

## **Improving technical support to enhance productivity of rural community in Boloso Sore and Boloso Bombe Woredas**

### **Abstract**

The study was aimed at how to improve the technical support to enhance productivity of rural community, assess viability of interventions and available risks and resources as well as to develop intervention model in Boloso Sore and Boloso Bombe Woredas. It employed both quantitative and qualitative study design. The empirical data obtained from the field using the Survey, KII and FGD guides, data from the secondary sources through desk review affirmed that serious efforts have been made and large amount of resources have been invested by Wonta Rural Development Association to improve the livelihood situation of the rural household in the intervention areas. The viability and scope of interventions made by the Wonta Rural Development Association to improve household productivity and intend to create rural employment worked out good in the areas of dairy goat and community based organizations like self help groups for savings but horticulture, poultry and other activities were found inferior during the study period. The study has suggested a conceptual model to improve rural household production and productivity to enhance household food security, to promote rural job opportunity and to introduce and apply value chain in rural context. Thus, we recommend applying the model during the intervention work.

**Key Words:** Technical support, Productivity, Conceptual model

### **INTRODUCTION**

Given that improving the efficiency of agricultural production is a key to pro-poor economic growth, improvements in agricultural technology are the principal means of doing this. Agricultural technology can affect smallholder income, labour opportunities for the poor, food prices, environmental sustainability, and linkages with the rest of the rural economy (FAO, 2000):

- Agricultural technology has been a primary factor contributing to increases in farm productivity in developing countries over the past half-century. Although there is still widespread food insecurity, the situation without current technology development would have been unimaginable.
- New technology can provide additional rural employment, but there are always countervailing pressures to reduce labor input and lower its costs.
- Food prices are demonstrably lower because of technology, but the distribution of benefits between consumers and producers depends on the nature of the local economy and trade patterns.

Agriculture is the dominant economic activity in many sub-Saharan countries, accounting for more than 60% of the total labor force, with more than 75% of the poor in these regions dependent on agriculture for their livelihoods. As such, it is widely believed that improving productivity, profitability and sustainability of smallholder agriculture in sub-Saharan Africa is key to promoting inclusive economic growth and the main pathway to reducing poverty and inequality (Mulubrhan Amare and Bekele Shiferaw, 2017).

To improve agriculture's effectiveness for development, upgrading the skill levels of rural people is of paramount importance. Low educational attainment levels coupled with scant opportunities to acquire job-specific skills and on-the-job training and experience, constrain job opportunities for many rural youth and adults seeking productive work in agriculture. Skills-focused programmes, including Training for Rural Economic Empowerment (TREE), target agricultural communities and bundle rural extension systems into broader knowledge and skills development packages, which interact with technical services, the private sector, and specific supply chains to support high-potential but small-scale agricultural production. Community-based and entrepreneur training initiatives open up means of linking training to local social networks, and have demonstrated how the limited opportunities for skills development in poor rural areas can be expanded and then linked to employment by identifying local potential economic opportunities and skills constraints, designing and delivering (or extending access to existing) community-based training, and providing post training services.

Community-Based Training for Rural Economic Empowerment (TREE) promotes income generation and local development, emphasizing the role of skills and knowledge for creating new

economic and employment opportunities for the poor, underemployed, unemployed, and the otherwise disadvantaged, towards sustained economic activities. Many of these target agricultural production and services, working to build capacities and value-chain networks.

Increasing agricultural productivity must be central to the growth and poverty reduction agendas in areas like Wolaita Sodo. It is also critical to food security and environmental sustainability objectives. This requires provisions of technical support to enhance agricultural productivity, value and supply chain management, skills required for production and marketing. Thus, this research was aimed:

- To assess the available needed skills and resources that will enable the resource poor farmers to respond better to household food security needs
- To investigate the viability and scope of various interventions conducted by Wonta Rural Development Association to enhance house hold food security
- To assess the productivity of agricultural enterprises and petty trades to absorb rural labor force and
- To formulate strategies to acquire needed skills and resources, fill existing food security and productivity gaps

## **Materials and methods**

### **Description of the study area**

This study was conducted in Boloso Bombe and Boloso Sore. Boloso Sore is one of the woredas in the Southern Nations, Nationalities, and Peoples' Region of Ethiopia. Part of the Wolayita Zone, Boloso Sore is bordered on the south by Sodo Zuria and Damot Sore, on the west by Boloso Bombe, on the northeast by the Kembata Tembaro Zone, on the northeast by the Hadiya Zone, on the east by Damot Pulasa, and on the southeast by Damot Gale. Boloso Bombe is one of the woredas in the Southern Nations, Nationalities, and Peoples' Region of Ethiopia part of the Wolaita Zone. Boloso Bombe is bordered on the south by Kindo Koysya, on the west by the Dawro Zone, on the north by the Kembata Tembaro Zone, on the east by Boloso Sore, and on the southeast by Damot Sore(CSA, 2007).

