

TOWARDS AGRICULTURAL MODERNIZATION AND INDUSTRIAL DEVELOPMENT: EXAMINING THE POSITION OF SMALL HOLDER FARMERS IN TANZANIA

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Abstract: Tanzania is working towards agricultural modernization aiming and improving agricultural productivity. The aim has been to transform traditional agricultural practices with modern practices and help smallholder farmers improve their productivity. However, there has been mixed evidence on the success of such modernization efforts some showing success and others showing the failure. By using available literature, this paper aim at showing the position of smallholder farmers in agricultural modernization process. Findings shows that, agricultural modernization has left smallholder farmers under a marginalized position filled with land grabbing, problems on availability, accessibility, affordability and the quality of agricultural inputs together with the problem of market for agricultural products. As a deliberate effort to improve agriculture sector the government need to increase investment in agricultural inputs by facilitating the availability of industries which produce agricultural inputs like fertilizer. Also, the government should encourage farmers to join into cooperative unions or groups to help them have bargaining power when it comes to marketing their crops.

Keywords: Agriculture, agriculture modernization, smallholder farmers

MENUJU MODERNISASI PERTANIAN DAN PENGEMBANGAN INDUSTRI: MEMERIKSA POSISI PETANI KECIL DI TANZANIA

Abstrak: Tanzania mulai menuju modernisasi pertanian dengan tujuan untuk meningkatkan produktivitas pertaniannya. Tujuan kebijakan tersebut adalah untuk mengubah praktik pertanian tradisional dengan praktik modern dan membantu petani kecil meningkatkan produktivitas mereka. Namun, terdapat bukti yang beragam mengenai keberhasilan upaya modernisasi tersebut, beberapa menunjukkan keberhasilan dan ada juga yang menunjukkan kegagalan. Dengan menggunakan literatur yang tersedia, makalah ini bertujuan untuk menunjukkan posisi petani kecil dalam proses modernisasi pertanian. Temuan menunjukkan bahwa, modernisasi pertanian telah meninggalkan petani kecil yang sedang dalam posisi terpinggirkan dan sedang mengalami perampasan tanah, masalah ketersediaan, aksesibilitas, keterjangkauan dan kualitas input pertanian bersama dengan masalah pasar produk pertanian. Sebagai upaya untuk meningkatkan sektor pertanian, pemerintah perlu meningkatkan investasi input pertanian dengan memfasilitasi ketersediaan industri yang menghasilkan input pertanian seperti pupuk. Selain itu, pemerintah juga harus mendorong petani untuk bergabung dalam serikat atau kelompok koperasi agar mereka memiliki daya tawar dalam memasarkan hasil panen mereka.

Kata Kunci: Pertanian, modernisasi pertanian, petani kecil

INTRODUCTION

Among 1.2 billion extremely poor people in the world, 75 per cent are found in rural areas and agriculture is identified as the source of their lively hood (World bank 2018). For example, Sub Saharan Africa which is inhabited by 24 per cent of world rural poor, it is recognized as a poorest region in the world whose economy largely depends on agriculture. (Chauvin et al, 2012). Agriculture being a back bone of Africa's economy, evidence shows that to a large extent agricultural activities are dominated by smallholder famers who owns and cultivate not more than two acres per year in average (Meemken & Bellemare, 2020; Woldemichael et al., 2017).

Agricultural modernization which involves transformation of agricultural activities from traditional to advanced practices which includes the use of modern technology in all agricultural life cycle, has been adopted as a strategy of improving agricultural productivity in many developing countries. However as elucidated in a vast of literatures (see Livingston et al 2011; Hussain and Pererra, 2004; Anríquez and Stamoulis, 2007), successful agricultural modernization should be designed to benefit smallholder farmers who occupies large population in rural areas. It is argued that small holder farmers should be involved as key stakeholders in all necessary process in a form of partnership to realize the desired growth. (Oxfam, 2013). Though the aim of agricultural modernization has been to help smallholders farmers adapt new agricultural practices and improve their yields, evidence shows that, majority of these famers have been left with little or nothing and in some places land grabbing has been reported to take place under the name of public private partnership (Graham et al., 2011; Kaarhus, 2011; Livingston et al., n.d.; Minister, 2012;

Spielman et al., 2010). In most cases evidence has shown that agricultural modernization has been well stipulated in policy papers but when it comes to its implementation few people do benefit leaving smallholder population in a comma.

