

Is Value Chain an Important Gap in Agricultural Extension Strategy of Ethiopia? Employers' Perspectives in Case of SNNPR and Oromia Regions

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Abstract: The emerging trend for agricultural sector in the global market creates opportunities for smallholder farmers in the developing countries to benefit from such opportunities by linking their activities to value chains through vertical and horizontal linkages. Extension workers are poorly trained with the knowledge and skills of value chain to perform their pivotal roles in full since input provision until the consumption. Upgrading the technical and professional skills of development agents with respect to the value chain is very important; and in turn calls for academia mainly universities to come up with custom-made programs that address the specific needs of this vital group of agricultural change drivers. This paper was intended to conduct a comprehensive assessment perspectives whether value chain is the missing component in Ethiopian agricultural extension strategy and as whether there is or not an in turn need from the important employers and stakeholders to the value chain oriented extension packages in Ethiopian agricultural development strategies. From among the regions in Ethiopia, two regions, South nation nationalities and peoples of regional state (SNNPR) and Oromia regional state were selected randomly. Important regional and zonal offices; office of agriculture and natural resource and/or office of livestock and fishery resource were assessed. The result of the study revealed that post-production problems like information/communication gap to plan on their product, lack of value addition and product processing, post-harvest handling and management problem, and market related problems were the main missing areas where extension services are not packaged for; and are the reasons for smallholder farmers behind generating low benefit from the agricultural enterprises. It is finally recommended that upgrading of development agents with the knowledge and skills of value chain oriented agricultural extension services as one of the way of solving the post-production problems of agriculture sectors in Ethiopia. Revisiting the current agricultural extension strategy and then reorient the extension professionals to address the post-harvest, value addition and market linkage extension gaps is, therefore, the inevitable way forwards. Thus, it is of paramount significant importance to prepare a full-fledged extension strategy considering the demand of agricultural development in line with the future direction of the agricultural extension services.

Key Words: - Agricultural Extension, Extension Strategy, Value Chain Oriented, Post-Production

I. Introduction

Agriculture is the mainstay of Ethiopian economy. This subsistence agriculture has continuously dominated economic development policy in Ethiopia contributing about 39% of gross domestic product (GDP) by the end of 2014/15 (Mellor, 2014). The government of the federal democratic republic of Ethiopia (FDRE) formulated agricultural policy and strategies, the agriculture development led industrialization (ADLI), to overcome the agricultural problems and transform the country's economy. By the 2013/14, the real GDP grew by 10.3% with 2.3% of this growth is from the agricultural sector. It is also estimated that it provides employment for about the 72.7% of the labor force (UNDP, 2015). ADLI has served as an umbrella strategy guiding the three most recent five year national plans: the sustainable development and poverty reduction program (SDPRP), 2002/03-2004/05; a plan for accelerated and sustained

development to end poverty (PASDEP), 2005/06-2009/10; and the growth and transformation plan-I (GTP-I), 2010-2015. Generally the Ethiopia's rural development policy and strategies' prioritize the transformation of smallholder subsistence agriculture to commercial agriculture through market-oriented production system. Accordingly, the government is investing heavily in agriculture with a focus on public extension services by deploying considerable human and financial resources (Ministry of Agriculture and Natural Resource, 2017).

However, Ethiopian agriculture is characterized by low productivity and it has been unable to produce sufficient quantities to feed the country's rapidly growing population (BezabihEmana, 2010). Though accelerated growth in agricultural productivity continuous to be an important emphasizing area, food security is continuing to be a challenge (NPC, 2016). With these circumstances, the government of Ethiopia is highly committed to sustainably increasing agricultural production every annum to meet the growing demand for food, industrial raw materials, and foreign currency earnings leading a need of dynamic and proactive extension system. Rigorous and vibrant extension system is a key policy instrument to enhance agricultural development. Development experts as crucial in achieving agricultural development, poverty reduction, and food security (Feder, *et al.*, 2011) have emphasized agricultural extension, in recognizing this, the government of Ethiopia has made great efforts to transform the agricultural sector mainly by strengthening extension services as part of the general agricultural policy reform. In spite of the considerable attention and efforts made to the extension system o the country in the past, the system is not bringing the desired results.