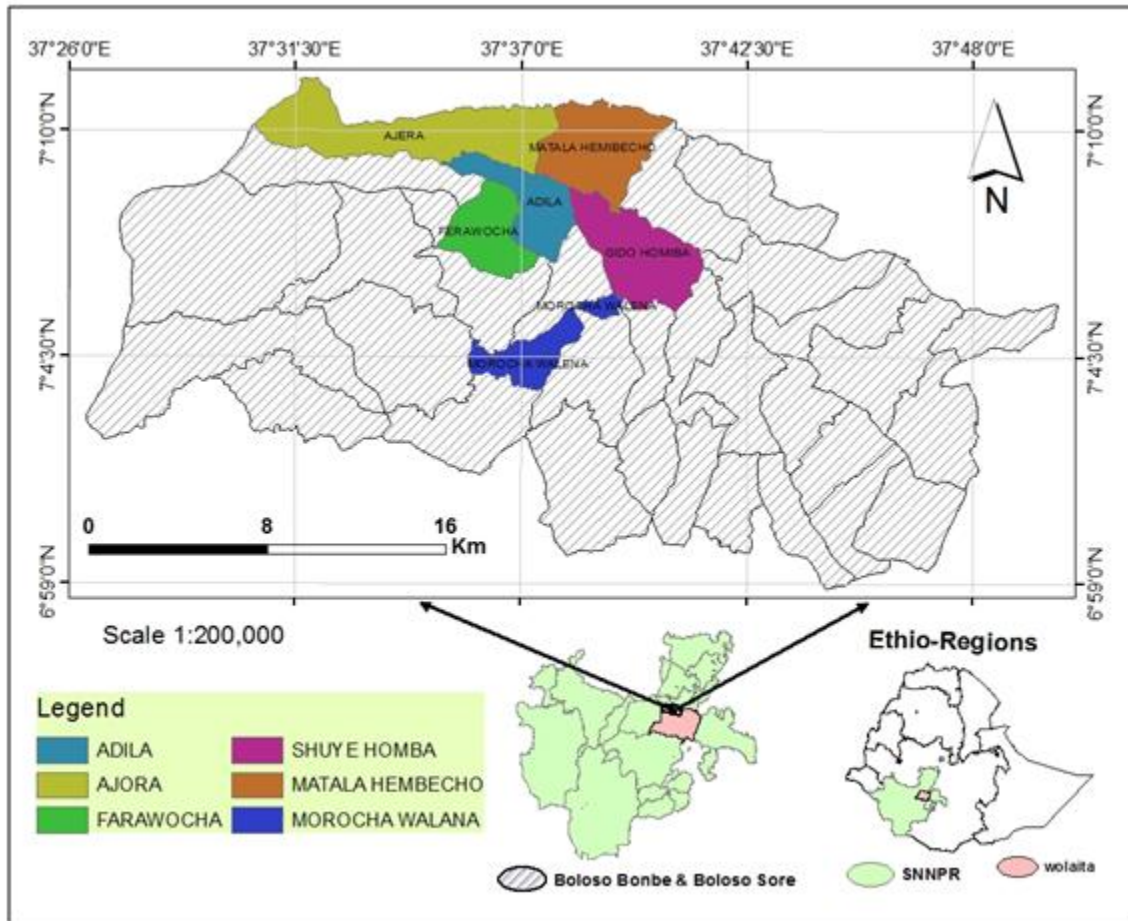


Fig 1 Arial Map of the study Woredas

### Study design

This research was employed both quantitative and qualitative research design. The Data from quantitative research—such as profitability, demographics, and socioeconomics—provided important information for productivity decisions. The qualitative design suited best with the focus is to develop an understanding of a phenomenon or situation in order to be able to develop the conceptual model.

### Data collection

The information for this study was collected using a review of existing literature, government policy documents, and FAO guidelines. Key informant interviews and focused group discussions were carried on with experts, farmers, and researchers to explore their own experiences and as

informants providing a broader perspective and observations related to technical support to improve the productivity of rural youths, women and male farmers.