Agriculture in Tanzania is recognized as the backbone of the country's economy which accounts for 95% of the food, 25% of the GDP and 30% of the foreign exchange earnings (URT, 2017). though Like other developing countries, smallholder farmers dominate Tanzania's agriculture industry whereby majority of them own a land from less than one to three hectares with an average farm size of 2.4 hectares. (Salami et al, 2010; Dirksen-Schrock et al, 2011). One of the characteristics of these smallholder agricultural activities includes the use of traditional agricultural methods of cultivating, seeding, harvesting and storage which results into low yields (IFPRI, 2013; Komba and Muchapondwa, 2012; Lokina et al, 2011; Salami et al, 2011).

As a deliberate effort to transform agricultural productivity and realize poverty alleviation, in recent years the government of Tanzania has decided to embark on different agricultural strategies like Kilimo Kwanza and the like. Currently the Agricultural Sector Development Strategy (2015/16 – 2024/25) is in its implementation. With the ASDS the government of Tanzania is aiming at transforming agricultural sector into a modern, commercial, highly productive, resilient, competitive in the national and international market to achieve food security, poverty reduction and contributing to realization of Tanzania Development Vision 2025 (TDV) (URT, 2016 Pg1). Under ASDS, the government of Tanzania is determined to involve all actors at local and international level whereby smallholder farmers have been identified as key stakeholders in realizing

agricultural improvement and poverty alleviation.

Since agricultural practices in Tanzania are dominated by smallholder farmers, ignoring their position in the transformation process wont results into the intended goal. To what extent small holder farmers benefits from modernization process remains unknown. Existing evidence from Jenkins, 2012, Milder et al 2013; Marke, 2012 focus on giving general arrangements of the projects aiming at agricultural modernization, success and opportunities respectively. This has necessitated the motive behind this study to examine the position of small holder farmers in terms of land ownership, the availability, accessibility, affordability and the quality of agricultural inputs together with the question of market and crop price in the context of agricultural modernization.

Smallholder farmers and Agriculture Modernization in Tanzania

Since independence to date, Agriculture is recognized as a major economic activity which employs more than 80 percent of the rural population (URT, 2017). The underlying truth shows that, agriculture in rural areas has been not only a source of food but also a source of earnings among rural poor. Though a recent study by Misaki et al., 2018 called the existence of smallholder farmers in Tanzania as an outdated contention, the truth is that, still agriculture in Tanzania is dominated by smallholder farmers who majority of them practice subsistence agriculture. Though it is not the aim of this paper to indulge in such a debate, we testify their existence in Tanzania by looking at many aspects including their inability to add value to their agricultural produce which makes them suffer from market prices now and then. Back to the focus of this paper, evidence shows that from

2011-18, agricultural sector contribution to GDP grew much slower than the rest of the economy, averaging 4.4 percent a year or 1.4 percent per capita (World bank group, 2019).

As efforts to transform the sector a number of strategies and policies were adopted towards agricultural modernization. Some of the remarkable efforts includes the enactment of the Agricultural Sector Development Programme which took two phases (ASDP-I, from 2006 to 2013, and ASDP-II, from 2018 to 2025) (Misaki et al., 2018). Among the intended outcomes of the ASDP I & II includes the improvements of agricultural facilities from the availability, accessibility, affordability and the quality of agricultural inputs and help farmers produces at high rates. As an effort to transform agriculture, Kilimo Kwanza which was intended to join between the government and private sector in agriculture was introduced in 2008. The aim was to commercialize agriculture practices by forming partnership with private sector and in this case Southern Agricultural Growth Corridor of Tanzania was launched in 2010 (Misaki et al., 2018).

