

## COMMUNITY PARTICIPATION IN SUSTAINABLE LAND MANAGEMENT IN GHANA

William Boateng

Departments of Sociology, University of Saskatchewan, Canada,  
and University of Cape Coast, Ghana. Email: wib980@mail.usak.ca

### ABSTRACT

*The paper investigates the applicability of community participation as a strategy for sustainable land management in Ghana. It discusses an assessment of the use of farmer co-operatives, as community-based associations, for enhancing community participation in land management in four farming communities in the Eastern Region of Ghana, where the fieldwork was conducted. A three-tier multi-stage sampling procedure involving purposive, cluster and simple random techniques was used to select communities, suburbs, areas, households and participants to participate in the study. A desk review revealed that community participation was critical for sustainable land management. It also showed that Ghana has adopted the farmer cooperative approach to community level action. The fieldwork reveals that farmer cooperatives had existed in the study areas since the 1990s. In spite of their long-term existence, farmer cooperatives are under-patronized by farmers in the area. Reasons for the low patronage include lack of interest, distrust of leadership and non-involvement. The study also shows that majority of the members of the farmer cooperatives had obtained some form of support. On gains regarding land management, farmers reported no gains. However, a test of significance reveals a high potential for use for sustainable land management implying that the potentials of farmer cooperatives have not been explored fully. Hence, suggestions have been made for exploring farmer cooperatives to enhance community participation for sustainable land management.*

**KEY WORDS:** Community Participation, Sustainability, Land Use, Farmer Co-operatives, Land Management.

### 1.0 INTRODUCTION

Ghana as a developing economy needs new and improved land use strategies to raise land production levels without destroying the natural systems on which agriculture ultimately depend. Protecting the land and increasing the output of agriculture are inseparably linked tasks. If the two are to be accomplished, it will require a careful and coordinated approach on a number of fronts. In Ghana, traditional farming systems are the basis of agricultural production and will continue to be so for a long time. Efforts must therefore be made to ensure that the burden, which traditional farming practices places on land, does not exceed its carrying capacity.

Land is perhaps the single most important natural resource in the sense that it affects every aspect of the lives of people. Apart from its use as a basis for providing shelter, land is also the basis of livelihood of rural populations in Ghana. Therefore, whether as a resource to a nation, region, urban or rural area land requires careful management for the maximization of benefits derivable from its utilization.

Regardless of the importance of land in societies, its degradation, caused by erosion, desertification, deforestation, and poor agricultural practices, and the resulting effects on the environment and people have become a major ecological concern in the African continent in recent time (FAO, 1985). It is now generally recognized that the degradation of African soils represents one of the most important constraints to increased food production. The Food and Agricultural Organization (FAO) (1985) reported that six million hectares of land in Africa was reduced to near or complete uselessness. The report further stated that about 130 million hectares of Africa's total cultivable land area of 790 million hectares could be lost in the long run if the trend of degradation persists. Unfortunately, however, after two decades of this warning, massive soil loss, deforestation and decreasing yields due to land-misuse persists in Africa. Land misuse is thus a real threat to Africa's survival.

The picture of land misuse in Ghana seems gloomy. Every year, the finite capacity of Ghana to grow food and fish is reduced by the degradation and loss of land in many ways. First, Ghanaian soils are losing valuable nutrients and organic matter without any effective strategies of replenishment. Top soils of about 10 centimeters are being lost through erosion (FAO, 1990). Secondly, all soil forms are being lost physically through accelerated erosion from the action of water and wind and the undesirable changes in their physical properties. Thirdly, quite an appreciable number of hectares of good farmland are being lost each year to non-farm purposes, such as unchecked urban expansion and mining. Finally, land abuse occurs through logging, over-grazing, over-cultivation and other unsustainable farming practices. The net result is the diminished capability to provide food, shelter, clothing and fuelwood for inhabitants.

The land situation is compounded by the rapid population growth in general and in urban areas in particular (Ghana Statistical Service, 2002). The result is the difficulty of acquiring large tracts of land for farming and other business ventures. Even when access to land is assured, in most cases, poor tenure arrangements tend to affect land use, negatively, in the long-run (Boateng, 2001). Together, fragmentation of landholdings and poor yields continue to perpetuate rural poverty. Rural dwellers are thus compelled by circumstances to adopt all sorts of farming practices to ensure their survival.