### **Key Informant Interview (KII) and Survey**

Key Informant Interview involved interviewing people who have particularly informed perspectives on an aspect of the subject being studied. Key informant interviews are "qualitative, in-depth interviews of 15 to 35 people selected for their first-hand knowledge about a topic of interest. The interviews are loosely structured, relying on a list of issues to be discussed. Thus, development agents, experts, researchers and farmers were deeply interviewed as per the interview guideline. A total of 40 households were also surveyed to explore relevant information in the areas of profitability/productivity, demographics, and socioeconomics of the households being studied.

### **Focus Group Discussion (FGD)**

A Focus Group Discussion (FGD) is a qualitative research method in the social sciences, with a particular emphasis and application in the developmental program evaluation sphere. FGDs are a predetermined semi-structured interview led by a skilled moderator. The moderator asks broad questions to elicit responses and generate discussion among the participants. The moderator's goal is to generate the maximum amount of discussion and opinions within a given time period (Mousa A. Masadeh, 2012).

### **Data analysis**

Qualitative data analysis involved the identification, examination, and interpretation of patterns and themes in textual data and determined how these patterns and themes help answer the research questions at hand. According to Joy Frechtlin and Laure Sharp, (1997), qualitative analysis is not guided by universal rules; is a very fluid process that is highly dependent on the evaluator and the context of the study; and likely to change and adapt as the study evolves and the data emerges. Therefore, the qualitative information was be edited, coded and categorized in to groups based on their similarities and differences and then connections were made among the information. The data then was compiled and organized. Finally, the grouped information was analyzed thematically. The quantitative data were computed descriptively.

## RESULT AND DISCUSSION

### Socioeconomic Characteristic of the Households

Table 1 Socioeconomic Characteristic of the Households

Factors	Minimum	Maximum	Sum	Mean	Std. Deviation
Age(Years)	19	45	1170	29.25	2.23
Education(years of formal education)	0	10	87	2.2	0.5
Family size(number)	2	10	264	7	1.8
Land size(hectare)	0.125	0.5	9.0	0.2	0.14
Livestock(TLU)	0.013	1.143	23.43	0.6	0.21
Annual income(birr)	781	5678	78,303	1958	57.1

N=40

As can be seen in (Table 1), the average age of sample respondents was 29.5 years with minimum and maximum to be 19 years and 45 years respectively. This might show that households in the study area in general, and the sample respondents in particular, were young and productive age group. As far as the education status of the sample respondents were concerned, the average years of formal education were found to be 2.2 with minimum and maximum of 0 and 10 years of schooling respectively. This indicated that sample respondents, in average, did not complete primary education. More specifically, there were people who did not attend any formal education in the study area. Thus, this might have contributed a lot to poor productivity of households in the area. Furthermore, the average family size of the sampled respondents was counted to be 7 with minimum and maximum of 2 and 10 respectively. This shows that the area to be characterized as very large family size.

The survey (Table 1) has also revealed that average land size of sample respondents to be 0.2 hectare with minimum and maximum of 0.125 and 0.5 respectively. This indicates that the areas were also characterized by very small land holding with very large family size. Moreover, the average number of livestock in Tropical Livestock Unit (TLU) was found to be 0.6 with minimum and maximum of 0.013 and 1.143 respectively. This indicated that the households in the study area were extremely recourse poor as some households were responded to own only a single chicken or poultry. In addition, the average annual income of sample respondents was computed as summation of all earnings (e.g. sale of crop, livestock, livestock products, earning

via petty trades, borrowings, remittances, etc). Thus, it was found to be birr 1,958 with minimum and maximum of birr 781 and 5,678 respectively. In other words, they earn not more than birr 5 per day if computed at regular bases. Further, there were households who earn the annual income of 781 which indicated they earn not more than birr 2 per day if computed at regular bases. According to the National Plan Commission of Ethiopia (2017), the absolute poverty line was determined at per-capita income of birr 7,184 per year per adult person. Thus, the evidence has shown that households in the study area were extremely poor and live in the condition of absolute poverty.

### **Available needed skills and resources**

Ethiopia is the land of promise with great potential and a comparative advantage in agriculture. The country is endowed with large and diverse plant and animal genetic resources; great yet mostly untapped irrigation potential (Awulachew , 2010); and agricultural land and highly diverse agro-ecology that are suitable for the production of a wide varieties of crops and for keeping different species of animals. And, more importantly, Ethiopia has a large pool of human resource with indigenous knowledge, which is vital to achieving sustainable agricultural development.

