

GENDER AND ICT IN EAST AND WEST AFRICA FOR SUSTAINABLE DEVELOPMENT GOALS: A COMPARATIVE STUDY

Prof Shikha Vyas-Doorgapersad

Department of Public Management and Governance, Faculty of Management
University of Johannesburg
Republic of South Africa
Telephone: +27 11 559 4720/ Email: svyas-doorgapersad@uj.ac.za

Dr A. Kithatu-Kiwekete

Post-Doctoral Research Fellow
Department of Public Management and Governance, Faculty of Management
University of Johannesburg
Republic of South Africa
Telephone: +27 72 210 9615/ Email: angelita.kithatu@gmail.com

ABSTRACT

In 2015, the global community, via the United Nations, adopted the Sustainable Development Goals (SDG) to provide strategic direction towards the elimination of global poverty, safeguarding the environment and ensuring improved levels of wellbeing for all. The transition from the previous international goals offers the opportunity to emphasize and engage with gendered concerns, that is, the nexus should propel the agenda for gender. Specific questions are raised to determine whether gender and information and communication technologies (ICT) work towards the SDG. How can gender and ICT contribute to the SDG narrative, particularly in East and West Africa? These issues are analysed through a desktop review, using case studies, country reports, national, regional and continental policies. The findings reveal that inroads have been made to promote gender equality in ICT but these must be scaled up under the new dispensation of SDG. With this in mind, policy recommendations for improvement are offered.

Keywords: *Africa; gender; gender equality; development; information and communication technologies; sustainable development goals.*

JEL Classification: Z00

INTRODUCTION

Although it is said that access to and use of the internet can boost women's income and increase their sense of empowerment and equity, there are still some women who are not aware of the internet and its benefits, and others who simply do not have the know-how or technical skills. Despite the increase in internet use in recent years, there are still over four billion of the world's population who do not have access to the worldwide web, the majority of whom are women (Global Information Society Watch, 2013: 16). This article utilises the Mainstreaming Gender Equality (MGE) approach, commonly referred to as gender mainstreaming. The approach originated in 1995 during the Fourth United Nations Conference on Women held in Beijing, China. Gender mainstreaming "ensures that all gender issues are addressed and integrated at all levels of society, politics, and programmes" (cited in Nhlapo & Vyas-Doorgapersad, 2016: 169). In this article, the Mainstream Gender Equality approach aims to work towards creating equal opportunities in the ICT sector in East and West African countries. Following a multidisciplinary research perspective, the authors conducted a thorough literature survey, document analysis, and desktop review of the complex realities of gender equality in ICT covering East and West African countries.

GENDER AND ICT IN AFRICA

Globally, various factors contribute towards the disparity in the use of ICT, notably factors such as "income, education and literacy levels, race, ethnicity and gender" (Huyer & Sikoska, 2003:2). As Akomolafe and Adegun (2013: 1) put it, ICT have opened up a myriad of new prospects, bringing "employment opportunities" for women. However, Gurusurthy (2004: 1) argue that "patterns of gender segregation are being reproduced in the information economy" with men still holding the "majority of high-skilled, high value-added jobs, whereas women are concentrated in the low-skilled, lower value-added jobs". She adds that "work in call centres perpetuates the devaluation of women's labour, and organisations in the information technology sector" and that as in other sectors, "reward

behaviour is [often] considered masculine” (Gurumurthy, 2004: 1). The literature review on the gender-based digital divide in the ICT sector confirms that employment in this sector often shows evidence of gender norms and inequalities (Gender Tool Box, 2015: 1).

In most African countries, compared to those in other parts of the world, the use of ICT, such as those necessary to provide e-government services, is minimal. The continent was once labelled a technological desert. The contributing factors, among others, are a lack of infrastructure, low literacy rates, slow economic development, and a variety of cultural factors (Rorissa & Demissie, 2010: 1). However, in order to meet the demands of sustainable development goals, a new initiative – eTransform Africa – has been launched by the World Bank and the African Development Bank, with the support of the African Union (AU). According to the report, the aim is to identify “best practice in the use of ICT in key sectors of the African economy”. Under the theme ‘Transformation-Ready’, there is progress in the use of ICT to in sectors such as agriculture, climate change adaptation, education, financial services, government services and health (World Bank, 2012: 2–3).

