs. Governments, with assistance from the international community, are designing national plans for communications infrastructure and services that use ICTs and, in many cases, contract implementation to the private sector. These companies can use their mandates responsibly to strengthen human rights, for example by building privacy safeguards into service delivery databases, or to jeopardize them – perhaps irremediably – for example, by building covert access mechanisms into such databases. When choosing private sector partners for ICT4D projects, governments and the donor community should exercise due diligence in evaluating companies' commitment to human rights, notably privacy and free expression, and require that private-sector partners meet

69 Freedom Online Coalition, "Report: Working Group 3 Privacy and Transparency Online" November 2015. Available from <https://www.freedomonlinecoalition.com/wp-content/uploads/2015/10/FOC-WG3-Privacy-and-Transparency-Online-Report-November-2015.pdf>.

70 Idem. For example, the Australian attorney general issues annual reports about government interception of user information and use of surveillance devices. Sweden's government reports statistics annually about interception and collection of user information. The British Interception of Communications Commissioner's Office (IOCCO) conducts an annual audit into the country's use of interception, and the U.S. National Security Agency has also released surveillance-related statistics.

**Progress and peril:
the role of ICT companies in promoting and curtailing human rights**

certain standards. At minimum, these standards should include transparency about company policies that affect human rights, evidence that companies have institutionalized their human rights commitments, measures that enable users to keep themselves secure, and mechanisms for remedy when users' rights have been violated.

VII. References

- “International principles on the application of human rights to communications surveillance, 2013. Available from <https://necessaryandproportionate.org/>.
- “Manila principles on intermediary liability”, 2016. Available from <https://www.manilaprinciples.org/>.
- A/HRC/32/L.20.
- A/HRC/RES/17/L.17/Rev.1.
- A/RES/217 (III).
- A/RES/70/1.
- AccessNow, “#KeepItOn”, 28 November 2016. Available from <https://www.accessnow.org/keepiton/>.
- AccessNow, “Transparency reporting index”, 4 November 2016. Available from <https://www.accessnow.org/transparency-reporting-index/>.
- Bertrand de La Chapelle and Paul Fehlinger, “Jurisdiction on the Internet: From legal arms race to transnational cooperation”, Global Commission on Internet Governance Paper Series, No. 28 (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, April 2016). Available from <https://www.cigionline.org/publications/jurisdiction-internet-legal-arms-race-transnational-cooperation>.
- Bill Marczak and John Scott-Railton, “The million dollar dissident: NSO group’s iPhone zero-days used against a UAE human rights defender. Citizen Lab, 24 August 2016. Available from <https://citizenlab.org/2016/08/million-dollar-dissident-iphone-zero-day-nso-group-uae/>.
- Business & Human Rights Resource Centre, “NGO alleges TeliaSonera contributing to repression in Belarus”, 16 September 2009. Available from <https://business-humanrights.org/en/ngo-alleges-teliasonera-contributing-to-repression-in-belarus>.
- Business & Human Rights Resource Centre, “NGO alleges TeliaSonera pulls out of Eurasia market because of corruption scandals in Azerbaijan & Uzbekistan; Company responds”, 9 October 2015. Available from <https://business-humanrights.org/en/ngo-alleges-teliasonera-pulls-out-of-eurasia-market-because-of-corruption-scandals-in-azerbaijan-uzbekistan-company-responds>.
- Carly Nyst, “Internet intermediaries and violence against women: Online executive summary and findings”, End Violence: Women’s Rights and Safety Online (Association for Progressive Communications, 2014). Available from <http://www.genderit.org/sites/default/upload/flow-cnyst-summary-formatted.pdf>.

- Carmen Valor, “Corporate social responsibility and corporate citizenship: Towards corporate accountability”, *Business and Society Review*, vol. 110, No. 2 (2005).
- Charlie Warzel, “A honeypot for assholes’: Inside Twitter’s 10-year failure to stop harassment”, *Buzzfeed*, 11 August 2016. Available from https://www.buzzfeed.com/charliwarzel/a-honeypot-for-assholes-inside-twitters-10-year-failure-to-s?utm_term=.qgYzVJ4BL#.rrZWe6GEI.
- David Bamman, Brendan O’Connor and Noah Smith, “Censorship and deletion practices in Chinese social media”, *First Monday*, vol. 17, No. 3 (2012), [dx.doi.org/10.5210/fm.v17i3.3943](https://doi.org/10.5210/fm.v17i3.3943).
- Elizabeth Stoycheff, “Under surveillance: Facebook online spiral of silence effects in the wake of NSA Internet monitoring”, *Journalism and Mass Communication Quarterly*, vol. 93, No. 2 (2016).
- Emily Taylor, “The privatization of human rights: Illusions of consent, automation and neutrality”, *Global Commission on Internet Governance Paper Series*, No. 24 (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, January 2016). Available from https://www.cigionline.org/sites/default/files/gcig_no24_web_2.pdf.
- Eric Lichtblau, “In Apple debate on digital privacy and the iPhone, questions still remain”, *New York Times*, 28 March 2016. Available from http://www.nytimes.com/2016/03/29/us/politics/in-apple-debate-on-digital-privacy-and-the-iphone-questions-still-remain.html?_r=0.
- European Commission, *ICT sector guide on implementing the UN Guiding Principles on Business and Human Rights*. (Brussels, 2013). Available from https://ec.europa.eu/anti-trafficking/sites/antitrafficking/files/information_and_communication_technology_0.pdf.
- Evgeny Morozov, *The net delusion: The dark side of Internet freedom* (New York City, Public Affairs, 2011).
- Facebook, “Encouraging respectful behavior: Hate speech”, 4 November 2016. Available from <https://www.facebook.com/communitystandards/#>.
- Facebook, “I believe my content was removed in error”, 4 November 2016. Available from <https://www.facebook.com/help/780814295267977>.
- Freedom Online Coalition, “Report: Working Group 3 Privacy and Transparency Online” November 2015. Available from <https://www.freedomonlinecoalition.com/wp-content/uploads/2015/10/FOC-WG3-Privacy-and-Transparency-Online-Report-November-2015.pdf>.

- Global Network Initiative, “The Global Network Initiative and the Telecommunications Industry Dialogue join forces to advance freedom of expression and privacy”, 1 February 2016. Available from <https://www.globalnetworkinitiative.org/news/global-network-initiative-and-telecommunications-industry-dialogue-join-forces-advance-freedom>.
- Global Network Initiative, “Principles”, 6 November 2016. Available from <http://globalnetworkinitiative.org/principles/index.php>.
- International Telecommunication Union and United Nations Educational, Scientific and Cultural Organization, Doubling digital opportunities: Enhancing the inclusion of women & girls in the information society: A report by the Broadband Commission Working Group on Broadband and Gender (Geneva, Switzerland, 2013). Available from <http://www.broadbandcommission.org/documents/working-groups/bb-doubling-digital-2013.pdf>.
- Jessa Lingel and Adam Golub. “In face on Facebook: Brooklyn’s drag community and sociotechnical practices of online communication”, *Journal of Computer-Mediated Communication*, vol. 20, No. 5 (2015), doi:10.1111/jcc4.12125.
- Jessica Valenti, “Anita Sarkeesian interview: ‘The word “Troll” feels too childish. This is abuse.’” *Guardian*, 29 August 2015. Available from <https://www.theguardian.com/technology/2015/aug/29/anita-sarkeesian-gamergate-interview-jessica-valenti>.
- John Gerard Ruggie, *Just business: Multinational corporations and human rights* (New York City, New York, W. W. Norton & Company, 2013).
- John Postill, “Freedom technologists and the new protest movements: A theory of protest formulas”, *Convergence: The International Journal of Research into New Media Technologies*, vol. 20, No. 4 (2014) doi:10.1177/1354856514541350.
- Jon Diamond, “Liberation technology”, *Journal of Democracy*, vol. 21, No. 3 (2010).
- Laura DeNardis and Andrea M. Hackl, “Internet control points as LGBT rights mediation”, *Information, Communication & Society*, vol. 19 No. 6 (2016), doi:10.1080/1369118X.2016.1153123.
- Laura DeNardis, *The global war for Internet governance* (New Haven, Connecticut, Yale University Press, 2015).
- Lyz Lenz, “Inside the psyche of a troll who threatens a child.” *Daily Dot*, 3 August 2016. Available from <http://www.dailydot.com/irl/jessica-valenti-online-threats/>.
- Mary L. Gray, “Negotiating identities/queering desires: Coming out online and the remediation of the coming-out story”, *Journal of Computer-Mediated Communication*, vol. 14, No. 4 (2009), doi:10.1111/j.1083-6101.2009.01485.x.

- Milton Mueller, *Networks and states: The global politics of Internet governance* (Boston, Massachusetts: The MIT Press, 2010).
- Organization for Economic Cooperation and Development, “The OECD privacy framework”, 2013. Available from <http://www.oecd.org/Internet/ieconomy/privacy-guidelines.htm>.
- Patrick Markey, “Algeria blocks Facebook, Twitter to stop exam cheats: State media”, Reuters, 19 June 2016. Available from <http://www.reuters.com/article/us-algeria-media-idUSKCN0Z50JX>.
- Paul M. Schwartz and Daniel J. Solove, “The PII problem: Privacy and a new concept of personally identifiable information”, *New York University Law Review*, vol. 86, (2011).
- Paul Ohm, “Broken promises of privacy: Responding to the surprising failure of anonymization”, *UCLA Law Review*, vol. 57, (2010).
- Peerzada Ashiq, “Jammu goes offline ahead of controversial wrestling event”, *Hindu*, 22 June 2016. Available from <http://www.thehindu.com/news/national/other-states/jammu-goes-offline-ahead-of-controversial-wrestling-event/article8756852>.
- Penelope Simons, “International law’s invisible hand and the future of corporate accountability for violations of human rights”, *Journal of Human Rights and the Environment*, vol. 3, No. 1 (March 2012).
- Peter Newell, “From responsibility to citizenship?: Corporate accountability for development”, *IDS Bulletin*, vol. 33, No. 2 (2002).
- Ranking Digital Rights, “2015 corporate accountability index”, November 2015. Available from <https://rankingdigitalrights.org/index2015/assets/static/download/RDRindex2015report.pdf>.
- Ranking Digital Rights, “2017 Indicators”, 14 September 2016. Available from <https://rankingdigitalrights.org/2017-indicators/>.
- Ranking Digital Rights, “Download the Data”, 6 November 2016. Available from <https://rankingdigitalrights.org/index2015/download/>.
- Rebecca MacKinnon and others, *Fostering freedom online: The role of Internet intermediaries* (Paris, France, UNESCO, 2014).
- Rebecca MacKinnon, *Consent of the networked: The world-wide struggle for Internet freedom* (New York City, New York: Basic Books, 2012).
- Rebecca MacKinnon, Nathalie Maréchal and Priya Kumar, “Corporate accountability for a free and open Internet”, *Global Commission on Internet Governance Paper Series* (Waterloo, Canada, Centre for International Governance Innovation and Chatham House, December 2016). Available from <https://www.cigionline.org/publications/corporate-accountability-free-and-open-internet>.

- Renginee G. Pillay, “The limits to self-regulation and voluntarism: From corporate social responsibility to corporate accountability”, *Amicus Curiae*, No. 99 (Autumn 2014).
- Ronald Deibert, *Black code: Inside the battle for cyberspace* (Toronto, Canada: McClelland & Stewart, 2013).
- Simon Parkin, “Pakistan’s troll problem”, *New Yorker*, 28 June 2016. Available from <http://www.newyorker.com/tech/elements/pakistans-troll-problem>.
- Shift and Mazars. (2016). “UN Guiding Principles reporting framework”. Available from <http://www.ungpreporting.org/>.
- Telia Company, “Respecting freedom of expression: Information about and Telia company view on new legislation in Tajikistan”, 8 June 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/respecting-freedom-of-expression--information-about-and-telia-company-view-on-new-legislation-in-tajikistan>.
- Telia Company, “Respecting freedom of expression: Recent major event as to service limitations in Kazakhstan, June 2016”, 1 July 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/Respecting-Freedom-of-Expression-Recent-major-event-as-to-service-limitations/>.
- Telia Company, “Respecting freedom of expression: Telia company view on new legislation in Moldova”, 25 April 2016. Available from <http://www.teliacompany.com/en/newsroom/news/news/news-articles/2016/respecting-freedom-of-expression--telia-company-view-on-new-legislation-in-moldova/>.
- TeliaSonera,” Human rights impact assessments: Focus on region Eurasia”, 4 November 2016. Available from <http://annualreports.teliasonera.com/en/2015/sustainability-work/human-rights-impact-/>.
- United Nations, Office of the High Commissioner on Human Rights, *Guiding Principles on Business and Human Rights: Implementing the United Nations “Respect, Protect and Remedy” framework*. (Geneva, Switzerland, 2011). Available from http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.
- United States, Department of Health and Human Services, “Records, computers and the rights of citizens, 1 July 1973. Available from <https://aspe.hhs.gov/report/records-computers-and-rights-citizens>.

Capacity Building, Technology Transfer and Development

Operationalising the right to water and sanitation and gender equality via appropriate technology in rural Nepal

Pamela White¹, Sanna-Leena Rautanen² & Pallab Raj Nepal³

Abstract

Can a tap, a squat toilet, or an improved cooking stove – all simple rural technologies – make a contribution to achieving human rights and the Sustainable Development Goals (SDGs)? What are the ‘soft’ elements, beyond the technology, that are needed? This article explores how, the principles of human rights based approach (HRBA), gender equality and social inclusion (GESI) are mainstreamed and operationalized through two bilateral rural water projects in Nepal - the Finland and Nepal-funded Rural Water Supply and Sanitation Project in Western Nepal (RWSSP-WN) and the Rural Village Water Resources Management Project (RVWRMP). The projects utilise a combination of hands-on technical assistance, community participation and appropriate technologies to achieve the Right to Water and Sanitation, as well as making a contribution to the SDGs. The technologies include water supply systems; renewable energy, including micro-hydropower schemes, improved cooking stoves, improved water mills and hydraulic ram pumps; as well as water seal toilets. However, simply providing technology is not enough. It is critical that it is applied within a strong planning and implementation framework, integrated in local government and communities, but supported with skilful facilitation. This case study focuses on the results achieved and critical lessons learned regarding gender equality and empowerment (SDG 5), and access to water and sanitation (SDG 6). The lessons learned, including the important role of the technical staff in the project modality, are valuable for planners and implementers of water and sanitation projects elsewhere.

Keywords: Human Rights; Nepal; Gender; Social Inclusion; Water Supply and Sanitation

- 1 Senior Project Manager & Gender & Social Inclusion Consultant, FCG International and doctoral candidate, University of Helsinki
- 2 Chief Technical Adviser, Rural Water Supply and Sanitation Project in Western Nepal, Phase II, and affiliated with Tampere University of Technology, Finland.
- 3 Management Information System (MIS) Specialist, Rural Village Water Resources Management Project, Phase III, FCG International, and PhD candidate at Sai Nath University, Jharkhand, India.

I. Introduction

Rural water projects have many opportunities to enable the achievement of human rights and sustainable development within the 2030 Agenda.⁴ This study focuses on the use of rural technologies together with capacity-building in the context of two rural water projects in Nepal that operate through local governments in remote locations, far from national and international legal and policy settings. The context is challenging, as noted by Meier et al who discuss the implementation of the human right to water and sanitation at different levels worldwide.⁵ They conclude that the right has been very well accepted by international institutions, national governments and NGOs, but at the local level, among local utilities or local government, it is difficult to translate the principles into practice. Meier et al found in their interviews that “local operators and members of water boards almost universally believed that human rights had no concrete effect on the management of water and sanitation systems. Human rights efforts create “political will from the top”, a civil society representative noted, but do not create “much traction at the local level”.⁶ In this article we discuss the two water projects’ efforts to support implementation of the right to water and sanitation at the local level. We also note the dilemmas in dealing with the gap between the legal commitments made in human rights conventions and constitutional law, as well as the more general aims of the Sustainable Development Goals (SDGs). In the Nepalese context, the constrained socio-economic circumstances and geographical challenges make it very difficult to operationalise human rights and the SDGs.

The principles of human rights based approach (HRBA), gender equality and social inclusion (GESI) are mainstreamed and operationalized through two bilateral rural water projects in Nepal. Technology is combined with social aspects in the bilateral Rural Water Supply and Sanitation Project in Western Nepal (RWSSP-WN) and Rural Village Water Resources Management Project (RVWRMP), funded by Finland and Nepal. The projects operate under the Ministry of Federal Affairs and Local Development in 24 districts out of a total of 75 in Nepal. As the projects work through local government systems and on a large scale rather than only piloting, they are able to contribute practical experiences to the water sector policy dialogue in Nepal and internationally. As

4 A/RES/70/1.

5 A/64/292; Benjamin Mason Meier, Georgia Lyn Kayser, Jocelyn Getgen, Kestenbaum, Urooj Quezon Amjad, Fernanda Dalcanale, and Jamie Bartram, “Translating the Human Right to Water and Sanitation into Public Policy Reform”, *Science and Engineering Ethics*, vol. 20 (January 2014), pp. 833-848. DOI 10.1007/s11948-013-9504-x.

6 Idem., p.844.

such they make suitable subjects for this case study to examine the way in which water projects can use technologies and build local capacity to enable human rights.

The rights-based approach is built into both projects from the beginning. The HRBA & GESI Strategy developed in these projects⁷ guides the operational works in both a cross-cutting and targeted way, influencing the choices of technology in each case. Both projects utilise a combination of hands-on technical assistance, capacity development, community participation and appropriate technologies to achieve the Right to Water and Sanitation.⁸ The 2030 Agenda aims to combat inequalities and discrimination and to “leave no one behind”, which is reflected in both projects.

