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THE IMPLICATIONS OF TANZANIA PRIVATIZATION POLICY ON SMALL SCALE FARMERS: THE CASE OF MISENYI AND KILOSA DISTRICTS

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ABSTRACT

Since 2000 the Government of Tanzania has adopted pluralistic and demand driven (privatization) extension as an alternative way of increasing productivity in the smallholder farming sector. It was felt that privatization would give farmers more choices, increase efficiency in public sector extension, and reduce the burden of government funding extension. After more than a decade of the new extension program our study sought to determine its effectiveness. Our survey of 300 smallholder farmers in two districts of Tanzania found limited adoption of innovations by smallholder farmers, including limited interaction with extension agents, and virtually no provision of extension by private agencies in the districts. Our conclusion is that while the new extension approach is a good idea, its implementation leaves much to be desired. We recommend increased interaction between farmers and extension workers, such as through the use of mass and social media like community radio and cell phones.

Keywords: Agricultural Extension, Pluralistic/ Demand-driven, Privatization of Extension

1. INTRODUCTION

The importance of agricultural extension in rural development is widely acknowledged, particularly in a developing country like Tanzania, with over 80% of its 45 million population in agriculture. In 2000, the Government of the Republic of Tanzania adopted two policies critical to strengthening agricultural extension. One was a political decentralization policy to ensure democratic decision-making at the grassroots. The other was a restructuring of the extension service to give private extension providers an opportunity to compete with public sector extension. The policy was called "pluralistic and demand-driven extension system" (Rutatora & Mattee, 2001). "Pluralistic" generally referred to the privatization of extension, whereas "demand-driven" sought to change the traditional top-down approach whereby government and donor agencies make decisions on what innovations to disseminate and foist on the local farmers without their input in these decisions. Demand-driven to advocate a "bottom-up" extension approach whereby farmers are allowed to express their needs or demand services and then the extension workers take these demands to resource providers to respond to them (Mvuna, 2010). This study,

conducted in 2013 or more than a decade following the adoption of the pluralistic and demand-driven extension policy, was carried out in the Morogoro Region of Tanzania to determine the effectiveness of implementing the new policy.

1.1 Background to the study

The Year 2000 marked a turning point in agricultural extension in the developing world, Africa in particular. From the mid-1970s to the end of the 1990s the World Bank had promoted its "Training and Visit System of Extension" (T&V) throughout the developing world at a cost of almost $5 billion (Anderson, Feder, & Ganguly, 2006). However, in 1999 the World Bank abandoned T&V as an ineffective and unsustainable extension policy (Birner et al. 2006; Anderson 2008). Since the Bank no longer financed agricultural extension projects, many developing countries, particularly in Africa, were without the funding to provide public sector extension services. Thus, it was felt that through a pluralistic approach, private and nongovernmental organizations (NGOs) could substitute for the public sector at least augmenting what is being provided by the public sector (Birner and Anderson, 2007). Also, since T&V was abandoned, scholars had different views of what extension's role should be. While some still associated extension with agricultural production, others felt extension's role should be linking farmers to markets (Neuchatel Group, 2006); reducing vulnerability and enhancing the voice of the rural poor (Farrington et al, 2002); developing micro-enterprises (Rivera, 2001); poverty reduction and environmental conservation (Alex et al, 2004); and strengthening farmer organizations (Sulaiman & Hall, 2002).

All these alternative views of extension implied that extension was no longer viewed in its traditional role as "agricultural education" teaching farmers how to plant crops and raise livestock, but more in a social science role, such as facilitating interaction among development partners to ensure timely and simultaneous delivery of inputs and services to ensure smallholder farmers' adoption of innovations. The contention was that smallholder farmers were generally aware of the existence of technological innovations; however, they lacked the resources to make adoption possible. Coordinating the provision of agricultural inputs and services, under the rubric of "integrated rural development" was viewed as the new emphasis on extension (World Bank Development Report 2008, Agricultural Advisory Services Chapter). Thus, a holistic approach to extension emerged whereby extension workers were to tackle issues, such as HIV&AIDS, population control, sustainable agriculture and climate change, and markets, among others.