ICT are not gender-neutral – they are not accessed, managed and controlled by men and women equally. As a result, men and women experience different benefits and effects of ICT at all levels, a point highlighted by many studies on ICT and gender since the early 1990s (United Nations Development Programme, 2008: 7–8). At the Fourth World Conference on Women in 1995, participants reflected on the issue of ICT and gender, and these were addressed in formal conference papers and non-governmental forums. Likewise, at the World Summit on Information Society (WSIS) in 2003 and 2005, women explicitly addressed the issue of the use of ICT for governance and their involvement in such forms of governance (Hijab & Raúl Zambrano 2008: 10). However, Hijab and Raúl Zambrano (2008: 10) emphasise that “both these events demonstrated the need for more work, particularly in the areas of policy, capacity development and governance mechanisms, to help catalyse social and political change in this field”.

GENDER AND ICT IN WEST AND EAST AFRICA

A desktop study was conducted by Vyas-Doorgpersad in 2014 and the author reviewed the literature to examine the correlation between gender and ICT in West African countries. The author explained (2014: 408) that “these countries

have faced the ordeals of conflict, war, and dictatorship. In order to bring peace and enhance development, the United Nations Security Council Resolution 1325 was adopted in 2000". In terms of this resolution there was significant involvement of women in social restructuring. This feminist reform led to the establishment of the Women in Peace-building Network (WIPNET) throughout West Africa. The author also consulted the official documents of the United Nations Economic Commission for Africa, specifically those of the Sub-Regional Office for West Africa for 2012, and emphasised that the "Economic Commission of West African States (ECOWAS) confirms the cross-cutting nature of gender [and in] a major move to provide the necessary structures and frameworks for gender mainstreaming, ECOWAS established a Gender Development Centre in 2003" (UN Economic Commission for Africa Sub-Regional Office, West Africa, cited in Vyas-Doorgapersad, 2014: 408). Furthermore, the success of this initiative led to the formation of the Women Peace and Security Network-Africa (WIPSEN-Africa) in 2006. These concerted efforts, in turn, led to the adoption of a gender policy document to mainstream gender in the sub-region and empower women.

Turning to East Africa, this article confirms that countries in the region face similar challenges. According to All Africa Global Media (2016: 1), the most demanding of these is the issue of peace and security: "Civil strife and political instability in Burundi, South Sudan and Somalia continue to impact negatively on the security and economic performance of the region". Mc Fadden (2011: 1) argues that the role of women can be significant in conflict resolution and social transformation and this was indeed acknowledged at the 7th African Regional Ministerial Conference on Women, held in Addis Ababa in October 2004. However, at this conference it was concluded that although "African governments continue to commit to international instruments promoting and protecting women's rights, ... there has been a lack of effective implementation at the national level"(Hersi & Akatsa-Bukachi 2016: 1). Burundi, Kenya, Rwanda, Tanzania and Uganda form part of the East African Community (EAC). Article 5 (3e) of the EAC statement of intent emphasises "the mainstreaming of gender in all its endeavours and the enhancement of the role of women in cultural, social, political, economic and technological development" (Hersi & Akatsa-Bukachi 2016: 1). A Gender and Community Development Committee has been formed to monitor the implementation of this objective. In addition, the Eastern African Sub-Regional Support Initiative for the Advancement of Women (EASSI), has initiated a project entitled "Towards an East African Declaration on Gender

Equality (EADGE)” (Hersi & Akatsa-Bukachi 2016: 1). This resulted in the formulation of a Gender Protocol for the East African region and is awaiting adoption by EAC’s partner states. The status of gender and ICT in West and East African countries is shown in Box 1 below.

Box 1: Gender and ICT in West and East African Countries: A Comparative Scenario

Gender and ICT in West Africa¹

***Benin:** The reason for lack of gender involvement in the information and technology sector is the shortage of educational resources.

***Burkina Faso:** The Internet users polled were mainly men (68.7%) (Fall, 2007:7).

***Côte d’Ivoire, Ghana and Senegal:** Women are not only excluded from equal social and economic opportunities but also from the benefits offered by ICT – including access to new technologies and from a place within the information society (Fraser-Moleketi & Senghor, Undated: 25).

***Republic of Gambia:** Inequalities have led to the exclusion of women and girls from participating actively in the development process of the country. Overall, gender responsiveness in Gambia is low (Ministry of Finance and Economic Affairs, 2012: 112).

