

Full Length Research Paper

The influence of changed Central-Local Government relations on enhancing equitable delivery of agricultural extension information services to farmers in Tanzania

Noel C.Komba¹, Malongo R.S. Mlozi² and Zebedayo S.K.Mvena²

¹Department of Business Support Services, Tanzania Rural and Urban Roads Agency, PO BOX 11042 Dodoma, Tanzania.

²Department of Agricultural Extension and Community Development, Sokoine University of Agriculture, P.O BOX 3000, Morogoro, Tanzania.

Accepted 28 December, 2018

This study assessed the influence of changed central-local government relations on enhancing equitable delivery of agricultural extension information services to farmers. A cross-sectional research design was used to collect data from 390 respondents using semi-structured questionnaire and interview checklist. Quantitative data were analyzed through Wilcoxon signed ranked test while qualitative data were analyzed through content analysis. Despite envisaged objectives of delivering equitable agricultural extension information services to farmers, the implementation of the reform has encountered a number of challenges related to both policy design, and actual implementations. A policy review to take into account diversities in the ground is a matter of necessity for equitable delivery of agricultural extension information to farmers in the study area.

Keywords: Changed central-local government relations, equity, agricultural extension, information services, decentralisation.

INTRODUCTION

Provision of equitable agricultural extension information services to farmers is one of the utmost concerns worldwide. In the context of agriculture, equity means fairness and impartiality in the treatment of women and men in terms of rights, benefits, obligations and opportunities (FAO, 2009). In this study, the concept of equity has been extended to include type of farming engagement undertaken in the study area such as livestock keeping and crop farming. The demands for agricultural services between the latter groups are not uniform and therefore call for attention on understanding

their intricacies and ultimately devise a mechanism for sustainable delivery of agricultural services. Kabura (2014); Mwamfupe (2015) studies on delivery of extension services and conflict between agro-pastoralist respectively provides clues on existence of unjust socio-economic system between these two groups.

Experiences are the same when the gender aspect is factored in. For example Rugasa, (2012); Kabura, (2014) differently found that agricultural extension information and delivery services were male biased. Moreover, Rugasa et al. (2012) in Ethiopia found that, households with female heads and female plot managers are less likely to get extension services than their male counterparts. These attitudes negatively affect productivity among the farming community. Several factors might have attributed to such results.

Kiplimo et al. (2015) pointed out that socio-economic factors including biasness have greatly contributed to unequal access to extension services between male and females. In addressing inequity in the delivery of services and in this case, agricultural extension information services, a favourable environment that will enable local government authorities to optimally tap the local resources must be nurtured. This entails changing the way central-local government relates. Central–Local relations are regarded as one of the fundamental institutional arrangements which determine rapid economic development (Zhu, 2016). It reflects the horizontal and vertical power dynamics between central and local government and related consequences on autonomy that local government enjoys from central government. Striking a balance in the way central-local government relates has proved to be a challenging assignment among various government officials, scholars and political analysts (Vincent, 2015). Cognizant of the latter, the Government of Tanzania in late 1990s instituted local government reforms that shaped the central and local government relationship. The new relationships under reforms involved the abolishment of the existed command relations and introduced new relationship based on consultations and negotiations (URT, 2009). The change in power structure between central and local government was anticipated to improve imbalances and equity in access and use of resources for agricultural development.

However, it is worth noting that, the change process is not automatic. Cabral (2011) believed that it depends on the underlying motivations, political dynamics and the capacity of service users to make the government accountable. The institutional frameworks in which the local and central governments operate affect the costs of interactions between actors and in turn affect the way the governments behave in response to citizens' demands (Hong, 2013). It is in that backdrop, this study assessed the influence of the the changed central-local government relations on the delivery of equitable agricultural extension information services to farmers. The understanding of underlying factors influencing the reform effectiveness will shed light on improving future government initiatives for equitable delivery of agricultural extension information services to farmers in the study area.

MATERIAL AND METHODS

Description of the study area

The study was conducted in Meru District Council (MDC) and Arusha District Council (ADC) in Arusha Region. The

surveyed villages included Poli, Ndatu, Karangai and Kikwe found in MDC and Lengijave, Olkejulenderit, Kisyeria and Mlangarini in ADC. The two Councils were purposively selected based on the nature of agriculture practices undertaken. The district council practices both crop farming and livestock keeping and therefore enabled gathering of data from agro-pastoralist.

