




# Gender in climate change, agriculture, and natural resource policies: insights from East Africa

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## Abstract

Gender mainstreaming was acknowledged as an indispensable strategy for achieving gender equality at the 1995 Beijing Platform for Action. Since then, governments have made substantial efforts in developing gender-responsive policies and implementation strategies. The advent of climate change and its effects, which have continued to impact rural livelihoods and especially food security, demands that gender mainstreaming efforts are accelerated. Effective gender mainstreaming requires that gender is sufficiently integrated in policies, development plans, and implementation strategies, supported by budgetary allocations. This study analyzes the extent of gender integration in agricultural and natural resource policies in Uganda and Tanzania, and how gender is budgeted for in implementation plans at district and lower governance levels. A total of 155 policy documents, development plans, and annual action plans from national, district, and sub-county/ward levels were reviewed. In addition, district and sub-county budgets for four consecutive financial years from 2012/2013 to 2015/2016 were analyzed for gender allocations. Results show that whereas there is increasing gender responsiveness in both countries, (i) gender issues are still interpreted as “women issues,” (ii) there is disharmony in gender mainstreaming across governance levels, (iii) budgeting for gender is not yet fully embraced by governments, (iii) allocations to gender at sub-national level remain inconsistently low with sharp differences between estimated and actual budgets, and (iv) gender activities do not address any structural inequalities. We propose approaches that increase capacity to develop and execute gender-responsive policies, implementation plans, and budgets.

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## 1 Introduction

Gender mainstreaming has been acknowledged as a global strategy for achieving gender equality since the 1995 Beijing platform for Action where governments were required to promote an active and visible policy for its implementation. In response to this appeal and to an increasing emphasis on women's empowerment, mainstreaming gender in policies took root in both development institutions and national policy (Parpart 2014).

Mainstreaming gender in policy is a key step towards gender equality, which is important for economic and social development and improves other development outcomes, e.g., increasing women's access to productive resources, improving health and nutrition, and increasing agricultural productivity gains, among other things (AfDB 2013). The impacts of climate change, which have affected various sectors but notably the agricultural sector (Cebrian Calvo and McGlade 2007), differ among the various social groups, including women and men (Nelson 2010; Nhamo 2014). Sociocultural and gender norms, the gender division of labor and differing levels of access to productive resources and cash, not only make women more vulnerable but also affect women's ability to respond and adapt to climate impacts and shocks (Alston 2014). Cultural norms related to gender roles can limit the ability of women to respond to or make quick decisions in the face of climate events. In the case of flooding, for example, the type of clothes that women wear or their responsibilities in caring for small children may restrict their ability to run or climb to avoid the danger (Neumayer and Plümper 2007). Also, the livelihoods and workload of rural women, both paid and unpaid, which are more directly affected by natural disasters, environmental degradation, and deforestation (Jahan 2008), are intensified by male outmigration to urban areas for employment (Paris et al. 2009). In some households where men are working off-farm in cities, women may also lack the power to make timely farming decisions or to convince their husbands to agree to new practices (World Bank et al. 2015; Habtezion 2016).

Thus, policy to build agricultural resilience in the face of climate change and its impacts should integrate an understanding of gender differences in capacity, needs, and priorities, to ensure successful implementation of adaptation actions. Since 1995, governments and development organizations have moved forward on developing guidelines, frameworks, and modules to guide gender mainstreaming in policies, development strategies, and programs (Parpart 2014). After close to three decades of using gender mainstreaming as a means of attaining gender equality, feminists, scholars, and practitioners are involved in debates of whether the strategy has been successful or not (Moser and Moser 2005; Rao and Kelleher 2005). These debates have motivated assessments of the effectiveness of gender policies (Krizsan and Lombardo 2013) and gender mainstreaming in policies, programs, projects, and institutions to ascertain extent of integration and impact of the strategy (Waal 2006; Nhamo 2014).

The literature shows that policies and practices designed to address and shape mitigation and adaptation strategies to date have largely failed to incorporate gender mainstreaming (Dankelman 2010; Alston 2013, 2014; Bob and Babugura 2014; Perez et al. 2015; Huyer 2016). Failure of policies to make reference to gender, and programs and projects to address gender inequalities have been highlighted as potential constraints to the successful and sustainable implementation of climate change mitigation and adaptation measures (Mubila et al. 2011; Tafur et al. 2015). Alston (2014) has argued that gender mainstreaming is essential to ensure that climate policies and programs are comprehensive, but cautions that the scientific and technological approach of institutional gender mainstreaming responses has often led to a lack of attention to social outcomes in general. Her view is that gender mainstreaming of

policy and programs should be complemented by the design of women-targeted policy to ensure that women are supported to act on their own behalf. The relation of mainstreaming climate and agriculture policies, strategies, or action plans with gender is one evolving approach that is gaining attention (IUCN 2011; Huyer 2016).

