Analysis of the Partnership Between The University of Cape Coast, Ministry of Food and Agriculture, and GTZ in an Integrated Crop Protection Project in Brong Ahafo Region of Ghana

Festus Annor-Frempong, Lecturer in Agricultural Extension School of Agriculture University of Cape Coast, Ghana <u>safeucc@ghana.com</u>, <u>papaannor@yahoo.com</u>

Moses M. Zinnah, Agricultural Extension Specialist Winrock International Institute for Agricultural Development School of Agriculture University of Cape Coast, Ghana Zinnahwi@ghana.com

Samuel Akuamoah-Boateng, Lecturer Department of Agricultural Economics & Extension School of Agriculture University of Cape Coast, Ghana safeucc@ghana.com

Abstract

This paper presents a study that analysed the partnership between the University of Cape Coast, Ministry of Food and Agriculture, and GTZ (German Technical Cooperation) in the Integrated Crop Protection (ICP) Project in Brong Ahafo Region of Ghana.

Interview schedules, farmer meetings, and field tours were used to collect data from 80 farmers involved in the project. Analysis of students' dissertations, project documents and personal communication with students and lecturers/supervisors were also used to gather data for this study.

The study revealed that the partnership was not necessarily formal but involved groups with complimentary objectives and roles aimed solving farmers' problems. The partnership acted as a forum for rural development. The levels of adoption of the ICP technologies by farmers were high. The major problem was that of group formation process. Valuable agricultural data were generated for future programme planning. The interactions among people involved in the partnership enhanced positive perceptions toward each other.

Among the factors that enhanced the partnership were good and committed leadership, open-minded communication, and sharing of common resources.

The study suggests, among other things, that partnership between private and public sectors is possible. However, it should dovetail into existing structures.

Introduction

Agricultural training institutions have a role to play in the development of economies of most developing countries. Formal agricultural education is needed for training skilled manpower required to serve the agricultural sector, improve food security and sustain agricultural production and rural development. However, agricultural education at all levels in most developing countries faces many challenges such as clientele demands for responsive training, inadequate budgetary allocation, and insufficient materials for teaching and research (FAO, 1993). One of the ways of overcoming this predicament is forging partnerships with private and public institutions.

Partnership as a concept is also gaining increasing importance because of the strength that can be mobilized (Miller, Rossing and Steele, 1992). As Zinnah (1999) succinctly put "Partnership is necessary because individual organizations lack the breadth of knowledge, skills, resources and power needed to deal with the complex problems of agricultural and rural development including the training of agricultural extension staff". According to Bagchee (1994), partnership can bring about many benefits, such as sharing of diverse talents, resources, experiences and perspectives.

In a bid to make the training of mid-career extension personnel pursuing the BSc. Agricultural Extension programme more responsive to the needs of its clients, the Department of Agricultural Economics and Extension, University of Cape Coast (UCC) entered into partnership with German Technical Cooperation (GTZ) and Ministry of Food and Agriculture (MOFA)'s Integrated Crop Protection (ICP) project during the 1999/2000 academic year. The project, which had already started in 1997 by GTZ and MOFA, has the major objective of reducing high pre and post harvest crop losses in Ghana. It combines cultural, physical, hygienic, sanitary, chemical and biological measures to reduce pest (animal, pathogenic and weed) to levels under economic threshold in a sustainable way. Specifically, it is aimed at enabling farmers, through extension agents, to decide on the use of appropriate ICP technologies (row planting, use of most effective botanical or chemical pesticides, mulching, farm yard manure application, germination tests, Agro-Ecological Analysis (AESA) and plantain corm splitting) to produce healthy crops. Participatory technology development is done with farmer groups that are involved in the cultivation of vegetables and plantain within four pilot districts in Brong Ahafo Region of Ghana.

Purpose of the Paper

This paper presents results of a case study that analysed the nature, benefits and factors that enhanced the partnership. Lessons leant could be very useful for other institutions that intend to forge such partnerships to improve training programmes.

Methods and Data Sources

Interview schedules were developed to collect data form 80 farmers on the constraints, impacts and rate of adoption of introduced options. Farmer meetings were held to follow up and discuss results of the data analysed from the interview schedule. Field tours were made to observe farmers field and demonstration plots. Documentary analysis on students' dissertations, agreement documents, vision and mission documents and personal communication with students and lecturers/supervisors were also used to gather data for this study.