Sampling Procedures

This study used a two-stage sampling technique. The first stage involved selection of geographical location while the second stage involved selection of farming households and main respondents involved in the study.

First stage: Selection of geographical location

Meru and Arusha District council were purposely selected from the list of seven councils in Arusha region as they were among the first councils to implement decentralized policy reforms. Based on ecological factors and nature of farming engagement, two wards and four villages were purposely selected from each council. In each council one ward that is predominantly crop farming and another one with livestock keeping were selected. In Meru District Council, Poli and Ndatu villages in Poli ward with dominant crop farming activities were purposely selected, while Kikwe and Karangai villages in Kikwe ward found in lowland represented livestock keeping communities.

In Arusha District Council, Lengijave, Olkejulenderit villages in Olkokola ward found in the highlands zone with dominant livestock keeping activities were selected to represent livestock keepers while Kisyeria and Mlangarini villages in Mlangarini wards found in lowland zone was selected to represent crop farming communities. These selection criteria enabled the researcher to get the opinion related to equity from livestock keepers, crop farmers, female and male farmers. Therefore, four wards and eight villages were involved in this study.

Second stage: Selection of farming households' respondents

According to 2007/2008 National agriculture and livestock census, Arumeru District has a total of 97,545 farming households'. From the population of 97,545 farming households, a sample size of 398 households were determined using a formula provided by Yamane, (1967) $n = \frac{N}{1 + N(e^2)}$ with the level of precision of 0.05 assuming 95% confidence level (Yamane, 1967). Whereas $N =$ number of population size 97,545 for agricultural households and e is the level of precision $= 0.05$.

From the calculation, it was established a sample size of 398. However, in the field the researcher managed to solicit information from 390 farming households' respondents. Out of 390 respondents, 196 were from Meru District Council and 194 from Arusha District Council with an average of 49 respondents from each village involved in the study.

The information were solicited from respondents with age of not less than 30 yrs in 2015 when data were collected. The age limit intended to involve only those with prior policy implementations experiences. In addition, 16 agricultural extension agents were purposively selected as key informants as per D-by-D policy implementation arrangement. The composition of key informants were as follows; 16 agricultural extension agents out of them 10 from the ward level, two agricultural officers at the District headquarter, two staffs from President Office – Regional Administration and Local Government (PO-RALG), and two staffs from Ministry of Agriculture and Fisheries (MALF).

Data Collection and analysis

Primary data collection

The study employed a cross-sectional research design. According to Agresti and Finlay (2009) cross-sectional design allows a combination of various survey methods for gathering both qualitative and quantitative data and offer quick results with minimal cost. Both quantitative and qualitative were collected. Quantitative data were collected through a semi-structured questionnaire. The checklists were used in focus group discussions, and key informants interview for soliciting qualitative data. Information collected included access to land, linkage and access to markets, agricultural inputs, financial services, agricultural information and technologies for female and male farmers as well as for livestock keepers and crop farmers.

Secondary data

Secondary data were obtained through reviewing different documents relating to this study. These included extension policy and guidelines, CAG performance report on assessment of extension services under decentralized system, and PO- RALG annual development reports.

Data analysis

Qualitative data were analyzed through content analysis that involved designing and condensing raw data into categories or themes based on valid inference and interpretation. Moreover, SPSS version 20 statistical com-

puter software were employed for quantitative data analysis using Wilcoxon Signed Ranked Test. The Wilcoxon signed ranked test is a nonparametric test appropriate for analyzing data from repeated measures design with two conditions (Field, 2009). A 5% level of significance was used throughout the study, an independent variable with p-value less than 0.05 was considered as significantly associated with the outcome variables.

RESULTS AND DISCUSSIONS

Wilcoxon signed ranked test results for accessing agricultural extension information and delivery of services based on gender

The variables used to assess equity included farmers access and linkage to markets, access to agricultural inputs and land. Others were access to financial services, agricultural information and technologies. The detailed discussion of each variable is presented hereunder.

Of the 390 respondents 32% were female and 68% were males, though the questions were administered to all respondents regardless of their gender. The findings of study in Table 1 show that, the number of the respondents who reported improvement in male farmers' access to markets due to changed central-local government relations had higher median rank than those who reported improvement in female farmers' access. Those who reported improvement in male farmers' access to markets had the median rank of 4.0 while for the case of female farmers' access to markets had the median rank of 3.3. The difference in number of the respondents who reported improvement in access to markets between female and male farmers were statistically significant at $p \leq 0.01$ and z score of -5.80.