Since 2000, agricultural extension has therefore faced the challenge of establishing a well-managed, effective, and accountable system that meets the needs of hundreds of thousands of farmers engaged in diverse and complex farming activities, that monitors and evaluates extension services and their impacts, and that addresses the inherent problems of ensuring political commitment and fiscal accountability for agricultural extension (Feder, Willett, and Zijp 2001). It is for these reasons that Rivera and Alex (2004) characterized the global extension system as an evolving institution. The challenge is: Can private extension initiatives accommodate the resource needs of poor rural smallholder farmers?

1.2 Agricultural Extension in Tanzania

Agricultural extension service in Tanzania dates back to British colonial rule and has been reinforced by the national governments since independence in 1961 (Kahama et al., 1986 cited by Lugeye, 1995). At independence, the country adopted a "gradual improvement in farming methods" whereby small-scale farmers were encouraged to adopt new practices while adhering to their traditional values and customs (Lugeye, 1995).

However, this method was quickly replaced by a "transformation approach" aimed at bringing more radical changes in the rural areas, as governments sought to transform the rural sector into a modern peasantry. The transformation approach included establishment of settlement schemes and state farms where farmers were encouraged to use mechanization under supervision of government agents (Mvena, 1984; Lugeye, 1995). However, the settlement scheme approach collapsed in the late 1960s and was replaced mainly by the World Bank-supported T&V system, under the National Agricultural and Livestock Extension Rehabilitation Project (NALERP) in 1989 (Friis-Hansen, 2007). Phase II of the National Agricultural Extension Project (NAEP II) came in 1997, characterized by an attempt at a participatory approach while retaining elements of the T&V approach (Friis-Hansen, 2007). Evaluation of NAEP II showed the program was unsatisfactory and under the Local Government Act No. 6 of 1999, responsibility for implementing agricultural extension services was taken from the Ministry of Agriculture, Food Security and Cooperatives and given to the Local Government Authorities (MRALG, 1998), which then became responsible for creating political decentralization of the country. Also, in 2001 the Tanzanian Government established the Agricultural Sector Development Strategy (ASDS), implemented through the Agricultural Sector Development Program (ASDP), as a framework for achieving the sector's objectives and targets. Several government Ministries came together to form the Agriculture Sector Lead Ministries (ASLMs), joined by several international development partners (URT, 2001; URT, 2006). Still yet, Tanzania became party to the Comprehensive Africa Agriculture Development Program (CAADP) which provided opportunity for Tanzania to adopt a comprehensive approach to achieving food security and poverty reduction under what became known as the National Strategy for Growth and Reduction of Poverty (NSGRP) I & II (URT, 2005). CAADP's goal of helping African government achieve food security fit well with Tanzania's ASDP and *Kilimo Kwanza* (Agriculture First) agricultural transformation initiative (URT, 2009).

This narrative shows the Tanzanian Government's determination to transform agricultural extension as the basis for achieving food security. In fact, the National Agriculture Policy (URT, 2013) stated that, "extension services are crucial in supporting poverty reduction in rural areas and market competitiveness for commercial agriculture in the domestic and global markets. It enables producers to realize increased production and productivity through accessibility to information for marketing and other support services essential for agricultural development" (p. 14).

Central to all these policies is the need for stakeholder involvement as the basis for success. In a 1997 workshop it was resolved that for farmers to be key players and to participate fully in the sustenance of the services, there was a need to develop a new model of extension management at the district level that stressed: demand-driven, cost-effective, gender-sensitive, sustainable, and targeted to specific categories of farmers, whose needs the system should be able to respond to. This study examined the extent to which the policy of smallholder farmer participation has been adhered.

1.3 Purpose & Objectives

The main purpose of the study was to examine the impact of the government's privatization of extension policy on Tanzanian smallholder farmers. Specifically, the study addressed the following objectives, to:

- Assess the demographic characteristics of smallholder farmers in Tanzania;
- Describe the level of innovativeness of smallholder farmers in Tanzania, that is, the degree to which they have adopted improved agricultural practices;
- Describe the level of extension contact with smallholder farmers as the basis for innovative information dissemination; and

- Determine the impact of privatization of extension on smallholder farmers, that is, are these farmers being served by private advisory service providers or is the extension contact, as in the second objective, the result of performance by public sector extension?

