CHAPTER 10

Challenges and Solutions for Gender Mainstreaming and Gender Integration in Research and Development

Ruth Mendum,1* Ana Maria Paez2 and Mary Njenga2,3

1 Office of International Programs, College of Agricultural Sciences, The Pennsylvania State University, 106 Agricultural Administration Building, University Park, PA 16802, USA
2 World Agroforestry Centre (ICRAF), P.O. Box 30677-00100, Nairobi, Kenya
3 Wangari Maathai Institute for Peace and Environmental Studies, University of Nairobi, Kenya, P.O. Box 30197-00100, Nairobi, Kenya

* Corresponding author, e-mail: mmm22@psu.edu

10.1 Introduction

There is an increasingly wider consensus that gender inequalities worldwide in agriculture and natural resource management are critical barriers to establishing robust food and nutrition security and poverty reduction. While there is commitment for inclusion at the policy level, implementation in both research projects and grassroots conditions remains complex. Even the definitions of equality vary substantially between cultures, nations and individuals. The purpose of this document has been to concretely demonstrate that the expansion and improvement of energy access in sub-Saharan Africa can provide a vehicle for expanding the economic, cultural and personal opportunities for women and girls. At the same time, by providing men and women with the chance to improve a central component of their lives – the production and use of energy products – the case studies described here show that expanding energy access and sustainability creates circumstances in which women’s contributions benefit all community members rather than becoming a zero-sum game in which women and girls benefit at the expense of men.

Gender mainstreaming is a term commonly used in the development community to discuss the process of bringing the concerns and experiences of women and men into development policies and programs for action aimed at achieving gender equality; as such the needs of women and men can be valued and favored equally (UN Women 2014). The term is perhaps unfortunate in that it implies that women and concern for gender have been excluded from the mainstream of social life. At the same time, it does indicate that while women and other marginal groups may in fact have developed subcultures around their limited arenas of responsibility, the well-being of home and family, for example, they have been precluded from participation in wider realms of engagement. In the case of home energy use, we see an area where men and women sometimes play highly restricted and codified roles. In some countries for example, women do all of the cooking in the home while men cook in restaurants where they are paid. As a result, as these case studies demonstrate, sharing technological innovations for home cooking, for example making briquettes from recycled waste or providing improved cooking devices, brings development professionals and researchers into social
contexts where traditional norms and gender expectations may be deeply entrenched. Using a new fuel or new cooking devices may require changes that touch on social practices that reach back beyond human memory. It is thus important to understand that the normative practices in some places and communities, the ‘mainstream’ if you will, may resist equality and an end to what from the global perspective may look like or be, discrimination.

Gender integration in development projects requires thoughtful planning, staffing and resourcing. It involves developing an understanding of the gender-based constraints and opportunities that could limit or facilitate a project’s desired changes, i.e. how will anticipated activities and their outcomes affect women and men differently, and how will the different roles and status of women and men affect the work to be undertaken. However, the real challenge is that one has to decide how much social change one thinks is possible or desired by the existing clients, being careful not to negatively disrupt their social conditions. In the development context one hears reference to gender-responsive projects in contrast to gender-transformative approaches. Although this is a contested arena, it is arguably the case that both individuals and communities may be more or less receptive to even a conversation about the roles that men and women may currently occupy, much less what kinds of social change may be acceptable. Gender-related differences in participation in agricultural production, natural resource management, household decision-making, marketing and food consumption need to be understood in the context of underlying sociocultural norms. Men and women’s experiences, expectations, needs and knowledge can be strongly influenced by these norms. In turn, their capacity to take advantage of income opportunities, new technologies or services will be impacted. Initiatives that fail to recognize the inherent differences and social inequalities that exist between men and women, and which are often complexity intertwined with clan mores, ethnicity, age and other modes of social differentiation, risk reinforcing such inequalities, and the sustainability of any development outcomes (FAO 2013; GEF 2017; IFAD 2012; CGIAR 2011).

Further, ‘men’ and ‘women’ are not consistent categories and one of the benefits of gender integration is that unnecessarily constraining norms can be replaced with a desire to utilize each person for her/his talents and interests. As described in the case studies on briquette enterprises by Sanivation in Kenya and Green Heat in Uganda in this document, sales skills by women in cooking energy, a domain they well understand, are being applied for enhanced demand and profits. It is necessary to tailor approaches and methods to the needs, priorities and interests of different social groups including women and men of different ages and socioeconomic, ethnic or religious backgrounds.