Uganda and Tanzania are among the East African countries that have developed gender mainstreaming strategies, and applied them to integrate gender issues in sectoral policies and programs (MCDGC 2012; Kusambiza 2013). Although Nhamo (2014) states that most of the newly formulated climate change policies and strategies within the different East African countries have integrated women to some degree, others find that gaps still exist (Acosta et al. 2016; Ampaire et al. 2016). Studies from Europe (Allwood 2014), the Caribbean (Tandon, 2012), and Nigeria (Ogunlela and Mukhtar 2009) also confirm that some climate change and agricultural policies and strategies are still gender blind. Gender inequalities are the major factors that have increased women's vulnerability to climate change, compared to men (Mignaqui 2016). From a global perspective, Otzelberger (2014) explains that although most governments have signed international agreements to have gender mainstreamed in their policies, climate change policies and actions have been evolving independently of these agreements, and the national gender policies have remained separate rather than being coherently integrated. A recent review of inclusion of gender in INDCs and other climate policy instruments such as NAMAs and NAPs (see Huyer 2016) reinforces this, noting that policy coherence and coordination across ministries is an important step for gender mainstreaming of climate policy at the national level. Therefore, there is need to understand why, more than 30 years after the Beijing platform for action, gender mainstreaming is not yet producing positive results in terms of addressing gender inequalities both in policy and practice, particularly in Uganda and Tanzania.

### 1.1 Gender budgeting: a necessary step in gender mainstreaming

Disappointment with the less than hoped for results of the gender mainstreaming approach over the last 30 years is partly attributed to a gap between policy and its implementation, lack of institutional commitment and leadership, and resistance to gender mainstreaming (Parpart 2014). One response has been the promotion of gender budgeting, based on the assumption that gender mainstreaming in policies requires the allocation of dedicated resources to implement stipulated gender activities within policy and program implementation, and the monitoring of gender results (Budlender 2014).

Gender-responsive budgeting<sup>1</sup> has been increasingly adopted as a tool to support gender mainstreaming in national policies (Budlender 2005). For example, the Green Climate Fund (GCF), which is the operating entity of UNFCCC's financial mechanism, takes a gender-sensitive approach while funding climate change adaptation and mitigation initiatives (Schalatek and Burns 2013). Since most national climate change initiatives obtain climate change finance from GCF, this has further motivated gender mainstreaming in climate change policies and programs at domestic levels (Budlender 2014). However, although governments in developing countries have endeavored to formulate gender-responsive budgets, their implementation has been constrained by (i) lack of

<sup>1</sup> Gender-responsive budgeting is a method to determine the extent to which government expenditure has detracted from or come nearer to the goal of gender equality. A gender-responsive budget is not a separate budget for women, but a tool that analyzes budget allocations, public spending, and taxation from a gender perspective and can be subsequently used to advocate for reallocation of budget line items to better respond to women's priorities as well as men's, making them, as the name suggests, gender-responsive. Source: UN Women

technical capacity in gender; (ii) lack of skills and expertise in planning, monitoring, and evaluation of budgets among those hired to implement GRB initiatives; (iii) limited or no resources allocated to gender activities; (iv) inadequate research and gender-disaggregated data; (v) negative cultural practices; and (vi) presence of gender-blind sectoral policies especially those that influence local development initiatives (Kusambiza 2013; Nepal 2016). An analysis of the 2013/14 Ministerial Policy Statement for the Ministry of Water and Environment by Budlender (2014) shows that Uganda lacks specificity on budget allocation since the budgeting guidelines focus on strategy and documents but ignore service delivery. For Tanzania, she observes that gender statements in the annual budget guidelines for 2013/14 and 2014/15 are vague, actor roles are not clear and more generally, the importance of gender is downplayed by placing it among cross-cutting issues.

## 1.2 Approaches used to assess gender mainstreaming and gender budgeting in policies

### 1.2.1 Assessing gender mainstreaming

Two main dimensions of empowerment have been used to analyze the quality of gender policies: autonomy and authority (Ferree and Gamson 2003). Authority, which is portrayed through providing decision-making power to the different groups, gives rise to the process analysis school of thought. Process analysis looks at policy formulation inquiring whether women's groups and practitioners participate at all stages of policy formulation or whether new (or amended) policies are more gender responsive<sup>2</sup> than the old ones. On the other hand, the autonomy dimension is the basis for the content analysis school of thought. The content analysis approach evaluates the content of policies in relation to representation or the extent to which women's concerns and interests are addressed. In the context of climate change and agriculture, and within a content analysis frame, Gumucio and Tafur Rueda (2015) developed a rubric to assess the degree to which climate change policies introduced gender issues in seven Latin American countries. The framework consisted of a five-degree grading system that depicts the extent to which gender issues were integrated in the policy document. However, it is worth noting that within the content analysis school of thought, the degree of gender integration in policy documents is not examined, but rather the analysis focuses on the gendered discourses used in the policies (see for example MacGregor 2010; Arora-Jonsson 2011). Some analysts propose instead a combination of content and process analysis, since the process of policy formulation affects the content of the policy (Krizsan and Lombardo 2013).