In order to increase productivity and helping farmers have access to subsidized agricultural inputs, the National Agricultural Input Voucher Scheme (NAIVS) was introduced in 2009. The aim was to benefit two million farmers (Cooksey, 2012 cited in Misaki et al., 2018). The aim of the NAIVS was to help poor farmers who had no ability to afford buying agricultural inputs through normal market arrangements and therefore the government subsidizes inputs like fertilizer to help farmers buy at low costs. Due to a number of reported cases related to misconducts in distribution of subsidized inputs which ended benefiting few wealth farmers, the government decided to replace the NAIVS with Fertilizer Bulk Procurement System (FBPS) in 2014 (Cooksey, 2012 cited in Misaki et al., 2018). Though the FBPS

started successful, the problem of fertilizer didn't end and recently the ministry of agriculture decided to abolish the FBPS on July 29, 2021 and allow the importation of fertilizer under multiple business persons (<https://www.tfra.go.tz/>). In his statement the Ministry of agriculture said;

"Tumeamua kuruhusu wafanyabiashara kuagiza bila mfumo wa uagizaji wa mbolea kwa pamoja-BPS ambayo hata hivyo haitakuwa na kibali mpaka pale Mamlaka ya Udhhibiti wa Mbolea nchini (TFRA) itakapotoa kibali baada ya ukaguzi kukamilika"

THEORETICAL FRAMEWORK

This study is built under Entitlement approach as proposed by Sen who emphasizes on the importance of endowments. According Sen, endowments includes a combination of all resources legally (by the state laws, norms and practices) owned and used by a person (Osmani, 1993). Some of these resources includes land, land, equipment's and other assets. According to Sen and in relation to this study, land is an important endowment which when used careful with together with other endowments, it is easily to fight against poverty and food security. Another important element in this theory is the entitlements which refers to those goods and services which a person can access using the endowments possessed. In this case, a farmer may use his or her land to access goods and services at the time of need.

Apart from entitlements, Sen also presents the idea of entitlement mapping or E mapping which represents the rates at which the resources of the endowment set can be converted into goods and services included in

the entitlement set (Osmani, 1993). In entitlement mapping Sen emphasis based on the ratio related to input-output taking into account the value one is likely to receive after selling his or land, after selling his or her agricultural outputs and the value of different agricultural inputs at the market price.

METHODOLOGY

This paper uses secondary data from journal articles, reports and different government documents relevant to agriculture modernization and smallholder farmers. It takes a narrative approach to literature review. The study begun by searching and collecting literatures from different online sources like google scholar and Web of Science. During searching key words used were "agriculture modernization", "smallholder farmers and agricultural modernization" "position of smallholder farmers in agriculture modernization", Tanzania Agriculture modernization" and "small holder farmers in Tanzania agricultural modernization". To ensure the validity of searched and collected literatures, collected literatures were reviewed to see their relevance in relation to the identified key thematic areas of the study as far as agriculture modernization and smallholder farmers is concerned (Xiao & Watson, 2019). This was followed by thematic analysis where key themes and subthemes were analyzed while limiting the scope to smallholder position in Tanzania (Mgaiwa, 2021).

FINDINGS AND DISCUSSIONS

Land ownership

The primary aim of agricultural modernization is to improve agricultural practices in all cycle of agriculture. This must

go hand in hand with the improvement of the livelihood of the communities whose life depends primarily in agriculture. As stated by Sen under the entitlement approach, one of an important endowments is land which when owned and used properly it can be used as an important tool towards poverty alleviation (Devereux, 2002). In this case, any form of agricultural modernization to be successful, smallholder farmers should not be deprived the rights to own and use the land under the name of modernization.

