



The Nexus between Land and Food Security in Ethiopia

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Introduction

Land is a vital natural capital that forms the basis of livelihoods for people engaging in various economic sectors – primary, secondary, and tertiary though the degree of importance of land varies by type the of occupation. Livelihood activities that generally fall under primary activities, which include agriculture, forestry, mining and fishery, are basically impossible without having access to a parcel of land. Likewise, the size of land that is necessary for livelihood activities also vary by level of development. In developing regions, people need a relatively larger and extensive area of land as crop yield per unit area are relatively low. Ethiopia is an agrarian nation where the great majority of population largely rely on land resources. The country’s total area is about 1.1 million square kilometres. About 80% of the country’s population resides in rural areas by directly drawing their sources of earning from agriculture (crop production and livestock rearing). In Ethiopia, agriculture accounts for about 39% of the GDP and 80% of export revenue. The smallholder subsistence farms covers about 90% of the cropped land and produce around 95% of the total agricultural outputs. These facts clearly tell us that land is the most crucial resource for the Ethiopian economy and food security of its population.

Land is a key factor of production and problems associated with land adversely affect the livelihoods and food securities of rural population in particular, and the country’s population in general. Due to rapid population growth there has been a considerable

downward spiraling in per capita land holding, with an average land holding of about 0.8hectare per household. Moreover, landlessness in the country is growing as the population of the young generation is increasing. In some areas of rural communities the proportion of the landless households reached half of the inhabitants. Farmland fragmentation due to continuous division of parcels among community members and family members has also become one of the concerns related to land. Furthermore, the limited use of improved technologies, by small farm holders and limited access to non-farm cash income to purchase productive technologies land productivities are very low at any standard. As a result, feeding own household members sufficiently and sustainably has been the serious challenge of food security among the majority of rural inhabitants in Ethiopia.

The globally agreed upon and the widely used definition of food security reads as: ‘Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and health life’ (FAO 1996). Food security has four core dimensions namely availability, access, utilization and stability. Availability refers to sufficient quantities of food of appropriate quality, supplied through domestic production or imports. Access is about adequate resources (entitlements) to acquire appropriate foods for a nutritious diet. By utilization we mean the utilization of food through adequate diet, clean water, sanitation, and health care, to reach a state of nutritional well-being in which all

physiological needs are met. Stability entails the regularity of access to adequate food at all times, independent of shocks (such as economic or climate-related crises) or cyclical patterns.

There exist two lines of thoughts regarding inter-linkages between land tenure and food security: Conventional and Recursive. The conventional link approach argues that when land and food are explicitly conceptualized together, they generally fall within a linear framework that begins with access to land and proceeds causally through production, income generation and consumption to nutritional status. The recursive/dynamic link looks at the interrelations between the two attributes through the lens of Sustainable Livelihood Approach. In this regard, land is seen as a component of natural capital that can be used as input of production on one hand, and it can serve as a capital that might be exchanged with other types of capitals, e.g. financial capital, physical capital or social capital, that could enhance consumption and investment, on the other (Maxwell & Wiebe 1999, Ellis 2000, Degefa et al. 2017). This paper is mainly informed by the discourse of conventional nexus approach although it does not fully ignore the idea of the dynamic linkages.

About one-quarter of Ethiopia's population is chronically food insecure and consume below the minimum requirement of 2100 Kcal. The nation is characterized by high rate of malnutrition since 40% of under-five children are stunted, 9% are wasted and 25% are underweight. On average, some 4.5 million people have been suffering from food shortage crises per annum over the last five decades. Ethiopia's situation in terms of hunger and malnutrition is still categorized as "serious" with the Global Hunger Index of 28.9 (IFPRI et al 2019). Interactions of various biophysical, socio-economic and demographic factors have been the driving forces to Ethiopia's food insecurity. Since the overwhelming majority of the country's population inhabit in rural setting working on livelihood activities that are directly related to land, land related constraints such as land scarcity and landlessness considerably affect households' food security.

On the basis of desk review of various empirical studies the original paper upon which this policy brief was written had an objective of establishing the relationships between land scarcity and landlessness and food security in Ethiopia. It concluded by forwarding some policy ideas that might help in addressing the persisting food insecurity challenges. It is important to underline that the main paper is a review manuscript article relied on the data from previous research being undertaken in the context of sedentary farmers and pastoral communities of Ethiopia.