This article’s research question is: how can the principles be operationalized in practice, taking the protection of human rights and the use of technology within the framework of the 2030 Agenda as the point of entry with a particular focus on gender equality, water and sanitation? We discuss the relevant literature, conventions and declarations globally; then move to Nepal and the two projects themselves. This case study shows how the projects have conceptualized the approach, how it is translated into action, what has been achieved, what have been the challenges, and which could be the relevant global learnings from this local experience. We combine both quantitative and qualitative approaches and multiple data collection techniques. Validity of the research is established by triangulation of data, observers, methodologies, and theory.

II. Literature

In July 2015, and after some years of deliberations, the UN General Assembly (including Nepal) passed the Resolution on the Human Rights to Safe Drinking Water and Sanitation. This instrument recognises that the human right to safe drinking water entitles everyone, without discrimination, to have access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use, and that the human right to sanitation entitles everyone, without discrimination, to have physical and affordable access to sanitation, in all spheres of life, that is safe, hygienic, secure, socially and culturally acceptable

7 Rural Water Supply and Sanitation Project in Western Nepal Phase II, *HRBA & GESI Strategy and Action Plan. Human Rights-Based Approach and Gender Equality & Social Inclusion in the Water and Sanitation Sector*. (Pokhara, 2015). Available from <http://www.rwsspwn.org.np/#!phase-ii-publications/ck0f>.

8 A/64/292.

and that provides privacy and ensures dignity, while reaffirming that both rights are components of the right to an adequate standard of living.⁹

In addition, the Universal Declaration of Human Rights,¹⁰ UN General Assembly Declaration on the Right to Development,¹¹ the International Covenant on Economic, Social and Cultural Rights (ICESCR),¹² and the Convention on the Rights of Persons with Disabilities¹³ are important human rights instruments for the two Nepalese water projects that are considered in this article. Particularly relevant are the right to health (CESCR article 12— see GC 14, para 11– 12), right to an adequate living standard (Article 25) and the right to food (Article 11.1— see GC 4, para 8[b]). Water and sanitation contribute to the right to health, as well as to nutrition and food security. There is an obvious link between open defaecation and the consumption of contaminated water, and subsequent water and food borne diseases. In addition, fewer parasites and diarrhoea mean that individuals have the opportunity to absorb nutrients from food. By decreasing environmental contamination, there is a smaller risk of environmental enteric dysfunction, which leads to stunting of growth in children.¹⁴

The ICESCR defines the legal bases for the right to water. The human right to water is indispensable for leading a life with human dignity and is a prerequisite for the realisation of other human rights. The right to water can be defined as the right of everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.¹⁵ When water and sanitation are recognized as human rights, the provision of water and sanitation is not a matter of charity but a legal obligation.

In 2009 the then Special Rapporteur on this issue, Caterina de Albuquerque, outlined to the UN General Assembly the clear obligations related to access to sanitation within existing human rights law, and argued that the lack of sanitation has catastrophic effects on health, education, economy, gender equality and overall development.¹⁶ She has also affirmed that

...the duty of States parties to the ICESCR to take ‘deliberate, concrete, and targeted steps’ toward meeting their Covenant obligations, while

9 A/RES/70/169, para. 2.

10 A/RES/3/217 A.

11 A/RES/41/128.

12 A/RES/21/2200.

13 A/RES/61/106.

14 Mduduzi N.N. Mbuya and Jean H. Humphrey, “Preventing environmental enteric dysfunction through improved water, sanitation and hygiene: an opportunity for stunting reduction in developing countries”, *Maternal & Child Nutrition*, vol. 12 (Suppl. 1) (November 2015).

15 E/C.12/2002/11.

16 A/HRC/12/24.

recognising that the full realisation of human rights is a long-term process that is frequently beset by technical, economic and political constraints.¹⁷

However, she argues that this is not an excuse to not act.

These obligations are included in the new Constitution of Nepal which states in articles 30(1) and 35(4) that all citizens have the fundamental right to live in a healthy and clean environment and to access basic clean drinking water and sanitation services. It guarantees that women, disadvantaged castes, ethnicities and religions, and people with disabilities can equally access these rights.¹⁸ In addition, many human rights aspects have been incorporated into the new Nepali Water Supply, Sanitation and Hygiene (WASH) Sector Development Plan (2016).¹⁹ This plan indicates that the human right to drinking water and sanitation has ten criteria, five of which are normative (availability, accessibility, quality/safety, affordability, acceptability), and five are cross-cutting ones (non-discrimination, participation, accountability, impact and sustainability, and transparency). The first three normative criteria can be assessed against the Nepali standard water service levels of quantity, accessibility, reliability and quality.²⁰ When water and sanitation are recognized as human rights, people are defined as rights-holders, and governments as duty-bearers of water and sanitation service provision. This means that the provision of water and sanitation is not a matter of charity but a legal obligation, as noted in the Constitution.

Nepal made good progress towards the achievement of the Millennium Development Goals (MDGs). One of the goals was related to water and sanitation - it specifically requested to “halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation”.²¹ The target for water supply was achieved in most of Nepal, however sustainability was compromised by poor functionality; and the target for sanitation is still not reached.²²

17 Catarina de Albuquerque and Virginia Roaf, *On the right track: Good practices in realising the rights to water and sanitation*. (United Nations Special Rapporteur on the human right to safe drinking water and sanitation, Lisbon, Textype, 2013).

18 Nepal, *Constitution Bill of Nepal* (Kathmandu, 2015).

19 Nepal, Ministry of Water Supply and Sanitation, Sector Efficiency Improvement Unit, *Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016 – 2030)* (Kathmandu, 2016).

20 Nepal, Ministry of Physical Planning and Works, *Rural Water Supply Policy*, Kathmandu, 2004.

21 A/RES/55/2 and reports can be accessed on <http://www.un.org/millenniumgoals/>.

22 Nepal, National Planning Commission Sustainable Development Goals 2016-2030 National (Preliminary) Report (Kathmandu, 2015). Available from <http://www.np.undp.org/content/nepal/en/home/library/sustainable-development-goals-national-report---nepal.html>.

Currently, the adoption of the 2030 Agenda for Sustainable Development and its 17 goals set the new aspirational targets to all nations. National governments must decide how to balance these aspirations against the legally binding human rights, as reflected in UN Declarations and national laws, with the local realities, capacities and levels of development. This is a consequence of the political nature of the SDGs (and the earlier MDGs), debated for many years and purposefully written as political projects and not legally binding international agreements.

In this regard, Satterthwaite discusses how the human right to water and sanitation supported the development of SDG 6 targets, via collaboration of technical, policy and legal experts. She notes that implementation of the laws and principles lags behind, stating how “[h]uman rights law is in many ways still the poor cousin of other fields of international law that have developed robust implementation and enforcement schemes”.²³ Meier et al.¹⁹ explored this problem further, acknowledging that many rights-based approaches tended to engage with human rights law conceptually and at a level of abstraction that can leave those implementing rights-based policy without a great deal of concrete guidance.²⁴ This was echoed by Marks, who considers that, to minimise the risks of technology to human rights, collaboration between scientists and engineers with human rights specialists could improve future policy and planning.²⁵ This combination of engineers and social sector experts, providing technical assistance and hands-on facilitation, is where the projects play a role. They provide the opportunity for both robust implementation and enforcement.

It cannot be assumed that if the technology is made available, it will be used appropriately or be accessed by the people who most need it. Haapala and White argue that “[s]imply providing technologies, such as taps, toilets, or new cultivation methods, cannot be assumed to result in uptake and positive outcomes unless appropriate steps are taken to change people’s behaviours”.²⁶

23 Margaret Satterthwaite, On Rights-Based Partnerships to Measure Progress in Water and Sanitation, *Science and Engineering Ethics*, vol. 20. DOI 10.1007/s11948-014-9514-3, p. 878, 2014.

24 Meier et al, *Translating the Human Right...* supra note 5.

25 Stephen Marks, “Human Rights and the Challenges of Science and Technology”, *Sci Eng Ethics*, vol. 20, (2014), pp. 869–875.

26 Juho Haapala and Pamela White, “Why do some behaviours change more easily than others? Water use behaviour interventions in rural Nepal”, *Waterlines*, vol.34, No.4 (2015), p.347.

III. Two Rural Water Projects

The Rural Water Supply and Sanitation Project in Western Nepal (RWSSP-WN) and Rural Village Water Resources Management Project (RVWRMP) work in remote rural communities in Nepal. They are embedded in local government planning and management systems, but with technical assistance from international and Nepali advisors providing skilled technical expertise for planning, capacity and approach development, and monitoring. The projects are aligned with Nepalese national priorities, supporting the national target of providing access to water and sanitation to all by 2017. The projects are financed jointly by the governments of Nepal and Finland, and share costs with District Development Committees (DDC), Village Development Committees (VDC), communities and users (see Figure 1 for the locations).

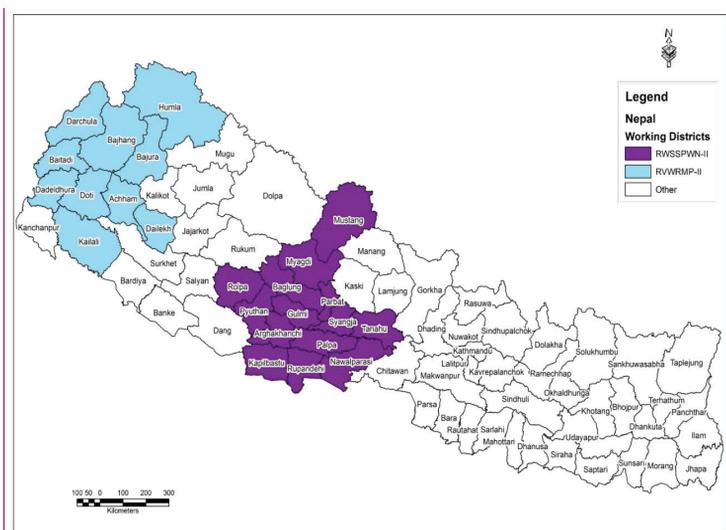


Figure 1: Map of Nepal illustrating the projects' working districts.

RWSSP-WN's overall objective is improved health and fulfilment of the equal right to water and sanitation for the inhabitants of the project area. The first phase ran from 2008 – 2013, the second phase from 2013-2018. The purpose is to ensure the poorest and excluded households' rights to access safe and sustainable domestic water, good health and hygiene through a decentralised governance system.²⁷

27 See the project's website for more details: www.rwsspwn.org.np.

RVWRMP's overall objective is improved health and reduced multidimensional poverty within the project working area. Phase I ran from 2006-2010, Phase II ran from 2010-2016, and Phase III is underway now. The purpose is to achieve full coverage of water supply and sanitation, and to establish functional planning and implementation frameworks for all water uses. Water use here is considered to include a broader scope than water and sanitation, such as agriculture, cooperatives, renewable energy and irrigation.²⁸ A central dynamic of the projects is about identifying root causes of poverty, empowering rights-holders to claim their rights, training them on their responsibilities and enabling duty-bearers to meet their obligations without discrimination.

The HRBA&GESI Strategy and Action Plan of both projects, published in 2015,²⁹ built on the earlier GESI strategy of RVWRMP. It involves several elements:

- Mainstreaming HRBA and GESI principles into policies, planning, implementation, monitoring and evaluation.
- Targeted actions, such as improving the access of menstruating women and people with disabilities to toilets and taps
- Capacity building of local duty bearers and policy dialogue, integrating the objectives into discussions at all levels, and communications.

In earlier years of the development cooperation between Finland and Nepal, a needs-based approach to development was applied, in which beneficiaries' *needed* assistance was considered in the projects. With a HRBA the beneficiaries become rights-holders, with a *right* to certain services (as described by Kirkemann Boesen and Martin).³⁰

Water is an enabler and entry point for equitable and sustainable socio-economic development in many sectors. This can be seen by the analysis of the contribution of the projects to many SDGs. The projects, together with local government, select working areas that are least served with water and face the most difficult living conditions. The Water Use Master Plans (WUMPs) and

28 See the project's website for more details: www.rvwrmp.org.np.

29 Rural Water Supply and Sanitation Project - Western Nepal HRBA & GESI Strategy and Action Plan. Human Rights-Based Approach and Gender Equality & Social Inclusion in the Water and Sanitation Sector. RWSSP-WN / DoLIDAR, Nepal. 2015. Available from <http://www.rwsspwn.org.np/#!phase-ii-publications/ck0f> (Accessed 05.11.2016).

30 Jakob Kirkemann Boesen, Tomas Martin, *Applying a Rights-Based Approach – An Inspirational Guide for Civil Society*. (The Danish Institute for Human Rights, Copenhagen, 2007), p. 45.

Village Development Committee WASH (VWASH) Plans³¹ ensure that the communities with greatest need are identified and prioritised within the local government borders. These are well-facilitated community planning processes. They check technical issues such as water availability, and identify needs and gaps at the grassroots level. Disadvantaged groups are encouraged to speak up. Those with limited mobility, such as people with disabilities and the elderly, can be consulted close to their homes. Through the participation of facilitators and confidence building workshops, dominance by local elites is avoided. Where there are physical barriers, alternatives such as solar, hydram or main electricity pumps may be used to pump water uphill. Rainwater tanks may be constructed or sources improved. Conflict is avoided by careful community consultations and by ensuring that water sources are registered in the name of the scheme. Water scarcity is a growing problem in many of the project areas.

Capacity is developed among communities (rights holders) and government at different levels (duty bearers) in the planning, construction and maintenance of the technologies, with an emphasis on participation and transparency. Involving communities from the start helps create a high level of ownership, which then supports sustainability. They are involved with the discussions of what is feasible, and the associated prioritisation.

The basic technical options supported include rural gravity-fed water supply systems, solar water lift systems, micro-hydro energy, improved cooking stoves (ICS), improved water mills (IWM), hydraulic ram pumps (hydrams), farmer-managed hill irrigation systems and combinations of these through multiple-use of water (MUS) systems. In addition, both projects support various technical options for the recharge and watershed protection. In RWSSP-WN II the recharge structures are increasingly considered as an element of all water supply systems: the design starts from the spring-shed, not anymore from the intake of the piped system. In RWSSP-WN from a total of 166,044 water supply beneficiaries (09/2013-10/2016), 49.99 per cent are women and 73 per cent belong to disadvantaged groups (DAG - i.e. all other social/ethnic/religious groups except Brahmin and Chhetri Hindu). Examples of the broader types of technologies in RVWRMP and the numbers of beneficiaries are provided below. The data used in the article comes from the monitoring stage of the projects and the field reports of staff, as well as the authors.

31 Guidelines are available on the project websites. <http://www.rvwrmp.org.np/water-use-master-plan.html> and <http://www.rwsspwn.org.np/wash-plans>.

Examples of the technologies applied in RVWRMP 09/2006-02/2016 (project monitoring data)

Type of Technology	Number of systems	Beneficiaries	Female	Male	Disadvantaged groups
Conventional & Non-Conventional (drip Irrigation (CI & NCI)	73	24 372	12 170	12 202	16%
Microhydro Power (MHP)	8	28 245	13 279	14 966	19%
Water Supply (WS) (with Sanitation support)	652	224 649	111 142	113 507	25%
Sanitation	118	489 587	245 534	244 053	39%
Multiple Use System (MUS) – involving combinations of CI, IWM, WS, MHP	51	44 666	22 414	22 252	19%
Improved Water Mill (IWM)	160	46 433	23 298	23 135	15%
Hydrant*	6	425 plus water for health post, VDC office & school	-	-	-
Improved Cooking Stove (ICS)*	18 246	95 746	-	-	-

**These figures haven't been disaggregated – however, in practice the beneficiaries are women, who would otherwise be carrying water uphill, collecting much more firewood or cooking over a smoky fire.*

IV. Discussion: how technology supports the SDGs and Human Rights

Typical development activities had applied a top-down, needs-based approach. Now with a HRBA, the focus changes and duty bearers in government and development interventions must support rights holders to participate in their social, political, economic and cultural development. Timely construction and community ownership are not just stock phrases.

Communities in western Nepal have commented that they are happy to participate in project activities, as they know that the scheme would be constructed by their own community members and will be high quality.³² In addition, the presence

32 Field level interviews held in RWSSP-WN, May 2016.

of the technical staff at the village implies that inhabitants can receive assistance to solve small problems before they become big ones. Facilitators encourage women and minority community members to speak up. Without this, it is likely that the most confident community members capture attention and funding for their priorities. This has been noted in discussions with local government staff, who value the funds the projects can supply for recruiting local facilitators.³³

The two projects in Nepal have fed lessons from the field upwards, both nationally to the development of the WASH Sectoral Development Plan and internationally, via contributions to the UN Special Rapporteur on the human right to safe drinking water and sanitation.³⁴ They have also supported turning the normative guidance into practical results in the field. The projects reduce inequality in Nepal by working in the most remote locations. In the case of RVWRMP, nine out of ten working districts have the worst rankings by Human Development Indicators.³⁵ This is an active decision to address inequality, rather than to choose the locations that are easiest to reach and the cheapest to work in (which would be justified if only looking at value for money). We have observed that these types of issues are heavily politicized, and hence targeting benefits to marginalized groups may not be in the interest of the ruling elites.

A. How the projects address Goal 5: Achieve gender equality and empower all women and girls

Since 1997 the United Nations Water Conference at Mar del Plata, the International Drinking Water and Sanitation Decade (1981-90) and the International Conference on Water and the Environment (Dublin, 1992), there has been explicit recognition of the central role of women in water management.³⁶ More recently, the UN Water for Life Decade (2005-15) promoted efforts to fulfil international commitments made on water and water-related issues by 2015. It placed emphasis on ensuring the involvement and participation of women as they play a central role in water provision and management.³⁷

In Nepal, women face many of the same problems as men, but experience them differently. Women generally live in greater poverty and lack of influence and power in decision-making. Nepal featured number 110 out of 145 countries

33 Ibidem.

34 Catarina de Albuquerque, *On the right track...*, Supra note 17.

35 Nepal, National Planning Commission (2015), Nepal Human Development Report 2014, Beyond Geography - Unlocking Human Potential, Kathmandu.