Furthermore, the study assessed linkage to agricultural markets between male and female farmers. The findings revealed that, the number of respondents who reported improvement in male farmers' linkage to market got higher median value than those who reported improvement in female farmers' linkage to market. Those who reported improvement in male linkage to market had the median rank of 3.4 and for those who reported improvement on female farmers had the median of 3.3. The difference in number of the respondents who reported improvement in linkage to markets between male and female farmers due to changed central-local government relation from commanding to intergovernmental relation was statistically significant at $p \leq 0.01$ with z score of -5.98 (Table 1). These study findings implied that, despite changed central-local government relation from command to intergovernmental

Table 1. Wilcoxon signed ranked test results for accessing agricultural extension information and delivery of services based on gender (n=390).

Variable	Male Farmers median score	Female Farmers Median Score	z-value	Respondents p-value
Male and female respondents access to markets	4.0	3.3	-5.80	0.01
Male and female respondents linkage to markets	3.4	3.3	-5.98	0.01
Male and female respondents access to agricultural inputs	4.0	4.0	-2.93	0.09
Male and female respondents access to financial services	4.0	4.0	-2.65	0.08
Male and female respondents access to land	3.6	3.3	-7.23	0.01
Male and female respondents access to agricultural technologies	4.0	3.3	-4.32	0.01

relation still on average 86% of the respondents had the view that, access and linkages to markets was not the same. Male farmers had more access and linkages to market than their female counterparts.

These findings are in line with those of Fischer and Qaim (2012) study in Kenya who found that, with the commercialization of agriculture, women were increasingly disadvantaged because of persistent gender disparities for accessing productive resources. In addition, Vargas Hill and Vigner, (2014) study on traditional perennial exports of cocoa in Ghana and coffee in Uganda show that women face barriers in accessing input markets, particularly for labor and non-labour inputs; this influences their choices of production technology. In Uganda, the low quantities marketed, and lack of access to bicycles, limit female coffee farmers to effectively market their coffee. The study findings can be explained by a number of factors including socio-cultural values in the study areas. Observation revealed that, women access and linkages to markets was limited to crops such as maize, beans, potatoes and carrots. Due to socio-cultural values, women in the study areas were restricted to engage in marketing of coffee while men did all the marketing of coffee and beans. Commodities generating lower average revenues are more likely to be controlled by women, whereas men control commodities that are high revenue generators, often sold in formal markets (Njuki et al., 2011). Furthermore, observations in the study areas revealed that, even if a woman had

inherited land with trees on it, she was supposed to seek consent and approval for harvesting and selling the trees from a previous owner who would be a father or uncle. Women could not make decisions relating to marketing: in terms of what amount to sell, what price to offer and where to be sold. In Ndatu Village a FGD participant showed dissatisfaction by saying that:

We and our children spent most of our time in farming. But when it comes to marketing of products, men come up and sell them. Experience shows that some men marry more wives and others remain in town and squander the money. (FGD- Ndatu Village -15.07.2015)

In addition, observation revealed that, weak farmers' groups and associations in the study villages have aggravated inequality between male and female farmers' access and linkages markets. Jones et al.,(2012) study in Malawi revealed that, farmers groups and associations have greater potentials in connecting women with markets. In addition, they can be better linked and access resources and overcome gender constraints. Responding on the observed situation, the village extension officer in Ndatu Village commented that:

We have been struggling to encourage farmers to join farmers' groups and associations as a solution to various agricultural challenges including marketing of their agricultural products. But the responses have not been positive as most farmers are hesitant due to past experiences associated with farmers' associations malprac-

tices (KI- AEA -Ndatu Village-15.08.2015)

Moreover, regarding access to land in the study areas, the findings indicated that, respondents who reported improvement on female farmers' access to land due to changed central-government relation had higher median rank than those who reported improvement in female access to land. The number of respondents who reported improvement in male access to land had the median score value of 4.0, while those who reported improvement on female access to land had the median score value of 3.3. The differences in the number of the respondents who reported improvement in male and female access to land were statistically significance at $p \leq 0.01$ and z score value of -7.23. The study findings are in line with those of ILC (2012) study in Rwanda and Burundi which found that women are particularly vulnerable, because of systematic discrimination in relation to the recognition of their land rights, systematic discrimination in public discourse and decision-making, their relative cash poverty, and their physical vulnerability. In addition, the study by Patel, (2012) in Brazil also revealed that, women had systematically less access to land and capital despite having sophisticated knowledge in the farming system. This therefore shows that resource allocation between male and female farmers is still a challenge in different parts of the world. Behrman et al., (2012) in Chile once posited that land deals that create new opportunities for women can make positive transformations, but those that take resources away from women can reduce the welfare of women and their families, even if there are some income gains to men.