From the systematic review of different literatures, one of one of the notable effects of agricultural modernization in Tanzania is the problem of land grabbing. Land grabbing which includes the land disposition from smallholder farmers to investors has been a thorn among smallholder farmers in Tanzania. Before providing the evidence of land grabbing it is better to establish why land acquisition in rural Tanzania through investors is called land grabbing. In Tanzania village land is governed by Village Land Act, No. 5 of 1999 which vests all the power to the village council and the village assembly on all matters regarding land acquisition and ownership. Therefore, companies under the name of investors have been approaching the village councils and offering some sort of bribery or promises to sponsor major social services facilities like health centers. In some places local companies have been used to help foreign companies acquire land acting like pimps (see Makoye 2011, Mwami & Science, 2011). Through this village councils have been used as vehicles in facilitating land grabbing leaving villagers (smallholder farmers) landless.

Evidence suggests that, majority of smallholder farmers who used to occupy potential lands have been left landless. Different studies (see Fao, 2013; Mwami & Science, 2011; Twomey & Schiavoni, n.d.)

have shown the existing land grabbing leaving majority of farmers displaced. This is reported to take place through large foreign companies which acquire land from the government with little or no knowledge from the local farmers. For, example in a case of Rufiji basin different companies like SEKAB Tanzania Ltd (Sweden), SYNERGY Tanzania Ltd (Asian), ALTRO AGRICULTURAL Ltd (Bangladesh), AFRICAN GREEN OIL Ltd, SAP Agriculture Ltd (Turkey), RUBADA and the SOUTH KOREANS (Korean Rural Community Corporation), KILOMBERO PLANTATION Ltd (Britain), KILOMBERO VALLEY TEAK CO Ltd (British), KILOMBERO SUGAR Co. Ltd (Boers, South Africa), KILIMO CHA YESU (Swiss), and GREEN RESOURCE were mentioned to be involved in land grabbing (Mwami & Science, 2011pg16). This has left farmers landless, powerless and marginalized contrary to the expectations under agricultural modernization.

Some of the effects land grabbing includes the issues of increased land conflicts and the problem of food shortage. For example in some areas of Kilombero and Kilosa, the endless problem of farmers and pastoralists friction, land grabbing has been mentioned to be the cause of such tragedies (James, 2015; John & J. Kabote, 2017). The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) project has been reported as one of the projects which has resulted into massive land grabbing which has left communities landless, marginalized and powerless. Evidence shows that's majority of the companies invested they are pro exportation and therefore it creates fear on food security (Mwami & Science, 2011; Schiavoni & Tramel, 2016).

The availability, accessibility, affordability and quality of agriculture inputs

One of the notable challenges facing smallholder farmers in the current error of agricultural modernization in Tanzania, is the issue of availability, accessibility, affordability and quality agricultural inputs like fertilizer, insecticides, seeds and other agricultural inputs. Reading from the ASDS-II: Agricultural Sector Development Strategy 2015/15-2025/26, shows the aim of the government to ensure that all necessary agricultural inputs are made available and accessible to all farmers at the affordable price and the same time at the required standards. However, findings from this study have found the opposite of what the government promised to do in this strategy despite the efforts laid down. For, example fertilizer which is one of the very important agricultural input has been a problem all over the country due to its unavailability and whenever is available the price has been not so affordable to small holder farmers. For decades now farmers have been crying over the issue of fertilizer which is not available and the one which is available it is sold at high price. When presenting the issue of fertilizer scarcity to the parliament, the MP of south Mufindi Hon. Kusini David Kihenzile (CCM) explained the problem of fertilizer availability to be a thorn among farmers who need to sale not less than four hundred kilograms of maize to buy one bag of fertilizer which is sold at almost 100,000Tsh while the price of maize is 5000Tsh per a bag of 20kgs (Mwananchi September 09, 2021). The following were his words in Swahili;