In order to counteract the land mishap, Ghana has put in place a number of strategies to advance sustainable land use. These include the implementation of an afforestation programme that seeks to provide a shelter belt for crops, intensification of agricultural extension services that prepare land-users on sustainable farming systems and

the establishment of formal credit institutions through rural and other commercial banks to assist land users with financial resources (Bani 2004; Ghana Government/NDPC, 2004). Although these strategies among others are in place, they cannot succeed without the participation of land users in the various stages involved in the implementation of these strategies.

FAO studies on participatory development indicate that the basic cause of land misuse in developing countries is the failure to involve rural communities actively and directly in the management of natural resources (FAO, 1992). The involvement of local communities in the management of natural resources is a practical approach that can improve local understanding of land use and enhance the adoption of sustainable measures, which are critically essential in all land use systems.

In this paper, the community participation theoretical orientation is used as the benchmark in assessing the functions of farmer co-operatives as a vital link in ensuring sustainable land use in Ghana. This paper argues that farmers are more likely to adopt sustainable farming practices if they are involved in all the strategies of ensuring proper land use in Ghana. It examines the justification for the use of a community participation prism as a land management strategy. This is followed by an assessment of the functions of farmer co-operatives as an element of community participation, as well as policy implications for adopting the proposed strategy.

### **3.0 THEORETICAL FRAMEWORK**

The paper draws from community participation as a land management strategy. Community participation can be said, loosely, to be the involvement of people in a community in projects geared towards addressing their own problems or felt needs. The concept of community participation, especially in the developing world, is informed by the view of forging partnerships between public authorities and local people with a view to evolving development from "below" (Chambers, 1983; 1997). Community participation accordingly rests on principles such as the integration of local community efforts in the overall development strategy of the nation. This concept has been promoted in fields such as rural development, sustainable development and community development for well over three decades. The current precept of the concept emphasizes a bottom-up approach in an all-inclusive fashion as a critical foundation for sustainable development.

A classical definition of community participation, however, is the process by which the efforts of the people are united with those of government authorities in order to improve the economic, social and cultural conditions of communities. This is done with the view to integrate these communities into the life of the nation, and to enable them contribute fully to national progress (United Nations Economic and Social Council Report, 1956). According to this classical definition, participation has three dimensions: involvement of all those affected in decision-making about what should be done and how it should be done; mass contribution to the development effort in-

volving the implementation of the decisions and; sharing in the benefits of the programmes.

The United Nations (1970) outlines the specific development objectives for achieving community involvement in development programmes as follows:

- Harnessing people's motive for action through incentives; which in turn requires assessment of the people's "felt needs;"
- Making people more able to analyze needs;
- Presenting people with facts, information, and resources to work out sound changes;
- Helping people to arrive at decisions for local and national development;
- Increasing people's interest in local and national affairs;
- Providing government services in ways that enlist the active participation of the people in such a way that it has an educational value;
- Organizing the efforts of the people in order to improve the quality of their efforts and;
- Helping people to develop simple skills.

After over three decades, these objectives are still relevant in ensuring that community participation in development advances the interest of local communities.

Also, a case is made for community participation as a resource management strategy in various literature (White 1981; Brown, 1984; Murray, 1992). White (1981) made a case for community participation as a development strategy by outlining various reasons for engaging in community participation. He believed that with community participation, more is accomplished; services can be cheaply provided; development is enhanced; intrinsic value for participants is provided; a sense of responsibility is encouraged; the use of indigenous knowledge is enhanced. As well, people are free from dependence on a few skills as well as made more conscious of their situation and what they can do about it. Community participation is therefore a crucial prerequisite in ensuring development with a "human face."

Murray (1992) also found from his interview with farmers that the Collaborative Community Forestry Initiative Projects in the three northern regions of Ghana were successful in the 1990s because of the participatory design that involves local land users in all phases of projects. Furthermore, it is evident that where an avenue existed for the local people to participate in the development process, such opportunity was judiciously utilized in Ghana (Brown, 1984). These studies and many others confirm the indispensability of people's participation in ensuring success in a development strategy that affects people.

Regardless of the pay-offs associated with the community participation approach, many state and local development projects are pursued without reference to it. The International Institute for Environment and Development (1992), for instance, reported on a joint study it undertook with the Forestry Department on the incentive for the sustainable management of the tropical high forest in Ghana. The study analyzed ways in which forests were used by different parties. As well, it attempted to develop the ways and means by which forest resources, both inside and outside forest reserves, could be better managed. An important observation made in the study was that the Forestry Department and for that matter the government of Ghana had been, since the practice of forestry began in the country, solely responsible for the protection and management of the nation's forest. Other interest groups or beneficiaries such as stools, landowners, farmers who care for trees in off-reserves, rural dwellers whose livelihood depend upon the forests and district assemblies who take a substantial share of the revenue accruing from forests, are often excluded from their stewardship responsibility.

