

DETERMINANTS AND LEVELS OF COMMUNITY PARTICIPATION IN AGRICULTURAL DEVELOPMENT PROGRAMS IN ALETA WONDO DISTRICT OF SOUTHERN ETHIOPIA

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ABSTRACT

Effective community participation is vital to bring meaningful and sustained developmental impact. The main objective of this research was to investigate the determinants and levels of participation of the local communities in agricultural development programs in southern Ethiopia. The research method adopted was descriptive and correlational. Study findings indicate that participation of the community in project planning is as low as 28 percent which rises to 39.5 percent during implementation stage. Low income, lack of information, lack of supportive policies and periodic monitoring, time constraint and traditional constraints diminish community participation in agricultural development programs. The study also finds out that income, educational level and family size of households are significantly correlated with level of participation. Awareness creation programs and collaboration with Non-Governmental Organizations that work closely with disadvantaged communities are recommended to increase community participation in agricultural development programs and ensure sustainable development.

Keywords: Aleta Wondo, Community participation, natural resource conservation, watershed management, irrigation, sustainable development

INTRODUCTION

Local development and enhancement of the lives of communities calls for effective and sustained community participation. The execution of community development programs have become the major means through which various communities get assistance from governmental and non-governmental agencies for development. Community development programs have inherent capacity of attracting development to an area. However, in spite of the benefits that could come through these means, many people do not go ahead as originally intended when it comes to effective participation (Ering, 2006).

The concept of community participation in development process has gained popularity during the last few years, particularly in reference to sustainable agricultural and rural development projects. The international community had linked the reason for the failure of rural development initiatives to the lack of active participation of the people in the development programs which were designed to assist them (FAO, 1992). Public participation today is demanding a greater role in decision making processes about the management of natural resource (Gwena , 2007).

In developing countries, development programs are the backbone of local development. Development programs are undertaken to improve the livelihoods of the community. Effective management of development programs depends primarily on proper selection, design, implementation, and monitoring and evaluation of development program. Moreover, values, norms, social beliefs and opinions of the local people which are affected directly or indirectly by development interventions should also be considered. Otherwise, sustainability of development programs may generally be questioned (Mohammed, 2010).

Many programs in some communities were either abandoned or poorly executed because of the poor participation and negative attitude of the people towards community development programs. The challenges facing most communities were how to link them to government programs. Various attempts by government to increase the utilization of the resources of the communities and to increase the productive capacity of the people have failed. Most people are not actively involved in need assessment and the implementation of such programs (Nwachukwu, 2011).

Sustainable Land Management (SLM) program is one of agricultural development programs available throughout the world. SLM is applied in Ethiopia into five main practices: physical soil and water conservation measures (dominant in the country); biological soil conservation measures; soil fertility improvement measures; agricultural water management measures and grassland management measures and forestry and agro-forestry measures. In line with the role of community participation in agricultural development program(ADP); most of the centrally planned projects, like soil and water conservation and irrigation programs are promoted with standard technical solutions such as terracing and contour bund on the assumption that soil conservation measures are universally applicable and local farmers are unaware of soil erosion and ignorant of its causes and consequences (MoARD, 2005) The large majority of watershed development projects are based on rigid and conventional approaches considering only physical planning without attention to socio-economic or ecological conditions (Tsfaye, 2011).

Therefore, this study is intended to analyze the level and importance of community participation on agricultural development programs for empowering the communities and ensuring sustainable development. It is also meant to examine the

relationship between socioeconomic status and some personal characteristics such as educational level, household size, household income, leadership position, with participation in development programs in Aleta Wondo District of Ethiopia.

ANALYTICAL FRAMEWORK

Community participation in Agricultural development programs is the main concern in this study. The existing institutional and regulatory framework, socio-economic status of the people and the existing politico-cultural situations which largely affect and shape participation in agricultural development programs are taken as determinants to participate in agricultural development programs. In addition, the level and the importance of community participation is also included. On the basis of the aforementioned literatures, discussions of various theories and propositions and various research findings, the variables were developed. For the purpose of analysis, the main factors that may affect people's participation in agricultural development programs especially in planning and implementation stages are mainly categorized in three areas; a) institutional and regulatory framework, b) socio-economic factors, and c) politico-cultural factors.