***Guinea:** Women represent less than 10 per cent of the Internet users (United Nations Conference on Trade and Development: Information Economy Report, 2006: 169).

***Liberia:** Men serve as the model for organizing societal information and communication technology (ICT) and the role of women in facilitating social, political and economic development (Republic of Liberia, Agenda for Transformation: Steps towards Liberia’s Rising, 2030 (Undated: 126).

***Mauritania:** Women have only one chance in three (less than men) of benefiting from the African information society in Mauritania (Biztech Africa, 2012).

***Nigeria:** There are no libraries or information centres in rural areas (Jorge, 2002).

***Sierra Leone:** ICT infrastructure is in dire need of reform (World Bank, 2005).

***Togo:** There is no official ICT policy in Togo (Agyeman-Duah 2007: 4)

Source: Vyas-Doorgapersad, 2014: 409–410.

Gender and ICT in East Africa

***Botswana:** There are no explicit references to gender equality or women’s empowerment in the national ICT policy (Isaacs, 2007a: 7).

***Ethiopia and Malawi:** There are at least six gender-based constraints to women’s use of ICT: Literacy and education; language; domestic responsibilities and therefore lack of time; geographical location of facilities; poor content; and sociocultural norms (Geldof, 2011: 4).

***Kenya:** Women, who constitute more than half of the population, continue to lag behind in their use of technology. There is an increasing number of women who are unable to benefit from Kenya’s development (World Wide Web Foundation, 2016: 1).

***Swaziland:** No explicit mention is made of gender equality and women’s empowerment with

reference to ICT in Swaziland (Isaacs, 2007b: 7).

***Madagascar:** There are no explicit references to gender equality and/or women's empowerment through the use of ICT in Madagascar (World Bank, 2007: 7)

***Mozambique:** It is true that the rural population as a whole is largely excluded from ICT, and that women have less access than men. This is mainly due to the high illiteracy rate among rural women, but it is also partly due to cultural values that consign technology and innovative initiatives to men's sphere of influence (Van den Bergh-Collier, 2007: 59).

***Sudan:** Female participation in public life in general (including education) and in the workforce in particular, remains fairly low due to long-standing cultural factors and traditions (Hamdy, 2007: 8)

***Tanzania:** There are no studies as yet which identify the information needs of women in Tanzania and whether women are able to access ICT (Kayoka, 2005: 7).

***Uganda:** Existing gender structures have been dented. Although patriarchy is stressed, the adoption of technologies such as mobile phones have led to transformation of gender relations to some extent. However, although underlying gender structures have been fractured, the beneficial impact of ICT remains limited (Madanda, 2010: 1).

***Zambia:** Users of ICT are found largely in the urban areas of Zambia and are mostly men. Due to a lack of gender disaggregated data, it is difficult to state how many women are Internet or mobile phone subscribers or indeed users, but it is generally agreed that the greater number is biased towards men (Wakunuma, 2006: 418).

***Zimbabwe:** The National Gender Policy acknowledges that there is a need to bring women up to the same level as men in terms of access to ICT, but no current or comparative statistics are available on the use of ICT by men or women in Zimbabwe. This information is crucial in addressing the gendered digital divide (Jena, 2015: 1).

These findings point to the conclusion that in both East and West African regions, women are not given equal access to ICT. There are important limiting factors such as income, education and social position that play a major role in explaining ICT access and usage. When men and women share similar backgrounds (education and income, for example) men have more opportunities to gain access to ICT (Gillwald, Milek & Stork, 2010: 33). Even where efforts are made to enable rural populations to partake in the information revolution, the social digital divide persists. Many of these limiting factors are linked to cultural issues that marginalize women into domesticity, thus limiting their mobility and exposure. (Wamala, 2012: 8). Given that many of the people in both East and West African regions adhere to traditional "patriarchal, hegemonic, and hierarchical practices, where men have more advantages than women and where inequality between genders seems to be the norm" (Wakunuma, 2006: 418), there are "gender relations, gender roles, and power relations between men and women ...[which] have a bearing on the diffusion and adoption of computing and mobile telephony" and other facets of ICT (Madanda, 2010:1). It must also be considered, as

emphasised by Buskens and Webb (2009: 207), that “the relationship between women, their empowerment and the use of ICT in Africa is complex; there are no simple summaries or solutions”. Women’s access to and use of ICT cannot be understood in isolation from their gender positions and identities and how these ... interact with their political-economic situation”. Buskens and Webb (2009: 207) stress that “women’s struggles to overcome the limitations of their positions and identities through the use of ICT” and their victories in this regard, have to be understood in this context.