Male dominance in the study areas can be explained by disparity to accessing land between female and male access to land. For example, observation in the surveyed villages in Meru and Arusha District Council revealed that, even when a female possessed land prior to being married, once she became married automatically the property owned transferred to men who are the household heads. In the discussions with respondents in FGDs in Mlangarini Village one participant was quoted saying:

I was given this piece of land by my father before he died; when I got married we shared all what we had with my husband including the piece of land and other stuffs from my parents. Now the land belongs to our family and it is under the custodian of my husband. Whenever we want to develop the land or sell it, we have to discuss together and then reach an agreement (FGD- Mlangarini Village-01.09.2015).

In addition, during interview with village extension staff in Poli Village, it was noted that though the traditional values allow women to inherit land, but since land is

scarce, in most cases males play a leading role when it comes to land ownership. Commenting on the situation the village extension staff once said:

Land is the source of life in this village. It provides platforms for various undertaking both crops and animal husbandry. Even though socio cultural values provide equal land ownership chances between a male and a female, but in reality, a large part of land is owned by males who are the household's heads (KI-AEA-Poli Village-19.08.2015)

It was observed that, 90% of land in the study villages is owned by men who are households' heads, most of which was acquired through inheritance or buying. In addition, Table 1 shows that, male respondents' access to agricultural technologies changed after central-local relation from commanding to intergovernmental relation was relatively higher compared to that of female farmers. The number of respondents reported improvement in male farmers access to agricultural technologies recorded the median score of four while those reported women improvement access had a median score of three point three. The difference in the number between respondents who reported improvement in access to agricultural technologies between female and male due to changed central-local government relation was statistically significant at $p \leq 0.01$ and z score of -4.32. These findings conform to those of Ragasa et al.,(2012); (Kabura, (2014); Okanya (2014) who differently found that agricultural extension information and delivery services were male biased. For example, Rugasa et al. (2012) who studied gender differences in access to agricultural extension services in Ethiopia found that, female farmers were less likely to get extension services than their male counterparts.

These study findings have partly been attributed to lack of access to resources among female including ownership to farming enterprises. During survey, it was revealed that, most of the farming enterprises belonged to families which were mostly controlled by males who also got the most agricultural extension information and delivery of services from the extension agents. For example one agent (Male one) in Ndatu Village commented by saying:

Most of our clients in this village are men. Because of the tradition they are the household heads and custodians of family land and cattle. They are the ones who receive the most agricultural extension information and services (FGD-Ndatu Village-15.07.2015).

Moreover, the difference between female and male farmers access to agricultural inputs and financial was statistically significant at $p \leq 0.09$ and $p \leq 0.08$, respectively (Table 1). The median scores for female and male access to agricultural inputs and financial services were

the same. The median score rank of 4.0 implying that there was no change due to implementation of decentralization reform.

Wilcoxon signed ranked test results for accessing agricultural extension information and delivery of services between crop farmers and livestock-keepers due to changed central-local relations

The Wilcoxon signed rank test was used to test respondents' opinions on the accessibility of agricultural extension information and services between crop farmers and livestock keepers due to changed central-local relations. Aspects that were measured for the access to agricultural extension information and delivery of services included access to agricultural technologies, agricultural information, land, financial services, and agricultural inputs.

The results presented in Table 2 show that, respondents who kept livestock had higher median rank of 3.5 than those who grew crops of 3.2 for accessing agricultural inputs due to changed central-local government relations. Those who reported improvement in livestock access to agricultural inputs had the median rank of three point five higher than 3.2 for those who reported for crop farmers. The differences in ranking between crop growers and livestock keepers were statistically significant at $p \leq 0.01$ with a z score of -4.41. The study findings implied that, slightly more of the respondents who kept livestock were of the opinion that they did not access agricultural inputs compared to their crop growers' counterparts during the changed central-local government relations.