Respondents in the current study have indicated that many of them are poor and food insecure and have limited access to markets and services. Their choices were constrained, but they cultivate their small sized land and produce food for subsistence. In addition to farming, they have multiple economic activities, often in the informal economy, to contribute towards their small incomes. These small farms depended predominantly on family labor. In a similar fascine, studies indicated that in China, nearly 98 percent of farmers cultivate farms smaller than 2 hectares –the country alone accounts for almost half the world’s small farms and land small capital and family labor with the indigenous knowledge are the skills and the resources that they have . In India about 80 percent of farmers are smallholders. In Ethiopia and Egypt, farms smaller than 2 hectares constitute nearly 90 percent of the total number of farms. In Mexico, 50 percent of the farmers are small; in Brazil smallholders make up for 20 percent of the total number of farmers (Nagayets, O., 2005)

If agricultural intensification has been practiced similar to green revolution, there is a possibility to enhance the productivity of agriculture with the skill and the land resources that the farmers

have at hand. This may contribute to absorb the labor force in the rural part and reduce uncontrolled urban rural and abroad migration of non skilled people pushed because of food insecurity in the study area.

**Viability and scope of various interventions**

The study has shown that dairy goat farming and women self help groups are viable and still potential interventions to fulfill the food security need of rural household as well as dietary diversity of children. Attempts in irrigation to enhance household crop production and productivity was operating and at its onset stage. The main problem of pest and disease attacks in ginger, enset, poultry, and tomato made these interventions impotent. In kebeles like Ajora, the yield per plant and plot of land is very minimal and it is of subsistence type that did not empower households to build household asset, absorb more labore force, even to satisfy the nutritional demand.

The study has identified that the interventions were suffering from poor technical support such as irregular extension support, no supply of full packages, almost improper stakeholder identification and mapping prior to intervention.

The horticulture sector associated with tomato was promising to satisfy household food security, nutritional as well as financial need of the farmers. Unfortunately, because of poor extension service to minimize pest and disease attack, post harvest loss and market problem, it was not productive. The study clearly indicated that proper stockholders mapping prior to any intervention is critical issue for the success.

**Productivity of agricultural enterprises and petty trades**

Table 2 productivity and profitability of agricultural enterprises and petty trade

Factors	Minimum	Maximum	Sum	Mean	Std.
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	Deviation				
<b>Productivity of Agricultural enterprises (quintal/hectare)</b>					
vegetables	0.12	3	44.6	1.12	0.62
cereals	0.5	4.3	56.48	1.41	0.86
Root crops	0.6	5.8	62.4	1.68	0.69
<b>Profitability of petty trade</b>					
Profit per market(birr)	5	62	783	19.50	4.50
N=40					

As shown in (Table 2), the average productivities of agricultural enterprises like vegetables, cereals, and root crops were computed as the ratio of total product of each commodity measured in quintal to the total area of land owned by the households. Thus, it was found to be 1.12 quintal per hectare, 1.41 quintal per hectare, and 1.68 quintal per hectare respectively. And, the minimum yields for vegetables, cereals, and root crops were found to be 0.12, 0.5, and 0.6 quintal per hectare respectively. The maximum yields for the same crops were 3, 4.3, and 5.8 quintal per hectare. This has shown that agricultural enterprises were extremely unproductive which might be due to poorly integrated interventions among others.

As far as the petty trade (e.g. fruit business, grain retailing, etc) was concerned, it was computed as summation of the net earnings obtained from markets per day. Thus, the average profitability per market was found to be birr 19.5 with minimum and maximum of birr 5 and 62 respectively. This implied that there exist a hopeful opportunity for these activities given that effective and very integrated interventions were made in the area.

### **Suggested approach to enhance productivity**

Improving agricultural productivity is essential for global food security. Raising agricultural yield eases pressure on land and avoids the Malthusian dilemma, while raising the productivity of agricultural labor in poor countries boosts income and stimulates broader economic development. By reducing the amount of land, labor, and other resources needed to produce food, higher agricultural productivity makes food cheaper and more plentiful, and has a powerful effect on poverty reduction. For these reasons trends in national and global agricultural productivity are important to monitor and assess. Evidence of a productivity slowdown in agriculture could be a harbinger of higher food prices, greater pressure on the environment, and regression in progress toward meeting United Nations Sustainable Development Goals.