Government legislation on forests has thus turned landowners into passive and marginalized recipients of insignificant and irregular shares of revenue with no decision-making role or community participation in any aspect of forestry management. Farmers and communities therefore have no incentives to protect, manage or invest in the forest resources. The net outcome is the decline in farm/soil fertility, which compels farmers to convert more areas of the forest into farmlands with long-term damaging effect on land resources. Community participation, thus, becomes a valuable approach to redeeming the nation's resource base.

Kasanga (1992) studied the land management practices and land conflicts in three locations in the Upper East Region of Ghana, namely the Tono and Veve Irrigation Schemes and the commercial rice belt of the Fumbisi Valley. The study established and analyzed the interactive effects of existing institutional and legal arrangements for the management and development of agricultural lands vis-à-vis customary/private, government and quasi-government land holding, and as well, their functions and powers. It delves into the extent to which all concerned with the agricultural development process were able to co-ordinate and participate in decision-making and implementation processes.

The study showed that little or no attention was paid to the land and human components of the Irrigation Schemes during the initial project planning stage. An overwhelming majority comprising 71% of the respondents said they became aware of the Irrigation Projects only during the construction stage. The results were that when the projects were completed, the indigenous people did not know what it was all about. The broadcasting of rice and other irrigation practices looked strange. Despite the fact that the services were free, for a long time, the people showed no interest in irrigation farming. The objective of the projects, which was to help land users adopt sustainable farming practices, was defeated at the onset because of the poor involvement of direct project beneficiaries.

Ensuring effective collaboration between local communities and governmental bodies, therefore, entails the institutionalization of appropriate structures to support and sustain the partnership. The FAO (1992) in a survey came out with four basic approaches that have proved effective in the promotion of people's participation. These are: (1) the creation of a favorable legal and policy environment; (2) the decentralization of planning and decision-making to the local people; (3) the mobilization of resources for small-scale producers, and (4) the building of rural people's organizations. These approaches are thus essential for incorporating into any project geared towards involvement of the individuals, groups or entire communities in order to address the obstacles associated with the implementation of the community participation approach.

The FAO (1992) identifies the obstacles to participating in development as follows:

- Lack of funding for projects and the poor state of development infrastructure;
- Government agencies continued operation in a top-down fashion and officials not appreciating the need for participation;
- Project beneficiaries and national staff not having greater role in project design;
- Desire for governments and donors to see physical targets and deadlines in project documents instead of people themselves deciding what should be done, how, when, and where and;
- Donor unwillingness to accept longer time frames for participatory projects even though building rural people's organization is a long term process.

It is discernible from the above findings that the perceptions of beneficiaries of all innovations must be respected, thus, creating the need for community participation in all strategies geared toward sustainable land management. Community participation can become ingrained as a land management strategy through effective running of farmer co-operatives or unions and the involvement of farmers in all strategies meant for improving the agricultural sector (Boateng, 2001; FAO, 1992). It is imperative, at this stage, that farmer involvement in land management strategies are assessed empirically, as an element of community participation approach in Ghana.

### **3.0 RESEARCH PROCEDURES**

This section involves discussions of procedures adopted for the collection of data during the fieldwork. Discussions center on nature of the study area, sampling procedures, data collection techniques as well as data processing and analysis procedures.

#### **3.1 The Study Area**

The fieldwork was conducted in the East-Akim District of the Eastern Region of Ghana, a major farming district. There are four main zones in the area. Four commu-

nities, namely; Kukurantumi, Apedwa, Kibi and Asafo were randomly sampled from each zone in the district. The area is typically rural with populations of less than five thousand for many communities. In terms of infrastructural development, only a few peri-urban communities have basic infrastructure such as tarred roads, good schools, potable drinking water and hydro-electricity.

In spite of its rural nature, the area is well accessible due to its geographical location. The district lies on the main highway linking Accra and Kumasi; two major cities of Ghana. Farming is the primary occupation of the area, with cocoa being one of the most cultivated crops. Almost all the farmers in the study area cultivate cocoa on their lands. Hence, the two most important cocoa institutions in the country are situated there. These are the Cocoa Research Institute of Ghana at Akim-Tafo and the Cocoa College at Akim Bunso.