Observations show that in the study areas, most of the livestock keepers bought their livestock inputs from private vendors who sometimes supplied agricultural inputs. The most common inputs were veterinary medications, roughage concentrate and milk processing handlings. These study findings conform to Tegegne et al., (2006) in Ethiopia who found that livestock keepers had reliable access to livestock inputs compared to crop farmers. Though findings indicated that, private sector supply was limited to supplies of veterinary drugs, roughage and concentrate feeds, as well as processing equipment utensils, therefore public sector remained to be the main supplier of livestock input.

The crop farmers and livestock keepers' opinion about access to agricultural inputs can be explained by the nature of farming activities they undertook. It was observed that, most of the livestock extension staff gave advice to livestock keepers than to crop farmers because of the incentives and the associated benefits they received when discharging their responsibilities. Further observation revealed that, it was an opportunity for a

livestock extension staff to supplement incomes from the service charges and selling of livestock and other medications than it was for crop extension staff. Also, most of the crop growers did not seek agricultural extension information and services from the crop extension staff; something which was common for livestock keepers. During FGDs at Lengijave Village one participant said:

I receive regular support from our livestock extension staff about agricultural inputs and information than I do from our crop livestock extension staff. Whenever, I detect something unusual in crop field, I normally consult my fellow farmers whom we share some experiences and it works. The livestock extension staffs are readily available because we pay for their transport, and other charges (FGD-Lengijave Village-27.08.2015)

Additionally, Table 2 shows Wilcoxon signed ranked test results about access to financial services due to changed central-local relations. Respondents who kept livestock had a median rank of 3.6, while crop growers had the median rank of 3.4. The differences in rankings between crop farmers and livestock keepers' access to financial services was statistically significant at $p \leq 0.05$ with a z score of -2.81. These study findings conform to those of with Tegegne et al. (2006) in Ethiopia who found that, livestock keepers were more connected with credit facilities. In the study areas observation showed that, the main suppliers of financial services to the respondents were microfinance institutions, food security projects, small-scale micro enterprises and NGOs. According to Siegmund-Schultze et al., (2007) the liquidity derived from keeping livestock was not matched by any other agricultural activities because cattle could be disposed quickly and easily at any time and bring incomes to farmers than crops.

Livestock-keepers access to micro credit facilities and rural financial services in the study villages was mainly attributed to the belief of the lender (Financial Institutions). The lender had the belief that, it was more risky to provide loan to crop farmers than livestock keepers due to liquidity and tangibility of livestock in case the lender defaulted to pay loan on time. It was further observed that, most of the rural financial institutions had stringent conditions that limited crop farmers' access to financial services.

Moreover, Table 2 shows Wilcoxon signed ranked test results about access to land. Crop growers had a lower median ranking score of 3.4 compared to livestock keepers whose score was 3.5 about access to land. The difference in the ranking about access to land between livestock keepers and crop growers due to changed central-local government relations was statistically significant at $p \leq 0.01$ and z score -3.17.

Table 2. Wilcoxon signed ranked test results based on crop farmers and livestock-keepers access to agricultural extension information and delivery services (n=390).

Variables	z-value	Crop farmers median score	Livestock-keepers median Score	p-value
Crop farmers and livestock keepers access to agricultural inputs	-4.41	3.2	3.4	0.01
Crop farmers and livestock keepers access to financial services	-2.81	3.4	3.6	0.05
Crop farmers and livestock keepers access to land	-3.17	3.4	3.5	0.01
Crop farmers and livestock keepers access to agricultural technologies	-4.05	3.4	3.6	0.01
Crop farmers and livestock keepers access to agricultural information	-4.32	3.3	3.5	0.01

These study findings are in disagreement with Benjaminsen et al., (2009) in Kilosa District in Tanzania who found that pastoralists' access to wetlands is decreasing due to expansion of cultivated areas and the promotion of agriculture. Moreover Mwamfupe, (2015) in Longido Tanzania found that livestock keepers are more insecure in terms of land access due to the emerging process of land grabbing which has been encroaching on local rights, marginalizing rural farmers and pastoralists who depend on land, water and other natural resources. According to Mwamfupe the problem of lack of security of tenure facing pastoral groups is best exemplified by eviction of Maasai pastoralists from eight villages in Loliondo District of northern Tanzania.