One of the major gaps the system less emphasize is the post production value addition that each concerning actors and stakeholders (smallholder farmers in particular) along the agricultural value chain would have been added than merely focusing on pre harvesting practices and mass production for food security. The emerging trend for agricultural sector in the global market creates opportunities for smallholder farmers in the developing countries to benefit from such opportunities by linking their activities to value chains through vertical and horizontal linkages. Value chain is the entire range of activities required to bring a product or service from the initial input-supply stage (conception) through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use (Kaplinsky and Morris, 2001). A key and indispensable precondition to agricultural development is the existence of frontline extension workers with the requisite knowledge and skills to drive the agricultural modernization process. Extension workers are poorly trained with the knowledge and skills of value chain to perform their pivotal roles in full since input provision until the consumption. Upgrading the technical and professional skills of mid-career frontline extension workers with value chain concept is, therefore, very important; and this calls for universities to come up with custom-made programs that address the specific needs of this vital group of agricultural change drivers.

In this regard, the role of Universities is to ensure that the wheels of the agricultural modernization process are well oiled with the necessary knowledge and skills to ensure continuous and sustainable development (Jeff Mutimba, 2011). Universities in Ethiopia are currently doing for solving agricultural product related problems such as market problems, value addition and postharvest management problems starting from producers up to final consumers. The way it is trying to solve this problem is upgrading the know-how of major stakeholders along the agribusiness and value chain management in mid-career program. Following the launching of the B.Sc mid-career extension program at Haramaya University, Ethiopia in 1996/97 academic year, it has then spread to eight other Universities (Hawassa, Bahir Dar, Mekelle, Wollo, Jimma, Arba Minch, Jigjiga and Samara), while Wolkite University is preparing to embrace the program. For this purpose the authors, as part of Wolkite University, conducted a comprehensive assessment to make sure that there is a need from the important employers and stakeholders to this value chain oriented mid-career program filling the knowledge gap of the development agents in relation to value chain.

II. Methodology

From among the regions in Ethiopia, two regions, South nation nationalities and peoples of regional (SNNPR) and Oromia regional states were selected purposively. Sample Zones/districts namely Gurage zone, Silte zone, Hadiya zone, Gedeo zone, Sidama zone, Kafa zone, and Yem special woreda were selected from SNNPR region randomly. Sample Zones and districts from Oromiaregion considered randomly were Finfine surroundings Oromia special zone, South-West Shewa zone, Jimma zone, and Kersa woreda, Omo nada woreda, OmoBeyemWoredas. There are around 136 and 287 woredas under SNNPR and Oromia regional states respectively. For this assessment purpose, a total of 17 regional and/or Zonal and/or woreda level offices were assessed against the need of value chain oriented agricultural extension mid-career program. From each sample organizations, office of agriculture and natural resource and/or office of livestock and fishery resource were assessed.

III. Results and Discussion

3.1. Role of agricultural offices: The major mandate/objective for the agriculture & natural resource and livestock & fishery offices were found to be providing training and awareness creation to the farming communities at FTC level through the DA's to promote quality production and productivity; providing advisory work and extension services for the farmers on how to produce quality product, how to process and supply to the market through primary cooperatives and Unions; making facilitation for promotion of agricultural extension; capacity building, planning, implementing, monitoring and evaluation; technology promotion and delivery/dissemination, and input supply; encouraging farmers to market oriented production; cluster production and value chain, facilitating market linkage to smallholder farmers (sometimes); and identification and scaling up of farmers level best practice.

3.2. Farmer's occupations: The major occupations of the community/society in the two regions and the respective sample zones were agriculture; but also trading to some extent from which most (64.7%) of the key persons representing the sample regions/zones or woreda replied that though smallholder farmers are productive in agricultural activity, about 58.8% of key informants replied that farmers are not still benefited from the agriculture business (Figure 1 and 2 below).