Most importantly, gender mainstreaming should, at its core, facilitate critical awareness of traditional gender roles that impede the equitable achievement of benefits for both men and women. In a recent study that builds on a sample of 700,000 people across the world, Fisher and Naidoo (2016) concluded that households headed by males have on average 13% more asset wealth than their female counterparts, and on average own an astonishing 303% more land. One general mechanism underlying the patterns that have been observed is that in many areas in developing countries, women lack the rights, knowledge or capital to secure their land and asset inheritance after being widowed, and such events can have a long-term impact on livelihood opportunities (Cooper and Bird 2012; McPeak and Doss 2006). As such, gender inequality in these regions is entrenched in the cultural, political and market systems that operate at household, community and national levels (Deere and Leon 2003; Vijaya et al. 2014).

10.2 The Challenges of Gender Integration

Many critics refer to how gender mainstreaming has been operationalized to serve the purpose of international development agendas not necessarily concerned with equality issues (Mukhopadhyay 2014). Others refer to how the loose adoption and adaptation of gender mainstreaming concepts have led to pervasive popularizations of notions such as women being less corrupt than men, images of women as being more environmentally conscious or inherently peaceful, generating myths that only serve to obscure the complexity of men and women’s lives and the interaction of gender issues with class or age (Cornwall et al. 2007).

Feminists and advocates for gender equality have observed a growing divide between gender debates and feminist theory, and the way gender mainstreaming is put into practice on the ground (Cornwall et al. 2007). Beneficial collaborative approaches for example, involve men and boys in discussions around women’s empowerment and gender equality, or involve tools that reach within the household dynamics bringing to light gender inequalities in the day-to-day activities of the household and the family, and foster discussions around how these inequalities contribute to their disadvantaged situation.

Efforts that meaningfully address gender inequalities among smallholder farmers and community-based organizations recognize that targeting and involving women only, does not automatically lead to more or equitable benefits. Even less it guarantee the sustainability of potential benefits and changes. Gender analysis needs to look beyond disparities between men and women, as these are the symptoms of a more fundamental problem that is rooted on traditional norms and attitudes about what it means to be a woman or a man in a given community.

In cases where a high level of conflict exists between individuals or subgroups, one of a development professional’s challenges is determining an achievable goal as opposed to striving for ideal conditions that may fuel backlash.
10.3 Considerations for Moving Forward

The different case studies presented in this document focus on energy innovations and the ways in which women’s participation can enhance community well-being. The cases portray examples of ways in which different organizations, both public and private, have tried to engage women across the energy value chain. Some initiatives have enabled increased participation of women in income-generating opportunities, such as the selling and marketing of briquettes. Others have increased women’s access to training and information, either to be able to participate in energy-associated businesses or to better demand and decide what kind of energy sources are most suited for them and their needs. Some initiatives also strengthened collective action through their work with women’s networks and community groups.

All these initiatives have the potential to increase women’s bargaining power, both in the community and within their households, that could provide them with more active participation in decision-making over their lives and those of their households. This is, however, not a straightforward process and it is influenced by the same gender relations and their entrenched power distribution that constrained women’s access to those opportunities in the first place. Women may have access to more income but assumptions (norms) regarding their role in the household might limit their ability to retain control over that income. Similarly, time burdens and domestic responsibilities may limit how far women can travel to work and the type of work they can undertake (Gammage et al. 2016).

Gender relations however are not static because they involve a constant process of negotiation and renegotiation that can render positive transformations. In this context, increased bargaining power is key, but it also requires acknowledgment of the negative effects of traditional gender norms by both men and women, engaging men in the discussions about gender, fostering intrahousehold collaboration and engaging in dialogue with community leaders, government and private sectors involved in the energy value chain.

10.4 Examples of Challenges Faced by Researchers in the Eastern and Southern Africa (ESAf) Region vis-à-vis Gender Integration and Solutions to Address Them