2. MATERIALS AND METHOD

This survey research of smallholder farmers was conducted in Tanzania in June and July 2013 in Kilosa and Misenyi districts in Morogoro and Kagera regions respectively. All smallholder farmers' households in the two districts constituted the population of the study. Three hundred smallholder farmers, identified as heads of households, were surveyed using a semi-structured interview schedule. Multi-stage sampling technique was used to select respondents for the study. In the first stage, six wards (three from each district) were randomly selected representing 46 wards in the two districts (20 in Missenyi and 35 in Kilosa). In the second stage, two (2) villages from each of the six (6) wards (each with the average of four villages) were randomly selected using simple random sampling technique giving a total of twelve (12) villages. The names of wards with their corresponding number of villages in the brackets are as follows: Missenyi district - Buyango (5), Bwanjai (6) and Kanyigo (4); Kilosa district – Chanzulu (3), Kilangali (3) and Tindiga (4). In the third stage twenty-five (25) heads of households from each village were randomly selected giving a total sample size of 300 respondents used for the study. The two districts are not representative of all farmers in the country and, therefore, the findings are not generalizable. Data were analyzed by using Statistical Packages for Social Sciences (SPSS) computer software.

3. RESULTS AND DISCUSSIONS

The findings of the study are presented below by the research objectives: a) demographic characteristics of smallholder farmers in Tanzania; b) level of extension contact with smallholder farmers; c) impact of privatization of extension on smallholder farmers; d) level of innovativeness smallholder farmers.

3.1 Socioeconomic Characteristics Of Respondents

Socioeconomic characteristics, such as age, gender and income provide useful indicators of the smallholder farming population under study. The study revealed that the vast majority of respondents (64.3%) were male while 35 7% percent female (Table 1). The age range varied from 20 and 90 years with the average being 48 years and a standard deviation of 16.1. The median age of respondent was 45 years. The age distribution of respondents tends to be positively skewed with the skewness of 0.54 indicating that there were younger household heads than were older ones (Figure 1). Seventy five percent of respondents were married, 12% were living single, 6.7% were widowed 6.3% were divorced. About half (50.3%) of the respondents' households had 4-6 members; 34.3% had 1-3 members; while other households had 7-9, and 10 or more members as shown in Table 1.

Figure 1. Age of Respondents

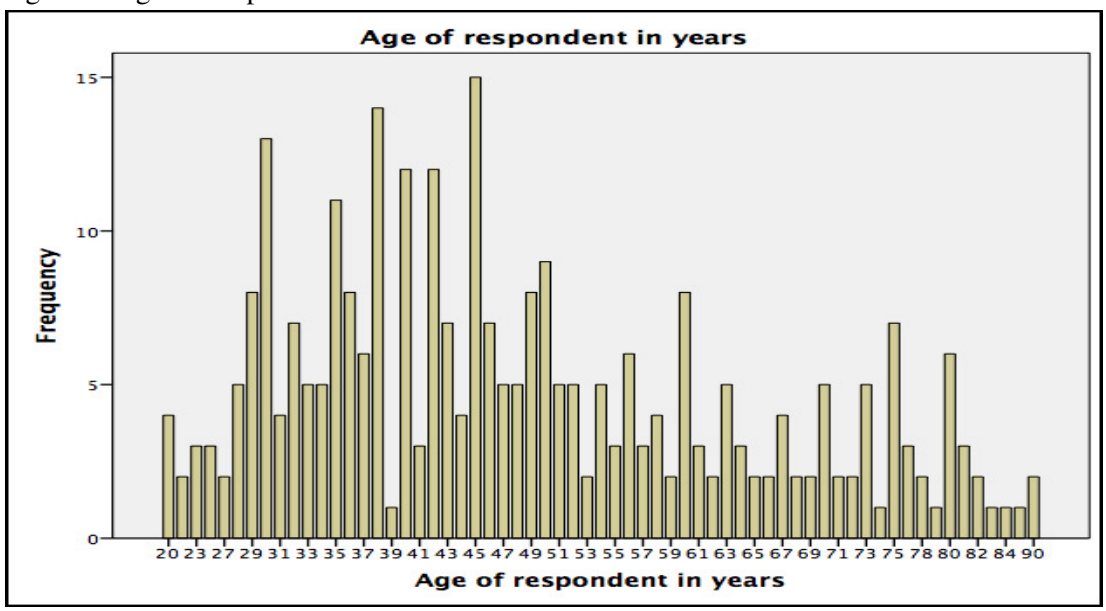

Table 1. Socioeconomic characteristics of respondents (N = 300)