The congenial institutional structure and supportive legal framework of a government in agricultural development programs is considered as a precondition for ensuring stakeholders' access in planning and implementation process of the program. The institutional structure integrates and widens the scope of all peoples involved in successful operation of development programs. It brings about and encourages people to participate in development initiatives undertaken by it. Lack of expertise in technical matters and absence of gradual institutional reform has made the existing local government structure non-participatory (Mohamed, 2010). In this study, structure indicates the existing local government institution formatting.

People's participation is also greatly determined by the socio-economic factors in which they are bound to live and adjust. The socially poor, disadvantaged community and minorities are rarely asked for participation in government-run program/projects. As social theory indicates, the social determinants for participation are gender, economic status, level of education and family size. Actually, socio-economic factors play significant role in shaping both participation and participatory outcomes. Age-old traditions like gender stratification, social backwardness, patron-client relation and so forth in the society may seriously inhibit the process of participation. Social exclusionary practices like gender inequality, and religious factors may undermine participation of certain groups particularly the women in decision-making (Gupte, 2004).

It is important to understand the levels and modes of community participation in development process as some levels are more relevant than others to ensure authentic public participation (Theron, 2005). These approaches become more relevant when the impact of participation is assessed in relation to programs or projects, and the degree of participation becomes a central feature in this regard (Fokane, 2008).

Community participation empowers the primary beneficiaries of development programs or projects by helping them to break away from a dependency mentality (Gupte, 2004). Another advantage of community participation is sustainability. Generally, development interventions are funded either by government or by donor agencies. Through community participation, resources available for development projects will be used more efficiently, fewer costs will be incurred if the people themselves are responsible for the project, and sustainable development will be guaranteed at large (Kumar, 2002).

MATERIALS AND METHODS

Aleta Wondo District is found in the Sidama Zone of Southern Nations, Nationalities and Peoples Regional State (SNNPRS) of Ethiopia (Figure 1). It is located at the south eastern part of Sidama zone between $6^{\circ} 35' 10'' - 6^{\circ} 38' 25''$ N latitude and $38^{\circ} 21' 0'' - 38^{\circ} 25' 0''$ E longitude at a distance of 337 kilometers from Addis Ababa, the capital city of Ethiopia. It has an average elevation of 1,942 meters above sea level; the highest and lowest altitudes being 2,026 and 1,858 meters respectively. It is characterized by a mono-modal rainfall distribution for 7 months from April to October that ranges between 900-1300mm annually. The total population is 181,782 out of which 92,588 are males and 89,194 are females with an area of 27,823 hectare of land (CSA, 2007). More than 88 percent of the population mainly depends on agricultural activities. Cereal crop, cash crop, root crop, fruit and vegetable production activities as well as livestock rearing are important agricultural activities practiced in the study area (AWWARO, 2013). Therefore, to keep these agricultural practices on sustainable way in the area it has to be supported by different environmental oriented developmental programs like watershed management, irrigation development and coffee production. Those programs need active community participation that has indispensable benefit to agricultural sectors development.

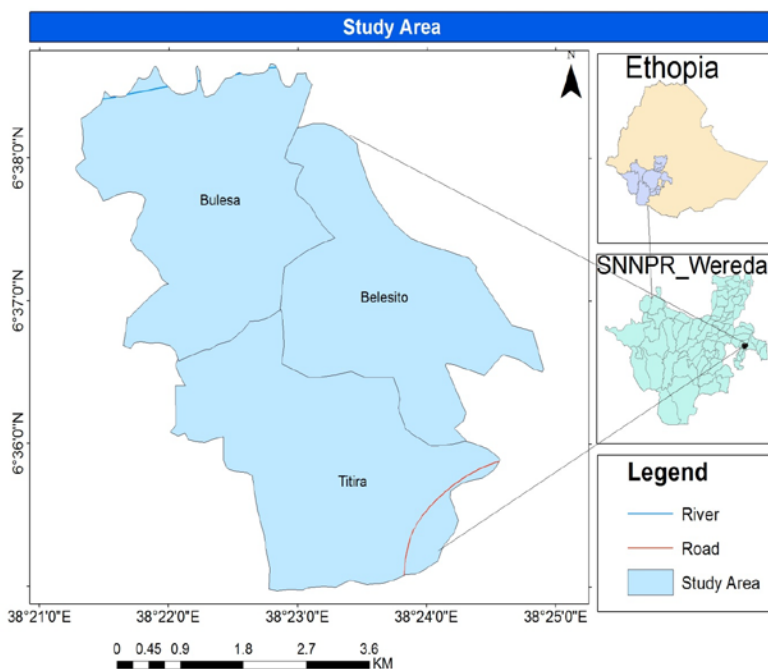


Figure 1: Map of the Study Area

In order to conduct this study, descriptive research type was employed. The study relied on primary and secondary data for analysis. Both quantitative and qualitative data were used. Quantitative data were collected through a questionnaire survey. The questionnaire was developed to adequately collect data on farmers and farm characteristics. Qualitative data were generated using interviews and focus group discussion.