36 UN Water, Inter-agency Task Force on Gender and Water, *Gender, Water and Sanitation: A Policy Brief*, 2006.

37 Ibidem.

assessed in the 2015 Global Gender Gap report.³⁸ In particular, the Far-Western and Mid-Western regions are male-dominated societies, where women suffer from gender-based violence, and there is discrimination between boys and girls in education, household chores and nutrition, as well as social and cultural boundaries.³⁹

The projects (particularly RVWRMP) campaign on topics such as menstrual hygiene and endeavour to eliminate the “untouchability” that menstruating women suffer, and which often prevents them from using the toilet, tap, and often banishes them to sleep in outside sheds during their menstruation.⁴⁰ This is a case where traditional beliefs have been applied to new technology (toilet construction), to the detriment of women. The discrimination is not applied evenly. In some communities in far west Nepal, menstruating women can touch the tap but not the source; yet in the neighbouring community, it is the tap that should not be touched.⁴¹

In consequence, the projects specifically contribute to the achievement of Goal 5 via the following indicators:

- 5.5 - Ensuring women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life (for instance, see the participation of women in the User Committees in the table below).
- 5a - Undertaking reforms to give women equal rights to economic resources (in this case, particularly to water and energy), as well as access to ownership and control over land and other forms of property, financial services (such as support to the cooperatives in RVWRMP), inheritance and natural resources, in accordance with national laws.
- 5b - Enhancing the use of enabling technology (in particular information and communications technology) to promote the empowerment of women.

38 World Economic Forum, Global Gender Gap Report 2015, available at <http://reports.weforum.org/global-gender-gap-report-2015/economics/#economy=NPL>.

39 Nepal Human Development Report 2014..., supra note 35.

40 Juho Haapala and Pamela White, *Why do some behaviours change?*, supra note 26.

41 Personal communications with staff and community members, and field notes, RVWRMP.

**Operationalising the right to water and sanitation and
gender equality via appropriate technology in rural Nepal**

Water and Sanitation User Committees (UCs) in the two projects (RWSSP-WN 10/2013-07/2016; RVWRMP 09/2006-02/2016) – project monitoring data

UC Position	Female	Male	Total All	Disadvantaged Female	Disadvantaged Male
Chairperson	46	797	843	15	231
Vice-chairperson	400	318	718	139	131
Secretary	144	681	825	51	193
Joint-secretary	12	26	38	4	2
Treasurer	552	268	820	199	77
Members	2 502	1 977	4 479	894	750
Total	3 656	4 067	7 723	1 302	1 384
% of Total	47%	53%	100%	17%	18%

Note: “Disadvantaged” groups include all ethnic/social and religious minorities except Brahmin and Chhetri Hindu.

Gender and participation

The projects aim for equality of outcome rather than identical treatment (in line with CEDAW’s recommendations).⁴² Therefore, technical staff carried out targeted activities for women in an effort to close the gender inequality gap. The HRBA & GESI Strategy and Action Plan of the projects worked through a range of strategic approaches when planning and implementing schemes.

Women are a key target group of both projects, as water is predominantly carried by women. Women are also the main beneficiaries of such technologies such as ICS and IWM. There are both equity and pragmatic reasons to ensure women are consulted. When women collect water and fodder daily and at all seasons in their watershed, they see changes and they know how the watershed behaves. Confidence-building workshops are held with small groups of women at local level as a standard step in the planning process (in the WUMPs or VWASH plans). Typically they lack the confidence to speak up in public meetings. By practising discussion of water issues in a supportive environment they then feel able to speak up in public and ensure that this information emerges during the planning and prioritisation in the large community meetings.

⁴² Committee on the Elimination of Discrimination against Women, general recommendation No. 25 (2004) on temporary special measures.

Given the fact that participation is a prerequisite for gender equality the projects set quotas for participation of 50 per cent women and proportional representation of ethnic and caste groups in all management committees and trainings; and women-only groups met to discuss tap placement.⁴³ It can be problematic to find women who are sufficiently literate, confident or even have time for committee roles or capacity building, yet in these projects 47 per cent of posts in committees were held by women. Capacity building and active facilitation has built confidence and increased active participation. Behaviour change communication activities by the projects focus on encouraging women to volunteer for leadership roles in committees and provide them with targeted training, including women-only leadership conferences.

Gender and renewable energy

RVWRMP's menu of options includes micro-hydro power energy (5-100 kW, with an average of 45 kW). These systems have minimal environmental impact. No dam is built, and water is only diverted, often utilising existing irrigation channels. Home lighting improves the quality of life of more than 13 000 women, particularly when rising early in the morning. This gives light and power for social interactions and household work, radio, and charging mobile phones. Small businesses become possible when reliable power from micro-hydro is available. Consequently, women have begun businesses such as spice grinding, noodle production and allo processing, providing income generation and employment in remote communities. For example in Jadarigad micro-hydro, Pouwagadhi VDC, there are three men employed as operators, and 11 women producing noodles and 10 grinding spices, as well as 10 men employed on carpentry. In Chhatara VDC 12 women and two men are using the renewable energy from Kashegad micro-hydro for allo processing (Himalayan nettle, which is processed into textiles).⁴⁴ During RVWRMP Phase II (2010-2016), 46 959 women participated in livelihoods trainings of various types. Some 500 micro-entrepreneurs, many of whom are women, have established food processing and commercial enterprises.⁴⁵

43 Project guidelines – available on project websites www.rwsspwn.org.np and www.rvwrmp.org.np.

44 RVWRMP Project monitoring data, unpublished.

45 RVWRMP Phase II Completion Report (Dhangadhi, 2016) – available on <http://rvwrmp.org.np/rvwrmp-documents.html>.

Improved Water Mills are based on traditional Nepalese water mills, but produce more power through the use of a more efficient drive shaft.⁴⁶ They are important in the daily milling of grain, resulting in considerable saving in time and hard work especially for women. The alternative is that women grind grain by hand or they queue to use old, less efficient mills. More end-use options are available for so called “long shaft IWMs”, as they can be used for electricity generation, milling, grinding, oil expelling, rice hulling and saw mills, and can replace diesel-powered mills.⁴⁷

Improved Cooking Stoves (ICS) are technologically simple. Some are made of locally available clay and stones, others metal. The typical clay stove has two potholes, a small point for feeding firewood and a chimney. ICSs were not popular in the hill communities initially, partly because women are used to the traditional three-stone open fire cooking style. In addition, some people preferred to have the chance to gather around the open fire for warmth.⁴⁸ However, the benefits of the ICS are very important, particularly for women. Cooking with solid fuels on open fires or traditional stoves creates high levels of indoor air pollution resulting in pneumonia among children and chronic respiratory disease among adults. Indoor smoke contains many pollutants that can damage health, such as carbon monoxide and particulates. Women report that when they use the ICS there is less (or no) smoke in the kitchen, which improves their and their children’s health. In RVWRMP an impact assessment carried out during 2014 found that the average annual firewood consumption per household is reduced by about 40-50 per cent from that of a traditional stove, and each family saves two full days of firewood collection in a month. Women spend half the time cooking (about three hours less per day) when there is a chance to cook with two pots at the same time. This gives women time to do other household chores or economic activities, to rest and to participate in community meetings. The study estimated that one ICS can reduce 3.143 ton of CO₂ emission annually.⁴⁹ More than 18,000 stoves were constructed in RVWRMP from 2006-2016.

46 Hari Awasthi, Final Evaluation of REFEL Project. Report prepared for FCG and the Nordic Climate Fund. 2014. Unpublished, but summary data available on <http://www.rvwrmp.org.np/renewable-energy.html>.

47 Ibidem.

48 Project field reports, unpublished.

49 Ibidem.

Gender in employment and training

Most jobs worldwide are water-dependent.⁵⁰ Water opens up numerous new employment opportunities. This is particularly evident in the RVWRMP working area. Micro-hydropower has brought electricity for the development of small cottage industries. The projects build capacity of the water users, masons and plumbers, and various skills within the local government staff pool and service providers. Women and disadvantaged group members are promoted for such training as to become village maintenance workers, though it is difficult to make this cultural change. This is both a rights issue and also a win-win for the project. In particular, women are likely to stay in the village and not migrate, and they are considered to know the most about water issues, while they can also earn money of their own. More than 60 per cent of the ICS masons trained by RVWRMP Phase II were women who, once they develop vocational skills on ICS installation, are now generating incomes. More women than men also received community-level training on a range of subjects.⁵¹

B. How the projects address Goal 6. Ensure availability and sustainable management of water and sanitation for all

SDG targets for 2030 in Nepal include 95 percent of households having access to piped water supplies and improved sanitation, and all communities being free of open defecation. Both projects make significant contributions to these targets. The projects have used rural water schemes to provide access to safe and sustainable water schemes, mainly focusing on simple gravity-fed systems piped to shared public taps or households. In some locations, water needs to be lifted. Water supply targets can be broken down to the two elements of availability and sustainability.

Ensuring availability of water

As a signatory to the Right to Water and Sanitation, and to all ESCRs in general, the Government of Nepal has a legal obligation to ensure a basic water supply. Support from the Finnish Government in the form of the two projects allows progressive realisation of the right, at least in project working areas. Both projects focus on reaching the “unreached” – communities in remote locations or those previously unserved due to issues of social disadvantage, cost or technical problems. These projects have taken a conscious decision to focus on the margins, working in complex village settings in remote regions

50 UNESCO, World Water Development Report 2016, available at <http://unesdoc.unesco.org/images/0024/002439/243938e.pdf>.

51 RVWRMP Phase II Completion Report, supra note 40.

to promote a human rights-based approach to water, sanitation and livelihoods. Endless participatory planning exercises can lead to frustration, but for instance the experience of working together to plan and construct a water scheme, has brought peace dividends in previously conflict-damaged communities.⁵² The focus is also to ensure that women, disadvantaged castes, ethnic minorities, people with disabilities, religious minorities and other disadvantaged groups are listened to and their views and needs are prioritised where technically feasible.

Sustainable management of water

Both projects use the Step-by-Step approach to ensure quality construction and good governance. The Step-by-Step approach is a systematic process of community planning, participation, capacity building, community management of procurement and construction. It includes public audits to ensure transparency.⁵³ Annual assemblies of water scheme members, regular collection of Operation and Maintenance (O&M) funds and employment of a Village Maintenance Worker, all of which improve sustainability.

Many water structures suffer from landslides and floods that are inevitable natural phenomena in Nepal. Functionality of water supply schemes is a massive challenge. According to government data, in 2014 domestic water supply schemes covered around 84 per cent of the population, yet in 2012 only about 25 per cent of these schemes were functioning well (NMIP 2014).⁵⁴ For instance, the longer the pipeline is from the source to the village, the bigger is the risk of landslides; hence the importance of careful planning and decision making. Small technical innovations can improve the functionality and sustainability of water schemes; i.e., cutting diversion channels above the source will limit the risk of contaminated water entering the system.

Women and children risk returning to their never-ending task of carrying water if systems aren't sustainable. All the water user committees are trained to produce a Water Safety Plan (WSP++), which incorporates water safety from source to consumption, with climate change adaptation and disaster risk reduction components and water tariff calculation. There is a strong focus on quality construction and O&M. RVWRMP reported in 2016 that of the 584

52 Interdisciplinary Analysts. *Beneficiary Impact Assessment*. Report for the Small Arms Survey, Nepal (unpublished, 2012).

53 Step-by-Step Guidelines available from the Project websites. <http://www.rvwrmp.org.np/step-by-step.html>

54 Nepal, Ministry of Urban Development, National Management Information Project, Nationwide Coverage and Functionality Status of Water Supply and Sanitation in Nepal (Kathmandu, 2014). Available on <http://www.seiu.gov.np/index.php/documents?folder=Sector%2BReports>.

schemes constructed, in 46 VDCs revealed that 558 schemes (96 per cent) were fully functional, 23 (3.9 per cent) partially functional and 3 (0.5 per cent) non-functional due to landslides. This compares very favourably to systems of similar age implemented by the government and other financiers.⁵⁵

Sanitation

Both projects support the national sanitation campaign.⁵⁶ The target is to end open defaecation in Nepal by 2017. While earlier project phases gave financial and physical support to building household toilets, there is now a no-subsidy policy. In addition, “soft” support is provided for community-led behaviour change communications.⁵⁷ Monitoring in Dadeldhura district in 2015 by government and project staff found a clear difference in results with non-project Village Development Committees (VDCs, the smallest administrative unit). For instance 71 per cent households had a handwashing place with soap and water, in contrast to 50 per cent in non-project VDCs (RVWRMP 2015 monitoring data). Impact data from 11 VDCs showed that the number of diarrhoea incidents had reduced by 26 per cent in three years.⁵⁸ Availability of water is important for sanitation in a country like Nepal, where there is a preference to use water to wash and flush in toilets. Thus, if there is no water supply, toilets are unlikely to be used.⁵⁹ The projects raise awareness on simple methods of improving access to household toilets for frail elderly and disabled persons, via training and brochures⁶⁰.

V. Conclusions

These projects make a particularly strong contribution via technology to SDGs 5 and 6 and could be argued to contribute to almost all of the SDGs. Appropriate technologies for rural communities are used to achieve basic access, in line with the Right to Water and Sanitation. Technology, or rather the process of planning, implementing and using the technology, can directly contribute to translating the principles into reality.

55 RVWRMP Phase II Completion Report, *supra* note 40.

56 Nepal, Steering Committee for National Sanitation Action, Sanitation and Hygiene Master Plan (Kathmandu 2011).

57 Lene Gerwel-Jensen, Sanna-Leena Rautanen and Pamela White, “Strengthening Behaviour Change Communication in Western Nepal – how can we do better?”, *Waterlines*, vol.34, No.4 (2015), p.330-346.

58 RVWRMP, Phase II Completion Report, *supra* note 40.

59 As noted by project staff of both projects.

60 RWSSP-WN thematic leaflets, on the website - <http://www.rwsspwn.org.np/thematic-leaflets>

The right to water and sanitation cannot be a theoretical concept at the national level. It is critical that HRBA and GESI principles are put into practice through tangible action. For instance, GESI is considered in various policies, strategies and action plans at the national level in Nepal, but enforcement at the village level is weaker. While cross-cutting and inter-sectoral work can be challenging at the policy and central levels, at the local level, benefits are real. This is where the technology in the form of infrastructure development comes in. We cannot go to a poor community that struggles to have one square meal a day and only *talk* about rights. Water serves as the entry point into a range of rural development issues. These rural water projects not only deal with engineering challenges, but respond to sustainable development issues in many ways. There are many needs for new or improved water schemes. If there has not been a thorough process of community consultations and careful facilitation by outside arbitrators, there is a tendency for the most confident and powerful households in the community to get their scheme prioritised. Consequently, more remote or disadvantaged groups miss out irrespective of real needs. The Finnish bilateral WASH projects have been very successful in preventing this.

A fundamental element of human rights law is a focus on those who are marginalised, excluded or otherwise at risk. Inclusive targeting is required if women, the poor and other disadvantaged groups (including people with disabilities) are to gain equitable access to resources and opportunities. This is necessary also to avoid elite capture, and “business as usual”. Hands-on technical assistance and monitoring support is focused on results. The small scale, appropriate technologies utilised maximise the chances for women and disadvantaged groups to get involved. This makes the chosen technology more sustainable in the long run, as there is a sense of ownership, which is critical in remote areas.

The projects have not resolved all problems. In particular, the clash between the rights to water and sanitation and strongly held traditional beliefs and taboos, such as those related to menstruation, are still difficult to change. In addition, there are inadequate resources to resolve all access issues immediately. Geographic barriers make some of the targets only aspirational. However, we support the Government of Nepal to plan for progressive realisation of the rights.

Project modalities have often been criticised for not creating real change, but instead solely providing inputs of technical advice or goods. In these cases, RVWRMP and RWSSP-WN are playing a role of social mobilisation, which could be described as social interference by some of the elites. By having a

team of long-term technical advisors – both international and local – they are able to provide skilful facilitation and to constantly raise the topics of gender, supporting women to speak and ensuring that inclusion is taken from theory to practice. Without this it is likely that the more confident community members would capture attention and funding for their priorities.

The projects demonstrate that as a development working modality they are not out-dated. Consequently, there is a role for project staff: a lot can be achieved with a strong field presence. The projects are not only piloting but are implementing on a large scale. They work in the most inaccessible places and remote locations to achieve the sustainable development goals via the strengthening of human rights. This is a significant lesson learned for development organisations internationally.

VI. References

A/64/292.

A/HRC/12/24.

A/RES/21/2200.

A/RES/3/217 A.

A/RES/41/128.

A/RES/55/2.

A/RES/61/106.

A/RES/70/1.

A/RES/70/169.

Benjamin Mason Meier, Georgia Lyn Kayser, Jocelyn Getgen, Kestenbaum, Urooj Quezon Amjad, Fernanda Dalcanale, and Jamie Bartram, “Translating the Human Right to Water and Sanitation into Public Policy Reform”, *Science and Engineering Ethics*, vol. 20 (January 2014), pp. 833-848. DOI 10.1007/s11948-013-9504-x.

Catarina de Albuquerque and Virginia Roaf, *On the right track: Good practices in realising the rights to water and sanitation*. (United Nations Special Rapporteur on the human right to safe drinking water and sanitation, Lisbon, Textype, 2013).

Committee on the Elimination of Discrimination against Women, general recommendation No. 25 (2004) on temporary special measures.

E/C.12/2002/11.