### 1.2.2 Analyzing gender budgeting

Budlender et al. (1998) enlists tools for analyzing gender budgeting that include (i) gender-aware policy appraisal; (ii) gender-disaggregated beneficiary assessments; (iii) gender-disaggregated public expenditure incidence analysis; (iv) gender-disaggregated tax incidence analysis; (v) gender-disaggregated analysis of the impact of the budget on time use; (vi) gender-aware medium-term economic policy framework; and (vii) gender-aware budget statement. The selection of suitable tools depends on availability of data, expertise, and time, although gender-aware appraisal has been the most adopted tool. Budlender (2002) developed

<sup>2</sup> Gender-responsive policies take into account gender norms, roles, and relations and include measures to reduce the harmful effects of gender norms, roles, and relations, including gender inequality (FAO 2014).

a five-step approach for carrying out the gender-aware appraisal: (i) analysis of the situation of women, men, girls, and boys in a given sector; (ii) assessment of the extent to which policies address the gendered situation; (iii) assessment as to whether budget allocations are adequate to implement gender-responsive policies; (iv) assessment of short-term outputs of expenditure, in order to evaluate how resources are actually spent, and policies and programs implemented; and (v) assessment of the long-term outcomes or impact expenditures might have. However, most of the gender budget analyses have based their assessment on the expenditure side rather than the revenue side of the budgets (Budlender and Hewitt 2003; Nallari and Griffith 2011; Combaz 2013; Budlender 2014). This is because the greatest proportion of resources for developing countries are from external resources (Budlender and Hewitt 2002), and sources of revenue are also not directly linked with expenditure lines (Budlender 2014).

## 2 Methodology

In this study, we focus on Uganda and Tanzania as two of the East African countries that have in recent years been involved in developing and implementing gender mainstreaming strategies in the agricultural sector. We also had access to policy documents based on the trust built with partners while implementing the Policy Action for Climate Change Adaptation initiative implemented by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

We limit ourselves to content analysis of policy documents and analyze the degree of gender integration in policies and the associated policy implementation budgets as a component of the policy analysis. Applying a framework developed by Gumuchio and Tafur Rueda (2015), we analyze the degree of gender mainstreaming in agri-food policies and use a modified gender-aware policy appraisal approach by Budlender (2002) to analyze gender activities and budgets. Additionally, policy stakeholder feedback meetings were conducted to allow stakeholders explain policy formulation, budgeting, and budget administration processes.

### 2.1 Policy documents reviewed

A total of 155 policy documents were reviewed, constituting agricultural, climate change and natural resource policies, development plans, implementation strategies, and action plans that we broadly refer to as agri-food policies.

For Uganda, 27 policy documents, 32 development plans, and 24 action plans were reviewed while for Tanzania, analogous categories included 28, 18, and 13, respectively. The documents were collected from three different levels of governance: national, district, and sub-county/wards (Table 1, supplementary material). Most documents were acquired from partnering government offices while a few national level policies were downloaded from official websites. The list of policy documents was validated and updated by collaborating government officials. The documents were assessed for degree of gender integration and how they characterized men and women.

### 2.2 Assessing gender integration in policy documents

Documents were reviewed for the integration of gender issues, following an adapted grading framework developed by Gumucio and Tafur Rueda (2015). Under this framework, the

documents that are gender blind are assigned grade 1. For those documents that incorporated gender, the extent of integration is assessed, and documents are graded from 2 to 5 (Table 1).

Documents were assigned grade 5 if they allocated any amount of financial resources to gender, that is, the amount allocated was not considered a criterion for grading.

### 2.3 Gender budget analysis

Budget documents for four consecutive financial years 2012/2013 to 2015/2016 were obtained from four districts in Uganda (Nwoya, Luwero, Mbale, and Rakai) and six districts in Tanzania (Kilolo, Kilosa, Gairo, Singida, Njombe, and Lushoto). For Uganda, three sub-counties were randomly selected from each of the districts from which more budget documents of the same financial years were obtained for analysis. We did not access budgets from wards in Tanzania because district planners explained that wards were not involved in “serious” planning; they submitted their hand-written priorities and sectoral budgets to the districts, which aggregated everything into the district development plan. In the analysis, the gender budget was aggregated from all sectors and reflected as a proportion of the overall district budget. We also scrutinized the specific gender activities to which a budget was committed and calculated the proportion of the gender budget spent on those activities.

In Tanzania, three levels of budget predictions were recorded by districts; forward budget estimates, which show future projections for two subsequent years, and which were revised each time an annual budget was developed. Annual budget estimates show a final budget developed for the next year, approved by the district leadership while the actual expenditure shows a proportion of the approved budget that was committed. In Uganda, both districts and sub-counties recorded estimated and actual budgets each year. The latter was used to calculate the proportions of the gender budget committed.

### 2.4 Feedback workshops: explaining results of the document review

The results from both gender mainstreaming and budget analysis were presented to district officials through participatory workshops. Participants included district and sub-county officials from production, natural resources/environment, community development, finance and planning departments, and politicians. Workshop participants helped to (i) corroborate the findings of the desk reviews, (ii) verify policy and budget documents used for sub-national level analysis, (iii) explain inconsistencies in the budgets and discuss context specific provisions and constraints for gender mainstreaming and budgeting, and (iv) identify strategies to improve gender responsiveness.

**Table 1** Grading of gender integration in policies, development, and action plans

Grade	Level of gender integration
Grade 1	No reference to gender in the document
Grade 2	Gender is mentioned only in the objectives or under cross-cutting issues
Grade 3	Gender is referenced throughout the document but without any clear implementation plan
Grade 4	Gender is mentioned throughout the document, with a clear implementation strategy but lacking allocation of financial resources
Grade 5	Gender is mentioned throughout the document, with a clear implementation strategy and allocation of some financial resources

### 3 Results

Polymaking and implementation processes happen in interlinked phases across governance levels. The results presented highlight mainly differences between study countries and across governance levels.