Despite study findings showing disparity for accessing land between croppers and livestock keepers, respondents' opinions also were influenced by the agro-ecological factors. Respondents resided in the two distinct agro-ecological zones practiced animal husbandry and crop farming. Due to the availability of water and fertility land, the upper zone was heavily populated and practiced crop farming as opposed to the lower zone, which was sparsely populated, dry and dominated by livestock keepers. The lower zone had more unoccupied land compared to the upper zone which prompted respondents growing crops to think that livestock keepers had more access to land than them. In FGDs at Ndatu Village one participant complained that:

We are heavily squeezed; the land in Meru (referring to the upper zone) is no longer supportive for our livelihood. Our population has tremendously increased over the last ten year. Now we are looking for other alternative land allocated for us a possibility for alternative land. With the land conflicts of 1990s the government looked alternative

land in Kilindi District in Tanga Region, but most farmers did not stay there longer due to unsupportive environment. Most of them came back here (FGD-Ndatu Village-15.07.2015).

Turning attention to agricultural information, Adio (2016) defined agricultural information as the various sets of information and messages that are relevant to agricultural production activities of farmers such as crop production and protection, animal production and management, and natural resource production and conservation. For the purpose of this study agricultural information therefore refers to agriculture related data which are transformed into meaningful and useful contexts or forms for effective decision making in agriculture or farming related activities. In the light of this understanding, the study findings on respondents access to agricultural information as a result of changed central-local relations indicated that, livestock keepers had higher median rank score of 3.6 compared to crop growers who had ranking score of 3.4. The difference in the ranking about access to agricultural information between livestock keepers and crop growers was statistically significant at $p \leq 0.01$ with a z score of -4.05.

Furthermore, regarding access to agricultural technologies due to changed central-local relation, Table 2 reveals that, respondents who grew crops showed improvement in accessing agricultural technologies by scoring low median scores of 3.3 compared to those who kept livestock. The differences in the ranking about access to agricultural technologies between crop growers and livestock keepers was statistically significant at $p \leq 0.01$ with a z score value of -4.32. Agricultural technology refers to tools and machines and equipment used in agricultural process. It focuses on technological

processes used in agriculture to create an understanding of how processes, equipment and structures are used with people, soil, plants, animals and their products to use the environment, to sustain and maintain quality of life and to promote economic, aesthetic and sound cultural values (RSA, 2005).

The study findings implied that, despite changed central-relation there was still inequity in accessing agricultural technologies between crop growers and livestock keepers. The results are in line with IFPRI, (2010) which found that despite a wide range of reform initiatives in agricultural extension in India in the past decades, the coverage of, access to, and quality of information provided to marginalized and poor farmers were uneven. Furthermore, Kabura (2014) study in Tanzania found that farmer's extension program is low among pastoralists than the agro-pastoralists. Several reasons can be given; the level of willingness between the two groups to initiate demand for extension services and incentives that livestock extension officers get when delivering services to their clients.

In the interview with the village extension officer as one of the key informant he was quoted saying that:

The level of aggressiveness in initiating extension services is higher among livestock keepers compared to crop growers. I often receive calls from livestock keepers than I do from crop growers. This has been attributed by several factors including the practices by crop growers of relying their fellow farmers when encountered challenges in their field (KI- AEA -Kisyeria Village-22.08.2015).

Moreover, during the FGD in Langijave Village one participant said that:

I practice both crop farming and keeping livestock, but when it comes to seeking agricultural advice and information, I am more eager to consult livestock extension staff than I do to crop extension staff to minimize the associated cost. For the crops, I usually get advice from my fellow farmers (FGD- Lengijave Village-15.07.2015).

Generally, observation revealed that, livestock keepers sought more information and services about their livestock than did crop growers. Most crop growers sought information about crop husbandry from their fellow farmers than from agricultural extension officers.

CONCLUSION

It was envisaged that, the changed central-local government relations from commanding to intergovernmental relations would have contributed to enhanced equity in the delivery of agricultural extension information services to farmers in study areas. However, contrary to policy expectations, the study found that, still

there were discrepancy in the access and delivery of agricultural extension information and services among different farmers groups in the study areas. It was further noted that, male farmers had more access compared to female farmers and based on the nature of farming engagement livestock keepers were more accessed to agricultural extension information services compared to crop farmers. The found disparities in access and delivery of equitable agricultural extension services provides justification that the changed central-local relations has failed to live up to its expectations.