A multi-stage sampling technique was adopted for the study. Bulesa, Belesto and Titira *kebeles* (the smallest administrative unit in Ethiopia) were purposively selected because their topography and natural resource potential are preferred and selected by the Woreda Agricultural Office to implement agricultural development programs. In addition, intensive community development programs are in place in these *kebeles*. Based on a standard statistical formula of sample size determination and through reference to the sample size determination table, a total of 125 respondent households were determined as sample size of this study (Table 1). Name of all participants' households in each selected *kebeles* were listed and respondents were randomly selected from each selected *kebeles*. Descriptive analysis and Person's correlation were used to analyze the data.

Table 1: Proportional Allocation of Sampled Households in the Study Areas

	Study area	Total household head in each kebele (pi)	Sample size $n_i = p_i * n / N$
1	Bulesa	721	44
2	Belesto	618	37
3	Titira	725	44
	Total	N (2064)	n (125)

Source: Woreda Administration, 2013 and own computation, 2014

RESULTS AND DISCUSSION

Socio-demographic Characteristics of the Respondents

Findings of the study showed that, most (74.8%) of the respondents were male-headed households with an average age of 41 years. The fact that there is no equal representation in age group in the sample indicates that the level of participation of the local community couldn't be similar as level of participation tends to vary depending on their age group. The study also showed that educational level in the study area was relatively low (2.5% secondary level and above) and the average family size of the respondent households were 5 members. The main occupation of the majority of households was farming (78.2%) and the average yearly income was seven thousand *birr* (Ethiopian currency). The study findings also revealed that most (74%) of sample respondent households are engaged in cash crop production like coffee and *chat* (*stimulant plant when the leaves are chewed*). The average farm landholding size per household of the respondents was found to be 0.55 hectare. The findings are in line with national reports showing the small land ownership in the rural areas of south central Ethiopia (Deribe, 2007). Majority of the respondents are small-scale farmers that produce for their families' sustenance. Out of the total area of land in the study area, 20 percent of the land is cultivated. Similarly, the average size of cropland per household of the country is 0.85 hectare without including the grazing land, while in the Southern Nations, Nationalities and Peoples Region, it is only 0.5 hectare (Central Statistical Agency (CSA) Agricultural Survey, 2003).

Nature and Level of Participation

Community participation in the level of decision making process of agricultural development programs in this study includes involvement of local community in project selection, planning and implementation process. During the survey, respondents

were asked about the developmental programs undertaken in their local area through community participation, and the extent and the level of participation in planning and implementation stage.

The result of descriptive data analysis showed that level of respondent’s knowledge of ADPs were low, however they indicated positive and relatively high level of knowledge and attitude toward watershed management program than other ADPs taking place in the study area. Based on the data provided and focus group discussion, watershed management program was the predominant program undertaken in the study area in relation to other programs and known more by the local community.

Community involvement in project planning is a precondition for its sustainability. However, during the survey, 72 percent of the respondents reported that they never participated in the planning phase of ADPs undertaken in their local area. Hence, the overall participation of grassroots community in project planning is low. The community could be involved in developmental program implementation process in two ways i.e., 1) through direct involvement in implementation process in project area and 2) through including as project implementation member of the program. It is found that the overall participation in implementation process was much higher (39.5%) relative to planning (only 28%).

In an attempt to discern the level of community participation in each ADPs and to compare the level of participation on those three ADPs, the study revealed that Watershed Management Program (WMP) was ranked 1st on both planning (29%) and implementation (41%) process, irrigation development and coffee production development programs are ranked 2nd and 3rd in planning and implementation process respectively (Table 2).