#### 3.1 Gender integration in policy documents: a comparison of countries and governance levels

Results show that 82% of the sampled national level policies in Uganda integrate gender. However, 33% of those integrating gender do not have implementation strategies, and 19% aggregate gender under the “cross-cutting issues” section (Fig. 1). In contrast, 65% of the district documents integrate gender and provide a budget for implementation although the trend is not replicated at sub-county level. Although 48% of the sampled sub-county documents have a clear implementation road map, 13% allocate a budget and close to half of the documents remain gender blind, implying that decisions at district level do not trickle down to sub-county level. Overall, district documents integrate gender more than national and sub-county level documents, signifying a lack of harmony in gender integration and budgeting across scale.

In Tanzania, 59% of national level policies integrate gender to some level but do not allocate implementation resources; 12% provide a clear roadmap for implementation; 29% remain gender blind; while 12% aggregate gender in the cross-cutting issues section or objectives. Most of the sampled district documents, and all documents sampled from the wards, were gender blind. The results suggest that in Tanzania gender is better integrated in national than in district policies while at the ward level, gender does not seem to be integrated in development plans. Thus, national level gender mainstreaming efforts are not replicated at lower levels.

#### 3.2 Extent of gender integration in policy documents

Table 2 presents key gender provisions and gaps for selected national level policies, strategies, and development plans. In this context, a gap means a shortfall of information, action, or

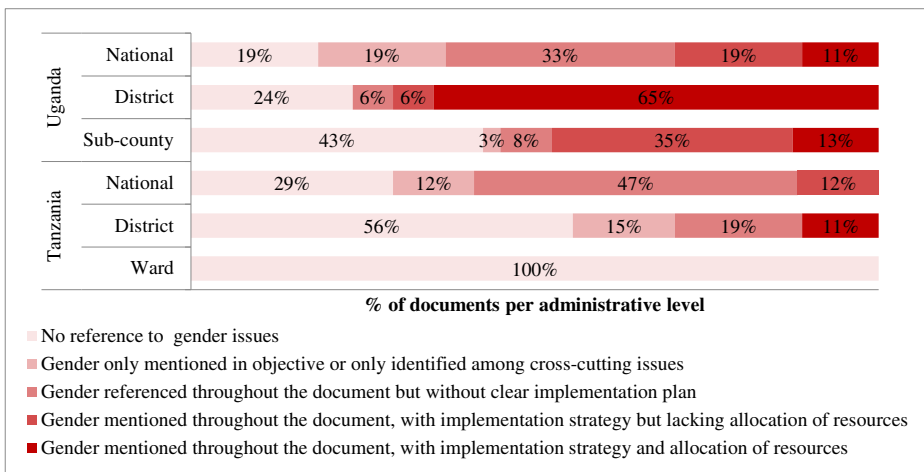


Fig. 1 Level of gender integration by administrative levels in Uganda and Tanzania

**Table 2** Gender integration in selected national policies in Tanzania and Uganda

Policy	Gender provision	Gender gaps
Tanzania		
Land Policy (1997)	Provides women with rights to inherit and acquire land	Does not legislate ownership of land between spouses; inheritance of land is governed by custom and tradition
National Environmental Policy (NEP) (1997)	Recognizes women as key players in natural resource management; acknowledges the need of addressing structural causes of inequality	Unclear strategies to address structural causes of gender inequality; except sections 43 and 44, all other policy sections are gender blind
Environmental Management Act (2004)	Mandates 30% of the members of the Environmental Management Boards to be women	Quota system limits the legally binding gender issues that the NEP claims need to be addressed
National Fisheries Sector Policy and Strategy Statement (1997)	Acknowledges the lack of appreciation of gender as a key constraint hindering the development of the sector, and advocates for women's empowerment	Proposed actions and strategies for the different fisheries sub-sectors are gender blind; relegates promoting gender to the NGO sector
National Forest Policy (1998)	Recognizes the need to design gender-sensitive extension forestry programs and the inclusion of women in forestry activities and decision-making processes	The role of men in forestry management is not acknowledged; relegates promoting gender and women empowerment to the NGO sector
National Water Policy (2002)	Gender equality is a specific target, gender adequately mainstreamed; emphasizes needs of youth	Lack of attention to structural constraints and their relation to gender inequalities in the water sector
National Agriculture Policy (2013)	Acknowledges "gender relations" as a key constraint; importance of youth's involvement in agriculture. Promotes gender equitable land tenure governance	Lack strategies for gender equitable land tenure governance; relegates gender to the gender ministry; roles of other ministries not clear
National Adaptation Plan of Action (NAPA) (2007)	Acknowledges a higher vulnerability of women and children to climate change (e.g., increased time burden due to longer distances needed to fetch water)	The proposed actions do not address identified gender constraints; gender responsiveness in climate change adaptation is not prioritized
National Climate Change Strategy (2012)	Acknowledges gender-differentiated vulnerabilities to climate change. Proposes strategies for gender integration of gender in programs and activities	Lacks consideration for gender structural constraints (e.g., land tenure)
National Climate Change Communication Strategy (2012–2017)	Presents a thematic area focused on gender; acknowledges the importance of indigenous and cultural beliefs	Does not include any gender output or outcome indicators in the monitoring and evaluation plan for the strategy
National Guidelines for Mainstreaming Gender into climate change Related Policies, Plans and Strategies (2012)	Acknowledges importance of equal decision-making, access to resources and knowledge; highlights roles of key ministries and institutions for gender mainstreaming	Women's vulnerability to climate change is overly highlighted, misses men's vulnerabilities; men and women presented as a dichotomy. Lacks a clear strategy for addressing gender issues
Guidelines for Integrating climate change Adaptation into National	Only recommends "gender" to be considered as a cross-cutting issue in all programs and policies	Lack strategies for integrating gender in sectoral policies, plans and