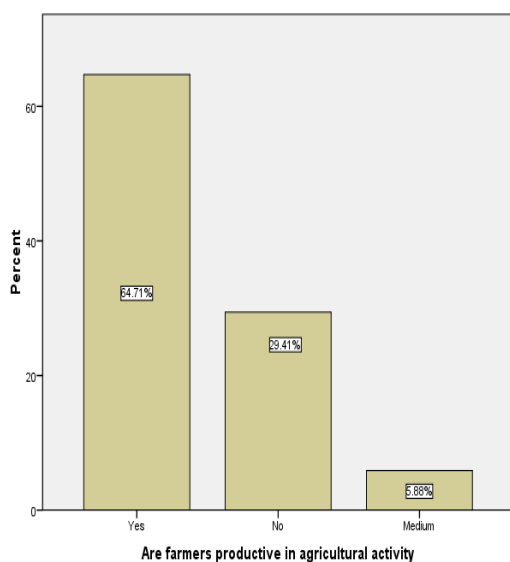


Figure 1: Farmers agricultural productivity

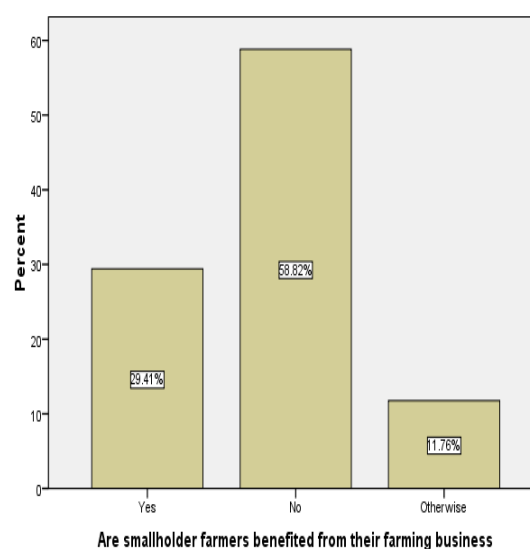


Figure 2: Farmers' benefit from agriculture

3.3. Post-production problems: Key informants were asked to indicate the post-production problems challenging farmers not to benefit/perform well in their farming business; and on average 73.55% of them responded that post-production problems are the main reason behind generating low benefit from the agricultural enterprise/s. The major underlying post-production problems hindering farmers from benefiting more were

- Knowledge/information/communication gap to plan on their product
- Lack of value addition and product processing at farm level
- Post-harvest handling and management problem
- Market related problems

Table 1: Underlying post-production problems of smallholder farmers

Problems	Response (N=17)		Severity of the problem
	Yes (%)	No (%)	
Information/communication gap to plan on their product	70.6	29.4	3 rd
Lack of value addition and product processing	82.4	17.6	1 st
Post-harvest handling and management problem	76.5	23.5	2 nd
Market related problems	64.7	35.3	4 th
Average	73.55	26.45	

Source: Authors Computation, 2017

3.4. Role of Development agents (DAs): DAs would contribute in provision of value chain oriented agricultural extension services which in turn would solve those post-production problems of farmers. However, in general they do have the knowledge gap on value chain aspect; their focus rather is on improving farmer's productivity in agricultural enterprises. As reported by the key zonal and regional officials, DA's major roles to the farming communities mainly limited to:

- Provide extension service and training farmers at FTC level and delivering inputs, new technology and new information.
- Provide advisory work and training to make them produce quality yields
- Make linkage between farmers and governments as well as other agricultural input suppliers.
- However, around 82.3% of the key informants replied DAs are challenged and not playing a role of providing value chain oriented agricultural extension services for smallholder farmers so far (Figure 3).

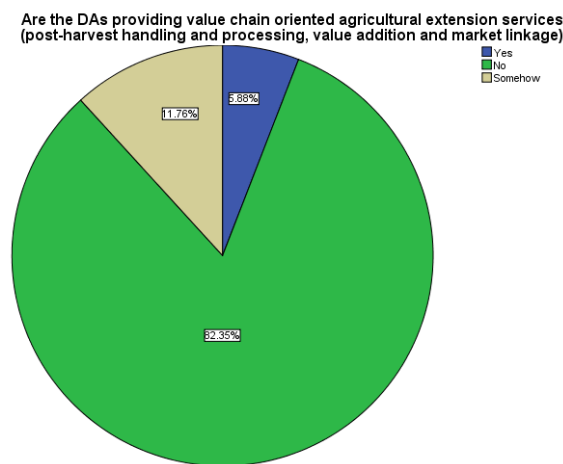


Figure 3: The role of DAs on value chain oriented agricultural extension service

Therefore, irrespective of the agricultural offices' objective in agricultural production, post-harvest handling and processing, value addition and market linkage, the role of development agents (DAs) are limited only on agricultural production but not on post-production activities (processing, value addition and market linkage).