Table 2: Respondents’ Participation Level in Agricultural Development Programs

	ADPs	Level of Participation in ADPs process		
		Planning (%)	Implementation (%)	Rank
1	Watershed Management Program	29	41	1 st
2	Irrigation development	23	34	2 nd
3	Coffee production	16	31	3 rd

Source: field survey, 2014

Determinants of Community Participation in ADPs

During the survey, respondents were asked to mention the factors that restrain the local community from involving in planning and implementation process in ADPs. According to the data presented in Table 3, significant percentage (70.6%) of the respondent households stated that limited financial capacity is the major factor that obstructed their involvement in ADPs. On the other hand, low income is also a cause for participation of the poor to improve their livelihoods. Studies have shown that individual and economic security variables, especially financial capacities, were major factors affecting community participation (Chesoh, 2010). The remaining factors that limit effective community participation in ADPs include lack of

information and limited knowledge (48.7%), lack of supportive policies (31.1%), lack of periodic monitoring (21.8%), time constraint (16.8%) and traditional constraints (5.9%).

Lack of commitment is a huge predicament in agricultural development programs participation and of its sustainability as development projects demand time, patience and hard work on the side of the community. Inconsistent availability of information and a means for participation and a growing culture of self-censorship by members of the community themselves; lack of resources required for strengthening community development structures and capacity building; and lack of monitoring and evaluation in the programs implementation process as well as negative attitude to the program are also factors that affect the local community to participate in ADPs in the study area.

Table 3: Distribution of Respondents Indicating Difficulties of Participation in ADPs

	Factors hindering community participation	Frequency	Percent (%)
1	Poor economic situation	84	70.6
2	Lack of information and limited knowledge	58	48.7
3	Lack of supportive policies and incentives	37	31.1
4	Lack of periodic monitoring	26	21.8
5	Time constraints	20	16.8
6	Traditional constraints	7	5.9

Source: field survey, 2014

Results of the interview further revealed that sense of ownership, empowerment and involvement, satisfaction from prior programs and consultation are factors used to sustain community participation in ADPs thereby promoting sustainable development. The findings are also congruent with findings of Kotze (2009), Swanepoel and De Beer (2008) and Marais et al (1998) that outlined that communities need to be informed and be able to transmit its views, wishes and interest to all bodies charged with arranging the development project.

Socio-economic Status and Level of Participation in Agricultural Development Programs

The study divulged a correlation between community participation and socio-economic backgrounds of the participant households and level of participation. Comparatively better-off respondent households claimed that there had been considerable involvement of the local community in ADPs process. Findings of the study (Table 4) disclosed that only 29 percent of the respondents who had lower yearly income (below 5,000 birr per year) claimed participation in ADPs implementation while 71 percent of the respondents who claimed of participation in ADPs implementation were found to be economically better-off (5,000 birr and more yearly income) with a reference to duration of time they participated.

Table 4: Correlation between Income Level and Participation in ADPs

Income Level (in birr/year)	Below 5,000	5,000-10,000	10,001-15,000	Above 15,000
Number of respondents	31	59	26	9
Number of respondents claiming participation	9	22	12	4
Average time of participation per week (in hour)	4	7	9	10
Respondent's participation in percent (%)	29.0	37.3	46.2	44.4

Source: field survey, 2014

There is an assumption that the higher the income, the higher the participation. Pearson's correlation coefficient was used to verify the assumption. During statistical analysis a high degree of positive correlation between income level and participation ($r = .807$) is found which is significant at the 0.01 level (Table 7). The level of participation of the participant household is measured by taking the duration of participation time in ADPs' implementation. This means that if the income level of the participant household increases, the time spent on participation increases as well. The findings are consistent with results of (Nwachukwu, 2011) and (Chesoh 2010) that found significant relationship between income and level of participation in their research.

In addition, the study indicated (Table 5) that respondents who had higher level of education are more likely to participate in ADPs. The statistical result showed that only 48 percent of the respondents with lower education level (less than primary level) claimed participation in project implementation while significant proportion of respondents who claimed participation in ADPs implementation were found to be educated (at least primary level) with a reference of duration of time they participated.

Table 5: Relations between Educational Level and Participation in ADPs

Educational level	Unable to Read & Write	Read and Write	Primary level	Secondary level	Above and other
Number of respondent	23	48	44	7	3
Number of respondents claiming participation	5	13	23	4	2
Average time of participation per week (in hour)	4	5	8	9	10
Respondent's participation in percent (%)	21.7	27.1	52.3	57.1	66.7

Source: field survey, 2014

Pearson’s coefficient correlation analysis showed that there is a high degree of positive correlation between educational level and participation ($r = .754$) which is significant at the 0.01 level (Table 7). In fact the higher level of education improves their awareness about community developmental programs and as such they participate more as educational status increase. The findings are in line with Adesope (2009) who found out that “as one attains a higher level of education, attitudes towards participation in community development are likely to be more favorable”. This study further uncovered that (Table 6) increasing family size diminishes households’ participation in ADPs.