Hari Awasthi, *Final Evaluation of REFEL Project*. Report prepared for FCG and the Nordic Climate Fund. 2014. Unpublished, but summary data available on <http://www.rvwrm.org.np/renewable-energy.html>.

Interdisciplinary Analysts. *Beneficiary Impact Assessment*. Report for the Small Arms Survey. Nepal (unpublished, 2012).

Jakob Kirkemann Boesen, Tomas Martin, *Applying a Rights-Based Approach – An Inspirational Guide for Civil Society*. (The Danish Institute for Human Rights, Copenhagen, 2007).

- Juho Haapala and Pamela White, “Why do some behaviours change more easily than others? Water use behaviour interventions in rural Nepal”, *Waterlines*, vol.34, No.4 (2015).
- Lene Gerwel-Jensen, Sanna-Leena Rautanen and Pamela White, “Strengthening Behaviour Change Communication in Western Nepal – how can we do better?”, *Waterlines*, vol.34, No.4 (2015), p.330-346.
- Margaret Satterthwaite, *On Rights-Based Partnerships to Measure Progress in Water and Sanitation*, *Science and Engineering Ethics*, vol. 20. DOI 10.1007/s11948-014-9514-3, 2014.
- Mduduzi N.N. Mbuya and Jean H. Humphrey, “Preventing environmental enteric dysfunction through improved water, sanitation and hygiene: an opportunity for stunting reduction in developing countries”, *Maternal & Child Nutrition*, vol. 12 (Suppl. 1) (November 2015).
- Nepal, *Constitution Bill of Nepal* (Kathmandu, 2015).
- Nepal, Ministry of Physical Planning and Works, *Rural Water Supply Policy*, Kathmandu, 2004.
- Nepal, Ministry of Urban Development, *National Management Information Project, Nationwide Coverage and Functionality Status of Water Supply and Sanitation in Nepal* (Kathmandu, 2014). Available on <http://www.seiu.gov.np/index.php/documents?folder=Sector%2BReports>.
- Nepal, Ministry of Water Supply and Sanitation, Sector Efficiency Improvement Unit, *Nepal Water Supply, Sanitation and Hygiene Sector Development Plan (2016 – 2030)* (Kathmandu, 2016).
- Nepal, National Planning Commission (2015), *Nepal Human Development Report 2014, Beyond Geography - Unlocking Human Potential*, Kathmandu.
- Nepal, National Planning Commission *Sustainable Development Goals 2016-2030 National (Preliminary) Report* (Kathmandu, 2015). Available from <http://www.np.undp.org/content/nepal/en/home/library/sustainable-development-goals-national-report---nepal.html>.
- Nepal, Steering Committee for National Sanitation Action, *Sanitation and Hygiene Master Plan* (Kathmandu 2011).

- Rural Water Supply and Sanitation Project - Western Nepal HRBA & GESI Strategy and Action Plan. Human Rights-Based Approach and Gender Equality & Social Inclusion in the Water and Sanitation Sector. RWSSP-WN / DoLIDAR, Nepal. 2015. Available from <http://www.rwsspwn.org.np/#!/phase-ii-publications/ck0f>.
- Rural Water Supply and Sanitation Project in Western Nepal Phase II, HRBA & GESI Strategy and Action Plan. Human Rights-Based Approach and Gender Equality & Social Inclusion in the Water and Sanitation Sector. (Pokhara, 2015). Available from <http://www.rwsspwn.org.np/#!/phase-ii-publications/ck0f>.
- Stephen Marks, “Human Rights and the Challenges of Science and Technology”, *Sci Eng Ethics*, vol. 20, (2014), pp. 869–875.
- UN Water, Inter-agency Task Force on Gender and Water, ‘Gender, Water and Sanitation: A Policy Brief’, 2006.
- UNESCO, World Water Development Report 2016, available at <http://unesdoc.unesco.org/images/0024/002439/243938e.pdf>.
- World Economic Forum, Global Gender Gap Report 2015, available at <http://reports.weforum.org/global-gender-gap-report-2015/economies/#economy=NPL>.

Technological innovations and equitable access to clean drinking water – three case studies from Gujarat, India

Ashish Ranjan¹ Linda Annala² Navdeep Mathur³
Ankur Sarin⁴ & Yewondwossen Tesfaye⁵

Abstract

This article aims to provide a critical view on technology in the context of water supply. We acknowledge how technology is envisioned in the Sustainable Development Goals as a mean to promote human rights and social justice. Our premise focuses not on technology by itself, but on how the use of technology by private actors in the context of water supply could lead to unjust social relations benefiting the private actors' interests more than those of the end-users. Our discussions will highlight reconstructed meanings of "safe water" or "clean water" and the respective societal and private implications, using a lens grounded in information asymmetries. Our research question asks: what are the societal implications of private sector led technological innovation in influencing and responding to the needs and perceptions around water quality among citizens? In answering this multifaceted question, we present three case studies: two from urban and one from rural Gujarat, India; all with differing levels of state involvement in the provision of clean drinking water. These three cases depict three separate technologies: Hydrogen Sulphide water test kits, household reverse osmosis water filters, and community-level reverse osmosis water filters. While surface water remains a primary source of supply in our sites of study, ground water has increasingly come to be used with largely unregulated bore wells. Moreover, while surface water is treated and monitored by centralized, governmental treatment plants, there is very limited information dissemination at point of distribution and consumption of ground water. In all our cases, technology plays a central role in the provision of drinking water to citizens. Each case portrays different types of relationships between the market,

1 Researcher working at Indian Institute of Management Ahmedabad (IIMA).

2 PhD Candidate at Hanken School of Economics, Finland.

3 Assistant Professor at Indian Institute of Management Ahmedabad (IIMA), in Public Systems Group.

4 Assistant Professor at the Indian Institute of Management Ahmedabad (IIMA), in Public Systems Group.

5 PhD Candidate at Hanken School of Economics, Finland.

We would like to thank the two anonymous reviewers for very helpful and constructive comments that substantially improved the quality of this paper. The study was financially supported by Hanken Foundation. We would like to further acknowledge the Comprehensive Initiative on Technology Evaluation (CITE) project at Massachusetts Institute of Technology which is funded through the Global Development Lab at USAID for their support in generating empirical material

water governance and citizen action, highlighting the complexities surrounding technological innovations and equitable access to clean drinking water.

Keywords: Drinking water, technology, human rights, information asymmetry, private sector.

I. Introduction

Technological innovations are considered to play an important role in tackling the imminent global crisis in water. Solutions that guarantee and protect the human right to water⁶ are undoubtedly required not only to achieve United Nations Sustainable Development Goal 6 (SDG), “...ensure availability and sustainable management of water and sanitation for all”, but also many of the other closely related SDG goals.⁷ The importance of new solutions rises in water stressed societies such as India, where freshwater is often not available when and where people need it. The latest Joint Monitoring Program for Water Supply and Sanitation indicates that in India, 75 million people still lack access to improved sources of drinking water.⁸ Although access figures have shown positive results for over the past 15 years, that positive trend has started to stagnate, especially in urban areas. Coupled with rising concerns about man-made water scarcity and climate change, solutions are being discussed and debated at global and national levels. Technological innovation is often portrayed as a major route to addressing the global crisis in water.⁹ This narrative is reproduced in India, where harnessing new technologies has increasingly become a panacea for water scarcity.¹⁰ The debate around technological innovations is, however, not an uncontested one.¹¹ At the centre of these debates on technological innovation is whether innovation facilitates the appropriation of water as an individualised economic good instead of defining water as a collective human right. While these tensions may not be necessarily new, the way novel technologies interact with accompanying business models increasingly render water into a profitable commodity.¹²

6 A/RES/64/292.

7 UN Water, “Water in the 2030 Agenda for Sustainable Development”, 2016. Available from <http://www.unwater.org/sdgs/en/>.

8 UNICEF and World Health Organization, *Progress on Sanitation and Drinking-Water: 2015 Update and MDG Assessment*. (Geneva, Switzerland, World Health Organization, 2015).

9 WaterAid, “Does the water sector need innovation?” 2016. Available from <http://www.wateraid.org/news/blogs/2015/november/does-the-wash-sector-need-innovation>.

10 M.S. Swaminathan, “Building a sustainable water security system”, *India Water Week*, 2016. Available from <http://www.indiawaterweek.in/download.aspx>.

11 E. Vandewalle and W. Jepson, “Mediating water governance: point-of-use water filtration devices for low-income communities along the US–Mexico border”, *Geo: Geography and Environment*, vol. 2, Issue 2 (July–December 2015), p. 107-121.

12 LT Annala, A. Sarin and J. Green. “Co-production of frugal innovation: Case of low cost reverse osmosis water filters in India”, *Journal of Cleaner Production*, (2016).

The year 1991 marked a departure from the post-independence regime of basic services to be provided by the public sector in India. Henceforth, the Indian State's policy framework on water provision increasingly viewed it as "an economic good". Drawing on the key thesis of the 1992 Dublin Conference that water as a scarce resource can only be used efficiently based on its economic value,¹³ the Rakesh Mohan Expert Group framed the Indian water sector as characterised by low tariffs, high costs, low cost recovery, and poor demand management. This perspective held the public sector as inefficient and promoted privatisation as the solution that would bring in new technologies and lead to increased efficiencies.¹⁴ The World Bank, already shaping the Indian economic reform process, weighed in with the view that privatisation of water and user charges would make water supply more reliable, and no longer would the poor need to rely on expensive private water tanker operators for daily water consumption, framing privatization as a potentially pro-poor shift.¹⁵ The National Water Policy was then developed along those very lines privileging private sector participation and user charging in water supply. In addition, due to structural adjustment reform measures, state governments in India were put under fiscal pressure by the Central government by reducing financial outlays for public provisioning of services. In their place, water management projects were to be undertaken by private firms financed by loans from the World Bank and Asian Development Bank (ADB) housed in state governments.¹⁶ However, drinking water and household supply remained the direct responsibility of the government. The National Water Policy of 2002 highlighted drinking water as the government's highest priority, followed by economically efficient uses of water. Even though in principle, the Indian state seems to acknowledge the provisioning of drinking water as a basic human right, yet the practices we highlight in this paper demonstrate a shift towards drinking water as an economic commodity that may be provided by non-state actors.

We do not judge the innovation purely in its technical sense. Indeed, it would not be possible to evaluate any technology without understanding its location and appropriation. Therefore, we seek to understand the manner in which the problem - to which the technology is offered as a solution - is constructed; and its private and social implications. Private expenditures on household water

13 Rogers P, De Silva R and Bhatia R, "Water is an economic good: How to use prices to promote equity, efficiency, and sustainability", *Water Policy*, vol. 4, No. 1 (2002), p. 1-17.

14 EGCIP - Expert Group on the Commercialization of Infrastructure Projects, "The India Infrastructure Report: Policy Imperatives for Growth and Welfare", (1996).

15 J. Briscoe, "Managing Water as an Economic Good" in *Water: Economics, Management and Demand*, M. Kay, T. Franks and L. Smith, eds. (London, E & FN Spon, 1997).

16 V. Asthana, *Water Policy Processes in India: Discourses of Power and Resistance* (London, Routledge, 2009).

filters and treatment systems, private boreholes and bottled water are projected to overtake public spending on water in a few years.¹⁷ In this context, where the public sector is trying to negotiate a new role for itself in the provision of drinking water, the consequences of technological solutions - largely situated in the private realm - need greater attention.

In this article, we focus on technological innovations targeted at improving or measuring water quality. The research question is: what are the societal implications of private sector led technological innovation in influencing and responding to the needs and perceptions around water quality among citizens? While SDGs target the provision of “safe” water, we discuss both the ambiguities and difficulties around defining and measuring what “safe” really means. Further, while the state and governing bodies “see” water in terms of binary “safe/unsafe” categories,¹⁸ people have more differentiated understandings about water quality, often arising out of the ambiguities in defining quality. These ambiguities and consequent segmentation of water demand create opportunities for private actors to utilise technological innovations to marketise water by assuaging people’s fears and preferences.

Drawing on three case studies, centred on three technological innovations in the Indian state of Gujarat, we argue for a more critical examination of such technologies. Technological innovations are helping to meet “consumer demand” for safe water, but on the other hand, also potentially threaten the status of water as a human right. In particular, we highlight how the state’s constrained capacity to engage with citizens on the issue of water quality enables the creation of markets characterised by information asymmetries that are both exclusionary and socially inefficient. The anxiety about water quality leads even the poor to express willingness to pay for low-cost water quality test kits, despite the despondency they feel about actually being able to utilise their results to bring about a change in the quality of the water they can access. The same anxiety is stimulated towards the growth of a profitable industry around water filters using increasingly affordable reverse-osmosis technology in both urban and rural settings. While the consequences in some cases might be privately rational, we describe how the outcomes are potentially socially sub-optimal. In doing so, we argue that some of the consequences of increased commodification of water are not merely distributional but also unsustainable. Our study suggests

17 C. Gasson, “A New Model for Water Access from the Snows of Davos”, *Global Water Intelligence*, 2015.

18 J. C. Scott, *Seeing like A State: How Certain Schemes to Improve the Human Condition have Failed* (New Haven, C.T., Yale University Press, 1998).

that technological innovations need to be closely evaluated for what they imply for water as a human right, prior to being celebrated and encouraged.

II. Water quality

The essentiality of water to sustain life is undoubted. Adding to the health benefits associated with clean drinking water,¹⁹ improved access to clean water reduces the time spent collecting and carrying water,²⁰ improves school attendance,²¹ and generates positive changes to livelihoods. Unfortunately, the distribution of access to clean drinking water is not uniform geographically.

Mitigating the challenge of providing clean drinking water for all has been a high priority for United Nations as part of the previous Millennium Development Goals (MDGs). The United Nations report states that over 90 per cent of the world's population now has access to improved sources of drinking water.²² The “improved” drinking water status, however, does not provide much on what water “quality” actually means.

The World Health Organization (WHO) understands water quality from the point of view of microbial, chemical, and radiological contamination.²³ Yet, the common citizen lacks such nuanced knowledge or tools to test the water quality. They have their own yardsticks for clear water. Doria et. al explain that, The estimation of water quality is mostly influenced by satisfaction with organoleptic properties (especially flavour), risk perception, contextual cues, and perceptions of chemicals (lead, chlorine, and hardness). Risk perception is influenced by organoleptics, perceived water chemicals, external information, past health problems, and trust in water suppliers, among other factors.²⁴

19 G. Howard and J. Bartram, *Domestic Water Quantity, Service Level, and Health* (Geneva, World Health Organization 2003); S. E. Burger and S. A. Esrey, “Water and sanitation: Health and nutrition benefits to children” in *Child Growth and Nutrition in Developing Countries*, P. Pinstrup-Andersen, D. Pelletier and A. Aldermann, eds. (Priorities for Action, Cornell University Press, New York, 1995), p. 153-174.

20 C. Sullivan, “Calculating a water poverty index”, *World Development*, vol. 30, No. 7 (2002), p. 1195-1210.

21 A. Prüss-Üstün and C. Corvalán, *Preventing Disease through Healthy Environments: Towards an Estimate of the Environmental Burden of Disease* (Geneva, World Health Organization, 2006).

22 United Nations Report on the Progress of Sanitation and Drinking Water, 2015.

23 World Health Organization, *Guidelines for Drinking-Water Quality* (Geneva, World Health Organization, 2011).

24 M. D. F Doria, N. Pidgeon and P. R. Hunter, “Perceptions of drinking water quality and risk and its effect on behaviour: A cross-national study”, *Science of the Total Environment*, vol. 407, No. 21 (2009), p. 5455-5464.

In urban settings, with complex pipeline networks, detection of the source of contamination is a difficult task, and water quality testing is often conducted in centralised water treatment plants. In India, the responsibility for testing and maintenance of water quality rests primarily with the government. Governmental actors, however, frequently fail to disseminate the status on the water quality back to the communities. Only in the times of some major outbreaks, the communication channels between the government and the public are opened. This information gap creates a room for a multifaceted and vague understanding of water quality,²⁵ i.e., the users of water have little idea on the quality of water they are consuming, whereas the providers are more aware of the quality of water they are providing.

A. Information asymmetries and the need for technology

Information asymmetry has been described as a situation where one party has more or better information than the other when making decisions. In microeconomics, such imperfect information leads to imbalances of power which in turn contribute to market failure. The theory of markets with asymmetric information rests firmly on the work of Nobel Prize winners George Akerlof, Michael Spence, and Joseph Stiglitz. Information asymmetry has also been utilised to explain the existence of many economic institutions to counteract the effects of quality uncertainty.²⁶ This uncertainty is linked with quality differences among producers of products and services, and the information needs of end users. At the time of purchase/usage, end users may not necessarily possess the same information on the quality of products and services as the producers. In situations where information asymmetries exist regarding quality of products or services, various institutions have traditionally acted as objective evaluators. The inherent difficulties arising from distinguishing good quality from bad without such evaluators pushes the risk of quality towards the end user. In addition, the power assigned to certain actors in defining quality may put end users in a vulnerable position. Trust is required towards these producers and actors for the power asymmetry to be acceptable for the end user.²⁷

Because of problems related to information asymmetries, the concept of quality is particularly difficult for public services. At the core of this asymmetry are the citizen's inability to evaluate the effort provided by the state in providing quality of services and the costs of doing so. Water treatment processes are often

25 Ibidem.

26 G. Akerlof, "The Market for "Lemons": Quality uncertainty and the market mechanism", *The Quarterly Journal of Economics*, vol. 84, No. 3 (1970), pp. 488-500.