POLICY RECOMMENDATIONS FOR EAST AND WEST AFRICA

The new global development agenda has promised to “address many of the shortcomings of the MDG by drawing “attention to a variegated set of concerns” and more importantly, “key structural constraints that hold back women’s enjoyment of their rights” (Razavi, 2016: 26, 27). The SDG (United Nations Development Programme, 2017) also have gender equality as an important “standalone goal”. However, it remains to be seen whether the implementation of the SDG will go “beyond what has been the consensus position for decades” (Razavi, 2016: 27). There is only one SDG that addresses the eradication of gender discrimination in the ICT sector. Gender equality (SDG 5), points to the empowerment of women through the use of ICT as a target to be realised, hence complements a development narrative that remains hierarchical and top-down. The narrative requires the adoption of global commitments that are then added to the regional development agenda which in turn feed into national development goals and policies that should eventually address gender discrimination. The evidence provided above shows that the preceding MDG regional policies have not been compelling enough in persuading African states to develop gender policies – nor has the potential of ICT to empower women been fully explored by most of the countries in Africa. The continent is in a position to create, foster and maintain a progressive, economic and social political order. It is imperative that the change be made: failure to do so will ensure the final collapse of many already failing states. The reflections above on Eastern and Western Africa illustrate the real danger in that ICT does not promote the empowerment of women for a majority of Sub-Saharan countries. This is despite a continental gender machinery that holds the interests of the African woman dear. The African Union gender architecture should provide a basis on which the empowerment of women can be enhanced through ICT. The pillars that inform Africa’s development priorities

include efforts to promote gender equality in the ICT sector. Enhancing technological capacities requires that there be improved access in the development and ownership of ICT with African women playing a more meaningful role. This should in turn assist women to realise their practical, strategic and reproductive roles in society. To reinforce the rhetoric on eradicating gender discrimination in the global arena requires a radical and comprehensive shift. Sandler and Rao (2012) propose three strategies that can be adopted simultaneously to address gender discrimination for the post-2015 development agenda. These strategies are checked against the continent's gender and ICT discourse to illustrate that the empowerment of women and gender equality cannot be solely addressed by the adoption and implementation of international instruments. Admittedly the global commitment offers a critical foundation but this is often deficient in dealing with the diverse and complex African context that is still heavily influenced by the Anglophone, Francophone and Lusophone connections to the West. This triple approach encompasses symbiotic, interstitial and ruptural transformations and these can be viewed as an innovative alternative to mainstreaming gender into ICT.

Symbiotic transformations require that the empowerment of women should occur concurrently with problem solving of issues for dominant categories and classes in society. Here, gender equality should be used as an ideal to transform communities. A more comprehensive "view of gender equality as it intersects with class, race, neoliberal economic models and the politics of North-South agenda setting", should be developed. It should include the adoption of "flexible strategies" to reconfigure a nuanced form of gender equality "that is intersectional, contextual, and location specific". This is a high priority for the new development agenda (Sandler & Rao, 2015: 553). The use of ICT can enhance the understanding of gender relations and roles. The increasing influence and use of mobile technology in Africa is an example of this tendency. M-Pesa is an ICT tool widely in use in Eastern Africa and has been instrumental in enlarging the scope and use of mobile phones. Furthermore, the innovative and flexible use of this ICT in the banking industry has had a profoundly positive impact in the banking patterns of rural communities and the labour force at large; many of these people were previously excluded by the formal banking sector. Anecdotal evidence of symbiotic transformations is presented by White (2012) who found that while M-Pesa improved the ability of the women in the fishing industry to send and receive money through M-Pesa and meet their practical needs, the local fishermen that these women traded with were paid regularly and in turn were able