Table 6: Relations between Family Size and Participation in ADPs

Family Size	Below 3	3-5	6-8	Above 8
Number of respondent	7	17	79	22
Number of respondents claiming participation	3	8	29	7
Average time of participation per week (in hour)	9	7	5	4
Respondent’s participation in Percent	42.9	47.1	36.7	31.8

Source: field survey, 2014

During statistical analysis, it is seen that there is a high degree of negative correlation between family size and level of community participation ($r = -.770$) which is significant at the 0.01 level (Table 7). Studies attest that people with lower family size tend to participate more in development programs due to the fact that small family size households enjoy better economic and social life which has great influence on better understanding of developmental programs (Mohammad, 2010).

Table 7: Correlations between Socioeconomic Factors with Level of Participation

Socio economic factors	Correlation (r)	Level of Significance
Income level	.807	0.01
Educational status	.754	0.01
Family size	.770	0.01
Alternative income	.782	0.01
Knowledge of ADPs	.744	0.01
Satisfaction on prior programs	.566	0.01

Source: field survey, 2014

The study indicated the importance of community participation for sustainability of the programs as well as for the participant community itself. Ensuring sustainable development, improving social relations, reducing dependency on government, creating sense of ownership, supporting the democratic process and improving knowledge are some of the benefits of participation. The findings are also consistent with Theron (2005) assertion that community participation should lead to sustainable development.

The study result indicated that formation of pressure groups, satisfaction from prior programs, participating to be empowered and involvement at every stage of program’s implementation, provision of incentives, consultations and information dissemination are the factors that would sustain and encourage women, the poor, the vulnerable and the marginalized to

participate in ADPs. The findings are congruent with the finding of Nkosi (2010) who find out that woman play important role in agricultural labour force in growing fresh vegetables and small rural projects that help them to earn money. These income generating programs help to alleviate poverty, stimulate economic growth and endure sustainable development. Due to this, encouraging the women, poor and marginalized group to participate in ADPs is important and inescapable in a low income area.

Furthermore, the outcomes of the empirical survey as agreed by the majority of the respondents indicate that information and communication are recommended strategies that could serve to achieve community's sustenance in participation. Respondents also suggested sense of ownership, empowerment and involvement, satisfaction from prior programs, and consultation that are the recommended factors used to sustain in the process of participation in ADPs.

CONCLUSION AND RECOMMENDATIONS

The research conducted in three *kebeles* of Aleta Wondo District of Sidama zone, Southern Ethiopia is aimed at investigating the determinants and levels of local community participation in ADPs. Participatory ADPs in the study area could be effective strategies for sustainable management of land and water resources for developing agriculture and ensuring sustainable development. For the strategy to succeed, partnership between local participants and the programs department is required with regards to ADPs. For this partnership, participants must have sufficient knowledge about the program, in terms of objectives, components, function and general knowledge of programs. In community participation, knowledge, awareness and behavior are interrelated components of an individual's action that need consideration. The study found that people have inadequate knowledge towards both concepts and practice of community participation programs; watershed management program being better known by most respondents relative to other developmental programs implemented through community participation. Participation of local community in agricultural development project planning in the study area has been found to be significantly low though it is a bit high in the implementation stage. Socio economic status (income and educational status) of the respondents in the research area has high degree of positive correlation on their participation in ADPs. Poor economic situation, lack of information and general knowledge, lack of supportive policies, lack of periodic monitoring, time constraint and traditional constraints were possible factors which have significantly and negatively affected participation of the local communities in ADPs.

The result of this study provided recommendations on participation in ADPs. The study showed that respondent's knowledge of agricultural development programs has positive relationship with level of participation in such programs, yet the overall knowledge of ADPs among community was relatively low. Thus more effort is needed for program management to deliver information on ADPs to promote their participation. The study also disclosed that respondent's socioeconomic status has positive relationship with level of their participation. This is a potential to managers for developing such programs in study area. Thus, more effort is needed for meaningfully participating the community in ADPs to bring effective and sustained programs and activities in the study area for the enhancement of the livelihoods of the community and foster sustainable development.

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