Safeguarding a Woman's Right to Education and Water in Africa

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The rights to both water and education have been repeatedly codified and reaffirmed in international law as absolute, regardless of present circumstance. As climate change repeatedly threatens the everyday lives of people across the globe, both the right to water and the right to education are becoming increasingly more challenging to actualize. It is women who stand to lose the most from these developments; it is women who disproportionately complete household tasks in rural communities, and it is young women whose education will be most severely impacted if these homemaking responsibilities continue to increase as a result of climate change. In this paper, I will explore the extent to which Sub-Saharan African nations are prepared to protect women's education in the face of climate change. I will do this through two case studies in rural Ghana and South Africa, first by exploring the guidance of international law and each nation's domestic law on these topics and then contrasting this to present conditions on the ground. I have found that the legal framework needed to protect this right to education exists even in the face climate change, but in practice these rights are not manifesting. Understanding the influence that culture plays on this reality, I will advocate for alternative ways of providing quality education for young women outside of the formal realm, namely in the form of vocational training.

A Framework in International Law on Gender and Education

There has been substantial documentation connecting the increased labor responsibilities of children, specifically young females, and a lack of education attainment (Johnson 2003:2-3; Canagarajah & Nielsen 2001:71-91; Webbink 2015: 84-98). There is also significant work published highlighting the exacerbating effect climate change has on the demand for additional labor in the world's poorest regions (Houser 2015: 67-74; Moseley 2016: 21; Jessoe et al. 2018: 230-261). Despite these trends, which are driven by climate change, both domestic and international law protect an absolute right to both clean water and education.

The right to water developed alongside the vast human rights advocacy being undertaken in the 1960's and 70's. Beginning in 1977, the Action Plan from the Mar del Plata Water Conference established that all peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs" (Mar del Plata Resolution II 1977). Frameworks such as the International Covenant on Economic, Social and Cultural Rights, which both Ghana and South Africa have signed and ratified, protect equality, establishing "the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions" (Article 11, 1966). This is further codified in the Convention on the Elimination of All Forms of Discrimination Against Women, whose article 14(2)(h) states that, "parties shall take all appropriate measures to eliminate discrimination against women in rural areas in order to ensure, that they… (h) Enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communication" (Article 14(2)(h) 1979). Ghana and South Africa have signed and ratified this agreement also. A "right to water" was further acknowledged in United Nations General Assembly (GA) 64/292 which acknowledged such a right, reflecting the GA understanding of water's essentiality to all other human rights (United Nations General Assembly Resolution 64/292 2010). Despite this, only 27% of Ghanaians have access to safe and potable water, compared to about 71% in South Africa (Cheng 2013: 7;Water: a Shared Responsibility: 502).

This sense that water is a multiplier for access to all other human rights is shared by the right to education, which also stakes its claim as a provider of additional access to rights (UNESCO 1974: Guiding Principles). Indeed, extensive legal framework exist advancing a right to education regardless of gender. Article 26.2 of the Universal Declaration of Human Rights advocates for education without gendered discrimination (UNHR 26.2), and principle 7 of the Declaration of the Rights of Child of 1959 echoes a similar sentiment (Declaration of the Rights of Child Principle 7). This is reaffirmed by the United Nations Educational, Scientific and Cultural Organization's (UNESCO) Convention Against Discrimination in Education, to which South Africa is a party, and the Convention on Elimination of All Forms of Discrimination Against Women's Declaration, which both Ghana and South Africa have ratified, and which builds on UNESCO's work on the subject. The repeated codification of this norm, such as in the 1990 Education for All Declaration guarantees, "Every person – child, youth and adult – shall be able to benefit from educational opportunities designed to meet their basic learning needs" (Education for All Article 1).

