AGRICULTURAL EXTENSION IN SWAZILAND: AN EVOLUTION

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Abstract

Swaziland's Ministry of Agriculture officials in 1984 recognized that the old British extension system was not adequately addressing the needs of farmers. After three years of endeavors with a new Train and Visit Extension System officials concluded that it needed to be modified to ameliorate Swaziland's agriculture. They modified the T & V Extension System to enable their extension staff to develop extension plans to implement programs aimed at the expressed needs of rural people, as opposed to just delivering untimely messages. At this writing, the Swaziland's Modified T&V Extension has succeeded in enabling extension field officers to develop local extension education programs, and farmers to have greater access to well trained extension field officers. A team from The Pennsylvania State University and Tennessee State University helped bring about those changes through the Swaziland Cropping Systems Research and Extension Training Project (CSRET).

Introduction

Between 1982 and 1991, the agricultural extension system in Swaziland--a country located between the Republic of South Africa and Mozambique--has experienced much change. During this period, the Ministry of Agriculture and Cooperatives recognized the benefit of a strong agricultural industry in Swaziland and identified a need for an effective agricultural extension system for Swazi farmers. A team from The Pennsylvania State University and Tennessee State University helped bring about those changes through the Swaziland Cropping Systems Research and Extension Training Project (CSRET).

Extension in Swaziland

First organized in 1930, the Swaziland Agricultural Extension Service has progressed from a colonial, British-dominated system, to a localized extension service staffed mostly by native Swazis (Trail, 1985). In 1969, funding from the World Bank, the United States Agency for International Development, and the United Kingdom enabled the government to organize portions of Swaziland into Rural Development Areas. The Rural Development Areas used the British style of agricultural extension.

Until 1984, the British style of agricultural extension was divided into sections. Each section in the Ministry of Agriculture had its own extension personnel. For example, the horticulture section had its extension field staff and the livestock section had its extension staff, as did the fourteen other sections. Each field officer was a specialist in their respective section. The advantage of this system was that extension field officers focused only on the subject areas covered within their section. The disadvantage was that farmers had to have access to the appropriate extension person for a specific question or problem. Because of many constraints (i.e., transportation, communications, and area of expertise), only a few farmers truly had access to extension field officers.

Introduction to Train and Visit Extension System

Ministry officials recognized the need for more farmers to have access to extension personnel. It was apparent that more and more farmers on Swazi Nation Land (land held in trust by the
king for the Swazi people) wanted increased contact with extension field officers for information, non-formal education programs and advice. To address this issue, Ministry officials, in collaboration with World Bank consultants, initiated a process that led to the reorganization of the extension service. After a review of the British style extension system in Swaziland, the World Bank consultants introduced the concepts of the Train and Visit (T&V) Extension System to Ministry officials. A study team from the Ministry steering committee traveled to Kenya to observe the T&V Extension System in place there. Upon their return from Kenya, the steering committee recommended that the T&V Extension System be adopted in Swaziland.

**T&V Extension System**

The T&V Extension System was developed in India during the second half of the 1970s (Cernea, 1983). Its organizational structure includes five levels: director of extension, district extension officers, sub-divisional extension officers, extension officers, and extension field officers (Rivera, 1986). In principle, this extension system is sufficiently flexible to be adapted to most types of farming. Cernea (1983) reports that "its aim is to improve the use of existing resources by concentrating initially on key improvements in major crops that can produce significantly better yields fairly quickly and cheaply."

The system was designed so local extension officers could quickly disseminate specific information to farmers through frequent visits to their farms. The T&V Extension System provides intensive education programs for extension field officers on timely agricultural practices and recommendations. Extension field officers were then expected to disseminate information on these practices and recommendations during the following two weeks. Cernea (1983) goes on to say that, "The central strategy of the T&V system is to concentrate effort. . . . The system functions by allocating precise responsibilities. . . and by concentrating on a few actions at a time. . . . Village Extension Workers visit small groups of 'contact' and other farmers at least once a fortnight to teach them three or four carefully chosen recommendations, or 'impact points,' about what to do over the next two weeks."

**Implementation**

Based upon the recommendations of the steering committee, the T&V Extension System was implemented in Swaziland beginning in September, 1985. All field officers who were specialists suddenly became generalists. A special twelve-week, in-service education program was sponsored by the Ministry to increase the officers' general agricultural knowledge base so they could effectively communicate with farmers and implement the T&V Extension System.

Typically, the extension officers in Swaziland spent two days each month meeting with subject matter specialists to obtain timely messages for farmers. The extension officers then met with their respective field officers one day every two weeks to give them the messages. The field officers then would conduct small group meetings with "contact" and "follower" farmers during the next eight days giving farmers the messages. This procedure was repeated each month, September through April.