to expand their fishing businesses as a result. The second strategy is the use of interstitial transformations for eradicating gender discrimination by “building empowerment in niches, spaces and margins of society where it does not pose an immediate threat to dominant elites” and thereafter “cultivating ‘win’ seeds,” transferring and planting them “in new areas encouraging them to grow in strength and influence” (Sandler & Rao, 2012: 555). Ndiaye (2013) concludes that M-Pesa increases the empowerment of rural women in the following key areas: the new acquisition of skills; an increase in the independent control of cash; and the capacity to voice needs that M-Pesa can solve, such as ordering and paying for goods across the country. To provide the multiplier for this innovative mobile tool it can be used in different spaces for grassroots mobilisation of human and women’s rights. Sanya (2013) explores how mobile technology could be utilised for “documenting and circulating of African women’s realities and stories”. This ICT tool, she argues, could have been used to mobilise a campaign advocating for women’s participation in Kenya’s constitution drafting process. This strategy will also involve the use of transformational leadership as change agents to harness the potential of ICT in enhancing gender equality and the empowerment of women. Women who have been instrumental in making inroads for gender equality could take on the role of change agents. Furthermore, it is important to re-engineer “personal and private spaces” as well as bureaucracies in the drive to deliver on commitment to women’s rights for two reasons: to “create reflective spaces allowing individuals in institutions to experience the kin of personal transformation that gives way to institutional change”, and to make organisations realise the need to “address discriminatory practices and values” that “inhibit them from achieving their goals (Sandler & Rao, 2012: 555, 556). The final and most radical strategy involves ruptural transformations which will need to “abandon processes and jargon” that have often permeated work on gender equality and have “unnecessarily bifurcated and created hierarchies” (Sandler & Rao, 2012: 559). Closer scrutiny of policies and the implementation of gender and ICT can reveal shortcomings of present processes and policies that hamper gender equality. This has been the case where the gains for women in local communities have been very limited despite the resources directed for gender and ICT. The country-wide provision of ICT in urban schools limits the number of rural schoolgirls who benefit from the use of technologies while also isolating rural illiterate women whose literacy could be enhanced through ICT.

It is the role of the different local organisations to adopt a bottom-up approach to enhance gender equality in and through ICT given the radical and rapid rise in the

alternative mobile use that is flourishing in the continent despite the limited infrastructure available to boost a formal economy. Instead the informal economy has harnessed innovation in ICT and made inroads for gender equality. This substantiates the Mainstream Gender Equality approach that aims to create equal opportunities for both men and women in the ICT sector.

CONCLUSION

The African Union's declared Common Africa Position in its post-2015 development agenda reiterates an imperative to eradicate gender discrimination in all aspects of life including ICT. This article finds that present policies are insufficient in addressing the empowerment of women in the ICT sector in East and West Africa. Furthermore, the current absence of national gender policies has a hampering effect at the country level. The article proposes that a new alternative SDG dispensation must be reconstructed at the local level and that this should challenge and address deeply-rooted norms and cultures that limit gains for gender equality and the empowerment of women. A place must be provided to integrate present policies and those that need restructuring while at the same time celebrating and replicating wins across the diverse African landscape for gender equality.

Notes

1. These findings were previously published in 2014. They have been summarised and given here in brief to draw a comparative analysis between West and East African countries. The work from which they are taken is acknowledged in fully in the references.

References

African Union (2014), Common Africa Position: On the Post-2015 Development Agenda, Addis Ababa: African Union.

Agyeman-Duahl, Osei (2007), *ICT in Education in Togo: Survey of ICT and Education in Africa: Togo Country Report*, http://www.infodev.org/infodev-files/resource/InfodevDocuments_433.pdf [Accessed 28.11.2016].

Akomolafe, Comfort O. and Olajire A. Adegun (2013), *Promoting ICT Opportunities for Women Empowerment in Nigeria: Issues and Strategies*, <http://oasis.col.org/handle/11599/2031> [Accessed 02.05.2017].

All Africa Global Media (2016), *East Africa: A Year of Multiple Challenges for EAC*, <http://allafrica.com/stories/201601042629.html> [Accessed 15.12.2016].

BiztechAfrica (2012), *Gender ICT Divide Worsens in Senegal*, <http://www.biztechafrika.com/article/gender-ict-divide-worsens-senegal/4873/#.Ut0OzuKxUdU> [Accessed 17.11.2016].

Buskens, Ineke and Anne Webb (2009), *African Women and ICTs: Investigating Technology, Gender and Empowerment*, Ottawa: International Development Research Centre.

Fall, Babacar (2007), *ICT in Education in Burkino Faso*, http://www.infodev.org/infodev-files/resource/InfodevDocuments_388.pdf [Accessed 26.08.2013].