These two rights, however, are at odds with each other, specifically in rural settings. As climate change creates a more arduous water collection process, fewer women are participating in education. While both laws protect absolutely young women's rights to water and education, in practice it is becoming more and more challenging to see both rights manifesting concurrently (Sur 2004: 255-274). Studies have shown that in South Africa, young girls find it difficult to focus in school because they are fatigued from household labor responsibilities (Graham et al. 2016: 3). Some students lack the privilege to even attend school as full-time students; as many as 1/3 of all school attending girls in Ghana arrive late to class because of their household duties, an even greater percentage of school age girls will never even begin a formal education (Graham et al. 2016: 3). While in theory, international law has sought to, and to some extent has succeeded in, increasing female education worldwide, it is clear that further local guidance will be needed in order for both rights to manifest, especially in rural environments such as within Ghana and South Africa.

An Application of Domestic Policy

Ghana

Since the end of colonization, Ghana has taken a number of domestic steps to shape its educational system. The Accelerated Development Plan for Education, which occurred in 1952 under colonial rule, aimed at providing fee-free primary education and significantly increasing enrollment (Thompson and Casely-Hayford 2008: 8). Access to free education was expanded substantially after colonization ended under the Education Act of 1961, in which Section 2.1 recognized the right of all children to attend school. Turmoil within the country in 1966 put a halt on many educational improvements. Ghana's educational structure relies on a long duration of pre-tertiary education, a system that is most detrimental for rural households, whose children are vital to the economy (MacBeath 2010: 10-15). The 1987 Educational Act shifted the system to prioritize primary education, shortening the period of time students spend in higher levels of education (Educational Act 1987). Article 12 of Ghana's constitution affirms the basic rights and freedoms of all people regardless of gender, which have later been expanded to include education through legislation on a domestic level (Ghana Constitution: Article 12). To a certain extent, these policies have been successful, as access to education for all children in Ghana fares far better than many other nations, both developed and developing, across the world. In practice however, local culture and custom has restricted access to essential educational opportunities for girls in rural areas, relegating them to traditional homemaking roles.

South Africa

The history of educational legal protection in South Africa has been driven by the segregations imposed by apartheid. At the fall of the apartheid government and the rewriting of the nation's constitution, particular care was taken to include a basic right to education which applies to all within South Africa's borders, not only citizens (Chapter 2, No. 108; FAO Report 2012). Beyond the constitution, additional policy has been passed to reinforce access to education across the nation. The South African Schools Act (SASA) of 1996 sought to ensure that all students have access to education without discrimination (SASA: Section 3). This act was amended by the Education Laws Amendment Act of 2005, which ensures that schools in poverty-stricken areas are free to attend (Laws Amendment Act of 2005). Additionally, a number of different reviews of student enrollment and retention have been conducted by the government in South Africa. As in Ghana, from a legal lens, education across the country is accessible to individuals

of all genders, but similar to Ghana, local custom has served to create gendered disparities in educational level.

Understanding Present Conditions

Ghana

Despite the existence of robust domestic and international law, many gaps still exist on the ground for rural women worldwide. Education is often seen as a great equalizer, a way to promote wellbeing and lift the impoverished. Education systems across the African continent generally are failing in rural environments. These systems have been shaped by a rocky colonial past, are underfunded, and are often seen as non-necessary entities altogether (Akyeampong et. al 2007: 4). In Ghana, the modern education system draws from a history of incentives for all children to attend school, an initiative of colonial powers (Akyeampong et. al 2007: 4). Upon achieving independence, education continued to be a priority, with legislation such as the 1961 Education Act attempting to increase enrollment and reduce overall educational costs (Akyeampong et. al 2007: 12). Unfortunately, the programs struggled to maintain enrollment and achieve any form of universalization (Akyeampong et. al 2007: 12). In recent years, enrollment of children who are of primary school age has peaked around 90% but concerning trends about retention and educational quality remain (United Nations: The World's Women 2015: 83). Ghana has ranked in the bottom 20% consistently for gendered educational achievement; many girls will drop out of school at a very young age or never enroll in the first place (Global Gender Gap Report 2017: 10).