**Table 2** (continued)

Policy	Gender provision	Gender gaps
Sectoral Policies, Plans and Programmes of Tanzania (2012)		programs, and gender-sensitive CC adaptation interventions
Water Resources Mgt Strategic Interventions and Action Plan for CC Adaptation (2012)	Presents gender as a key cross-cutting adaptation issue; recognizes the need for gender responsiveness of climate change adaptation options for water resources management	Gender is in the cross-cutting issues section; no clear indication of the relevance of gender in the different aspects of water resources management
Tanzania Climate Smart Agriculture Programme (2015–2025)	No mention of gender	No mention of gender
Tanzania INDC 2015	No mention of gender	No mention of gender
Uganda Uganda National Climate Change Policy (NCCP) (2015)	Identify critical barriers that increase women's vulnerabilities, recommends attention to improve resilience of vulnerable groups with specific strategies	Lack of a plan that articulates how the policy will engage with other sectors to implement its gender-inclusive approach
National Draft Climate Change Costed Implement Strategy (2013)	Gender mainstreaming is a key strategy in addressing CC; promotes participation of men and women; recommends that gender and CC issues be integrated in education curriculum and training programs	No action plan is provided to implement gender activities; no specific budget for gender activities
The National Agriculture Policy (2013)	Mentions to achieve equity in agricultural growth through ensuring gender equity in implementing agricultural interventions	Lacks a plan on how gender will be integrated in policy interventions; does not consider gender structural barriers
The Uganda National Environmental Management Policy (1994)	Gender should be integrated in the environment management process. Proposes to work together with the Ministry of Gender, Labour and Social Development (MGLSD)	Not clear how the sector proposes to work with MGLSD; gender considerations not budgeted for and not part of the objectives to achieve in financial year 2014–2015
The Uganda National Environment Management Policy (2014) Fine draft	Recognizes gender imbalances in decision-making regarding natural resource use; suggests integration of gender in policies, education/training, and research	Lacks a gender integration strategy, action plan, and budget to operationalize gender integration; does not indicate actors and roles
The National Land Policy (2013)	Refers to legislation that provides for protection of women and children's rights to inherit and own land; provides a consent clause to protect children	The rights of the widow and divorcees are not tackled; policy does not provide means of improving legislation enforcement
The Uganda Forestry Policy (2001)	Recognizes gender-differentiated access to forest resources; encourages women and youth to increase their tenure security and actively participate in decision-making over forest resources	No action plan to ensure gender equity in access to and use of forest resources; tree planting act (2003) is gender blind. Policy is silent on actors, and does not address structural challenges to women and youth access
National Seed Policy (2016)	Recognizes role of the youth and women in the seed sub-sector; suggests promotion of gender	Does not lay down strategies that should be used to ensure

**Table 2** (continued)

Policy	Gender provision	Gender gaps
National Extension Policy (2016)	friendly technologies and interventions Recognizes that lack of gender responsiveness is a key constraint to effective extension delivery; gender-responsive operational procedures are to be operationalized by MAAIF	participation of women and the youth in the interventions Gender concerns not highlighted; measures to address constraints of women and youth not provided; technical capacity development in gender and youth was budgeted for at the directorate level only
Agriculture Sector Development Strategy and Investment Plan (2010)	Gender is shallowly highlighted among other cross-cutting issues; highlights women and youth constraints to participation in commercial agriculture	Lack measures to overcome the major constraints highlighted; no strategies to achieve gender equality in commercial agriculture
National Development Plan I (2010/11–2014/15)	Highlights different forms of gender discrimination; stipulates actions for promoting gender equality	Budget provided to operationalize projects but these were not gender responsive
National Development Plan II (2015/2016–2019/2020)	Recognizes the limited integration of gender in sectoral plans, programs, and projects and recommends improvements; structural challenges to attaining gender equity and interventions are highlighted	Means of addressing structural challenges not provided; interventions to achieve gender equity fall short of mentioning actors and do not commit an implementation budget
Uganda Wetland Sector Strategic Plan (2001–2010)	No mention of gender	No mention of gender
National Adaptation Plan of Action (NAPA) (2007)	No mention of gender	No mention of gender
The Uganda Climate Smart Agriculture Programme (2015–2025)	Actions are provided to ensure increased participation of women and youth by 50% and 20% respectively in CSA initiatives	There is no action plan and budget allocated for the actions aimed at enhancing women and youth participation in CSA initiatives
Uganda INDC 2015	Gender is recognized as a cross-cutting issue that must be mainstreamed in policies, plans, and strategies and considered in climate change actions	Does not provide strategies in which gender can be mainstreamed into national policies, plans, and strategies

strategy associated with the provisions in the policy (see details in Table 2). The policies presented serve as an example to illustrate gender integration; thus, no criterion is associated with their selection.