Fraser-Moleketi, Geraldine and Diana Senghor (Undated), *E-governance and Citizen Participation in West Africa: Challenges and Opportunities*, New York: UNDP in collaboration with PIWA-West Africa.

Geldof, Marije (2011), *Gendered ICT Use among Youths in Ethiopia and Malawi*, <http://itidjournal.org/itid/article/viewFile/792/333> [Accessed 27.11.2016].

Gender Tool Box (2015), *Gender and ICT*, <http://www.sida.se/contentassets/3a820dbd152f4fca98bacde8a8101e15/gender-and-ict.pdf> [Accessed 23.12.2016].

Gillwald, Alison, Anne Milek and Christoph Stork (2010), *Towards Evidence-based ICT Policy and Regulation Gender Assessment of ICT Access and Usage in*

Africa, <https://idl-bnc.idrc.ca/dspace/bitstream/10625/44152/1/130564.pdf>
[Accessed 29.09.2016].

Global Information Society Watch (2013), *Human Rights, Gender and ICTS*,
https://www.giswatch.org/sites/default/files/accesing_infrastructure_gisw13.pdf
[Accessed 12.09.2016].

Gurumurthy, Anita (2004), *Gender and ICTs: Overview Report*,
<http://www.bdigital.unal.edu.co/51434/1/1858648408.pdf> [Accessed 24.12.2016].

Hamdy, Amr. 2007. *Survey of ICT and Education in Africa: Sudan Country Report: ICT in Education in Sudan*. https://www.infodev.org/infodev-files/resource/InfodevDocuments_430.pdf [Accessed 27.05.2013].

Hijab, Nadia and Raul Zambrano (2008), *Gender Responsive E-governance: Exploring the Transformative Potential*, New York: United Nations Development Programme.

Hersi, Ali and Marren Akatsa-Bukachi (2016), *Tracking Gender Equality Commitments in the East African Community*,
<http://www.sidint.net/content/tracking-gender-equality-commitments-east-african-community> [Accessed 04.01.2017].

Huyer, Sophia and Tatjana Sikoska (2003), *Overcoming the Gender Digital Divide: Understand ICTs and their Potential for the Empowerment of Women*,
<http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SHS/pdf/Overcoming-Gender-Digital-Divide.pdf> [Accessed 12.01.2017].

Isaacs, Shafika (2007a), *Survey of ICT and Education in Africa: Botswana Country Report: ICT in Education in Botswana*,
<http://documents.worldbank.org/curated/en/354071468012950544/pdf/464100BR10Box31na010ICTed0Survey111.pdf> [Accessed 25.04.2016].

Isaacs, Shafika (2007b), *Survey of ICT and Education in Africa: Swaziland Country Report: ICT in Education in Swaziland*, http://www.infodev.org/infodev-files/resource/InfodevDocuments_431.pdf [Accessed 25.04.2016].

Jena, Daphne (2015), *How Can We Make it Happen For Women in ICTs?*, <http://herzimbabwe.co.zw/2015/03/how-can-we-make-it-happen-for-women-in-icts/> [Accessed 11.01.2017].

Jorge, Sonia (2002), The Economics of ICT: Challenges and Practical Strategies of ICT Use for Women's Economic Empowerment. Paper presented at the "Information and communication technologies and their impact on and use as an instrument for the advancement and empowerment of women", Seoul, Republic of Korea, 11 to 14 November 2002.

Kayoka, Charles Mustapha (2005), Ministry of Community Development Gender and Children: Women's Information Centre. Report of the Proceedings of the Workshop on the Role of Information in Women's Empowerment, Held at The Courtyard Hotel, Dar-Es-Salaam, 1 to 3 June 2005.

Madanda, Aramanzan (2010), Gender Relations and ICT Adoption in Contemporary Uganda: A Case of Computers and Mobile Telephones, Uganda: Makerere University.

McFadden, Patricia (2011), *Contemporary African Feminism: Conceptual Challenges and Transformational Prospects*, <http://www.osisa.org/buwa/womens-rights/regional/contemporary-african-feminism-conceptual-challenges-and-transformational> [Accessed 26.10.2016].

Ndiaye, Oumy Khairy (2013), Is the Success of M-Pesa Empowering Kenyan Rural Women? *Feminist Africa*, Issue 18, December, pp. 156–161.