A variety of food crops are also grown in the area with mixed farming as the major farming practice. The area being a forest zone has different species of trees for logging purposes. Timber logging is thus an important activity in the district. With the exception of a few authorized timber contractors, the majority of the people engage in the logging business illegally. The Birim River is also noted for its diamond deposits, which directly and indirectly serve as economic buffer for inhabitants along its basin and even outsiders. Bauxite has also been found in Kibi, but it is yet to be extracted for the benefit of the area and the nation.

### **3.2 Sampling Procedures**

All adults aged twenty-one years and above and who were land users (farmers) and all members of government as well as the leaders of the communities connected with land management constituted the population for the study. Multi-stage sampling, involving the use of three-stage sampling procedures was applied to the selection of communities and participants for the study.

In each sample community, cluster sampling was used to select suburbs while simple random sampling technique was used to select areas for the study. A list of all households and systematic sampling technique used to identify and invite the participation of households. On the whole, thirty (30) households were systematically selected in each community.

As well, purposive sampling was applied in selecting ten individuals connected with land management in each of the selected communities. These comprise community leaders and members of government. Incidentally, all the members connected with land management in the areas were also farmers. Forty (40) farmers were interviewed in each of the four study communities. Hence, one hundred and sixty (160) farmers participated in the study. Only adults above twenty-one (21) years of age and who were land users (farmers) were selected and interviewed, in each selected household in each of the four selected communities comprising the study area.

### **3.3 Data Collection Techniques**

Interviewing was employed as the major technique for data collection. This instrument was pilot-tested at Apewosika, a village within the University of Cape Coast Community. This helped in the identification of potential problem areas in the instrument. The final schedule was therefore revised based on the findings of the pilot study. Interviewing was adopted in order to gain a thorough understanding of the problem under study. This technique offered the respondents the opportunity to express themselves freely as much as possible. The technique also made it possible for questions to be explained very well to respondents for the right reactions to be gained. Ten days was used for the entire fieldwork, which involved the researcher and four interviewers who were trained purposely for the data collection exercise. A two-way communication channel established between the interviewers and the respondents made it possible for the administrators of the instrument to observe closely both explicit and implicit expressions of the respondents.

### **3.4 Data Processing and Analysis**

Data gathered during fieldwork were edited to ensure that all interview schedules were complete and accurate. The data were then coded and computerized. Statistics including percentages, frequencies, cross-tabulations and the chi-square were used to test the hypothesis that "land users are more likely to adopt strategies for sustainable land use, if they are well involved in all the various phases of the strategies." The statistical computations served as the basis for drawing justified conclusions from the findings of the study. This facilitated the attainment of the study objective, which was to assess the functions of farmer co-operatives as a form of community participation approach for ensuring sustainable land use in Ghana.

## **4.0 FINDINGS AND DISCUSSIONS**

For sometime now farmer co-operatives have been in existence with the major objective of seeking the welfare of farmers. Many communities in Ghana are now operating farmer co-operatives to advance their causes. This is in line with one of the objectives of the National Agricultural Extension Project (NAEP), which is assisting the Department of Co-operatives to mobilize farmers into groups and associations in order to improve their income through better access to inputs, credits and markets.

Farmer co-operatives, like most interest groups are very important and necessary for the optimization of benefits and successes. Co-operatives as interest groups have a number of advantages for individual members and the collective. For instance, problems confronting individuals in the execution of their work become the concern of all other members of the association or group. Such associations or groups also become the mouthpiece of members. Individual resources are shared and in many cases pooled for the benefit of all members.



The study entailed an assessment of the role of farmer co-operatives as a form of community participation approach for sustainable land management. The study revealed that farmer co-operatives started in the study area in the early 1990s. It started with an initial membership of about twenty-five (25) farmers. Currently, however, the membership has risen to about three hundred and sixty (360) farmers. This reflects a fourteen-fold increase over a period of about fifteen (15) years.

Also, the study showed that 30.6% of the respondents knew about the existence of the farmer co-operatives in the study area. Of this number, 67.4% were members of co-operatives. Those who knew of the existence of the association but were not members were asked to give their reasons for not enrolling in the association. A greater percentage (71%) of them were not members because they did not have any interest in such associations. Twenty-nine percent (29%) said they were not members because they did not have trust in the leadership of the co-operatives. The 69.4% of the respondents who did not know of the existence of the association were given the chance to indicate whether they would want to become members of a farmer co-operative. Only 27% of them expressed interest in becoming members. Various reasons were assigned by the remaining 73% for their unwillingness to join co-operatives. Of this category of respondents, 44.5% would not want to join farmer co-operatives because they would not have the time to do so; 24.7% did not have the interest in associations; 18.5% did not see the need to join an association; with 12.3% being undecided on the issue.