Results show that most national level policies in both countries recognize the need for gender equality by specifying issues of concern, but fall short of reflecting clear strategies, actions, or means of addressing the issues highlighted. In Tanzania, whereas the natural resource policies for land, environment, and water, which were ratified in the 1990s and early 2000s, emphasized the need for gender equality, the more recent climate change policies and strategies have neither built on earlier work to prioritize gender nor sufficiently addressed causes of structural inequalities. For example, both the INDC of 2015 and the National Climate Smart Agriculture Programme 2015–2025 are gender blind; and the National Climate Change Communication Strategy 2012–2017 lacks gender output and outcome indicators in

its monitoring and evaluation plan. Some recent policies in Uganda specify the need for youth and women inclusion in policies and interventions but still lack explicit strategies of inclusion and fail to address structural causes of exclusion.

Results in Table 2 also show that in the last decade, there has been increasing positive response in the extent of integrating gender, i.e., there is a shift from gender-blind policies or only integrating gender in the objective or cross-cutting issues section, to integrating gender throughout a policy. Policies in Uganda seem to demonstrate greater gender integration more than policies in Tanzania, although the extent of gender integration fluctuates from time to time in both countries.

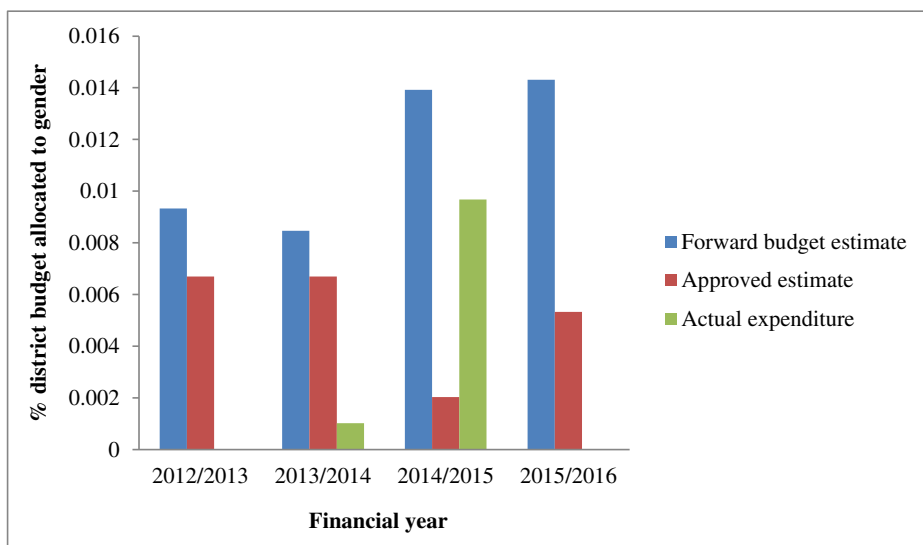
### 3.3 Gender integration in policy documents by themes

Results show that out of the five gender-related policies in Uganda and Tanzania, only one provides a budget, three integrate gender significantly but fall short of providing an implementation budget, while one does not have a clear implementation plan. It is noteworthy that these are key documents expected to guide gender mainstreaming in the target countries. Regarding other themes, development plans in Uganda integrated gender to the greatest extent, while environment and natural resource policies integrated gender to the greatest degree in Tanzania (Fig. 2, Supplementary Material).

### 3.4 Illustrating gender budgeting and how the gender budget is committed

Results of the budget analysis (Fig. 2) present an example of how Tanzania districts budget for and allocate resources to gender activities.

Results show that on average, only a small proportion ( $< 0.015\%$ ) of the district budget was allocated to gender over the years (Fig. 2). In addition, the small budgetary allocations



**Fig. 2** Average proportion of district budget committed to gender in Tanzania. For 2014/2015, the inflated actual expenditure stems from funds received from a livelihood project that was not initially part of the district-approved budget

fluctuate every year, implying that both budget planning and actual allocations do not prioritize gender. During feedback workshops, district officials explained that the approved estimate is dependent on the ceiling set by the district council, which is often less than the forwarded budget estimates. Similarly, the actual budgets are often lower than the approved budgets since the approved budget is an operational figure which may not be fully realized. Regarding actual expenditure, only Kilolo and Kilosa districts reported actual expenditures for 2013/2014 and Gairo and Njombe for 2014/2015. Njombe district council received funding for a livelihoods project that was not initially part of the district-approved budget and this inflated the actual expenditure budget. However, district officials in both Uganda and Tanzania argued that the budgets committed to gender were somewhat higher than the results show except that they did not know how to develop and implement gender-disaggregated activities and budgets.

We analyzed the nature of activities to which the gender budget was committed, and Fig. 3 presents the findings from Uganda.

Gender-budgeted activities were aggregated into (i) awareness creation (educating women about income-generating activities and gender-based violence, and training youth in leadership), (ii) support activities (supply of goods and services to women and youth groups; support to children, youth, disabled and the elderly; supporting orphans and facilities for vulnerable children), (iii) celebrations (officially recognized days such as International Women's Day), (iv) gender mainstreaming (establishment of women, youth and disability councils), and (v) allowances for community development officers. Results show that districts commit more of the gender budget to gender mainstreaming and support activities while sub-counties spread the gender budget across gender activities (Fig. 3). The activities attracting investment at both governance levels do not address structural gender inequalities, but rather maintain the status quo.