27 Ibidem.

complicated and technical, thus making it challenging for citizens to evaluate state's efforts directly. While centralised water treatment is useful to citizens, the outcome does not necessarily tell what was done and definitely not in a way that can be meaningfully understood by them. Any evaluation also shares the same challenges as a "public good", with the incentives to bear the costs of participation and organisation to demand information from typically opaque and unresponsive public authorities is mitigated by the possibility of free-riding and lack of awareness of the value of the information. Therefore, despite a demand for information on the quality of water, as evidenced by people's willingness to pay for technology that provides them this information, the demand gets manifested primarily in more easily acquired market-based private solutions. However, the translation of this demand to actual consumptions can be true only for those who can pay for these solutions. These concerns about equity do not necessarily enter the private innovator's calculus of who is more driven by average revenues that the innovation is able to earn rather than who the marginal customer is. Consequently, such an environment, with a growing demand from citizens, is optimal for business actors to develop and innovate new technologies around public services.

In India, state governments have established departments or special agencies to supply domestic water in urban and rural areas. These institutions are also responsible for the monitoring of water quality.²⁸ Regular tests of water quality do take place, but the results of these tests are not generally available to the public.²⁹ Information asymmetries and perceptions on water quality are, however, highly contextual and ambiguous – a topic that we discuss in this article through the use of theoretical reasoning of information asymmetry as a lens through which the ambiguities around information on water quality can be illustrated.

III. Methodology and setting

Our study consists of three cases comprising the following technologies: H₂S (Hydrogen Sulphide) water test kits, locally assembled household reverse osmosis (RO) filters, and community-level RO water purification plants. We employed a mixed method approach to resonate with the objective of each case study. The first two cases (H₂S water quality test kits and locally assembled household RO filters) comprise both qualitative (actor interview) and quantitative (survey

28 R. Srikanth, "Challenges of sustainable water quality management in rural India", *Current Science*, vol. 97, No. 3 (2009).

29 D. McKenzie and I. Ray, "Urban water supply in India: status, reform options and possible lessons", *Water Policy* 11 (2009), p. 442–460.

data). Data collection was primarily conducted in June-July 2014 as part of the Comprehensive Initiative on Technology Evaluation (CITE) project.

CITE is a 5-year initiative at the Massachusetts Institute of Technology which is funded through the Global Development Lab at USAID. The project targeted urban and peri-urban households in the Ahmedabad metropolitan region. Consequently, two independent surveys: a) household survey with the sample size of 100 (on household RO filters), b) household survey with a sample size of 234 (on H₂S test kit testers) were conducted. Stratified sampling³⁰ was used in both surveys to investigate certain types of households, based on the project's overall objectives. The survey results on household RO filters were used to describe user demographics and to estimate household expenditures on different types of filters. The survey on H₂S test kit tests focused on user perceptions on validity, technology usage, and citizen action. Follow-up interviews comprising 37 households, and 1 Focus Group Discussion (FGD) on H₂S test kits were conducted. Moreover, in the case of RO filters, 16 in-depth interviews comprising government officials, water filter retailers, a water purification association representative, and two FGDs on RO end users were undertaken. The contents of the 28 transcribed interviews were inductively coded and categorised into broad themes derived from interview notes and several in-depth discussions among the research team.³¹ These themes were then conceptualised and contrasted further drawing on the literature on citizen action and water governance.

The third case study (community-level RO purification plants) was conducted between April and June 2016. The study was carried out in the villages of Panol and Madhasan in Sabarkhanta district, Gujarat. Methodologically, this case study is designed to follow a critical tradition of discourse analysis inspired by poststructuralist discourse analysis as well as critical methodologies developed in applied linguistics.³² Our field study was basically focused on two data sources; company documents, and interviews and FGDs. We conducted 13 unstructured in-depth interviews with local community organisations (*panchayats*), cooperative and private franchisers of community-level purification plants, and 11 FGDs (6 with users and 5 with non-users of filtered water).

About the urban context of our study: groundwater has been historically the dominant source of water for residents of Ahmedabad. In the last 30 years, the city

30 M. Q. Patton, *Qualitative Research* (Wiley Online Library, 2005).

31 K. M. Eisenhardt, "Building theories from case study research", *Academy of Management Review*, vol. 14, No. 4 (1989); S. Spiggle, "Analysis and interpretation of qualitative data in consumer research", *Journal of Consumer Research*, vol. 21, No. 3, (1994), p. 491-503; A. Strauss and J. Corbin, *Basics of Qualitative Research*, vol. 15. (Newbury Park, CA: Sage, 1990).

32 N. Fairclough and R. Wodak, "Critical discourse analysis", in *Discourse as Social Interaction*, T. A. van Dijk, ed. (London, Sage, 2005); N. Fairclough, *Analysing Discourse: Textual Analysis for Social Research*. (Psychology Press, 2003).

experienced scarcity of water and the main source of supply was changed from groundwater to surface water.³³ The shift from groundwater to surface water has been enabled by linking Narmada River into Ahmedabad city. According to a recent study, water in Ahmedabad has a high level of Total Dissolved Solids (TDS); the median TDS value being 639mg/litre.³⁴

About the rural context of our study: A number of rural villages face drinking water shortages every summer in Gujarat.³⁵ The main source of water for Gujarat is surface water,³⁶ but bore wells are becoming increasingly popular solutions to overcome water shortages, especially in rural parts. Potable water supply appears to be a pressing issue in both villages of the third case study. Unfortunately, many of these bore wells are informal and remain out of the regulatory control and further contribute to groundwater depletion. We acknowledge that all our data is limited to the state of Gujarat, India. And any discussion beyond the context of Gujarat should be seen as only indicative, not representative.

A. Technologies examined

In the following paragraphs, we discuss the two technologies used: the RO water purification technology and H₂S water quality test kits.

Reverse osmosis - a contested technology to purify drinking water

RO water purification technology is an essential part of the case studies of this article: community-level RO purification plants and household-level RO water filters. The current amount of water pollution, especially in urban areas that experience rapid population growth, and the unregulated practices of industries that dump wastewater into the rivers have put pressure on water treatment. Coupled with degrading water infrastructure in some parts of the world, the demand for water purifiers has increased substantially. The global water purifier market generated revenues worth US\$ 44.78 Bn in 2014 and is projected to expand at a Compound Annual Growth Rate (CAGR) of 9 per cent during the forecast period (2015-2023) to reach US\$ 95.57 Bn by 2023.³⁷

33 T. Bhatkal, W. Avis, and S. Nicolai, "Towards a better life?: A cautionary tale of progress in Ahmedabad", Development Progress Case Study Report, (London: ODI, 2015).

34 Comprehensive Initiative for Technology Evaluation is a 5-year initiative at the Massachusetts Institute of Technology which is funded through the Global Development Lab at USAID.

35 Government of Gujarat, "Gujarat", 2016. Available from <http://www.gujaratindia.com/state-profile/state-profile.htm>

36 Government of Gujarat, "Types of water sources of Gujarat state", 2016. Available from <https://guj--nwrws.gujarat.gov.in/showpage.aspx?contentid=1449&lang=english>

37 Transparency Market Research, 2016. *Water Purifier Market (By Technology - Gravity Purifiers, RO Purifiers, UV Purifiers; By End-User - Industrial, Commercial, Household) - Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2015*. Available from <http://www.transparencymarketresearch.com/water-purifier-market.html>

Artificially-produced demineralised waters such as RO water were historically used mainly for industrial, technical and laboratory purposes. These technologies became more applicable in the 1960s as a solution for treating sea water and highly mineralised brackish water due to the limited drinking water sources and growing demand in some coastal and inland arid areas. Initially, these water treatment methods were not used elsewhere since they were technically exacting and costly.³⁸ During the RO filtering process, water is pumped through a filter which is permeable only to very small molecules such as water and some inorganic salts.³⁹ Micro-organisms, most Total Dissolved Salts (TDSalt) and chemicals are rejected by the membrane and discharged. In this process, a considerable amount of the feed water gets wasted; according to some estimates, the wastage can reach 80 per cent of the original feed water. However, issues around ecological consequences of RO use are contested, with conflicting claims made on dimensions like quantity of water wasted, the ability to recycle the wasted water and the potential damage of allowing the waste water to drain off back to the ground. Media reports indicate that spurred by a plea by a non-governmental organisation, the National Green Tribunal⁴⁰ has asked the central government to clarify its stand on the issue of water wastage because of RO.

As of today, RO filters and plants are mainly used to purify water and to lower the Total Dissolved Solids (TDSolid) of drinking water. According to WHO, the presence of TDSolid in water may affect its taste, making it more of an aesthetic attribute rather than a health hazard.⁴¹ While water with extremely low concentrations of TDSalt may also be unacceptable because of its flat, insipid taste there are also concerns about the adverse health consequences (e.g. cardiovascular disorders, tiredness, weakness or muscular cramps) of drinking “demineralised” water.⁴² While systematic evidence on the issue is still lacking⁴³, user’s own anxieties around the relationship between drinking RO

38 World Health Organization. *Guidelines for Drinking-Water Quality*...supra note 23.

39 P. Payment, and others, “A randomized trial to evaluate the risk of gastrointestinal disease due to consumption of drinking water meeting current microbiological standards”, *American Journal of Public Health*, vol. 81, No. 6 (1991), p. 703-708.

40 Established under a constitutional act by the Indian parliament, the tribunal has been granted special jurisdiction on environmental issues (<http://www.greentribunal.gov.in/>).

41 The tastiness of drinking water has been rated by panels of tasters in relation to its TDS level as follows: excellent, less than 300 mg/litre; good, between 300 and 600 mg/litre; fair, between 600 and 900 mg/litre; poor, between 900 and 1200 mg/litre; and unacceptable, greater than 1200 mg/litre.

42 F. Kozisek, “Health risks from drinking demineralised water”, *Nutrients in Drinking Water* (2005).

43 L. A. Catling and others, “A systematic review of analytical observational studies investigating the association between cardiovascular disease and drinking water hardness”, *Journal of Water and Health*, (2008).

processed water serve as a key driver behind some of the innovative practices of the local entrepreneurs that sell household-level RO filters.

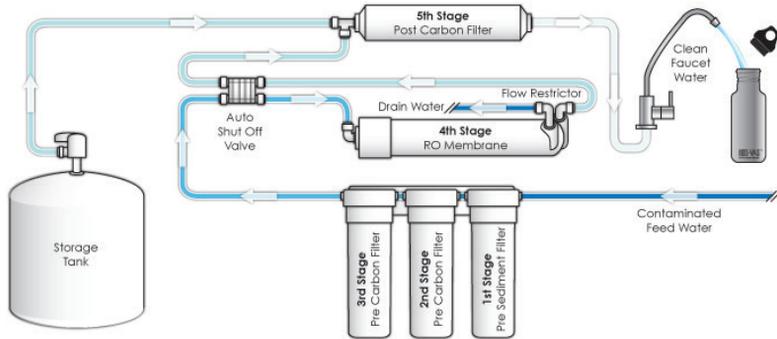


Figure 1: Water Flow Path and Reverse Osmosis Diagram for All Reverse Osmosis SystemsSource: FreshWaterSystems, 2016.

H₂S water quality test kits – differing contexts, differing results

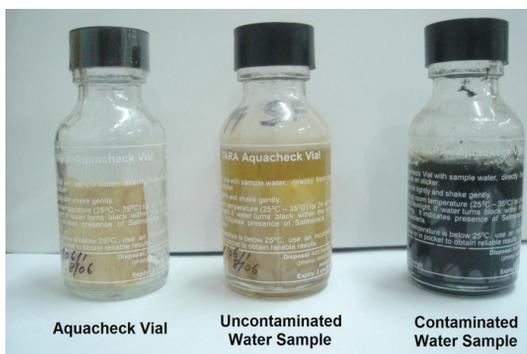
The WHO has identified contamination of water from human or animal faeces as the greatest microbial risks. The presence of *Escherichia coli* (*E. coli*, a member of the total coliform group) indicates the possibility of recent faecal contamination and has been extensively used as a measure of water pollution. In water, coliform bacteria have no taste, smell, or colour. They can only be detected through a laboratory test. Manja et al. (1982, p. 797) discuss the association of coliform presence with the hydrogen sulphide producing organisms. The paper describes “a simple, rapid, and inexpensive field test for the screening of drinking water for faecal pollution, based on the detection of hydrogen sulphide” which is in “good agreement the standard most probable number (MPN) test”.⁴⁴ The reliability and ease of usage of the hydrogen sulphide testing have also been confirmed by several other research papers.⁴⁵

Given its importance, receiving information on water quality should be expected to lead to behavioural changes. For instance, using similar water testing vials, Jalan & Somanathan (2008) found that “household initially not purifying their water and told that their drinking water was possibly contaminated, were 11

44 K. S. Manja, M. S. Maurya, and K. M. Rao, “A simple field test for the detection of faecal pollution in drinking water”. *Bulletin of the World Health Organization*, vol. 60, No. 5 (1982).

45 P. Chuang, S. Trottier and S. Murcott, “Comparison and verification of four field-based microbiological tests: H₂S test, Easygel®, Colilert®, Petrifilm™”, *Journal of Water Sanitation and Hygiene for Development*, vol. 1, No. 1 (2011), p. 68-85; S. K. Gupta, and others, “Usefulness of the hydrogen sulphide test for assessment of water quality in Bangladesh”. *Journal of Applied Microbiology*, (2008).

percentage points more likely to begin some form of home purification in the next eight weeks than households that received no information.⁴⁶ However, Bauhr & Grimes (2014) argue that merely providing information cannot trigger action. In particular, they argue that the lack of institutional avenues for citizens to hold the public office holders accountable deter civic engagement and citizens are consequently not able to utilise the information provided to them.⁴⁷



Source: TARAEnviro, 2016

IV. Findings

A. Case study 1: Hydrogen Sulphide water test kits in Ahmedabad

This case draws on a larger study that has been conducted over the span of two years. The first phase required participants to complete a H₂S test with simple, inexpensive, single-use vials that detect the presence of H₂S-producing bacteria, including some coliforms, in a water sample. Surveys were administered to 234 low-income households in February 2015 as part of the Comprehensive Initiative on Technology Evaluation (CITE) project.⁴⁸ The survey was conducted in six different low-income communities of Ahmedabad. The respondents were asked to test their drinking water using the vial. The survey tried to capture respondents' ease of using the technology, willingness to use and pay for the technology in future. Besides, the study also considered the issues related to water governance in the community – their knowledge on who is responsible for

46 J. Jalan and E. Somanathan, “The importance of being informed: Experimental evidence on demand for environmental quality”, *Journal of Development Economics*, (2008).

47 M. Bauhr and M. Grimes, “Indignation or resignation: The implications of transparency for societal accountability”, *Governance*, vol. 27, No. 2 (2014), p. 291-320.

48 CITE is 5-year initiative at the Massachusetts Institute of Technology which is funded through the Global Development Lab at USAID.

water; what kind of actions (individual/collective) have been taken in the past if faced with water related issues. Those who found their water contaminated were asked what actions they were planning to take.

The second phase was a follow-up research to explore the issues concerning water governance, citizen-state relationship, accountability, and role of low-cost technical tools in creating a demand for better public service delivery. The study took a mixed method approach combining semi-structured interviews with the 37 respondents whose personal water was contaminated across the six slums of Ahmedabad and one FGD.

Ease of usage and confidence over the testing results

The respondents who were demonstrated the process made 62 per cent less mistakes than the respondents who were given the instruction orally.⁴⁹ The survey results highlights that the respondents were very confident to conduct the test. Ninety-one per cent respondents trusted the results and spoke of suggesting the vials to their friends and neighbours. The respondents were aware of the entire processes and could repeat the test even after a year during the follow-up test.

Detection and source of contamination

The survey reveals that when it comes to detecting contamination, the respondents are still limited to using physical senses of taste (34 per cent), smell (33 per cent), colour (38 per cent) and turbidity (48 per cent). Apart from these physical signs, people also judge the quality of water with signs like stomach problems and hair fall. Coliform can only be detected through a lab test since it has no taste, smell, or colour. The government takes water samples periodically from various communities and keeps a check on water quality. The result, however, is hardly shared back to the communities. This creates confusions in some of the communities as observed by the field researchers:

“Wo aate hai sarkari log paani lene har hafta, thali mein leke chale jaate. Pata nahi kya karte hai uska!” [The government employees come every week to collect a water sample. We never come to know what happens to those samples.]

49 CITE. “Water Filter Evaluation Integrated Report. 3Ss: Suitability, Scalability, Sustainability”. (Cambridge, Massachusetts, MIT. Forthcoming).

Unaware of their water quality, the community households have to rely on local private players to give them information on water quality. The lack of authentic information makes many households fall prey to false advertising, purchase of overpriced products which might not improve their water quality substantially from what the government is providing.

The need of such field based robust tool becomes more important to test the microbial contamination. The fact that 56 per cent of the respondents (with contaminated water) were not sure about the source of the contamination makes it challenging for them to take any action.

(Re)Actions to the information of contaminated water

Surprisingly, we heard quite varied responses from those who got the positive results (contaminated water) in the Ahmedabad study. While a few suggested that they would start boiling their water or change their water filtration technique, 44 per cent of respondents were unclear about what could be done. The responses varied from having no idea to seeking suggestions from the researchers to even resignations, “What can we do, we have no choice but to drink it.” The follow-up study got similar responses even after a year – people found it difficult to voice their grievances. “*In logon ko apne jaan ki parvah hi nahi, koi kuchhousehold karta kyun nahi?*” [These people do not care for their lives! Why don’t they do anything [to improve their situation]?], exclaimed one of the field researchers unsure about the myriad reasons that would have prohibited the community from taking any action.

One would hope that enhancing transparency via self-administered tools like water vials would lead to individual or collective action. The lack of such action is puzzling. The focus group and follow-up interviews tried to unpack this anomalous behaviour. Many respondents revealed their helplessness to take individual action due to income constraints. “Those who have money have bought filters. What can we do!”, was a common response. The knowledge about government provisions and responsibilities also seemed lacking. Lack of faith in the government systems was quite evident as many respondents complained about government’s inactiveness and the lack of grievance redressal mechanism. The communities where no action has been taken also share a common frustration towards the local politicians. In places where local leaders/politicians have championed the cause of water quality for the community, there has been improved facility in terms of municipal pipeline, purifiers, and public utilities.