Socioeconomic characteristic	Number	Percent
Sex of respondent		
Male	193	64.3
Female	107	35.7
Marital status of respondent		
Single	36	12.0
Married	225	75.0
Divorced	19	6.3
Widowed	20	6.7
Household size		
1-3	103	34.3
4-6	151	50.3
7-9	41	13.7
10 or more	5	1.7
Education level of respondent		
Started but did not complete primary	54	18.0
Completed Primary School	147	49.0
Started but didn't complete secondary school	11	3.7
Completed Secondary school	31	10.3
College/University	11	3.7
Never gone to school	30	10.0
Completed standard eight	16	5.3
Live in the aluminum roofed house		
Yes	260	86.7
No	40	13.3
Size of land in hectares cultivated last year		
Less than 1	48	16
1-3	205	68.3
4-6	22	7.3
7-9	21	7.0
10 or more	4	1.3

About half (49%) of respondents had completed only primary school, 18% started but didn't complete primary school, 10.3% completed secondary school while the rest reached different levels of education as shown in Table 1. The majority (86.7%) of the respondents lived in the alminium-roofed houses. Sixteen percent of the respondents cultivated less than one hectare of land while the majority (68.3%) cultivated between one to three hectares only (Table 1).

3.2 Farmers' Level Of Innovativeness

The level of innovativeness is the degree to which farmers have adopted innovations (Rogers, 1986, cited by Hedija, 1999). Smallholder farmers' level of innovativeness was measured based on their use of four innovations: a) improved seed; b) chemical and/or organic fertilizer; c) recommended spacing; and d) tractor ploughing. The results are presented in Table 2. Of 300 farmers only 24 (8%) used improved seed; 31 (12%) applied chemical fertilizer and 98 (33%) applied organic fertilizer or manure; 61 (20%) also followed recommended spacing at least for one of the crops they produced (i.e. maize, rice, cassava, banana, beans, sweet potatoes) (for which crops??); and only 8 respondents (3%) ploughed their fields using a tractor. In short, the level of innovativeness in farming is extremely low.

Table 2 Innovativeness of the smallholder farmers (N = 300)

Innovation	Number	Percent
Improved seeds	24	8
Chemical fertilizer	31	12
Organic fertilizer	98	33
Recommended spacing	61	20
Used tractor	8	3

3.3 Farmers' Access To Extension Services

Access to extension services, as used in the study, measured, among other things, farmers' awareness of the existence of extension services; whether they knew who their extension agent was; whether they had contact with extension agents; and whether they used public or private extension services, if any. Table 3 presents the results of the study. Of the 300 farmers, 69% reported knowing what an extension worker does; 70.6% knew their extension workers; only 33% of them knew where the nearest extension office was. Also, more than half (55.3%) of respondents had never had an extension worker visit their home or farm. Of the 134 respondents who were visited by extension workers, 75.4% were served by government extension agents; the remaining 24.6% did not know whether the agent worked for the government or private sector extension. None reported to have been visited by a private extension worker.

The study also asked whether smallholder farmers "demanded" extension services, that is, approached extension agents for help. Of the 166 farmers who were not visited by extension workers, only 3.6% requested extension services while the majority, 96.4%, did not. Among the reasons given for not demanding services or help were: a) 160 respondents or 75.6% of them said they had no reason for visiting their extension agents; b) 21.3% didn't know where the extension office was located; and c) 3.1% of them said the offices were too far. In summary, the smallholder farmers surveyed had limited services or contact with extension agents and also did not see the need to contact these agents.