Moreover, since the principal policy instrument for raising agricultural productivity is investment in research and development (R&D), which usually involves a long time lag to achieve impact, evidence of an emerging slowdown should be treated with urgency. It could take a decade or more to reverse such a trend through increased spending on R &D.

Most international organizations and donors generally advocate for the role that smallholders can play in increasing food production if suitable innovations are used to address market failures, though the attitude of governments is more mixed. Asian governments have generally supported smallholders, with favorable public policy facilitating access to extension, inputs and financial products. In Latin America, confidence in the contribution of smallholders has not been as strong, with support generally being connected to welfare concerns. In sub-Saharan Africa, more so than other regions, governments have tended to be attracted by the promise of capital-intensive larger-scale farms to boost productivity.

Improving agricultural productivity, while conserving and enhancing natural resources, is an essential requirement for farmers to increase global food supplies on a sustainable basis. The role of smallholder farmers and their families in increasing agricultural productivity growth sustainably will be crucial. Half a billion small family farms produce most of the food consumed in developing countries and farm over 80% of the land in Asia and Africa, but their productivity is generally lagging. The success of developing countries in increasing agricultural productivity will have global implications in strengthening the resilience of food markets, enhancing food security, improving wellbeing and promoting sustainability.

A study made in India using a time series data (1969/70 to 2005/06) has shown that labor, capital, and land are the sources of agricultural productivity growth with output elasticity of 1.96, 1.06 and 0.15, respectively (Tripathi & Prasad, 2008). Family size, the income of the household, level of education of the head, access to credit facilities are the factors influencing agricultural productivity in rural communities of Pakistan (Rahman, Hussain, & Taqi, 2014).

After more than a decade since the Comprehensive Africa Agriculture Development Programme (CAADP) was launched in 2003, many African countries have begun to articulate an agricultural transformation or Green Revolution agenda. These two approaches— like previous agriculture-led development frameworks, priorities, and strategies— hinge on a fundamental issue: how to

raise and maintain high agricultural productivity. With the majority of the population living in rural areas and depending on agriculture for their livelihoods, and with typical household sizes of five to eight family members that together farm only 1– 3 hectares (ha) of land characterized by low agricultural productivity, it is easy to understand why rural poverty is so prevalent and persistent— and why raising agricultural productivity in a sustainable manner remains a fundamental development goal for Africa.

An impact evaluation study made in Malawi (2005/06 to 2008/09) confirmed that participation of households in the fertilizer and seed subsidy program supports households to raise maize production and productivity (Dorward & Chirwa, 2011). Similar findings have been found from a panel data analysis from Kenya. From the year 1997–2007, the productivity growth in maize is determined by an increase in fertilizer use, changes in the adoption of high-yielding seed varieties, and an increase in the fertilizer distribution outlets (Kibaara et al., 2009). Supporting this finding is also found in a study made in Southern Ethiopia. Labor, fertilizer use, capital, technical support and oxen power are the significant variables affecting the productivity of maize by farm households (Geta et al., 2013). Findings from Benin focusing on the productivity of maize revealed that access to inputs, capital, and the poor institutional arrangements in which farmers operate were limiting the productivity of maize (Amegnaglo, 2018).

Microfinance services are an anti-poverty program, a source of gender empowerment and an overall driving force for economic development. Microfinance enables rural households to solve their financial problems during the preparation of their farm activities. To this end, microfinance impacts positively agricultural production and productivity in the rural community. Research work from Ghana supports such notable and positive relationship between microfinance and crop production; an increase in microcredit provision to the farmers improves the crop production of the farmers by more than 33.3 Kgs (Nuhu et al., 2014). While total livestock unit and farm size of the rural households have an adverse effect in explaining the variation in cassava productivity, access to credit enhances the productivity among the credit beneficiary households in Nigeria (Awotide et al., 2015).

Governments, international development agencies, and stakeholders also introduced farmer field schools in rural communities to train the farmers on the adoption of technologies and other

development related techniques. A study made in eastern Africa, mainly in Kenya, Tanzania, and Uganda, has witnessed the positive impact of such schools on agricultural productivity and other outcomes. Participating in the farmer field school improves the crop production of the study countries as a pool by 61 percent, and increases the crop production in Kenya by 80 percent (Davis et al., 2010).