10.4.1 Gender integration challenges faced by researchers

To identify some practical challenges that researchers face in integrating gender in their work, an online survey via e-mail was carried out on August 3, 2018 among ICRAF researchers working in the ESAf region. The survey was mailed to 39 people who were asked to identify two priority challenges, ranked by severity, that they faced in integrating gender into their research in development work and possible solutions to address each of them. Responses were received from five male and five female researchers. Analysis of the responses indicated that culture and mindset were most important (Figure 10.1). These findings tend to support the argument presented earlier that researchers and practitioners desiring innovative and inclusive solutions to agricultural and natural resource challenges need to understand the local social cultural norms that define differences and inequalities between men and women. Culture, for example, defines women and men’s participation in meetings where women are passive and find it hard to express themselves in the presence of men. Likewise, young people’s participation is browbeaten by the presence of older people. From a cultural perspective, women believe that their views do not hold the same weight as those of men. In fact, some women prefer to air their views through men which negatively affects their contribution to research and development (RED). In order to conform to cultural beliefs and tendencies they prefer to give responses that are biased, hence it is difficult to divine the truth about issues. If women’s views and needs are not effectively communicated and interpreted this hinders their effective empowerment and development of appropriate technology. The need for proper understanding of women’s needs and perceptions is critical in the development of appropriate cooking systems as discussed in the case on the gasifier cooking system in Kenya.

The cultural expectation that women should give birth at a certain age, take care of families and carry out family maintenance roles inhibits their full participation in gaining formal education. A study in rural areas of Chongwe District in Zambia revealed disparities between boys’ and girls’ education caused by high drop-out rates among girls at both primary and secondary schools (Mwanza 2015). Girls, for example, failed to continue with their education due to domestic chores, early marriages or becoming pregnant. The resulting low formal education among women was the second most critical challenge affecting gender integration. This cultural expectation on women’s contribution to bearing children at a specific age, for example, adversely affects women’s advancement in higher education among the staff of the Green Heat briquette-producing company. Most final decisions regarding resources such as land management rest with men and this is also linked to culture. Knowledge and skills on improvement of resources, such as those concerned with cooking energy, are held by women but decisions on changes such as the installation of a biodigester or planting of trees on farms are made by men. The men’s power in decision-making even includes disposal of women’s earned income, a factor that inhibits women’s development and leads low growth of to waste in energy enterprises as funds are diverted to other uses by the husbands.
Limited knowledge about gender and the inherent misconception that gender is designed to favor or support women only among the beneficiaries and researchers was among the top three challenges affecting gender integration in R&D among the interviewed scientists. This is linked to ineffective interaction between communities and researchers and ineffective data collection on gender issues as scientists may not have the necessary skills to carry out gender-related work. The lower number of female researchers compared to men was another limitation. Due to the lower representation of women in teams of researchers, the views of women participants may be stifled and not entirely captured as women are more liberal in disclosing information to other women.

Disproportionate numbers of women participants at training events was another challenge to gender integration identified by the researchers. This was associated with ineffective skills’ transfer to women, especially in activities mainly carried out by women, and a possible cause for low adoption of technologies. Low attendance rates by women at training events could be due to the triple burden roles they play in reproductive work (e.g. domestic chores and care giving to children and adults), productive work (salaried or informal work) and other community-related work.

### 10.4.2 Possible solutions to addressing barriers in gender integration

**Awareness-raising:** The researchers proposed points of action to enhance gender interaction including: raising awareness about the importance of recognizing every individual perspective and recognizing and respecting holistic participation in order to overcome cultural barriers and achieve sustainable development (Table 10.1). In this way men will be supportive of the initiatives directed at women and youth empowerment as opposed to feeling alienated. Cultural barriers could also be overcome through the use of compatible and appropriate research tools and approaches in data collection, training events and communication. As recommended by Mwanza (2015), there is a need to address negative attitudes and cultural beliefs that hinder the education of female children in order to encourage the full participation of girls in schools.

**Capacity development:** Low education of women and low involvement of women in leadership at the community level could be addressed through deliberate policies that promote education for all with effective reinforcement systems and training on leadership skills. Increasing women’s formal education levels at the community level will enhance their capacity resulting in active participation in development, leadership

---

**FIGURE 10.1. PRIORITY CHALLENGES FACED IN GENDER INTEGRATION IN R&D IN THE ESAF REGION.**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women’s burden with domestic roles</td>
<td>0</td>
</tr>
<tr>
<td>Land and tree tenure</td>
<td>20</td>
</tr>
<tr>
<td>Most household decision-making is by men</td>
<td>40</td>
</tr>
<tr>
<td>Less women in leadership</td>
<td>60</td>
</tr>
<tr>
<td>Disproportionate number of women researchers compared to men</td>
<td>80</td>
</tr>
<tr>
<td>Challenge in correct identification of household decision-maker</td>
<td></td>
</tr>
<tr>
<td>Disproportionate number of women compared to men attending trainings</td>
<td></td>
</tr>
<tr>
<td>Limited knowledge/expertise in gender and misconception that gender is designed to favor women</td>
<td></td>
</tr>
<tr>
<td>Women’s low formal education</td>
<td></td>
</tr>
<tr>
<td>Culture and mindset</td>
<td>100</td>
</tr>
</tbody>
</table>
### TABLE 10.1. PROPOSED SOLUTIONS TO ADDRESS THE CHALLENGES IN GENDER INTEGRATION IN R&D.