But places like *Kodhyar Nagar*, saw minimal change as the community does not believe that the local leaders are working for their interests.

Another important factor that differentiates the non-active community is a general lack of trust among community members. Relocated from multiple locations, the community members do not share any history to come together and the newly formed housing society also finds it difficult to mobilise people for a common cause. Some of the community members also argue that people do not see water as a right, thus, they fail to create a demand on government for better provisions of quality drinking water. Targeted sell of filtered water by private initiatives have also hampered public provisioning. Water pouches of Rs. 2 (\$ 0.03) are also available for sale in the slums we visited.

It is a humbling experience to see the inaction of communities/individuals in the light of these complex interactions. The action does not get triggered just by enhancing transparency. Bauhr and Grimes also questioned this assumption, “if principals (citizens) lack institutional avenues by which to utilize the information to hold agents (office holders) accountable, information may instead deter civic engagement.”⁵⁰

B. Case study 2: Household RO water filters in Ahmedabad

Household water RO filters – an exclusive technology

The range of actors involved in the production of drinking water through household RO filters includes end users, local RO entrepreneurs, manufacturers of branded RO filters, RO filter distributors, and government actors. The Ahmedabad Municipal Corporation (AMC) is responsible for the quantity and quality of water at a centralised level, but has little control over the private bore wells that are being constructed in middle and high-income residential areas. In their opinion “there is no need of RO, we are publicly announcing that we don’t need RO in Ahmedabad city” (AMC Chief Engineer). However, our study indicates that end users do not feel the same way. As municipal water that gets purified in central water treatment plants travels through the water supply network and gets mixed with the brackish, high-TDS groundwater pumped from bore wells, the quality of the water generally diminishes. Accompanied with end users’ distrust towards the distribution network, the main reason for purchasing RO filters is the high TDS-level of the water (33 per cent of respondents owning an RO filter).

50 Bauhr and Grimes, *Indignation or Resignation...*, supra note 47. P. 310.

The results of the household surveys show that filter use is proportionate with people's income levels: lower-income households tend to use cloth filter and/or a coarse strainer (*jali*), while higher-income households often purchase more expensive products such as gravity non-electric filters and RO filters. Fifty per cent of those who use cloth and/or coarse strainer and 67 per cent of those who use no filter cited cost as the main reason they do not use a commercial filter. Moreover, lower-income households generally rely on intermittent public water supply as compared to middle and high-income residential areas utilising private bore wells. The public water supply consists mainly of surface water which is low in TDS and therefore does not trigger the necessity of purchasing a filter due to high salinity. Cloth and *jali* are actually ineffective at removing turbidity and bacterial contamination, and some *jali* models actually contaminated previously clean water samples.⁵¹

Responding to the need for quality water

Both branded and low-cost RO filters are marketed to potential customers through health-focused selling arguments. Marketers envision filters to be used in situations where tap water does not correspond to users' perceptions of water quality, and where health-conscious customers aspire to transform their "contaminated" water into "pure" water. Interestingly, the quality of water is defined in terms of TDS levels of the water, but generally, users do not even know the right TDS count. Many users also experience anxiety regarding the reverse health effects resulting from the absence of essential minerals in the RO-purified water (FGD 1 and FGD 2). These anxieties have resulted in various innovative solutions both on the side of the RO entrepreneurs and manufacturers, as well as among the users. Some users reported utilising normal tap water for cooking to increase their mineral intake, and removing the whole RO membrane and turning the filter back into a simple purifier.

The filters are often coupled with maintenance agreements that allow for technicians to visit customers' homes on a regular basis. In the case of small-scale RO entrepreneurs, these maintenance encounters have in fact evolved into an important aspect of the business, through which trust is established and new innovative solutions for improving the filters are being negotiated. The proximity of the small-scale RO entrepreneurs, as well as fast customer service, have become essential parts of building customer relationships, and end users have grown to value this responsiveness to their water-related concerns highly.

51 CITE report. Household Water Filter Evaluation - Ahmedabad, India: Comprehensive Initiative on Technology Evaluation at MIT: Product Evaluation Report, Fall 2015 (several authors). Massachusetts Institute of Technology, Cambridge.

C. Case study 3: Community-level RO water purification plants in rural villages

Description of technology

Primal Water Ltd. is a for-profit organisation engaged in developing and operating community level water filtration plants in mid-sized Indian villages (approximately 5000 inhabitants). Primal operates under the brand name Sarvajal (hereafter addressed as the company). The company's aim is not limited to water purification; rather its main organisational mission is concerned with potable water distribution, and management in the post-purification phase. Accordingly, the company has developed a potable water distribution model namely Water franchises. It relies on unemployed youth with an entrepreneurial spirit (at the community level) to build up a business for themselves, who are recruited and trained by the company. Franchises purchase a water purification unit, a chiller (water cooler), a delivery vehicle and the water bottles (which water is delivered in) from the company, and manage the water purification and distribution process. As another example of the utilisation of a technological innovation, the water purification unit is equipped with a Cloud technology, which allows the company to centrally monitor and also shut down the purification process when required.

Moreover, “local employment (partnership/franchise) generation” is another key component of the innovative aspect of the company's technology.⁵² The company makes a deal with the franchise to set up a filtration equipment with a certain percentage of the capital cost (varies from 25k to 40 K), taken as a deposit. The franchise owner typically hires an operator, a driver, and a helper to the driver. The franchise also purchases water containers from the company to transport water in an uncontaminated manner. And, the income generated from the partnership is divided between the company and the franchise 40 per cent and 60 per cent respectively.

Problematization and legitimisation: The need for the ‘technology’

Surface and groundwater contamination and poverty at the local level are the basic reasons within the company's conceptualisation of “the need for its technology”. The company constructs its technology as “innovative” for the fact that it is accessible by and affordable for the poor (20 litres for Rs.10), and for the fact that any disparities and malfunction in the purification unit, as well as management of financial aspects, can be controlled centrally.

52 Primal Sarvajal. Available from www.sarvajal.com.

The story at the village level

Potable water supply was a pressing issue in the studied villages. Every household got water from the public source at least two to four times a week. The villagers were not significantly constrained by the lack of daily supply due to the availability of storage facilities; actually, storing water is well embedded in their lives. The main problem, as shared with us, seemed to be “water contamination” because of high TDS. Accordingly, all village level institutional establishments (such as schools and public institutions) own and manage their own RO water purification units to serve mainly their functionaries and clients. Other than that, the company/its franchises/ is the only owner of RO plants for commercial communal use.

Franchise management and distribution

In both villages, the owners of the franchise are local agricultural cooperatives. However, at the time we visited Panol Village, the partnership between the company and the cooperative seemed to have been terminated. As explained by the cooperative, the main reason for terminating the partnership was non-profitability. The arrangement between the company and the cooperative demanded that the cooperative pay the company Rs. 4000 every month, regardless of the actual income generated from water sales by the cooperative. According to the cooperative, the arrangement forced the cooperative to share its income generated from other (non-water sales related) activities with the company, which appeared to be unsustainable.

Even though the partnership between the Medhasan cooperative and the company was still ongoing at the time of data collection, it was clear that the terms of the agreement had been problematic. A series of disputes that were taking place regarding the monthly fees were narrated to us. The primary reasons underlying the disputes (within the arrangement) were assumptions about the demand and its relationship with profitability. The company’s calculations assumed that the number of clients would increase year after year. However, according to the cooperative, this assumption had been only true for the first few months where the number of clients increased rapidly but then stagnated for the rest of the partnership period without reaching the projected critical mass upon which the monthly fees were initially computed. Hence, the aspired profitability and/or cost-benefit ratio could never be reached.

Potable water supply

As discussed earlier, the franchise was initially conceived to be innovative for its ability to target low-income families. However, our data shows that only those families with middle and higher income could afford to use the company's water. Lower income families continued to get water from the public supply. The sought effects of the company's water remain insignificant among lower income families. And, this is where the concept of "contamination" appears to be a dividing factor between the different income groups and product types. That is, "contamination" has been discussed as a "right" and as a "social construct". As a right, the lower income groups claim that every financially well-off person in the community procures uncontaminated water, but the rights of the poor to uncontaminated water has not been addressed by any party. And they have also stressed that since they cannot afford to procure this "right", the state should be responsible for awarding it to them for free.

On the other hand, "contamination" appears to be a vague social construct. There appears to be a lack of legitimate and tangible information about "contamination"; a concept that is strongly associated with public water supply, even though there is no data at the village level to support the claim. Some users of public water supply tend to directly link their ill health with "contamination" without any medical evidence. This does not necessarily mean that these people are imagining it, but they may not often go to the health facilities to check on their health every time they feel some kind of sickness. So, there is no way (no personal health data) to find out if their health was actually affected by their drinking water or not. Others claim to have perfect physical health even though they are using the public water supply (still, no health data to verify their well-being).

On the contrary, the company's water is believed to be "uncontaminated" and still, there is no evidence to support it. The franchises do not have any data on the actual TDS level to know if their water is in accordance with the standard. They claim that this data is only available at the company's central level. Cases of bad taste and dirty containers were considerably evident, but they were never materialised to disregard the company's water as "contaminated (unclear)". And users of the company's water strongly believe that whatever health issues they may have had, all were definitely not due to their water supply.

V. Discussion and conclusions

Our study finds that household RO water filters and village-level purification plants as technological products create new business opportunities for local residents by involving entrepreneurs in distribution activities and thus creating profitable franchising businesses. However, privatised technologies lead to a shift from achieving water as a political human right to a dependency on the market driven “innovative” measures. More concretely, the lifeworld of water access is mediated by information asymmetries among the various actors.

Information plays a central role in constructing the myth of “contamination” on which action is restricted to actors having access to such information. The various interpretations of contaminations then make visible existing resource inequalities and reproduce these in the target communities. Given these inequities in informational resources, we note that in the case study villages, “contamination” appears to be factually not evidenced and unidirectional; one kind of water supply system is considered “contaminated” and another is considered “pure”, even though there is no unequivocal evidence to support or disregard either of those claims. It is within this context then that private actors reinforce the anxiety-generating interpretation of “contamination” for self-promotion and revenue growth. For example, in the case of community-level RO water purification plants, the company’s RO technology continually enjoys this understanding of “contamination” for self-promotion, i.e., “contamination” is highly discussed in the company’s problematisation of the need for privately managed community level RO technology, but without a specific time-based evidence corresponding to a particular village.

The same has also been evident in the case of household RO water filters, where marketing of RO units has been intensely tied with health benefits, which completely reconstructs tap water as “contaminated”. Likewise, in H₂S water quality test kit case, users have to rely on local private players for water quality information (due to inefficiency of public functionaries), which empowers the private actors to employ the concept of “contamination” for false advertising and putting overpriced products (with no proved quality check) on the market. In general, we can say that lack of legitimate and reliable information on water “quality” and/or “contamination” skews technological benefits in favour of private/business actors. First, it has enabled private actors to reduce the concept of water “quality” only to mean TDS level.

Second, it legitimises the people’s believe on the responsibility of the state for the water contamination; which is grounded on another vague concept: state failure.

The hidden message in the “contamination” discourse subtly constructs the villain (the state) and the saviour (private initiative and individual responsibility), legitimising the shift in the nature of water itself. The reconstructed storyline then would see “private water” as clean and “State water” as unhygienic and of poor quality.

Third, it has left users unprotected against false marketing strategies; and finally, it has enabled “contamination” to evolve to be a communal lens through which social status is evaluated, i.e., “those who afford clean water” and “those who drink contaminated water”. Rather than creating more equitable social relations technological innovation (driven by information asymmetry) becomes yet another enabler of social inequality, deepening existing divides and resource maldistribution than its presumed role of a social leveller.

The 2030 Agenda envisions the application of technology to be climate-sensitive, to respect biodiversity and to promote social justice, human rights, and equality.⁵³ However, our findings showed that technology (in the context of water supply, in Gujarat) is no harm by itself but the control of its use by private actors can produce unequal and/or unjust social relationships, which may not treat water as a human right. Our research has established that the provision of water is the site at which the “nature” of water itself is being transformed. Our case studies reinforce its most salient transformation into a market-amenable commodity, which is parcelled into multi-player logistical processes involving both a variety of actors and infrastructures. These studies highlight that the State has clearly ceded space to actors from the for-profit as well as the not-for-profit sectors in the link between water access and citizens. Foundationally, the space for guaranteeing basic human rights (in this case of water) has been made open to actors that are not constrained by constitutional notions of probity, transparency, and public accountability. Water provision hence has itself constituted the grounds for the reshaping of the State.

While there is some literature on factors influencing perceptions of water quality, we add to this literature by pointing to the interaction between private sector activity, technological innovations, and perceptions around water quality. In particular, we highlight how the lack of the public-sector engagement with issues of information around water quality⁵⁴ represents the failure to provide a

53 A/RES/70/1.

54 A. Crampton and A. Ragusa, “Exploring perceptions and behaviors about drinking water in Australia and New Zealand: Is it risky to drink water, when and why?”, *Hydrology*, vol. 3, No. 1 (19 February 2016), p. 8; S. Dolnicar, A. Hurlimann and B. Grün, “Branding water”, *Water Research*, vol. 57 (June 2014), p. 325-38.

public good that the private sector then meets with technology that risks being exclusionary and unsustainable. Our contribution lies in critical innovation studies, bringing in concepts from public policy and water governance.

In India, user demand for water technologies is tangibly expressed, unlike for example in many parts of Europe where it is public policy that is expected to play that role.⁵⁵ Our study provided indicative results (in the context of India), which showed that water technologies do have the potential to provide citizens with new roles in decision-making regarding their water supply. However, careful consideration around the consequences of technological innovations should be initiated as to avoid the human being becoming envisioned to have greater hope of accessing clean water as a customer than as a citizen.

55 Y. Krozer and others, “Innovations in the water chain: Experiences in The Netherlands”, *Journal of Clean. Prod.*, vol. 18 (2010), p. 439-446.

VI. References

A/RES/64/292.

A/RES/70/1.

A. Crampton and A. Ragusa, “Exploring perceptions and behaviors about drinking water in Australia and New Zealand: Is it risky to drink water, when and why?”, *Hydrology*, vol. 3, No. 1 (19 February 2016).

A. Prüss-Üstün and C. Corvalán, *Preventing Disease through Healthy Environments: Towards an Estimate of the Environmental Burden of Disease* (Geneva, World Health Organization, 2006).

A. Strauss and J. Corbin, *Basics of Qualitative Research*, vol. 15. (Newbury Park, CA: Sage, 1990).

C. Gasson, “A New Model for Water Access from the Snows of Davos”, *Global Water Intelligence*, 2015.

C. Sullivan, “Calculating a water poverty index”, *World Development*, vol. 30, No. 7 (2002), pp. 1195-1210.

CITE report. *Household Water Filter Evaluation - Ahmedabad, India: Comprehensive Initiative on Technology Evaluation at MIT: Product Evaluation Report*, Fall 2015 (several authors). (Massachusetts Institute of Technology, Cambridge, 2015).

CITE. “Water Filter Evaluation Integrated Report. 3Ss: Suitability, Scalability, Sustainability”. (Cambridge, Massachusetts, MIT. Forthcoming).

D. McKenzie and I. Ray, “Urban water supply in India: status, reform options and possible lessons”, *Water Policy* 11 (2009), pp. 442–460.

E. Vandewalle and W. Jepson, “Mediating water governance: point-of-use water filtration devices for low-income communities along the US–Mexico border”, *Geo: Geography and Environment*, vol. 2, Issue 2 (July-December 2015), pp. 107-121.

EGCIP - Expert Group on the Commercialization of Infrastructure Projects, “The India Infrastructure Report: Policy Imperatives for Growth and Welfare”, (1996).

F. Kozisek, “Health risks from drinking demineralised water”, *Nutrients in Drinking Water* (2005).

- G. Akerlof, “The Market for “Lemons”: Quality uncertainty and the market mechanism”, *The Quarterly Journal of Economics*, vol. 84, No. 3 (1970), pp. 488-500.
- G. Howard and J. Bartram, *Domestic Water Quantity, Service Level, and Health* (Geneva, World Health Organization 2003).
- Government of Gujarat, “Types of water sources of Gujarat state”, 2016. Available from <https://guj--nwrws.gujarat.gov.in/showpage.aspx?contentid=1449&language=english>.
- J. Briscoe, “Managing Water as an Economic Good” in *Water: Economics, Management and Demand*, M. Kay, T. Franks and L. Smith, eds. (London, E & FN Spon, 1997).
- J. C. Scott, *Seeing like A State: How Certain Schemes to Improve the Human Condition have Failed* (New Haven, C.T., Yale University Press, 1998).
- J. Jalan and E. Somanathan, “The importance of being informed: Experimental evidence on demand for environmental quality”, *Journal of Development Economics*, (2008).
- K. M. Eisenhardt, “Building theories from case study research”, *Academy of Management Review*, vol. 14, No. 4 (1989).
- K. S. Manja, M. S. Maurya, and K. M. Rao, “A simple field test for the detection of faecal pollution in drinking water”. *Bulletin of the World Health Organization*, vol. 60, No. 5 (1982).
- L. A. Catling and others, “A systematic review of analytical observational studies investigating the association between cardiovascular disease and drinking water hardness”, *Journal of Water and Health*, (2008).
- L.T. Annala, A. Sarin and J. Green. “Co-production of frugal innovation: Case of low cost reverse osmosis water filters in India”, *Journal of Cleaner Production*, (2016).
- M. Bauhr and M. Grimes, “Indignation or resignation: The implications of transparency for societal accountability”, *Governance*, vol. 27, No. 2 (2014), pp. 291-320.
- M. D. F Doria, N. Pidgeon and P. R. Hunter, “Perceptions of drinking water quality and risk and its effect on behaviour: A cross-national study”, *Science of the Total Environment*, vol. 407, No. 21 (2009), pp. 5455-5464.