Driven by policy incentives, recent productivity improvements in developed countries have occurred with lower levels of variable input use, and thus more sustainably. Innovation systems have responded to the demand articulated by users, policy makers and international development partners and developed innovations that allow for more sustainable use of resources, such as no-till farming, insect-resistant crops, more efficient irrigation, water management systems, sensors for nutrient status in crops, remote sensing and Geographic Information Systems (GIS) to improve and monitor land use and SMS messaging for enhancing advisory services to farmers.

The productivity of farms can be improved through economies of scale and the adoption of more technically-efficient production systems. However, long-run productivity growth for the sector as a whole requires continuous technological progress, as well as social innovations and new business models. For agriculture to respond to future challenges, innovation will not only need to improve the efficiency with which inputs are turned into outputs, but also conserve scarce natural resources and reduce waste (OECD, 2011).

Many rural households move out of poverty through agricultural entrepreneurship; others through the rural labor market and the rural nonfarm economy; and others by migrating to towns, cities, or other countries. The three pathways are complementary: nonfarm incomes can enhance the potential of farming as a pathway out of poverty, and agriculture can facilitate the labor and migration pathways.

Fostering higher agricultural productivity and accelerating agricultural growth in Africa are commonly seen as core strategies for overall development in the continent (Lewis 1954; Fei and Ranis 1961; Hayami and Ruttan 1985; Hazell and Haggblade 1991; Binswanger and Townsend 2000; World Bank 2009). Because the majority of Africa's poor and malnourished population depends largely on farming, these strategies can be particularly effective in reducing poverty and hunger. Yet, agricultural growth in Africa lags behind overall economic growth, and the

continent's agricultural performance has fallen further behind that of other developing regions of the world.

There is a consensus that market-oriented development of smallholder agriculture in SSA can be a critical pathway out of food insecurity, poverty, and a powerful tool to stimulate rural and national economic growth. Improving the productivity of smallholder agriculture in SSA makes direct contribution to the realization of the Sustainable Development Goals.

Poverty reduction and achieving overall development are the heart of all policies, strategies, and plans of the Ethiopian government. From the inception of the Agricultural Development-Led Industrialization (ADLI) policy framework in 1994, a series of interconnected policies and strategies were formulated and implemented; Sustainable Development and Poverty Reduction Program (SDPRP) which covered year 2002/3 ~ 2004/5, a Plan for Accelerated and Sustained Development to End Poverty (PASDEP) achieved during 2005/05–2009/10 period, and Growth and Transformation Plan I (GTP I) for 2010/11 ~ 2014/15. Based on the critical evaluation of the strong and weak sides of the previous policies and the socio-economic aspirations of the nation, the Ethiopian government has implemented the Growth and Transformation Plan II for 2015/06 ~ 2019/2020. In all these policies and programs, greater attention has been still given to the productivity and welfare of the smallholder farmers.

To enhance agricultural productivity and improve the livelihood of the small landholder rural people, the government has trained extension workers and allocated them to villages, introducing different agricultural packages, expanding credits services, and providing selected agricultural inputs (CSA, 2013). Even though the government has designed and implemented alternative policy options, still the incidence of poverty and food insecurity is very high, and the country depends on food aid. Agricultural productivity is very low and cannot support to cover the food demand even by the farming communities themselves. Accordingly, more than 10 million people were facing a food shortage, hunger and malnutrition every year and the numbers are rising greatly if there is weather change like shortage of rainfall, “El-Nino” and others (Ethiopian Communication Minister [ECM], 2015).

The agricultural sector in Ethiopia provides employment to 85% of the population (of which women constitute 49.5% according to the 2007 census data), contributes 44% to the country's

GDP and 85% of the country's export earnings. The country's aspiration for achieving overall economic growth largely depends on the performance of the agriculture sector. The sector requires substantial transformation in order to sustain economic growth, reduce poverty and ensure food security. To this effect, the Government of Ethiopia has established the National Agricultural Transformation Agency (ATA) with the mandate of identifying systemic constraints to agricultural development and growth, design solutions that will help achieve sustained structural transformation and support the coordination and integration of agricultural development projects among various institutions. The agricultural sector is the country's major source of economic growth under Ethiopia's Growth Transformation Plan (GTP), with attention given to productivity and production increase which is crucial for the country's effort to attain food security and increase export earnings. Agriculture in Ethiopia has experienced steady growth since 2004. Though the overall trend is encouraging, both in terms of overall agricultural production and productivity, the sector suffer from major structural problems. Despite an average investment close to 13% of the total expenditure, Ethiopian agriculture remains low input, low-value and subsistence oriented, and is vulnerable to frequent climatic shocks.

