POLICY BRIEF ON GENDER AND AGRICULTURAL MECHANIZATION

Situation Analysis

In Ethiopia, more than 80 per cent of the population exists rurally, and primarily depend on agricultural production for their livelihoods. Yet, significant challenges in the country’s agriculture sector include land degradation, shifts from agriculture labor to alternative sectors, and, a growing need to adapt to climate change.

Moreover, an excess of 90 per cent of farming households own less than 2 hectares of land, and many smallholder farmers use non-mechanized techniques which translates to low productivity, and leaves farmers vulnerable to a variety of other challenges. And when agricultural technology is available, much of the equipment is dated, fragile and suited to male users, which furthers a gender gap in agricultural productivity.

Meanwhile, and from a gender perspective, women represent half the country’s population, 29 per cent of all agricultural labor, but contribute approximately 70 per cent of food production in Ethiopia. However, women’s impact in agriculture remains largely unrecognized, thus females have limited access to resources, hold less bargaining power due to persisting gender stereotypes, and remain virtually invisible in the agricultural sector. Subsequently, female farmers in the country produce 35 per cent less yields per hectare than male counterparts, undoubtedly, also due to limited access to extension services and formal credit — all of which lead to fewer modern inputs, and a minimal variety of products. Exacerbating these circumstances, women hold less access to agricultural mechanization services and information than men. One approach to increasing national agricultural productivity and economic growth, while also enhancing food security, is to support smallholder female farmers increased commercial efficiency through the provision of better suited farming equipment. Despite this opportunity, however, many rural-development initiatives fail to consider agricultural productivity from a technological perspective — often largely due to a lack of consultation with either communities or women. Moreover, women farmers remain particularly overlooked, which results in missed opportunities for genuine developmental progress and reinforces harmful gender stereotypes.

Considerations for Policy Makers

The Government of the Federal Democratic Republic of Ethiopia’s National Agriculture Mechanization Strategy (NAMS), 2014, was produced with broad agricultural mechanization initiatives in mind. As such, policy review suggests that NAMS requires comprehensive gender analysis which would serve to highlight key mechanization challenges in the agricultural sector, and so better represent and serve female smallholder farmers in Ethiopia. Subsequently, this policy brief highlights issues in the NAMS policy, and so provoke dialogue and reflection of gender issues for policy makers.

Access to Extension Services

Predominantly, agricultural extension models have prioritized collaborating with male over female farmers, often due to the targeting of ‘model’ or ‘progressive’ farmers perceived to be more likely to adopt and use technological innovations. However, to increase national agricultural productivity, food security, economic development and

GDP growth – as per national priorities, it may be argued that farmers closest to the bottom should be given priority and supported in key interventions. For instance, female farm managers are 11 per cent less likely to attend extension programmes compared against male counterparts. Likewise, women’s access to extension services sit at 19 per cent, with 28 per cent of males accessing services. Undoubtedly these circumstances contribute to female farmer’s lower agricultural productivity. Subsequently, it may be argued that directing the majority of technical support at your most successful agricultural operations is akin to feeding the fattest goat in the farmyard – rather than those which are going hungry.

**Financial and Other Services for Agricultural Mechanization**

Another challenge linked to rural poverty is that many farmers have limited or no access to reliable financial services – often inhibiting accessibility of extension services or innovative technologies. Exacerbating this issue is that, no inclusive financing strategy or comprehensive financial services exist for smallholder farmers in Ethiopia. And while some equipment leasing schemes are being implemented, many stakeholders – particularly women – face entrance barriers to these programmes due to the high demands of participation in such initiatives. As rural women face particular challenges in accessing agricultural financing a gender analysis of NAMS is warranted, and would serve to inform policy makers as to the implications of financing gaps are for female farmers. Undoubtedly, lack of financial services is a need which impedes many farmer’s rate of success. To not fully understand how the most vulnerable farmers – female farmers – are affected and supported in key interventions. For instance, female farm managers are 11 per cent less likely to attend extension programmes compared against male counterparts. Likewise, women’s access to extension services sit at 19 per cent, with 28 per cent of males accessing services. Undoubtedly these circumstances contribute to female farmer’s lower agricultural productivity. Subsequently, it may be argued that directing the majority of technical support at your most successful agricultural operations is akin to feeding the fattest goat in the farmyard – rather than those which are going hungry.

**Access to Information**

Based on anecdotal evidence, female farmers’ access to technical agricultural information is often limited. Yet information regarding suitable inputs; farm management best practices; safer pre and post-harvest handling methods; and, strategic marketing and pricing systems, would be critical contributions to every smallholder farmer. However, disbursement of this information is limited for women due to low rates of literacy and inconsistent information systems. Likewise, limited access to information is often rooted in a poverty-related work overload, such as unpaid care or domestic demands, and so the extension system should review and consider a redesign of existing information systems.

**Knowledge Management & Coordination**

For mechanization technologies to sufficiently reach and benefit the agricultural sector’s female farmers, gender responsive policies are needed. Policy serves to normalize and guide, and implementers need to be aware of the gender disparities – and opportunities – in the agricultural sector. Therefore, increased efforts to collect, analyze and disseminate information which appropriately informs policy would aid future initiatives in conception and design.

Presently, Ethiopia has opportunity to close the gender gap amongst farmers, and so realize notable growth in agricultural production, as well as enhances food security, through the utilization of innovation agricultural technologies which considers both female and male farmers. However, the introduction of user-friendly and gender-responsive technologies demands an environment conducive to change. Using current infrastructure and coordination mechanisms for the agricultural sector makes valuable of existing gender expertise and finance, both of which are critical for the successful implementation of a new agricultural mechanization policy.

**Gender Mainstreaming in Agriculture**

Gender mainstreaming of agricultural policy is not only important from a rights perspective, but also carries great value in terms of productivity, economic growth and sustainability. Given that women represent a majority of the agricultural sector, gender mainstreaming in policy and institutions better utilize Ethiopia’s most important resource – human capital. By taking steps to better involve female farmers in the process of mechanization research and development, as well as a target clientele, significantly higher agricultural productivity will be ensured. Other gender policy considerations include the following:

- Provision of subsidies for female farmers to access loans with low interest rate;
- Promote and conduct women-focused capacity building;
- Enable all actors participating in technology development and dissemination to understand gender dimensions;
- Identify technology needs of women farmers, support production and dissemination of technologies which reduce women farmers’ work burden and save time.

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4 FAO. *National Gender Profile of Agriculture and Rural Livelihoods in Ethiopia*. 2019.