- M. Q. Patton, *Qualitative Research* (Wiley Online Library, 2005).
- M.S. Swaminathan, “Building a sustainable water security system”, *India Water Week*, 2016. Available from <http://www.indiawaterweek.in/download.aspx>.
- N. Fairclough and R. Wodak, “Critical discourse analysis”, in *Discourse as Social Interaction*, T. A. van Dijk, ed. (London, Sage, 2005).
- N. Fairclough, *Analysing Discourse: Textual Analysis for Social Research*. (Psychology Press, 2003).
- P. Chuang, S. Trottier and S. Murcott, ”Comparison and verification of four field-based microbiological tests: H2S test, Easygel®, Colilert®, Petrifilm™”, *Journal of Water Sanitation and Hygiene for Development*, vol. 1, No. 1 (2011), pp. 68-85.
- P. Payment, and others, “A randomized trial to evaluate the risk of gastrointestinal disease due to consumption of drinking water meeting current microbiological standards”, *American Journal of Public Health*, vol. 81, No. 6 (1991).
- R. Srikanth, “Challenges of sustainable water quality management in rural India”, *Current Science*, vol. 97, No. 3 (2009).
- Rogers P, De Silva R and Bhatia R, “Water is an economic good: How to use prices to promote equity, efficiency, and sustainability”, *Water Policy*, vol. 4, No. 1 (2002), pp. 1-17.
- S. Dolnicar, A. Hurlimann and B. Grün, “Branding water”, *Water Research*, vol. 57 (June 2014), pp. 325-38.
- S. E. Burger and S. A. Esrey, “Water and sanitation: Health and nutrition benefits to children” in *Child Growth and Nutrition in Developing Countries*, P. Pinstrup-Andersen, D. Pelletier and A. Aldermann, eds. (Priorities for Action, Cornell University Press, New York, 1995), pp. 153-174.
- S. K. Gupta, and others, “Usefulness of the hydrogen sulphide test for assessment of water quality in Bangladesh”. *Journal of Applied Microbiology*, (2008).
- S. Spiggle, “Analysis and interpretation of qualitative data in consumer research”, *Journal of Consumer Research*, vol. 21, No. 3, (1994), pp. 491-503.
- T. Bhatkal, W. Avis, and S. Nicolai, “Towards a better life?: A cautionary tale of progress in Ahmedabad”, *Development Progress Case Study Report*, (London: ODI, 2015).

- Transparency Market Research, 2016. Water Purifier Market (By Technology - Gravity Purifiers, RO Purifiers, UV Purifiers; By End-User - Industrial, Commercial, Household) - Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2015. Available from <http://www.transparencymarketresearch.com/water-purifier-market.html>.
- UN Water, “Water in the 2030 Agenda for Sustainable Development”, 2016. Available from <http://www.unwater.org/sdgs/en/>.
- UNICEF and World Health Organization, Progress on Sanitation and Drinking-Water: 2015 Update and MDG Assessment. (Geneva, Switzerland, World Health Organization, 2015).
- United Nations Report on the Progress of Sanitation and Drinking Water, 2015.
- V. Asthana, Water Policy Processes in India: Discourses of Power and Resistance (London, Routledge, 2009).
- WaterAid, “Does the water sector need innovation?” 2016. Available from <http://www.wateraid.org/news/blogs/2015/november/does-the-wash-sector-need-innovation>.
- World Health Organization, Guidelines for Drinking-Water Quality (Geneva, World Health Organization, 2011).
- Y. Krozer and others, “Innovations in the water chain: Experiences in The Netherlands”, *Journal of Clean. Prod.*, vol. 18 (2010), pp. 439-446.

Critical Human Rights Education and Technologies of Peace: A Teleology Too Far?

Kris Hyesoo Lee,¹ Loughlin Sweeney² & Kevin Kester³

Abstract

As human rights in the last six decades have become universally recognized, human rights education has gradually become a popular approach within the education sector. Drawing on Michel Foucault's concept of technologies, this article explores the intersections between human rights, human rights education and technology, and it problematizes the techno-bureaucratic approaches to these endeavors as framed within liberal humanist ideals. To locate human rights within a technologic and liberal humanist framework, we first review Foucault's concept of technologies and argue human rights education as the technologic modality of human rights discourse. We then discuss human rights from its common historical and normative positions. By positioning human rights discourse and human rights education as technologies, the article provides reflexive critiques concerning the intersections of notions of progress, state-centric human rights strategies, and de-politicized technocratic approaches to peacebuilding through technology and global Sustainable Development Goals. Finally, human rights education is discussed in relation to the new directions and possibilities this Foucaultian argument supports.

Keywords: Human rights, Human rights education, Foucault, Critique.

I. Introduction

In this article, we discuss the intersections between human rights, human rights education (hereafter HRE), and technology. In particular, drawing on Foucault, we problematize the common, uncritical approaches to these endeavors as framed within liberal humanist ideals. To locate human rights within a liberal humanist framework, we first introduce Foucault's "technology" and argue HRE as the technological arm of liberal human rights discourse. Then, we discuss human rights from its common historical and normative positions. By framing education (i.e. pedagogic action) as a technology, from an epistemological standpoint the article enters into a theatre of critique. Initially, there are three critiques: the first

- 1 School of Geography and the Environment and Christ Church College, University of Oxford.
- 2 Faculty of History, Modern Irish History working group and Queens' College, University of Cambridge.
- 3 Corresponding author. Endicott College of International Studies, Woosong University.

concerns the intersections of notions of progress/universalism and technologic solutions to the social problems inhibiting such progress. The second deals with the tendency to focus on state-based strategies of human rights work. The third concerns the de-politicization common within technocratic approaches to peacebuilding that dehumanize the subject as an object of the state. These critiques engender the importance of thoroughly examining the underlying premises of human rights and HRE prior to the de-political proliferation of UN ideals through the Sustainable Development Goals (SDGs). Finally, having gone through this critique, it follows that HRE will then be discussed in relation to the new directions and possibilities the argument prefaces.

As the language of human rights gradually became universal and compliance with such universal values have become the standard, it has also become commonplace that states are measured by this standard, and their intervention in the affairs of other states can be justified and legitimized in terms of (non) compliance with human rights norms.

From a Foucaultian standpoint, then, we argue that uncritical techno-bureaucratic approaches to human rights and HRE are problematic. In the context of the article, concepts of “technologies” are utilized in order to realize the development of civil society and state ideologies in the context of education. Education as a technology shapes the structural environments of individuals through a series of formal pedagogic actions. Relatively standardized curricular and assessment processes of HRE aspire to reach the level of educational production, which satisfies the universal and indivisible value of human rights. Based on the constant interplay with the structural environment (e.g. educational sites and discourses), individuals and collectives (e.g. young people) act upon themselves to modify or challenge their circumstances within the structures. The notion of technologies is used to isolate and highlight two types of technologies: first, technologies that configure particular structural environments of HRE, and second, technologies that allow individuals to exercise and perform the language of their rights.

In the pages that follow, we will first overview Foucault’s concept of technologies as our conceptual lens for analyzing and critically discussing HRE. This will be followed by an outline of the history and evolution of human rights thought with a particular focus on liberal humanist discourse. We then detail HRE as a contested approach to human rights protection and proliferation before entering into critiques of HRE and their subsequent possibilities for HRE in the 21st century.

II. “Technologies” of Power and Self

Michel Foucault writes deftly on power, repression and resistance. In one of his most important works in this regard, “Technologies of the Self”, he formulates the notion of “technologies” as modalities of social control and self-production, and he explicates the interplay between these forms. Specifically, Foucault sets out four major categories of technologies as the way of creating and refining the self in relation to regulating bodies, including:

- (1) technologies of production, which permit us to produce, transform, or manipulate things;
- (2) technologies of sign systems, which permit us to use signs, meanings, symbols, or signification;
- (3) technologies of power, which determine the conduct of individuals and submit them to certain ends or domination, an objectivizing of the subject;
- (4) technologies of the self, which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality.⁴

For the purposes of our analysis in this article we are drawing specifically on points three and four – technologies of power and technologies of the self.

These technologies are likened to a form of “modification of individual conduct”, not only in terms of personal achievement but also in the way regulating bodies control individual attitudes and behaviors through regulative discourses.⁵ In particular, Foucault notes that technologies of power and technologies of the self hardly ever function independently, as there is perpetual interplay between the two. His use of the word “government”, for example, inquires into the relations between these technologies of the self and technologies of domination:

He [the individual] has to take into account the interaction between those two types of techniques—techniques of domination and techniques of the self. He has to take into account the points where the technologies of domination of individuals over one another have recourse to processes by which the individual acts upon himself. And conversely, he has to take into account

4 Michel Foucault, “Technologies of the Self”, in *Technologies of the Self: A seminar with Michel Foucault*, Martin, L., Gutman, H. & Hutton, P., eds., (Amherst, MA, University of Massachusetts Press, 1988), p. 18.

5 Ibidem.

the points where the techniques of the self are integrated into structures of coercion and domination. The contact point, where the individuals are driven by others is tied to the way they conduct themselves, is what we can call, I think, government. Governing people, in the broad meaning of the word, governing people is not a way to force people to do what the governor wants; it is always a versatile equilibrium, with complementarity and conflicts between techniques which assure coercion and processes through which the self is constructed or modified by himself.⁶

The important aspect we are taking from this excerpt is the recognition that actors are simultaneously involved in submitting to and resisting such regulative discourses, which in our analysis is what encompasses the pedagogic act of HRE. Foucault insists that individuals' practices must not be understood as manifestation of his or her autonomy that are independent from existing sets of practices. Such practices of self are archetypes that an individual finds in dominating structures, which are "proposed, suggested and imposed on him by his culture, his society and his social group."⁷

In this respect, we understand Foucault to distinguish the individual from the subject. This is the key contribution of the Foucaultian lens. The individual in individual human rights hitherto understood, when examined through a Foucaultian analysis, is exposed as a subject. The individual is subject inasmuch as s/he is the means of achieving regulative agendas via technologies of power. Such technologies of power include education. In "The Subject and Power", Foucault suggests two meanings of the term "subject": "subject to someone else by control and dependence; and tied to his own identity by a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to."⁸ Therefore, for Foucault, both technologies of domination and technologies of the self give rise to effects that constitute the self: not only do they define the individual, but also they guide and lead the individual's (constrained) behaviors.

Foucault views that "power", even when the term is used by itself, is always "a short cut to the expression 'the relationships of power'."⁹ In the same vein,

6 Michel Foucault, "About the Beginning of the Hermeneutics of the Self: Two lectures at Dartmouth", *Political Theory*, vol. 21 (1993), pp. 203-204.

7 Raúl Fonet-Batancourt and others, "The ethic of care for the self as a practice of freedom: an interview with Michel Foucault on January 20, 1984", *Philosophy & Social Criticism*, vol. 12 (1987), p. 122. [Note: The masculine language is in the original.]

8 Michel Foucault, "The Subject and Power", *Critical Inquiry*, vol. 8 (1982), p. 781.

9 Raúl Fonet-Batancourt, *The ethic of care...*, supra note 7, p. 122.

technologies of power and domination is analogous to the relationship between anonymous structures, networks of knowledge, social and cultural institutions, and the relationships between individuals and groups. The relationships of power only prevail when they are exercised. They are productive, as well as reproductive, and underlie particular types of knowledge (e.g. scientific discourse, religious doctrine) and cultural practices (e.g. gift exchange). All those structures construct people's life and set the guidelines or procedures to be manifested; they "determine conduct of individuals".¹⁰

Nonetheless, the subject is not a passive consequence of existing power relations who simply follows the institutional orders set by the structures. The subject has the ability to determine how to conduct oneself and what choices to make among the social patterns available in his or her environment. Foucault notes that it is the agency of individuals, which "permit individuals to effect by their own means or with the help of others a certain number of operations on their bodies and souls, thoughts, conduct, and the way of being, so as to transform themselves..."¹¹

Further, Foucault argues that in order to scrutinize the process of the constitution of the subject, one has to take into consideration the interaction between "technologies of domination" and "technologies of the self". Foucault emphasizes the intersection:

where the technologies of domination of individuals over one another have resource to processes by which the individual acts upon himself. And conversely, he has to take into account the points where the technologies of the self are integrated into structures of coercion or domination.¹²

Thus, Foucault's notion of "technologies" and his approach to analyzing the constant interplay between technologies of domination and technologies of the self offers the framework to perceive an individual as subject in the context of pedagogic interaction. We propose, therefore, that the individual as conceived by liberal human rights discourse be re-framed as a Foucaultian subject – one who is both subjected to and productive of human rights. We now relate this framework to technology and the SDGs.

10 Michel Foucault, *Technologies of the Self...*, supra note 4, p. 17.

11 Idem, p. 18.

12 Michel Foucault, *Hermeneutics of the Self...*, supra note 6, p. 203.

III. Human Rights and Technology

Critics of human rights point out that the same liberal humanistic values that animate contemporary human rights interventions were deployed in the name of the missionary, commercial and militaristic interventions of the imperial powers in the 19th and 20th centuries. These efforts were aimed, in part, at technological advancement: building “capacities” and strong institutions, developing infrastructure and commercial opportunities, and putting an end to practices deemed unacceptable to Western mores, or standing in the way of supposed civilizational progress.¹³ It is imperative that in implementing the SDGs and other human rights standards that international development practitioners and educationalists take seriously the concerns of critics.¹⁴

Conflations of humanist and imperialist modes of thought are not new in human rights literature and practice, nor are associated critiques of technological positivism.¹⁵ Norman Leonard perceptively writes that, “one of the most important and difficult problems of contemporary social ethics” is whether it is necessary “to slow or halt economic technology in order to build a better world.”¹⁶ As far back as the 1970s, scholars began discussing these critiques of technology.¹⁷ What has changed since, however, is that the “liberal humanist dream” has, over the intervening 40 years, neither afforded the unfettered progress it promised, nor solved the specific problems it presumed to challenge.¹⁸ Critics contend that, far from a universal conception of human rights flowing naturally from Western enlightenment in actuality such a conception has been held back

- 13 cf. Bernard Porter, “The Absent-Minded Imperialists: Empire, Society and Culture in Britain” (Oxford, OUP, 2004); Philippa Levine, “The British Empire, Sunrise to Sunset” (Harlow, Pearson, 2007); M. Thomas, B. Moore & J. Butler, “Crises of Empire: Decolonization and Europe’s Imperial States” (London, Bloomsbury, 2015).
- 14 J.K. Patnaik, “Human, rights: the concept and perspectives: a third world view” *The Indian Journal of Political Science*, vol. 65, No. 4 (Oct.-Dec., 2004); Ellen Messer, “Pluralist Approaches to Human Rights” *Journal of Anthropological Research*, vol. 53, No. 3, *Universal Human Rights versus Cultural Relativity* (Autumn, 1997).
- 15 C. Quillen, “Feminist Theory, Justice, and the Lure of the Human”, *Signs*, vol. 27 (2001), pp. 87-122; Norman Leonard, “Economic Technology and the Liberal-Humanist Dream”, *Social Science*, vol. 48 (1973); R. Eastman, “Murder and Imagination: A Defense of Liberal Humanism”, *College English*, vol. 32 (1971).
- 16 Leonard, *Economic Technology...*, supra note 15, p. 149.
- 17 Idem, pp. 142-151.
- 18 Khoja-Moolji, “Producing Neoliberal Citizens: Critical reflections on Human Rights Education in Pakistan”, *Gender and Education*, vol. 26 (2014); S. Hill, “The Tragedy of Technology: Human Liberation versus Domination in the Late Twentieth Century” (London, Pluto Press, 1988); C. Lohrenscheit, “International Approaches in Human Rights Education”, *International Review of Education / Internationale Zeitschrift für Erziehungswissenschaft / Revue Internationale d’Education*, vol. 48 (2002).

by an over-emphasis on a Western-dominated ideology, which may be ill-suited to the majority of the global population.¹⁹

Christensen offers a case study examining the promotion of technology as a fix to social ills.²⁰ He contends that, “political statements and policy play an important role in discursively framing our understanding of technology, and these statements are often laudatory in nature and part of a process through which technologies achieve a central role in contemporary societies.”²¹ This is not a new phenomenon. The ascendancy of neoliberal hegemony in the 1970s and 1980s prompted thinkers to critique technological positivism as a teleology which was both borne out of, and threatened to undermine, the liberal humanist ideal.²² What has changed in the contemporary world, especially when it comes to HRE and other instances of activist liberation, is that the discourse Christensen terms “technological constructivism...The emancipatory power of digital technology, for example...[is] not seen as the proposition of a subjective opinion...but simply the presentation of fact”.²³ Christensen provocatively dubs this narrative “liberation technology”.

Where this discourse of technological constructivism becomes problematic is when blind faith in its emancipatory capacity occludes the potentially opposite effect, especially when the agendas behind education become de-politicized and accepted as unquestionable. As Leonard queries:

could it be true that the social conditions which promote growth of economic technology are also the social conditions which promote the neurotic and psychotic personality? Are the social parameters of technology antithetical to the building of a loving personality?²⁴

While Leonard problematized the “simple compatibility of economic technology and liberal humanism” over 40 years ago, the problem appears to have surfaced anew in the contemporary world.²⁵

We turn our gaze toward contemporary human rights discourses. Modern SDGs and HRE are often enveloped within technological positivist approaches. For example, in order to achieve SDG goal number four on “quality education”, it

19 Messer, *Pluralist Approaches...*, supra note 14.

20 C. Christensen, “Thoughts on Revolution, State Aid and Liberation Technologies”, *Irish Studies in International Affairs*, vol. 23 (2012).