Much of this is likely driven by the culture present within the nation regarding gender. Family structures in Ghana tend to be strongly patriarchal, and women often lack power to make decisions within the family as a result (Baden 1994: 9-10). This is further exacerbated by the reality that partners traditionally do not combine their resources to become a family unit, which frequently leaves females, who often maintain homemaking roles, in a financially insecure position (Baden 1994: 5). This situation has been furthered by a startling trend of male out-migration from Ghana, leaving many females to balance both homemaking and professional responsibilities (Wrigley-Asante & Agandin 2015: 184-187). As a result, many women fall into what has been characterized as the "resource degradation poverty trap", a phenomenon in which individuals are unable to escape poverty because of low levels of human development and an inability to invest in income-building activities (Barrett 2008: 45-60). Substantial work in policy and practice has led to some improvements in gender parity within Ghana. Today, the country ranks only 72nd in the Gender Gap Report but ranks in the top twenty in economic participation for women (Gender Gap Report 2017: 10). Ghana's poor overall score is best explained by a lack of female empowerment within the labor force and a subsequent abundance of poverty nationwide (Cooke et. al 2016: 1-5). Education is also struggling to bridge the gender gap, as the dropout rate is substantially higher for females than it is for males, a product of female's role in informal community work (Nordensvard 2014: 278-286). In both case studies, educational disparities presently exist and are frequently tied to informal community roles young girls are culturally expected to assume.

South Africa

South Africa has similarly suffered from historical deficits within its educational system, stemming mostly from the apartheid regime. Prior to 1994 and the assumption of power by the African National Congress (ANC), education was segregated by race and was only required to be provided for white children (de Wet et. al 2009: 359-376). The period since 1994 has been marked by stark transitions and integrations of all children, regardless of race or gender, into the educational system. Many have argued that while access to education in South Africa has improved markedly, the quality of the education received is still lacking, driven primarily by poor school funding (Sapa 2015; Economist 2017). Likewise, as in Ghana, females are far less likely to be enrolled in school and far less likely to complete schooling than their male counterparts, especially in rural areas (Gender Gap Report 2017: 23).

Much like in the aforementioned example in Ghana, limited emphasis has historically been placed on these gender disparities, but this trend has improved over time. South Africa has been labeled as having limited traditions of gender equality, a society where women traditionally were labelled as weaker and in need of protection (Cock 1991: 150-170). However, in the 1980's, women across South Africa began a substantive movement for equality (Albertyn 2017: 47-80). Upon the success of the ANC, women demanded to be included in the creation of the new South

African government, and their voices were heard. With genesis of a post-Apartheid government in the early 1990's, and throughout the drafting of a constitution, women's rights were heavily recognized and protected (Albertyn 2017: 47-80). Today, South Africa ranks 19th in the world in gender parity and is one of the top nations in the world in women's health and survival (Gender Gap Report 2017: 10). Despite these triumphs, profound work remains to be achieved on economic participation for women, where South Africa ranks 89th in the world (Gender Gap Report 2017: 10). Poor performance in women's economic empowerment are likely linked both to education, where women are far less likely to be enrolled in higher education than men, and in the labor market, where women are far less likely to be employed than men and far more likely to live in poverty (The Status of Women in the South African Economy 2015: 9). Many of these statistics can be explained by cultural norms and expectations for women; women are traditionally seen as the homemaker and in almost all cases, are either partially or exclusively responsible for homemaking capabilities (Pretorius et al. 2015: 346-369).

The Role of Children in Climate Change

In rural settings in both Ghana and South Africa, and in many other nations across the world, children are expected to participate in house-making activities. These tasks are time consuming; often children must travel great distances to collect water or firewood for their family (Laird 2005: 457-466). In Ghana, it is estimated that the children in any given household spend over fifteen hours per week on household tasks (Stephens 2000: 29-47). These tasks often fall more squarely on the shoulders of girls. Similar expectations for women exist in rural South Africa. While access to formal education is generally equal across gender, due to cultural expectations, household labor generally falls harder again, on women. Indeed, it is women who have to travel the great distances to collect water in rural South Africa and Ghana (Augestad 2013: 135-152).