RECOMMENDATIONS

Based on the identified findings it is clear that, the delivery and access of equitable agricultural services among different farming groups is impeded by number of challenges which calls for reactive policy measures correct policy malfunctioning. The measures will entails reviewing the policy design so that it should be farmers centered and have reflection of the socio-cultural values and diversity of farmers needs to make the policy more pragmatic.

REFERENCES

- Behrman J, Meinzen-Dick R, and Quisumbing A. (2012).The gender implications of large-scale land deals.JPS39(1),49–79. doi: 10.1080/03066150.2011.652621.
- Benjaminsen TA, Maganga FP, and Abdallah JM. (2009). The Kilosa killings: Political ecology of a farmer-herder conflict in Tanzania. *Development and Change*, 40(3), 423–445. doi: 10.1111/j.1467-7660.2009.01558.x.
- Cabral, L. (2011). Decentralisation in Africa: Scope, motivations and impact on service delivery and poverty.FAC 20:1-14. doi: 10.1142/9789812818645_0001.
- FAO (2009).Scaling-Up Conservation Agriculture in Africa: Strategy and Approaches. Addis Ababa, Ethiopia.
- Field A. (2009). Output from the discriminant analysis. In: Field A. London: SAGE Publications Ltd. p. 618-21.
- Fischer E. and Qaim M. (2012).Gender, agricultural commercialization, and collective action in Kenya. *Food Security*, 4(3),441–453. doi: 10.1007/s12571-012-0199
- Glendenning C J, Babu S. and Asenso-Okyere, K. (2010). Review of Agricultural Extension in India Are Farmers Information Needs Being Met?.International Food Policy research institute Discussion paper No. 01048. 48pp.
- Hong H. (2013). Government websites and social media's influence on government publicrelationships-

- .j.pubrev39(4),346–356.doi:
10.1016/j.pubrev.2013.07.007.
- Jones E, Smith S. and Wills C, (2012). Women producers and the benefits of collective forms of enterprise. *Gender and Development*, 20(1),13–32. doi: 10.1080/13552074.2012.663640.
- Kiplimo JC. (2015). Determinants of access to credit by smallholder farmers in eastern and western Kenya. *JDAE*, 7(9), 303–313. doi: 10.5897/JDAE2014.0591.
- Mwamfupe D. (2015) 'Persistence of Farmer-Herder Conflicts in Tanzania. *ijsrp* 5(2), p. 8. Available at: <http://www.ijsrp.org/research-paper-0215/ijsrp-p3862.pdf>.
- Njuki J, Kaaria S, Chamunorwa A, Chiuri W (2011). Linking Smallholder Farmers to Markets, Gender and Intra-Household Dynamics: Does the Choice of Commodity Matter?' *ejdr*, 23(3),426–443. doi: 10.1057/ejdr.2011.8.
- Patel RC. (2012). Food sovereignty: Power, gender, and the right to food', *journal.pmed* 9(6), 2. doi: 10.1371/journal.pmed.1001223.
- Philip K J. (2014). Extension program needs by farmers in Tanzania : a descriptive study. Dissertation for Award of Msc.in Agriculture Education Extension at IOWA State University. 119 pp.
- Ragasa C. (2012). Gender and Institutional Dimensions of Agricultural Technology Adoption: A Review of Literature and Synthesis of 35 Case Studies', *International Association of Agricultural Economists (IAAE) Triennial Conference*, (January 2012), pp. 1–57.
- Siegmund-Schultze M, Jb da Veiga, JM King (2007). Cattle are cash generating assets for mixed smallholder farms in the Eastern Amazon. *j.agsy* 94(3),738–749. doi: 10.1016/j.agsy.2007.03.005.
- Tegegne A, Gebremedhin B. and Hoekstra D.(2006). Input Supply System and Services for Market-oriented Livestock Production in Ethiopia. *Proceedings of the 14th Annual Conference of the Ethiopian Society of Animal Production (ESAP)*, held in Addis Ababa, Ethiopia, September 5-7, 2006. Part I: plenary session., pp. 1–19.
- Vincent, C. (2015). Local Government Capacity Building and Development: Lessons, Challenges and Opportunities. *J Pol Sci Pub Aff* 3(1), 1–5. doi: 10.4172/2332-0761.1000149.
- Yamane, T. (1967). *Elementary Sampling Theory*. Prentice Hall.'