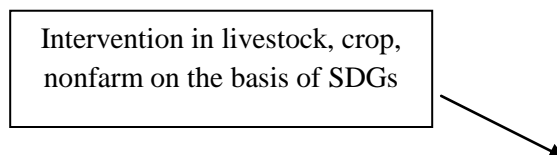
Due to its importance, the government of Ethiopia gives high priority to the agriculture sector by setting a strategy of agricultural development led industrialization (ADLI). The main goal of the agricultural policy is not only achieving the sustainable increase in agricultural production and productivity of small holder farmers but also accelerate agricultural commercialization and agro industrial development in the country (PIF, 2010-2020). Agricultural productivity can be increased by using two ways. The first method is through improvement in technology given some level of input and the other option of improving productivity is to enhance the output per household labor ratio of rural household farmers, given fixed level of inputs and technology.

Economies characterized by large rural population and slow industrialization will need to focus on creating rural employment, although economic diversification and management of urban growth remain critical objective. For the contribution that agricultural and Non Farm Income provide to the Ethiopian economy and remaining as the priority for the government and international donor agencies, local development actors, and as tools for achieving food security, it is legitimate to suggest the conceptual model how these sectors improve household productivity to escape abject rural poverty.

The current study has indicated that the stakeholders' engagement in various intervention programs was weak. Full packages with efficient technical support from the development agents were missing. The monitoring and evaluation scheme and feedback about the intervention were not sufficiently implemented. The only monitoring approach was the evaluation report obtained from the zonal department for finance and economic cooperation. We, the team of researchers therefore suggested to use the following conceptual model for the improvement of the productivity in all its spheres of rural households in the intervention areas of the Wonta local development association.

UNDER PEER REVIEW

**Suggested conceptual model**



**Key stakeholders mapping**

**Wonta**

- Agriculture, livestock, trade and industry, admin offices
- Model farmers
- Entrepreneurship development center

- WSU, TVET, Research center,
- Traditional institutes (Idir, community based organizations)

Technical Staff

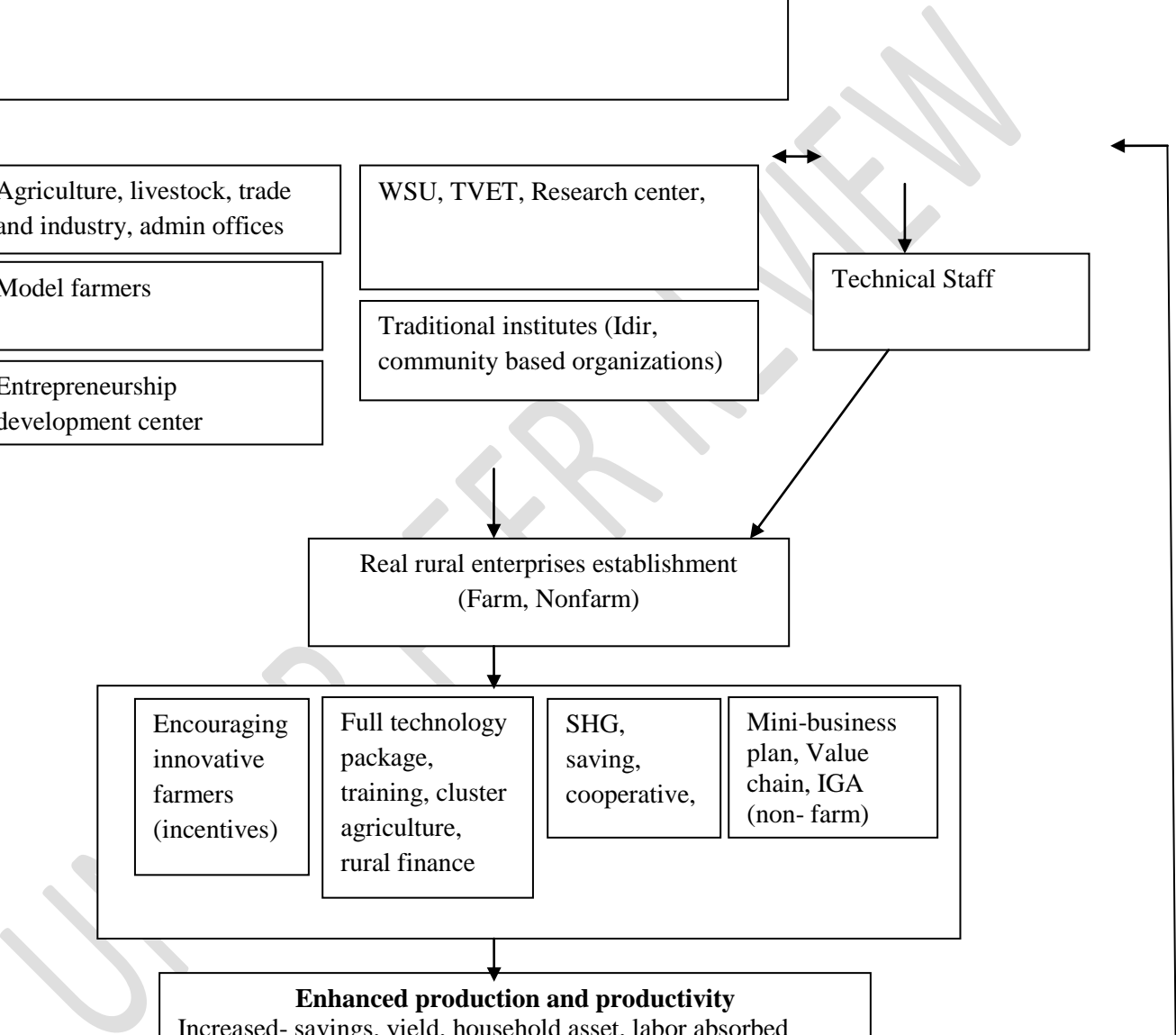
Real rural enterprises establishment (Farm, Nonfarm)