Discussion of Major Issues

Land and Agriculture

Ethiopia has about 51.3 million hectares of arable land. Nonetheless, less than 20% of it has been put under cultivation. The CSA data show that size of farm cultivated as well as number of land cultivators over years has increased. The population growth and minimal outmigration from farming could be the reason for increased land cultivators, while increase in land operated by smallholder farmers could be attributed to expanding farming into grazing land, forest area and marginal lands. The total number of agricultural households in rural areas exceeds 15 million and the area under all crops is greater than 14 million hectares. According to CSA agricultural survey on crop land size, the average land holding size per holder has in general been decreasing since 1995, reaching about 0.80 ha. per household holder in 2018 (CSA, 2019). Despite good potential the country possesses with regard to agricultural production, Ethiopia has been characterized as a nation of persisting food insecurity over decades.

Food security

Causes of Ethiopian food insecurity are multiple and complex. Interactions among a number of biophysical, socio-cultural, demographic, economic, political and infrastructural factors in various ways adversely affect food availability, access to food and utilization dimensions of food and nutrition security. The well documented driving forces of food insecurity have been drought, floods, land degradation, poverty and poor wellbeing, rapid population growth, and conflict and lack of good governance. Drought has been the main triggering disaster to food shortage as evidenced with several catastrophic famines. Drought risk remains one of the key drivers of food insecurity in Ethiopia. Floods occur mainly in the main rivers flood plains. The most vulnerable segments to flooding include the poor people, children, elderly, lactating and pregnant women. Land degradation in the form of soil erosion and deforestation is another cause of food insecurity in Ethiopia. A comprehensive study by FAO (1986) estimated that, on average, 100 tons/ha/year soil is lost from farmland. More than 40% of the forest cover of the country many decades back has now diminished to less than 15%. Apparently, degradation results in a direct loss of productivity, and 3% decline of GDP drawn from agriculture.

Poverty is the most widely cited cause of food and nutrition insecurities in Ethiopia. Currently, 25% of the population subsist under poverty line. Likewise, with HDI of 0.489 – Ethiopia ranks

173th of 189 (UNDP 2019). The poor and destitute are the most vulnerable to food insecurity. Rapid population growth of about 2.5% per annum has much implication to both food availability and access. Severe land scarcity in rural setting (about 0.8ha per HH), and high rate of overall and youth unemployment in urban areas are the direct consequences of rapid population increase in the country. Conflict and civil unrest have also adversely affected the Ethiopian food security over years. The main root causes of conflict in the country include: competition over scarce natural resources, land rights and ownership, policies and cross-border activities. Governance and policies related challenges that threaten food security include lack of good governance, lack of pro-poor policies, and lack of preparedness and sound early warning systems (Getachew 1995, Degefa 2005).

Nexus between Land and Food Security

Quite a large number of researches in different parts of rural Ethiopia have documented that food security are positively correlated with land holding size. A study in three communities of Munessa Wereda Central Ethiopia indicated that the landless households are the most vulnerable to the shock of food insecurity. The relationship is narrated as:

First, the landless and the land-poor households are often rent-in or share-crop-in land to get their means of subsistence. The sharing of produce with land holder both in kind and cash payment consumes a considerable proportion (up to 50%) of the income of a household. Second, the community members believe that lack of access to land has created social unrest. This is because some landless are engaged in undesirable activities such as theft, plundering and looting as a means of subsistence. Third, insufficient non-farm activities, coupled with rapid population growth at the study sites have exacerbated the problem of food insecurity where everybody's attention concentrated on conventional sources of rural livelihood: crop production and livestock raising. Fourth, the landless households who get access to land mostly for one season through various transactions lack tenure security (Degefa 2003).

Another study in North-eastern Ethiopia has also witnessed about similar relationship indicating that the landless or land-poor peasants have less capacity to produce their own food for consumption than their counterparts with relatively sufficient landholdings (Degefa 2005). According to the same research 'the very poor' and 'the poor' were identified to be the landless or near landless who at the same time were mostly facing food shortage crises.

A study conducted in six districts of the three Regional States – Oromia, Amhara and SNNPR (two districts at each) found out that increase in land size is associated with improvement in food security status. Compared to households that have land sizes of less than one hectare, those that have one to two hectares of land had 59% higher chances of being food secure. Likewise, households with land size of greater than two hectare were 1.34 times more likely to be food secure. Small size of land holding increases food insecurity in two ways. First, as households with small farm sizes are often poor and lack surplus product, they cannot afford farming technologies and other inputs. Second, motivation for conservation of land is constrained in two ways. One is reduction of traditional land conservation practices such as fallowing. Farmers sell crop residue, animal manure and the like to generate income in order to bridge consumption gaps rather than using them to enhance soil conservation and productivity (Degefa et al. 2017). The case study households narrate how land scarcity (A) and landlessness (B) make life terribly difficult, and contribute to persisting chronic food insecurity facing them.