Results and Conclusions

Nature of Partnership

The study revealed that the partnership was initiated at the instance of students enrolled in the BSc Extension programme. The Supervised Enterprise Project, which is the nerve of the BSc Extension programme, encourages students to link up their projects with agencies with similar aims. Further attendance of workshop at UCC by the Team Leader of GTZ/ICP project finalized the partnership. The partnership was not necessarily formal. Agreements were signed at the beginning of each academic year depending on the focus of the project.

The partnership involved groups with clearly defined and complimentary roles and responsibilities aimed at solving the problems of farmers using the ICP concept. GTZ and MOFA introduced the Integrated Crop Protection practices. Each year a batch of students from UCC implementing their field experiential projects work with the farmers and project development staff depending on the focus. To date, students, in conjunction with their supervisors have identified constraints and achievements and implemented appropriate actions to facilitate the adoption of the ICP technologies.

Benefits of the Partnership

The partnership acted as forum for rural development. The small-scale farmers were the ultimate beneficiaries. Needs analysis conducted in the farming communities indicated that there were problems with the group formation process. Some group membership was too large for cohesion. Other problems included poor attendance at meetings, absence of leadership and inadequate understanding of the objectives of the ICP concept. Based on this, student researchers, lecturers and MOFA staff developed strategies to facilitate group formation and group meetings. Using PRA methodologies, farmers were motivated to attend meetings, developed and enforced byelaws by themselves. Talks on the importance of working in groups, sharing of experiences and resolving misunderstandings among members were emphasized. Leaders were elected and linked to cooperatives department for assistance.

Impact assessment on 80 farmers in the project communities by UCC revealed that, the majority of the farmers (83%) were using neem extract (botanical pesticide) to control insect pests on vegetables. However, they complained of resurgence of insects few days after application. This was attributed to inadequate sprayers to cover all farmers leading to late timing of application of the neem extract.

The farmers (79.2%) indicated they have completely abandoned the use of inorganic fertilizers and resorted to the application of farmyard manure. The major problems that are likely to affect rate of the manure usage are its bulkiness in transportation, and inadequate supply in the farming community due to the high patronage. Farmers were introduced to compost building using household refuse, leguminous plants and farmyard manure. Mulching and sunken beds were also introduced to reduce soil nutrient and water losses during dry season vegetable production. Farmers also perceived the ICP concept to be socially acceptable, less expensive and produce healthy crops. Marketing was however a problem. Low prices were offered for farm produce. Avenues to sell healthy crops were few.

The study also found that through the partnership, internal evaluation data was made available for GTZ and MOFA. Thus, UCC introduced external evaluation into the project. These data sets were used to plan future programmes and provided justification for resources to be invested in the ICP project. The partnership also afforded UCC the opportunity to make its curriculum more responsive to its clients–farmers. The interactions among farmers, MOFA, GTZ and UCC were important in enhancing positive perceptions towards each other. Based on the field experiences and exposure, a new Integrated Pest Management curriculum has been drawn up to accommodate the emerging issues and to replace old one in the B.Sc extension programme at UCC. Students on the ICP project used the data to complete their dissertation for the award of BSc. degree in Agricultural Extension. The students and lecturers (most with extension education background) involved in the partnership were thus given the opportunity to upgrade and apply knowledge on crop protection practices. One of the students retorted "The project has exposed me to the understanding of how to work with adult farmers. I have been able to translate what I learnt in the classroom into the field". Supervisors also rated ICP project students very high on facilitation skills, use of approved practices and local materials, adult teaching methodologies, quality of planning and attitudes towards farmers. The presence of students also encouraged farmer attendance at meetings and participation in group activities.

Factors that enhanced the partnership

One of the main factors that enhanced the partnership was good and committed leadership. The leadership at GTZ and MOFA were committed to reducing high pre and post –harvest crop losses in the selected communities. Therefore they encouraged broader participation from the UCC. A Senior Lecturer from UCC on sabbatical also convinced GTZ that inclusion of the university in the project could strengthen the project. UCC was committed to offering training that is more responsive to the needs of farmers.

The people involved in the partnership were frank and open-minded. The mechanism for partnership was drawn up. The terms of reference, including deadlines for supporting reports, were clearly spelt out in the agreements. The strict adherence to the dictates of the agreement also enhanced the partnership.

The partners had complementary strengths and experiences. GTZ was the major sponsor. The farmers were already organized under MOFA. Resources such as money and expertise were made available and on time for implementation of the project by GTZ. UCC also published the technical report.

Educational Importance and Implications

The study suggests, among others things, that partnerships between private and public sectors in training and rural development are possible. However, in forging of such partnerships, the approach should be flexible and accommodating. It should also dovetail into the existing structures. Moreover, there should be sharing of common resources, experiences, skills, and knowledge to solve problems.

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