Encouraging innovative farmers (incentives)	Full technology package, training, cluster agriculture, rural finance	SHG, saving, cooperative,	Mini-business plan, Value chain, IGA (non- farm)
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**Enhanced production and productivity**  
Increased- savings, yield, household asset, labor absorbed (rural employment)

Strong monitoring and evaluation scheme on the basis of SDGs

Feed back





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**Fig 2:** Schematic representation of the model

### **Conclusion and recommendation**

The empirical data obtained from the field using the survey, KII and FGD guides, data from the secondary sources through desk review affirmed that serious efforts have been made and large amount of resources have been invested by Wonta Rural Development Association to improve the livelihood situation of the rural household in the intervention areas. The viability and scope of interventions made by the Wonta Rural Development Association to improve household productivity and intend to create rural employment worked out good in the areas of dairy goat and community based organizations like self help groups for savings seemed good but horticulture, poultry and other activities were found inferior during the study period. The Green revolution has indeed enjoyed major successes in many countries and regions and has helped in reducing food shortage and developing their agricultural sectors. Stakeholders' identification and engagement is one of the key issues for success of intervention projects. Wonta Rural Development Association has not committed to identify and map key collaborators prior to implementing projects in the intervention areas.

- The SDG strongly recommends the consideration of gender and youths in any development based intervention program. Besides the current constitution of Ethiopia also shares the same view with the above UN goals. Although, Wonta Rural Development Association projects' are gender and youth sensitive, it is critical to maintain gender and youth issues in future intervention projects too.
- Indeed, public research and development should respond effectively and efficiently to the challenge of improving labour productivity in small-scale agriculture. First-best policies and novel funding mechanisms – such as pull-mechanisms that reward successful innovations ex post, and push-mechanisms which fund potential innovations ex ante – should exploit the edge in private research by making their engagement in smallholder-specific technologies profitable.
- Enhancing agricultural knowledge-base and capacity to access and productively use knowledge will be crucial for achieving productive, remunerative and sustainable smallholder agriculture. For such knowledge and capacity development to be relevant to

Wonta, it is important for key stakeholders such as universities, research centers and TVETs to be involved and aware of the development strategies and priorities for development actors. Thus, the initiative to create functional multi-stakeholder platform, at zonal levels, needs to be considered.

- The implication of this study was that the productivity of the farmers can be increased through better allocation of the available resources especially land, oxen power, credit availability for inputs, technical support, strong inter sectoral collaboration, labor and fertilizer. Thus, concerned bodies in the development intervention activities working with the view to boost productivity of the farmers should work jointly in a comprehensive manner.
- We recommend the implementation of the proposed conceptual model during development intervention programs

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