### 3.5 Characterization of women and men in policies and development plans

Overall, 55% of the Uganda documents that referred to gender mentioned women and men in some way, compared to 16% of the Tanzania documents. All documents characterized women, while only 30% and 3% characterized men in Uganda and Tanzania, respectively. Across

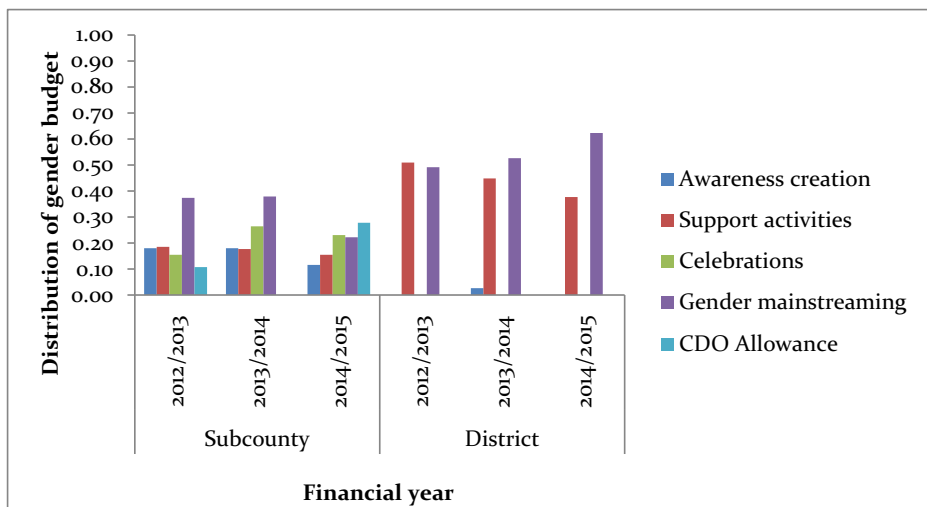


Fig. 3 Proportion of the gender budget committed to gender activities in Uganda

countries, both men and women were reflected as homogeneous groups delinked from other dimensions of intersectionality. Women were largely portrayed as marginalized and vulnerable without control over productive resources (56% for Uganda and 55% for Tanzania). Additionally, 45% of documents in Tanzania and 4% of the documents in Uganda described women as major actors in agriculture, natural resource managers, and agents of change. On the other hand, men's dominance in access to and ownership of productive resources, especially land and forests, was emphasized by 34% of Uganda and all Tanzania documents characterizing men. Whereas more Uganda documents mention both men and women, higher proportions of documents in both countries describe women more than men, making gender a women's issue.

Across governance levels, most national and district level documents in both Uganda and Tanzania characterized women as vulnerable and marginalized while they were either silent on men or described them as dominant and power holders, thus neither paying attention to men's vulnerabilities nor their adaptive capacity. Uganda sub-counties described women as leaders, literate but with low income while they described men not only as dominant and owners of resources but also as agents for environment degradation and the less productive group compared to women. Although the differences in the prescribed roles and behavior of men and women at sub-county level are context specific, they signify the centrality of the sub-county with respect to ultimately achieving gender transformation. The differences also suggest that a more accurate gender analysis should be done at each of the levels to identify clear roles, responsibilities, and constraints of men and women, in order to better inform development and execution of gender-responsive policies and interventions.

## 4 Discussion

Through a content analysis of 155 policy documents and budgets, this study has demonstrated a high level of variation in how gender is understood and integrated in policies and development plans in the two countries, and across different implementation levels. The variation of gender integration among sectors and countries resonates with the results Gumucio and Tafur Rueda (2015) obtained in a study conducted in seven Latin American countries which found different levels of gender integration in policy documents in different parts of the region.

Our results further suggest that both countries lack a harmonized approach on how gender is prioritized in policy planning, integrated in policy documents, and implemented at local level. If these countries are to fully embrace the gender mainstreaming agenda, it is important that they put in place and enforce a framework that harmonizes gender mainstreaming across governance levels and is supported by operational coordination mechanisms (Gumucio and Tafur Rueda 2015; Huyer 2016). The framework should show clearly how gender integration relates to and connects among the different governance levels, with clear guidelines on what needs to be done at each level. An over-arching framework will guide policy actors and practitioners on how to integrate gender in policy, taking care of issues of intersectionality, and men and women's vulnerabilities, opportunities, and capacities to adapt. The framework will also help in identifying key steps for gender analysis and budgeting and match needs with appropriate solutions. One example is the Kenya Strategy for Mainstreaming Gender in Climate Change, an instrument to encourage the integration of gender into national climate change policies, strategies, and initiatives. It also requires governance structures of national climate change institutions to have balanced gender representation in decision-making processes at all levels (technical and thematic working groups, etc.) and in institutions and financing mechanisms, including in the climate secretariat (MEMR 2012).