The very important reasons behind it are:

- a. Skill and knowledge gap about value chain, value addition and processing of agricultural commodities.
 - DAs are not equipped with value chain knowledge
 - DA's main focus is providing extension service only on production than on post-production activities,
 - DAs assume the work of creating market linkage and value chain for other organizations and say the work of market linkage and value addition is not their mandate and they concerned only for production and productivity activities.
 - Since they are rural *kebele* level, they assumed they couldn't create market linkage
- b. Their fields of study/background are plant science, animal science, and natural resource management; but not agribusiness and value chain management and agricultural marketing
- c. Commitment problems and burden of other sector works and other related challenges hinder them to focus on value addition and market linkage.

3.5. Importance of Agribusiness and Value Chain Management field of study: Respondents were then asked whether or not the Agribusiness and Value Chain Management field of study could solve DAs' knowledge gap on value chain oriented agricultural extension services in turn solves problems of farmers low performance along the agricultural value chain. Around 94% of the respondents revealed that value chain oriented agricultural extension service is the missing part before; and this particular field of study by now is important to customize the development agents and solving agricultural product related problems such as market problems, value addition and postharvest management problems starting from producers up to final consumers.

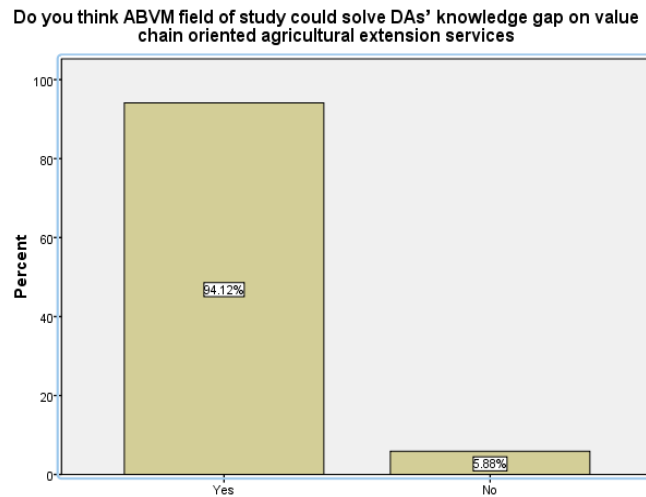


Figure 4: Importance of Agribusiness and Value Chain Management field of study

The key informants/officials finally recommended positively the upgrading of DAs with the knowledge and skills of value chain oriented agricultural extension service as one of the way of solving the post-production problems of agriculture sector.

IV. Summary and Conclusion

There is growing realization that smallholder farmers in Ethiopia are not benefiting from the full potential of their farm produce. The assessment revealed that smallholder farmers could increase their incomes substantially if they process and add value to their produce; hence increase their competitiveness in an increasingly competitive environment. Part of the reason why farmers were not getting the full benefit from their farm business is that the current extension service is focused mainly on production and productivity. The agricultural extension service in Ethiopia has been focused to provide services to the farming communities concerning production and productivity alone, excluding the post-production activities (i.e. processing and Value addition). However, the changing market conditions, the significance of post-production activities, value addition and consumer preferences require adjustments in the training and education sector. In this regard, there is an increasing need to revisit the current agricultural extension strategy and then reorient the extension professionals to address the post-harvest, value addition and market linkage extension gap. Thus, it is of paramount importance to prepare a full-fledged extension strategy considering the demand of agricultural development in line with the future direction of the agricultural extension services. In doing this, the strategy should develop a strong market-oriented, demand-driven, and well-functioning agricultural extension system to transform the subsistence agricultural production to a value addition and commercialization. It is also recommended that the strategy should identify first the key bottlenecks to the transformations and proposes the respective series of interventions scoping from agricultural input supplies to consumers in a value chain with integrated extension approaches.

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