Table 3: Farmers' contact with extension agents

Question	*Number*	*Percent*
Do you know the function of extension worker? (n = 300)		
Yes	207	69
No	93	31
Do you know your extension worker? (n = 300)		
Yes	212	70.6
No	88	29.4
Do you know where the nearest extension office is? (n = 300)		
Yes	98	33
No	202	67
Have you ever been visited by your extension worker? (n = 300)		
Yes	134	44.7
No	166	55.3
If your extension worker has not visited you, have you ever tried to visit her/him? (n = 166)		
Yes	6	3.6
No	160	96.4
Why have you not visited her/him? (n = 160)		
I have no need for her/him	121	75.6
I don't know where her/his office is	34	21.3
Her/his office is very far from here	5	3.1
Is your extension worker a government or private employee? (n = 134)		
Government	101	75.4
Private	0	0
Don't know	33	24.6

4. CONCLUSIONS AND RECOMMENDATIONS

This study examined the extent to which Tanzania's pluralistic and demand-driven extension approach, introduced in 2000, has been successful. In this study, success of the approach was measured in terms of: a) the degree to which smallholder farmers actively participated in the extension process; and b) farmers use of private extension services. To the first, the researchers found that smallholder farmers' adoption of agricultural innovations, such as improved seed, fertilizer and use of tractors in ploughing was minimal at best. Second, although the majority of respondents, 70.6% knew who their extension agent was, they did not request services or information from these agents. In fact, they did not demand anything because they saw no need to. In fact, they may have welcomed the new 'demand-driven" extension approach because it meant being left alone to practice their traditional ways of farming.

The new "pluralistic" extension approach was to create opportunity for private extension providers to compete with the public sector in providing extension services for smallholder farmers. Our study found no private extension providers in the two districts. If anything, smallholder farmers continue to depend on the public sector extension. One reason may be that these farmers cannot afford the fees charged by private extension providers. On the corollary, private extension providers do not find operating in rural areas to be profitable.

A general conclusion, therefore, is that the new extension policy, stressing pluralistic provision of extension services, public and private; and asking extension agents to wait for smallholder farmers to demand services before they can act, is not a realistic approach in the context of a developing country like Tanzania for two reasons. First, privatization does not work for smallholder farmers because they cannot pay for extension services; and second, the demand-driven approach does not work where traditional farmers are either not aware of

the availability of agricultural innovations or want to be left alone to practice their traditional ways of farming.

The Neuchâtel Group (2006) stated that demand-driven extension should empower poor farmers in order to effectively demand services. In essence, the demand-driven extension approach requires that extension agents first inform farmers on the availability of innovations as the basis for creating farmers' demand. It appears that this educational function has not taken place in the study area.

Based on the above findings and conclusions, we make the following recommendations. First, we recommend that smallholder farmers in the study area must be mobilized, organized and empowered as the basis for a "demand-driven" extension system. When farmers are organized and trained, they see market opportunities, prospects for improved living conditions, and the need to produce more. Then and only then, will smallholder farmers aspire to increase productivity, and thus, demand access to technological innovations, credit and so on. Groups and organizations can give voice to farmers' demands. Farmers are very heterogeneous, but groups and organizations of farmers with similar interests can secure better and more responsive service provision and more efficient use of public resources. They have stronger negotiation power with private services providers (Neuchâtel Group, 2006).

Our second recommendation is that extension agents in Tanzania need to make their role more visible to smallholder farmers. It is gratifying that smallholder farmers see extension agents in their midst. However, they may not know what these agents do in the rural areas. Extension agents need to attend community gatherings, introduce themselves, and encourage famers to interact with them. More than a decade after the introduction of the pluralistic and demand-driven extension system, it is disturbing to know that the interaction between smallholder farmers and extension agents is very low to non-existent. Smallholder farmers in Tanzania are still practicing traditional farming methods in spite of 60 years of existence of extension in the country.

Thirdly, we recommend that the extension system in Tanzania explore use of mass and social media, such as radio and cell phones as alternative ways of reaching smallholder farmers instead of relying solely on face-to-face interaction. Use of cell phones is becoming increasingly popular in rural areas of Tanzania (Sanga, Kalungwizi & Msuya, 2013) and, with proper planning, it should be possible for farmers to call in for information on farming. Tanzania also has one national language, Kiswahili, therefore radio can be a viable medium for disseminating extension information. Radio sets are relatively cheap and solar-powered radios are also available. Furthermore, it is possible for the government to subsidize the cost of radio sets for rural households to make radio a mass medium for extension. Training of agricultural extension workers in mass and social media use for extension is also recommended.

Since the two districts are not representative of all farmers in the country and therefore the findings are not generalizable, the replication of similar study in the wider part of the country will provide results that present the performance of extension in Tanzania.

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