The policy content analysis also revealed that in both East African countries, gender is largely considered a “women’s issue,” with very little attention to men’s vulnerabilities to climate change. Other analysts studying gendered climate change discourses and policies have equally identified this gender = women’s issues association (McGregor 2010; Arora-Jonsson 2011; Huyer 2016). Furthermore, the exclusion of men in gender and climate change policy discourses suggests that they are not acknowledged as agents of change for the achievement of gender equality in climate change adaptation, even though their key contribution has been highlighted (Kato-Wallace 2016). Our findings not only establish a predominance of women’s issues in gender and climate change policy, but also identify a pervasive characterization of women as a homogeneous vulnerable group in both Uganda and Tanzania. While women have in many studies indeed been identified as more vulnerable to climate change (see Dankelman 2010 for an overview), this dominant and prevalent characterization of vulnerability in policy documents has been argued to prevent a greater focus on structural barriers to gender inequalities and to run the risk of perpetuating victimizing stereotypes (MacGregor 2010; Resurreccion 2011; Arora-Jonsson 2011). It also fails to take into account the active role women take in adapting to and mitigating the effects of climate change and disasters (Denton 2002; Dankelman 2010). Additionally, treating women as a homogeneous vulnerable group simplifies the complexity of vulnerability and adaptability to climate change and thereby increases the risk of simplistic climate change gendered policy and actions that will likely fail. These observations also suggest insufficient data exist along with inadequate capacity of policy makers in both East African countries to understand and act on gender issues. It is therefore necessary that researchers, policy makers, and analysts move beyond this over-simplification of gender and engage with nationwide intra-household data collection as well as sex-disaggregated data collection and gender analysis in key climate change sectors (Huyer 2016; Jost et al. 2016; Singh et al. 2010) while considering the intersectionality that gender has with other forms of social divides (Govinda 2009; Nightingale 2011).

Insufficient integration of gender in policies, small gender budget allocations that fluctuate over time, and commitment of budgets to superficial gender activities are perceived to be a result of failure to prioritize gender in policy planning and intervention delivery. Even when guidelines for gender mainstreaming are in place, we still observe failure to sufficiently integrate and allocate resources for gender activities. For example, Tanzania has National Guidelines for Mainstreaming Gender into Environment 2014. Nonetheless, the National Environment Policy (NEP) 1997 and the revised advanced version of final draft National Environment Management Policy 17th MAY 2016 both lack a clear strategy on how to implement gender issues highlighted in the documents.

During the feedback workshops, government officials explained that they did not have sufficient skills to conduct proper gender analysis and integrate findings in the planning process. For example, the gender work at district level in Tanzania and sub-county level in Uganda is expected to be done by community development officers, who do not necessarily have background training in gender analysis or gender-responsive approaches. Engagement with members of parliament in Tanzania revealed that legislators had limited understanding and appreciation of the importance of gender responsiveness in improving food security and harnessing climate adaptation. There is thus apparent need to improve the understanding of gender, gender mainstreaming, and building capacity of government officials at different levels to enable effective execution.

## 5 Conclusions and policy recommendations

The governments of Uganda and Tanzania have over the years made positive strides in integrating gender in policies, development plans, and implementation strategies. Although there are variations in the extent to which gender is integrated, there is a general shift from gender-blind policies to integrating gender under cross-cutting issues section or throughout the policy. However, substantial work remains to be done to move towards more effective execution of gender mainstreaming in policy and practice. Based on the results, we proposed the following to improve the situation:

- (1) There is apparent need to improve the understanding of gender and gender mainstreaming as well as to build the capacity of policy makers and development practitioners across governance levels in (i) conducting proper gender analysis and applying gender-responsive approaches; (ii) designing tools and collecting gender-disaggregated data; (iii) setting up gendered monitoring indicators; (iv) gender budgeting; and (v) gender-responsive reporting. In relation to this, research needs to intensify effort in generating evidence that justifies the need for gender-responsive policy and feed it into the policy development process. The process should engage policy decision makers at all governance levels until they appreciate the role of gender responsiveness in enabling food security and adaptation at national and sub-national levels.
- (2) Capacity building of government officials and practitioners requires that researchers work with government and non-state actors to collectively develop tools and guidelines for both capacity building and supporting practitioners to apply the acquired knowledge. There is also a need to increase the knowledge base of actors in gender departments and women-focused organizations so that they can effectively collaborate with agriculture and climate change institutions. These tools can be integrated in government planning through the policy engagement processes.
- (3) Currently, governments have supportive regulations and resources in place. For example, the equal opportunities commission of Uganda has instituted an equity certificate that is used to evaluate local government development plans and budgets for gender mainstreaming, who must qualify to receive this funding from ministry of finance. Such regulatory frameworks need to be supported with gender-responsive planning and coordination tools at local government level so that the secured funds are used appropriately. Establishment of operational mechanisms to promote coordination and collaboration, such as inclusion of women's ministries in national climate change planning and committees; development of cross-department gender taskforces; and other interdepartmental planning coordination mechanisms, will improve mainstreaming gender in agriculture, climate, and natural resources.

Ensuring effective gender mainstreaming in agriculture, natural resources, and climate policies is a major pillar for countries in meeting the objectives outlined in major global agreements including the Beijing Platform for Action in 1995 and the major policy agendas of the twenty-first century, Agenda 2030, and the Paris Agreement. Basing national policy and action in gender analysis, the collection and analysis of sex-disaggregated data, and monitoring of gender results will help countries achieve their development goals in the context of current global challenges of climate change and sustainable development.

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