“Inamlazimu mkulima kuuza mahindi debe 20 ndipo apate mfuko mmoja wa mbolea ambao unauzwa karibu Sh100,000 wakati bei ya mahindi ni Sh5000 kwa debe moja jambo

linaloumiza wakulima na kuwakatisha tama,”

Based on this underlying truth, the intended objective of agricultural modernization and benefiting small holder farmers will not be achieved. This is in relation to what Sen entitlement mapping is conveying that whenever the ratio between input and output does not match, the productivity is likely to be affected and therefore the efforts towards and personal economic wellbeing won't be achieved. Apart from fertilizer saga, the issue of poor quality of agricultural inputs has been a living problem to among farmers to date. In some places farmers have complained to buy seeds of low quality which do not germinate and in other places farmers have complained on the quality of insecticides. This has been repeatedly reported in different places and despite government efforts to curb the problem, still farmers have been the victim of such problems. In some cases, untrusted agricultural inputs suppliers have been using the ignorance of farmers to become rich by selling them irrelevant and low quality seeds and other related inputs like those intended to fight against diseases (Anderson et al., 2016; Matowo et al., 2020).

Market and the prices of the crops

According to Sen for a person to enjoy his or endowments the input-price ratio must be reasonable. This case, the farmers harvest's must be sold at the price relative higher than the agricultural inputs used in a respective season. Findings from this study shows the vice versa due to the fact that, despite the high prices of agricultural inputs, farmers have been experiencing continues drop of the crop's prices each season. For example, in 207-2018 the price of peas (Mbaazi) dropped drastically from between 2,500Tsh and

4,000Tsh per kilogram to 100Tsh and 200Tsh (Mwananchi Wednesday December 19, 2018; IPP Media June 26, 2020). This has been a case for maize, cotton, cashew nuts and other related crops. One of the factors contributing to such frequent price drop in crops includes the absence of enough food processing industries, the conducts of middle men (agents) who plays an important role in determining prices of crops by sometimes fooling farmers and buy at cheap prices (Anderson et al., 2016; Misaki et al., 2018). The absence of enough food processing industries has resulted into surplus of crops among farmers which in some cases it has been termed as overproduction of a particular crop in a particular year or season. For example, a recent maize case surplus forced the government to spend more than 50 billion Tanzanian shillings to buy maize from farmers who had nowhere to go after a successful production year. Showing the government commitment in rescuing famers from untold lose, the prime minister of Tanzania Hon. Kasimu Majaliwa quoted in Mwananchi newspaper of Friday September 10 2021 said;

“Tayari Mheshimiwa Samia Suluhu Hassan, Rais wa Jamhuri ya Muungano wa Tanzania, ametoa Sh50 bilioni na ununuzi utanza Jumatatu, tarehe 13 Septemba, 2021,”

The question has been for how long will this continue if the aim of agricultural modernization is to increase productivity and changes the social economic status of farmers? From this juncture it is vivid that the strategic goal stated in ASDS-II: Agricultural Sector Development Strategy 2015/15-2025 of ensuring that farmer access profitable markets has not been achieved. This affect

farmers and makes them remain poor and powerless.

CONCLUSION AND RECOMMENDATIONS

The efforts towards agricultural modernization in Tanzania are recognized and widely accepted as it will not only benefits the farmers, but also creates more employment opportunities, increase food security, provision of raw materials to the industries and at the end contribute to the national economic growth. However, the ongoing trends in Tanzania does not provide a promising future among smallholder farmers who are the heart of the agriculture. The existing challenges if not well addressed small holder farmers will remain where they are and the poverty continue to stick in their lives. As a deliberate effort to improve agriculture sector the government need to increase investment in agricultural inputs by facilitating the availability of industries which produce agricultural inputs like fertilizer. Also, the government should encourage farmers to join into cooperative unions or groups to help them have bargaining power when it comes to marketing their crops.

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