Culturally, there is a fear that formal education will make girls detest domestic work, and as a result, many young girls receive little to no formal education (Stephens 2000: 29-47). Instead, from a young age, girls are trained by elder females in welfare and household work (Laird 2005: 457-466) . The Constitutional Court of South Africa ruled in *Mazibuko and Others v. City of Johannesburg* that while piped water is plentiful for the wealthy and businesses, rural villagers, especially women, "spent hours laboriously collecting their daily water supply" (Mazibuko and Others v. City of Johannesburg 2009). Even in cases where clean water exists nearby, long lines and hours of waiting face women waiting to collect water (Augestad 2013: 135-152). This diverts time and energy away from other valuable tasks, especially among children. This trend is likely to continue; traditionally boys are favored for education over girls because families see their education as a greater return on investment (Appleton et al. 1996: 313; Herz, Subbrarao, Habi, & Raney 1991: 21). Björkman-Nyqvist conducted a study in rural Africa and has found in a case study in Uganda that in cases of water shortage, a decrease in rainfall (relative to average local rainfall) by 15 percent results in 118 fewer female students in grade 7, while the same drop had no effect on male enrollment (Björkman-Nyqvist 2013: 237-253). She believes that this result can be extrapolated to the nearby nations with similar conditions (Björkman-Nyqvist 2013: 237-253).

The conditions in Ghana and South Africa are similar to those in Uganda, where decreased rainfall has already led to substantial water shortages. According to UNAID's projections, Ghana will likely see a 1.4-5.8 C increase in temperature by 2080, and will see 4% less rainfall, and South Africa is also likely to see decreased precipitation and increased temperatures of a similar magnitude (USAID 2016a). In Ghana, hydration patterns are becoming more extreme, shifting from severe flooding to crippling drought (Kabo-bah 2018: 64). Studies conducted by the Council for the Scientific and Industrial Research Water Research Institute have indicated that Ghana will likely be a water stressed country by 2025 (Kankam-Yeboah et al. 2011: 65-69). A similar situation is unfolding in South Africa, where about 20% of the rural population lacks access to a reliable water supply (UN Water 2006: 519). The World Resources Institute has projected based on a business-as-usual projection of the possible effects of water shortage that South Africa will be extremely water stressed by 2040 (Maddocks et al. 2015). As groundwater becomes increasingly scarce, water collectors will have to travel further and further to reach a reliable source of drinking water, exposing them to numerous risks (Paul 2016). Climate change will reduce low income individual's access to livelihood assets, their path to economic growth and increase food scarcity (Brainard et al. 2009: 1-9). Preliminary studies by Burke, Hsiang, and Miguel (2015: 1-6) of Stanford University indicate that South Africa will see a 66% decline in its GDP per capita and Ghana will see a 90% decline in its GDP per capita by 2100. Droughts have

become more common across Africa but have had the greatest impact in Western Africa (Seneviratne et al. 2012: 109-230). Simultaneously, Cape Town in South Africa has come increasingly close to its day zero mark, a period marked by daily water rations for the residents, which is an indication of the severity of the water scarcity (McKenzie and Swails 2018). In order to prevent trends similar to what Björkman-Nyqvist finds in Uganda, domestic policy and international law must be better utilized to prevent these gendered gaps from furthering. It is clear that in the short-term, policy must better reflect the needs on the ground.

Policy Recommendations

While all the appropriate protections exist in both international and domestic law in both Ghana and South Africa, in practice, females are disproportionately burdened when the need for additional household labor exists. Driven by local culture, women are frequently removed from schools to join their parents in domestic work. As climate change continues to increase the need for household labor, more girls will likely be pulled away from their educational pursuits, in favor of homemaking roles. However, the conclusion that this is in fact a negative outcome hinges on the assumption that formal education is in fact the best use of time for young females. This assumption, in many rural settings, is antithetical to local practices.