An impressive percentage (82%) of the respondents who were members of the association had benefited from it. Of the respondents who had benefited, 42.4% stated that they were assisted to obtain loans from rural banks by the association; 30.3% had inputs through the association, with 27.3% having support from the association in times of social difficulties. Farmer co-operatives in the study area had some problems like all organizations. These were highlighted as poor patronage (42.3%), lack of funds (38.5%), and poor leadership (19.2%).

The executives of the association explained that due to poor patronage by farmers in association activities, they had not been able to achieve their goals. This revelation, together with the preceding assessment of the farmer co-operatives, reflects the dismal performance of farmer co-operatives in the study area. The executive members also said they were in touch with the Extension Services Department of the Ministry of Food and Agriculture, Town Development Committees and Chiefs. They have been using these sources to educate and encourage farmers to enroll as members of the association with the view to finding common grounds for addressing their problems, collectively.

An important aspect of the study was to determine the extent of participation of the association in land management practices. These practices identified included the afforestation programme and the education of farmers on the adoption of sound farming practices. Unfortunately, respondent reports show no impact in the two areas. The

respondents said they interacted with the extension staff occasionally, but their views were hardly sought by them regarding afforestation and extension activities. This is indicative of a lack of an authentic and/or functional collaboration between the front-line personnel of the land management strategies and the farmers, who serve as implementers of strategies. The executives of the farmer co-operative, however, said they had all those agenda on the drawing board and needed time and authentic cooperation for their realization.

In order to test the study hypothesis, respondents were asked to indicate whether the adoption of poor farming practices in their communities could be attributed to lack of their involvement in land management strategies. Responses to this question indicate that 83 (52%) of the farmers attributed the poor use of land in their communities to lack of peoples' participation in land management strategies. As many as 65 (41%) of the respondents believed that land was not properly utilized, but did not attribute the problem to lack of participation in land management strategies. Rather, they attributed the problem of land misuse to poor tenure arrangements in the study communities. Twelve (7.5%) of the respondents felt land was used in a sustainable manner in their communities.

The chi-square value of 13.87 indicates that the result was significant at 0.05 confidence level. The hypothesis therefore becomes accepted on grounds that at one degree of freedom, the critical value at  $P = 0.05$  was 3.84 which was less than the calculated chi-square value of 13.87. This implies that farmers are more likely to adopt sound farming practices if they are fully involved in all land management strategies.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

The discussions above reveal that farmer co-operatives in the study area have not made a significant impact on the farmers and their society. This state of affairs is blamable on the poor attitudes of the farmers themselves towards the association. Chiefs, policy-makers and extension staff of the Ministry of Food and Agriculture need to work as a team to make the co-operative viable by educating farmers to enroll in the association. Extension staff in particular should play a major role in ensuring the success of farmer co-operatives. This is because farmers are more likely to listen to extension staff farmers if they approach the farmers through their associations. All things being equal, farmers will likely share resources among themselves if encouraged to work as a group or community with common passion and objectives.

The discussions above reflect a need for fundamental changes and adjustments in land management practices. A prominent factor for such a change entails active involvement and participation of rural people through their own organizations, including farmers' co-operatives and informal groups in developing sustainable, integrated and management systems.

The discussions also show that farmer co-operatives are important for the development of agriculture in Ghana. Farmer co-operatives as a form of community participation, however, stand the risk of failing if some few farmers “hi-jack” the activities of the association. Active community participation will not be achieved when a few farmers with egoistic interests scare away the majority. In order to forestall such tendencies, all farmers, irrespective of their socio-economic backgrounds should be encouraged to enroll as active members of the association.

Hence, it can be concluded that ensuring community participation through farmer co-operatives can bring about sustainable land use in a number of ways. Farmers are likely to find common solutions to constraints such as access to credits if they work together as a community. Farmer co-operatives can also serve as guarantee for farmer credits in the event where collateral security is required. The association can ensure repayment of credits by encouraging its members to repay loans in order to earn more assistance from institutions. These advantages, among many others, would be at the disposal of farmers, if they embrace the community participation approach as a strategy in land management. Above all, cooperatives can serve as fora for educating farmers on poor farming practices to the greater good of enhanced productivity and environmental sustainability.

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