21 Idem, p. 40.

22 Leonard, *Economic Technology...*; supra note 15; Quillen, *Feminist Theory...*, supra note 15.

23 Leonard, *Economic Technology...*, supra note 15, p. 150.

24 Ibidem.

25 Idem, p. 144.

must be understood that the goal requires not just increased access to schooling for young girls and boys, and women and men. Instead the goal requires quality education that prioritizes learning the basics – literacy and numeracy – early in the education course. Doing so will in part help prevent the gender and socioeconomic inequalities that often follow later in the trajectory of schooling and higher education. Yet, while important, even this second point is insufficient; it still rests on techno-bureaucratic interventions as solution to structural inequities. In other words, this latter position still views the system as its own fix. But is it not the system that perpetuates the inequalities? Our concern is not that human rights or the SDGs are a folly, but that the current lack of criticality is in part what reduces the HRE efforts to mere rhetoric, at best, and, at worst, the reproduction of the very inequities SDGs are supposed to be protecting against. Is there another way? We will address this below in our HRE critiques and possibilities.

The danger of allying a technological perspective to the humanist ideals that animate HRE is that it conceives a false equivalence, a recourse to unassailable truths, that can conceal exploitation and inequality. Additionally, over-emphasis on technologies of HRE can serve to de-emphasize the groundwork of local activists, denying local agency in favour of celebrating the impositions of multinational technology and state firms.²⁶ As Quillen puts it, “differences that clearly exist can, in the absence of obvious legal or institutional causes, easily be taken as morally relevant precisely because actors posit natural equality. On a global scale, differences in race, religion, technological sophistication and so on have in the past all functioned to authorize treatment that would in the absence of these differences appear outrageous.”²⁷ Naturally, contemporary HRE ought to take due care to avoid such ominous and counter-productive outcomes, by realizing explicitly that technology is no “silver bullet” to solving the slippery and contextual question of HRE and liberation. In the breathless world of rapidly-developing technological and computing applications, educationalists and others run the risk of forgetting that technology ought to be seen not as an absolute against which to measure cultural indicators, but treated as a cultural text in its own right.²⁸

Hence, the notion of human rights dissemination and protection through education, is a technology when education is seen simply as an instrument to achieve regulative discourse. In other words, it is perceived to be an avenue

26 Christian Christensen, *Thoughts on Revolution...*, supra note 20.

27 Quillen, *Feminist Theory...*, supra note 15, p. 95. Emphasis ours.

28 S. Hill, *The Tragedy of Technology...*, supra note 18.

through which the liberalism of civil society and state ideologies might be enacted toward the vision of a better world in the view of those few whom lead state apparatuses. Should one approach education and social action through this hegemonic liberal humanist standpoint, a teleology appears when human rights dissemination and protection via state and civil society institutions becomes unquestionable. These regulative enactments seek in part to ensure the monitoring and evaluation of the successful implementation of human rights by those actors adopting human rights as their prerogative. Human rights advocacy, then, is often dialectically founded on this Foucaultian philosophy of regulating discourse. The question is when does such regulation become imposition?

We now turn to this question to offer further critiques of liberal humanism and SDGs in its realist/empirical enactments. With SDGs embodying the contemporary form of global human rights activity, we contend that the aims of SDG four in particular must be conceived and enacted in a way that does not deny the agency, aspirations and concerns of communities based on an uncritical application of technological positivist discourse.

IV. Human Rights Education: Critiques and Possibilities

Employed within education, human rights are typically implemented as a universal rights-based approach to raising citizens' awareness toward their civil, political, economic, social and cultural rights; and through a protective discourse toward the responsibility of citizens to sympathize with and act on behalf of the marginalized.²⁹ This is typically embedded within liberal humanist discourse, which we problematized above.

In this section we will further deliberate three primary critiques we note in the literature and conceptualizations of HRE. These three points concern: problematizing the universalisms associated with HRE, critiquing its concomitant state-centricity, and finally revealing its psychologizing tendencies to focus on the individual as the locus of social change and human rights realization.

29 F. Al-Daraweesh and D. Snauwaert, "Toward a Hermeneutical Theory of International Human Rights Education", *Educational Theory*, vol. 63 (2013); B. Reardon, "Educating for Human Dignity: Learning about rights and responsibilities" (Penn Press, Philadelphia PA, 1996); T. McCowan, "Human Rights Education: Assessing the Justifications", *Cambridge Journal of Education*, vol. 42 (2012); M. Bajaj, "Schooling for Social Change: The Rise and Impact of Human Rights Education in India" (New York, NY, Bloomsbury, 2012); A. Keet, "It is Time: Critical Human Rights Education in an Age of Counter-Hegemonic Distrust", *Education as Change*, vol. 19 (2015); A. Keet, "Discourse, Betrayal, Critique: The Renewal of Human Rights Education", in *Safe Spaces: Human Rights Education in Diverse Contexts*, C. Roux, ed. (Rotterdam, Sense Publishers, 2012).

First, it seems that rights are often taught as though they are undeniable and inalienable truths. Yet, from a Foucaultian standpoint, it is clear that this approach is problematic. Foucault helps clarify that rights are indeed contestable.³⁰ Furthermore, there is danger herein toward cultural imposition via those elite entities that oversee the production and reproduction of cultural and political norms,³¹ such as the instruments and bodies of the UN frequently dominated by Western states.³² A first step toward decolonizing the notion of inalienable rights is to approach the question from a non-hegemonic standpoint. Are individual rights, in other words, appropriate from diverse cultural contexts? Might other forms of social organization (other than the individual) acknowledge and promote the relational village as a more socially just unit of analysis? Further, could there not be a danger by focusing peace on the individual's capacity to realize his/her rights as a distraction from important social and structural analysis? Is such an HRE approach not dangerously close to neoliberalizing and de-politicizing HRE?

Within the SDGs discourse, the 2030 agenda is presented as unquestionable, indivisible and universal with goals to be implemented for all people in all countries. In other words, the 2030 Agenda is a universal agenda and is universally applicable for all people in all locales, including wealthy and developing contexts. The problem is that from this standpoint the answer to our three questions at the end of the previous paragraph is a resounding: no. Individual rights are not culturally diverse – they are universal. Individual rights are individual rights, not communal. Individual rights focus on the individual/subject, not structures. This takes us to our second critique.

Second, educating young people and the socially marginalized about their rights does little to change the global power structures that reproduce the very human rights abuses. Human rights, it seems despite popular discourse, only exist for states and the subjects of those states. In other words, do those groups without a recognized state (i.e. Palestinians, Somalians, Roma) share in the same rights as citizens of powerful states? In this sense, teaching about human rights must be linked with political critique and social action in order to address global power inequalities, and to thoroughly examine the nation-centred orientation of HRE. This is a critical point, as it must be noted that much HRE is focused on changing

30 M. Zembylas, "Foucault and Human Rights: Seeking the Renewal of Human Rights Education", *Journal of Philosophy of Education*, vol. 0 (2015).

31 Michel Foucault, *Technologies of the Self...*, supra note 4; B. Bernstein, "Pedagogy, Symbolic Control and Identity: Theory, research, critique" (London, Taylor and Francis, 1996).

32 F. Al-Daraweesh and D. Snauwaert, *Hermeneutical Theory of Human Rights Education...*, supra note 29.

states and lobbying governments to implement new laws and policies. Such an approach does not question the state at all, and indeed it may distract much needed attention from the populace HRE claims to be protecting from the start. This leads us to our third point.

The third concern is how HRE “subjectifies” the individual as the locus of HRE realization. The individual is an atomized unit of society under the remit of the state, and is the centre of the illness to be treated in the protection of the state. The subject’s mind is the site of the problem. In education, this is realized through a psychologized approach to learning human rights. In this approach the assumption is that once students have learned their objective rights they will then protect those rights from being abused. Obviously, this ignores the entities perpetuating the abuse, or the power (or lack thereof) of the learner to realize/protect his/her rights. Thus, responsibility toward human rights protection is downloaded onto the individual, in some cases the very individual experiencing human rights violations. The state is cleared of wrongdoing and has completed its legal responsibility. Is this not adding insult to injury? The issue with this thinking is that it de-politicizes and de-contextualizes the problem. Bekerman and Zembylas argue:

that psychologized language—as an assemblage of knowledge, professionalism, methods, and forms of evaluation—is linked to education as a “technology” of solving social problems, by looking at the inner selves of individuals. Moreover, psychologized language also constitutes a particular way of organizing, exercising and legitimating certain forms of political power in everyday life [...] psychologized epistemologies are strengthened through particular manifestations of education (e.g. tracking) and vice versa; these manifestations essentially depoliticize the issues involved and put aside inequality and injustice.³³

In the same way, individual and collective social action to exercise individual human rights is, in Foucault’s terms, “technologies of the self” or instances of how individuals – in this case young people and the socially marginalized – act upon themselves.³⁴ In line with Foucault’s emphasis that individuals’ behaviour is never segregated from the patterns individuals find in their states (i.e. structural environment), individual’s actions within the established structural context cannot be viewed as isolated instances of personal choice. The actions

33 Z. Bekerman and M. Zembylas, “Psychologized Language” in “Education: Denaturalizing a Regime of Truth” (forthcoming, 2017), p. 201.

34 Michel Foucault, “About the beginning of the hermeneutics of the self: Two lectures at Dartmouth”, *Political Theory*, vol. 21 (1993), p. 203.

of individuals are constrained by the resources available to them and are largely determined by the socio-historical contexts of individuals.

There is a paradox here, clearly, as states promote individual human rights, on the one hand, as the foundation of a globally just world order; yet, on the other hand, the “subjectifying” of individuals extracts from those individuals their individuality and freedom. They are thus psychologized and conditioned/self-conditioned to act in particular ways consistent with and ultimately supportive of the systemic context. This may happen, for example, in the name of citizenship, where citizenship is the usurping of the individual’s identity to replace it as an object of the state. Citizens are thus subjects of the state, acting, even in their resistance, in line with the expectations of that system. Foucault criticizes this with his “technologies of power”. But this notion of technologies also offers some possibility toward transcendence of this individuating approach by re-constituting and re-empowering the self, albeit perhaps a self-emancipation, where the individual must envision alternatives and collective grassroots initiatives to change society, and simultaneously acknowledge the limitations of the self. Hence, the way forward for SDGs 2030 may be through reflexive self-emancipation and community development, a sort of grassroots sustainable peacebuilding.

Toward this vision, we propose (non-prescriptively) that educators and other development practitioners begin, first, with greater degrees of humility toward what might be accomplished through HRE. Second, we suggest that practitioners recall that HRE is heterogeneous. There is not a single HRE, but many ways to work toward human rights to, through, and in education. Thus, we do not offer a prescription to the problems we have addressed, but a plurality of perspectives that demands a diversity of methods for HRE. We only contend that criticality is an essential component of any sort of critical and transformative HRE.

Third, we retain that HRE is a dynamic and malleable process that must continually be re-negotiated. A largely elicitive rather than prescriptive method would enable this process. Finally, as we have argued throughout, HRE must move away from uncritical declarations of universal truths (of individualism, equality, peace, and democracy) and toward a reflexive engagement that is “neither a full embrace nor a total rejection”³⁵ of universal human rights within the SDGs 2030 framework. Embracing the SDG’s education goal as a transnational aspiration for human betterment while rejecting its cultural imperialism and de-contextualization is a first step toward a new 21st century peacebuilding and sustainable development.

35 B. Golder, “Foucault’s Critical (Yet Ambivalent) Affirmation: Three Figures of Rights”, *Social and Legal Studies*, vol. 20 (2011), p. 283.

V. Conclusion

In this article, we have discussed the intersections between human rights, HRE, and technology. We utilized the Foucaultian notion of technologies of power and the self, and problematized the common approaches to human rights endeavours as framed within liberal humanist ideals. We argued HRE as the technological arm of human rights discourse within a liberal humanist framework. We also examined human rights from its common historical and normative positions. By framing HRE as a technology, from an epistemological standpoint the article offered three critiques; first, we explained our concerns with the universal, unquestionable notions of progress and technologic solutions in HRE, where HRE plays a precarious role within the modernist march toward a better world. The second critique pointed to the limitations of state-based approaches to HRE, and called for a move toward more grassroots responses, while the third dealt with the de-politicization/“subjectification” common within technocratic approaches to peacebuilding. These critiques engender the importance of thoroughly examining the underlying premises of human rights and technology, which we have engaged with in this article, prior to a de-political proliferation of UN ideals through HRE. Finally, having gone through this reflexive argument, it follows that one way forward for HRE and the SDGs is through non-hegemonic, non-universal, non-state-centric, grassroots approaches to human rights realization. This counter-movement calls for an SDG and HRE agenda that promotes organic, local, creative, contextually relevant, and re-politicized approaches to a better world based on a collective sustainable vision.

VI. References

- A. Keet, "Discourse, Betrayal, Critique: The Renewal of Human Rights Education", in *Safe Spaces: Human Rights Education in Diverse Contexts*, C. Roux, ed. (Rotterdam, Sense Publishers, 2012).
- A. Keet, "It is Time: Critical Human Rights Education in an Age of Counter-Hegemonic Distrust", *Education as Change*, vol. 19 (2015).
- B. Bernstein, "Pedagogy, Symbolic Control and Identity: Theory, research, critique" (London, Taylor and Francis, 1996).
- B. Golder, "Foucault's Critical (Yet Ambivalent) Affirmation: Three Figures of Rights", *Social and Legal Studies*, vol. 20 (2011).
- B. Reardon, "Educating for Human Dignity: Learning about rights and responsibilities" (Philadelphia PA, Penn Press, 1996).
- Bernard Porter, "The Absent-Minded Imperialists: Empire, Society and Culture in Britain" (Oxford, OUP, 2004).
- Christian Christensen, "Thoughts on Revolution, State Aid and Liberation Technologies", *Irish Studies in International Affairs*, vol. 23 (2012).
- C. Lohrenscheit, "International Approaches in Human Rights Education", *International Review of Education / Internationale Zeitschrift für Erziehungswissenschaft / Revue Internationale d'Education*, vol. 48 (2002).
- C. Quillen, "Feminist Theory, Justice, and the Lure of the Human", *Signs*, vol. 27 (2001).
- Ellen Messer, "Pluralist Approaches to Human Rights" *Journal of Anthropological Research*, vol. 53, No. 3, *Universal Human Rights versus Cultural Relativity* (Autumn, 1997).
- F. Al-Daraweesh and D. Snauwaert, "Toward a Hermeneutical Theory of International Human Rights Education", *Educational Theory*, vol. 63 (2013).
- J.K. Patnaik, "Human, rights: the concept and perspectives: a third world view" *The Indian Journal of Political Science*, vol. 65, No. 4 (Oct.-Dec., 2004).
- Khoja-Moolji, "Producing Neoliberal Citizens: Critical reflections on Human Rights Education in Pakistan", *Gender and Education*, vol. 26 (2014).
- M. Bajaj, "Schooling for Social Change: The Rise and Impact of Human Rights Education in India" (Amherst, MA, NY, Bloomsbury, 2012).

Critical Human Rights Education and Technologies of Peace: A Teleology Too Far?

- M. Thomas, B. Moore & J. Butler, “Crises of Empire: Decolonization and Europe’s Imperial States” (London, Bloomsbury, 2015).
- M. Zembylas, “Foucault and Human Rights: Seeking the Renewal of Human Rights Education”, *Journal of Philosophy of Education*, vol. 0 (2015).
- Michel Foucault, “About the Beginning of the Hermeneutics of the Self: Two lectures at Dartmouth”, *Political Theory*, vol. 21 (1993).
- Michel Foucault, “About the beginning of the hermeneutics of the self: Two lectures at Dartmouth”, *Political Theory*, vol. 21 (1993).
- Michel Foucault, “Technologies of the Self”, in *Technologies of the Self: A seminar with Michel Foucault*, Martin, L., Gutman, H. & Hutton, P., eds., (Amherst, MA, University of Massachusetts Press, 1988).
- Michel Foucault, “The Subject and Power”, *Critical Inquiry*, vol. 8 (1982).
- Norman Leonard, “Economic Technology and the Liberal-Humanist Dream”, *Social Science*, vol. 48 (1973).
- Philippa Levine, “The British Empire, Sunrise to Sunset” (Harlow, Pearson, 2007).
- R. Eastman, “Murder and Imagination: A Defense of Liberal Humanism”, *College English*, vol. 32 (1971).
- Raúl Fornet-Batancourt and others, “The ethic of care for the self as a practice of freedom: an interview with Michel Foucault on January 20, 1984”, *Philosophy & Social Criticism*, vol. 12 (1987).
- S. Hill, “The Tragedy of Technology: Human Liberation versus Domination in the Late Twentieth Century” (London, Pluto Press, 1988).
- T. McCowan, “Human Rights Education: Assessing the Justifications”, *Cambridge Journal of Education*, vol. 42 (2012).
- Z. Bekerman and M. Zembylas, “Psychologized Language” in “Education: Denaturalizing a Regime of Truth” (forthcoming, 2017).

The 2030 Agenda for Sustainable Development is a global plan designed to “to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.” In order to implement it, states are determined to put people on the centre, to protect the planet, promote peace, create partnerships, and ensure prosperity. However, it is surprising that in the approved resolution no specific mention to human rights is made in the preamble, while technological progress is perceived as a requisite to enjoy prosperous and fulfilling lives.

For international law experts the linkages between human rights and technologies seem pretty obvious, but for specialists in other fields it is not that evident. Scholars tend to focus in one field, and for that reason, to find interdisciplinary research in this area is very difficult. At UPEACE we consider that the new global agenda provides the necessary elements to study how the uses of current **technologies**, and the development of new ones, can contribute to guarantee and protect human rights. Thus, this book is a compilation of studies from all over the world that pretends to start the discussion and promote interdisciplinary research on this matter.



University for Peace