(A) Case of household facing food insecurity due to land scarcity

My name is Atsede. I am a divorced woman who married at the age of 20 and I have two children (1 male and 1 female). I have half hectare of land, which I obtained during land redistribution. My first husband has land. But, I did not claim the land upon divorce as it was very small. I did not also ask my second husband to share to me his land. Although I have small size of land, I do not have oxen. Hence, I am forced to sharecrop-out. During the recent harvest year, I obtained only 150kg of field pea from a total of 300kg produced by the sharecropper. However, it is not sufficient to cover our subsistence requirements. I, therefore, feel that life is difficult due to small plot of land, and was compelled to sharecrop it out.

Landlessness causes food insecurity because livelihood activities that are not linked to access to land are nearly non-existent in rural areas of Wonago district, one of the two case study districts in SNNPR. The following case of landless household (B) depicts how household wellbeing and food security situations were in bad shape.

(B) Case of household encountering food insecurity due to landlessness

My name is Dibabe and am 60 years old. I have 4 children (3 males and 1 female). I have no farmland. My husband died 35 years ago. We had one hectare of land and it was given to the two sons. Our livelihood is mainly based on

safety net. The support is money and grain for six months a year. During the other period, I am engaged in daily labour (collection of coffee). I have very few stands of coffee and enset (false banana) around my homestead. I also used to trade grain. I am aged but I have to work to feed the children. Despite my health problem, I need to work more to meet the living requirements of the children. Despite the support, we face food shortage all year round. The shortage is severe during summer. To cope with the problem, we use enset and cabbage from the homestead when it is available. In addition we borrow money and enset. I return the money with high interest rate. Paying back the money is quite difficult. Now I am very much despaired and I do not really know what to do to improve the living situations of the children.

Forum for Social Studies (FSS) conducted a research that looked at land, landlessness and poverty in four main regions of Ethiopia namely Amhara, Oromia, SNNP and Tigray on the basis of mixed (qualitative and quantitative) social science research approach. The core findings of the research reveal that landlessness has been increasing in all regions studied, and rapid population growth was the principal driving force. Rural youth unemployment, widespread poverty and chronic food insecurity were identified as the problems that land shortage and landlessness have induced across the regional states covered by the studies (Dessalegne and Meheret 2017).

The shrinking of pastureland and water scarcities among pastoral communities has also adversely affected their livelihoods and food securities. This is the issue that our recent fieldwork among Borana pastoralists in southern Ethiopia witnessed. It was observed that the Borana has become the land of scarcity for milk and milk products, as well as for grains. Hence, both food availability and access to food have dawdled over years resulting in the threat of food insecurity among the great majority of the population (Degefa 2018). The livestock economy has deteriorated

in response to expansion of desert, shrinking of rangelands both in quality and quantity resulting in shortage of marra (pasture) and water, drought and climate variability, livestock diseases, and population pressure (both human and livestock), and marketing related problems. Those who have begun crop production and became agro-pastoralists also encounter a lot of constraints such as drought and rainfall variability, poor soil fertility and poor crop yield. Although communal tenure arrangements predominate in arid and semi-arid areas of pastoral communities, the observations from the same study clearly depicts the relationship between land size and the status of food security.

Concluding Remarks

Finally, it is important to throw some suggestions as to how a nation should improve food security of its citizens in the light of the nexus between land and food security. Quite extensive empirical research have suggested the ways Ethiopia can overcome food insecurity problems induced by the core triggering factors such as drought, floods, land degradation, poverty, rapid population growth, conflict and lack of good governance. This policy brief concludes that having access to sizeable land is a crucial issue for attaining food security in the context of both sedentary farmers and pastoral communities. However, due to rapid population growth and the resultant high demand for land, the country has to seriously think about bringing about fundamental structural economic change. Ethiopia should aggressively work towards transforming its economy from agriculture dominant to industries. Other suggested ways out of overcoming the problem of land shortage towards improving the status of food security include intensifying small holders' agriculture so as to boost productivity per unit area; improving livestock feed sector; and aggressively work on strategies of diversifying rural economy.

Source:- ደገፋ ቶሎሳ (2013) የገጠር መሬትና የምግብ ዋስትና በኢትዮጵያ

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