Education has undeniable benefits for women who are able to participate and achieve certain thresholds of academic attainment. Education of women in rural settings increases economic fulfillment, increases the likelihood of family health, should the woman choose to have children, and decreases illiteracy (Floro & Wolf 1990: 12). There are also generally under-researched links between women's academic achievement and their agricultural productivity, a task that is exceptionally important to many rural African women (Baden 1994: 4-10). Education of women in this generation also has been shown to produce many future generations of educated women, as norms of female education slowly begin to develop within communities (Floro & Wolf 1990: 12).

It is equally important however, to realize that this understanding of academic importance does not apply to families that struggle with daily survival. In some of the most rural, impoverished regions of Ghana and South Africa, household members are needed to perform basic household tasks as a means of survival, not as a means of familial preference (Blackden et al. 2007: 2). Formal educational statistics also fail to account for homeschooled students, an often more viable alternative to local public schools. Between travel times to and from school as well as changing daily and seasonal needs for child labor, homeschooling can often provide another option for education of rural children (Moore 2002: 28). Similarly, vocational training outside of the formal educational realm can also help the economic attainment of both girls and boys. In rural settings, vocational and household skills might serve to be more economically productive in the short run than devoting years to formal education.

Perhaps the solution to continuing education in the face of climate change lies in these many forms of education occurring outside the formal setting. Continued investment in vocational training for children, focusing on relevant skills to the local community, such as farming, could allow for more efficient and more profitable work for future generations of rural communities (Hamilton and Asiedu 1987: 338-355). Additionally, this funding could be used to provide valuable education on sustainable agricultural practices, serving to further mitigate future impacts of climate change (Ghenai 2012: 27-38). Taking this education outside of the formal realm provides flexibility for school age children to help support their families but also allows them to receive relevant education. In tandem with existing primary educational institutions, which could attain a universal basic education level, vocational training could capture a share of students who otherwise would drop out of, or never enter, school. There is a growing consensus that children's education across Africa should serve to prepare them for the realities of the world that awaits them (Hamilton and Asiedu 1987: 338-355). Despite this, substantial gaps between this consensus and current practice exist.

Concerns regarding this proposed policy would likely stem from the financial concerns, specifically if funds were to be moved from existing institutions to allow further investment in these vocational programs. To the greatest extent possible, all avenues of higher education in the formal setting should be left available to those who desire to attain it. However, these schools remain very liberal arts oriented, and often fail to provide solid vocational training (Hamilton and Asiedu 1987: 338-355). Incentives for institutions should be considered at a per pupil basis, regardless of the

type of program, formal or vocational. In the interim developing phases for these nations' rural areas, an increase in vocational emphasis and on informal education could serve to improve the lives of many (Atchoarena et al. 2002: 25). This immediate balance between short-term child labor and education should not take away from existing long-term frameworks which promote the universalization of formal education in both nations. Additionally, continued efforts should be made to combat climate change, so as to steady the increasing need for child labor in these nations, to allow access to basic resources, and to decrease the rampant problems caused by out-migration (Singh et al. 2015: 212-220). As these consequences are actualized less and less, there will be less of a need for female labor as a means of survival and more freedom for females to join the labor force as willing participants.

Conclusion

Climate change stands to touch every aspect of the daily lives of all. In rural communities, existing vulnerable populations will be the most impacted by these changes (Private Meeting 1, 2018). Policy must continue to evolve to ensure that education and basic standards of living can be met concurrently under existing and future global conditions. Both international law and domestic law in Ghana and South Africa are equipped to protect these basic rights and a right to education but in practice, the shifts needed to attain both simultaneously have not yet fully occurred. Understanding the need for a local approach, one that prioritizes local culture and custom, will allow for the integration of policy into everyday life. Lengthy formal education is currently not the ideal investment in light of the increasing difficulties rural communities face. In a fight for day-to-day survival against climate change, shortened and highly vocational educational programs will help to ensure that those who stand to lose the most, particularly women, will not fall further behind.

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