Nhlapo, Tsholo M.S. and Shikha Vyas-Doorgapersad (2016), Human Resource Provisioning Strategy for Gender Equality within the Department of Correctional Services: The Case of Groenpunt Management Area, *Administratio Publica*, Vol. 24, No. 3, pp. 166–182.

Razavi, Shahra (2016), The 2030 Agenda: Challenges of Implementation to Attain Gender Equality and Women's Rights, *Gender & Development*, Vol. 24, No. 1, pp. 25–46.

Rorissa, Abebe and Dawit Demissie (2010), *An Analysis of African e-Government Service Websites*, www.elsevier.com/locate/govinf [Accessed 13.12.2016].

Sandler, Joanne and Aruna Rao (2012), *The Elephant in the Room and the Dragons at the Gate: Strategising for Gender Equality in the 21st Century*, *Gender & Development*, Vol. 20, No. 3, pp. 547–562.

Sanya, Brenda Nyandiko (2013), *Disrupting Patriarchy: An Examination of the Role of Technologies in Rural Kenya*, *Feminist Africa*, Issue 18, December, pp. 12–24.

The Republic of the Gambia (2012), *Programme for Accelerated Growth and Employment [PAGE] 2012- 2015*, Gambia: Ministry of Finance and Economic Affairs.

The Republic of Liberia (Undated), *Agenda for Transformation: Steps Towards Liberia Rising 2030*, <http://mof.gov.lr/doc/AfT%20document-%20April%2015,%202013.pdf> [Accessed 19.11.2013].

United Nations (2006), *UN Conference on Trade and Development: Information Economy Report*, http://unctad.org/en/docs/sdteecb20061ch3_en.pdf [Accessed 15.06.2016].

United Nations Development Programme (2008), *Gender Responsive E-governance: Exploring the Transformative Potential*, http://www.undp.org/content/dam/aplaws/publication/en/publications/womens-empowerment/primers-in-gender-and-democratic-governance-4/f_GenderGovPr_eG_Web.pdf [Accessed 23.07.2016].

United Nations Development Programme (2017), *Sustainable Development Goals*. <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html> [Accessed 02.05.2017].

Van den Bergh-Collier, Edda (2007), *A Profile on Gender Relations Update 2006: Towards Gender Equality in Mozambique*, http://www.sida.se/contentassets/80caaf7d1aaf48738b7b70386574b59e/towards-gender-equality-in-mozambique_693.pdf [Accessed 28.11.2016].

Vyas-Doorgapersad, Shikha (2014), Gender, ICT and Millennium Development Goals for Sustainable Development in West Africa, *Mediterranean Journal of Social Sciences*, Vol .5, No. 21, pp. 405–412.

Wakunuma, Kutoma Jacqueline (2006), *Gender and ICTs in Zambia*, <http://www.irma-international.org/viewtitle/12770/> [Accessed 23.11.2013].

Wamala, Caroline (2012), *Empowering Women Through ICT*, Stockholm: Spider – The Swedish Program for ICT in Developing Regions.

White, Danielle (2012), *The Social and Economic Impact of M-Pesa on the Lives of Women in the Fishing Industry on Lake Victoria*. Independent Study Project (ISP) Collection, Paper 1246, <http://digitalcollections.sit.edu/isp.collection/1246> [Accessed 09.01.2017].

World Bank (2005), Republic of Sierra Leone (Joint IDA-IMF Staff Advisory Note) on the Poverty Reduction Strategy Paper, Washington, DC: World Bank.

World Bank (2007), *Survey of ICT and Education in Africa: Madagascar Country Report: ICT in Education in Madagascar*, <http://documents.worldbank.org/curated/en/293081468271510875/pdf/463800BRIOBox31ar010ICTed0Survey111.pdf> [Accessed 28.09.2015].

World Bank (2012), *E-Transform Africa: The Transformational Use of Information and Communication Technologies in Africa*, <http://siteresources.worldbank.org/EXTINFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/282822-1346223280837/Summary.pdf> [Accessed 24.06.2016].

World Wide Web Foundation (2016), *We Must Ensure Women aren't Left Behind in Kenya's 2030 Vision*, <http://webfoundation.org/2015/10/we-must-ensure-women-arent-left-behind-in-kenyas-2030-vision/> [Accessed 28.12.2016].