<table>
<thead>
<tr>
<th>Challenges in gender integration in R&amp;D</th>
<th>Solutions to address barriers in effective gender integration in R&amp;D</th>
</tr>
</thead>
</table>
| Culture and mindset                     | • General awareness raising on the importance of gender integration and women's involvement to overcome cultural barriers;  
• Capacity development for women, e.g. in decision-making to overcome cultural barriers;  
• Use of appropriate gender-responsive tools and approaches in data collection, training events and communication;  
• Exposure for women through exchange visits;  
• Effectively addressing cultural practices that adversely affect women; and  
• Church and local leaders to play a role in promoting women's involvement in development including addressing cultural barriers unfriendly to women. |
| Women's low formal education            | • General policies on education with effective reinforcement systems; and  
• Increased opportunities for formal education for women. |
| Limited knowledge/expertise in gender and misconception that gender is designed to favor women | • Capacity development among scientists on gender integration especially in the design of gender-responsive projects and research methods such as collection of gender-disaggregated data; and  
• Raising awareness on the role of gender integration in development among community members. |
| Disproportionate number of women compared to men attending training events | • Deliberate efforts and incentives as well as support mechanisms that encourage women's participation in training events. |
| Challenges in correct identification of household decision-makers | • Raising awareness on the role of gender integration in R&D among community members. |
| Disproportionate numbers of women researchers compared to men | • Capacity development and training of more women scientists and their placement in strategic institutions. |
| Fewer women in leadership positions     | • Capacity development among women on leadership. |
| Most household decision-making is by men | • Women’s empowerment on income generation in activities they are already involved in. Sensitization of men and women on issues around gender equality within the household. |
| Land and tree tenure                   | • There is a need for community sensitization on the need for women's involvement in decision-making; and  
• Changes in policy for recognition of women's rights on land and tree resources. |
| Women's burden with domestic roles     | • Systematic assistance for women and girls who already have children to ensure that parenthood does not preclude participation in education and other activities; and  
• Raising awareness on the effects of numerous children in a family compared to resource endowment and increased access to family planning information and methods. |
and entrepreneurship. Capacity development for scientists, especially in the design of gender-responsive projects and collection of gender-disaggregated data, was proposed as a way to enhance their skills in gender integration. The low number of women scientists could be addressed through special programs to encourage women to pursue science-oriented careers and put in place mechanisms and incentives that encourage their appointment in R&D institutions upon completion of their studies. The outcome of the capacity development for women in energy-based entrepreneurship as presented in the case study by wPOWER showed positive results where women took leadership in businesses as well as awareness raising at the grassroots level on environmental management.

**Active participation of women:** Awareness raising about the role of gender in development and capacity development was suggested as a way to improve women’s active participation such as speaking at meetings and taking leadership roles. There is also a need for women’s awareness raising and education on programs that are friendly to their way of carrying out business. For example, the case study about the investment environment in waste-to-energy businesses in Kenya found that women were intimidated by the application procedures for sourcing funds from banks or donors. The recommendations included educating women about mobile money through systems such as Mpesa where they can borrow money through their phones for their business. Mpesa is a mobile phone-based money transfer, financing and microfinancing service launched and operational in Kenya since 2007.

**Improved decision-making capacity for women:** Men’s involvement in initiatives that are designed to improve women’s decision-making would result in men’s support of the process which then avoids alienating them. Awareness raising among men and women including local and church leaders on gender and cultural issues that undermine women’s decision-making power is also important. In the case study on briquettes by Green Heat in Uganda, management involved the husbands of the women sales agents in training events so that they could address the problem of the men diverting income from the briquette business. This approach agrees with the proposals made in this chapter that involvement of men and boys in discussions around women’s empowerment and gender equality is promising for transformative change. It is widely documented in previous gender-related studies that commercialization can change gender roles within the farm household, often resulting in a lower share of the income being controlled by women (Chiputwa and Qaim 2016). Chiputwa and Qaim (2016) suggest that loss of female control can be prevented and even reversed when measures to promote gender equity are integrated into market-linkage initiatives.

### 10.5 References