The implementation of the T&V Extension System did cause an increase in the number of farmers having contact with field officers. However, as expected with any change process, implementation was resisted within the rank and file during its first year (October, 1985 - September, 1986).

**T&V Two Years Later**

Upon reviewing the status of Swaziland's T&V Extension System two years (1987) after implementation, it was found that the extension subject matter specialists, T&V coordinators, extension officers, and field officers expressed much frustration and confusion with the system. The morale of the staff as a whole was very low, leading to a number of extension officers resigning from the civil service or requesting a transfer to other ministries.
**Issues That Evolved**

Because the T&V Extension System was not fully accepted by the extension field staff, the system began to flounder in many ways. The staff were experiencing frustration because of these issues (Diamond, 1990).

- **Confusion.** The extension field staff members were unclear about how the system was to function. Many were confused as to what their specific roles and responsibilities were.

- **Transportation.** Field staff and subject matter specialists lacked transportation to attend meetings and visit homesteads; extension officers were not able to give proper supervision to field officers because of insufficient transport, communication, and commitment.

- **Numbers.** Field staff indicated they had too many farmers under their jurisdiction. Some reported that they had 200 farmers while others reported they had as many as 750 farmers scattered throughout the countryside. It was difficult to visit more than four to six farmers per day on foot.

- **Political.** The T&V Extension System required the use of contact farmers to serve as communication links between the extension field officer and other farmers. Local chiefs were concerned that the field officers were preempting the right of the chief to select the contact farmer. Some chiefs felt that it was their duty to select the contact farmers. In a number of cases where chiefs selected the contact farmers, they did not always select the innovators or early adopters.

- **Timing.** Farmers were receiving untimely messages from the extension field officers. Often three to four weeks lapsed before the farmer received the messages.

- **Rigid System.** Field officers complained they were only carriers of messages. The system was too rigid and did not allow flexibility for field officers to develop specific extension education programs based on the perceived needs of local farmers.

- **Changed Roles.** Field officers were insecure in their roles as agricultural extension generalists. Having been specialists, the field officers feared humiliation if farmers asked questions they could not answer or if asked to solve problems in domains where they had little or no education or experience.

- **Communication.** Because of the number of times messages were relayed through the system, the information was often distorted by the time it reached the farmers. Subject matter specialists would give oral messages to the extension officers, who relayed the messages to the field officers, who would then relay the messages to the farmers.

- **Planning.** Little planning was done by subject matter specialists to prepare the monthly messages before being released to field officers. Messages were redundant or developed on the "gut feeling" or bias of a subject matter specialist, with little or no attention given to feedback from farmers or field staff.

- **Technology Transfer.** Research officers did not offer much research-based information or appropriate technology to be given to farmers. They argued that by not knowing what was going to be discussed prior to the meetings, they were not prepared to offer any input.

- **Credibility.** Farmers lost confidence in the field officers. If a field officer's previous specialty was livestock and a farmer asked why his tomato plants were turning black, the field officer would be reluctant to give an answer because of not being familiar with vegetable diseases and having little experience in vegetable production.

- **Irrelevance.** Farmers quit attending contact farmer meetings. A farmer would take a morning off from his daily chores and walk some distance to the meeting, where the extension field officer would pass on the monthly messages. The messages, for example, would be on what varieties of maize to select, how to select a fish pond site, and how to prepare the seed bed for tobacco plants. The
farmer would walk back to the homestead saying to himself, "I already have my maize planted and now I'm told what maize variety to select. I don't want to build a fish pond, and I can't grow tobacco because it's too cold here in the high veld." The extension field staff were mandated to give all the messages to farmers, regardless of their ecological zone or type of enterprise. When the farmers found out what these meetings were like, they simply quit attending.

Modification

In early June, 1988, officials in the Ministry of Agriculture and Cooperatives recognized there were serious problems with institutionalizing the T&V Extension System. It had nearly collapsed during its third year. A Swazi research officer who specialized in rural sociology was commissioned to do a study to assess the system. In November, 1988, after collecting the data and compiling the results, the findings were submitted to the Ministry officials. The officials met to discuss the results of the study and after much deliberation, they made the decision to modify the T&V Extension System.

On December 15, 1988 on behalf of the Minister of Agriculture, the Principal Secretary mailed a letter to all extension personnel in Swaziland announcing and explaining the modification of the T&V Extension System. In essence, the letter said that between January 1 and March 30, 1989, the extension field officers were required to break their assigned areas into three "units." A suggested schedule of visits was included. A bimonthly meeting of the senior agricultural officers, agricultural officers, senior extension officers, research officers, and subject matter specialists was scheduled to discuss extension program progress and needs. In addition, three days of in-service education were to be conducted quarterly for all extension field staff.

The T&V Extension System in its purist form simply did not function as intended within the structure of Swaziland's rural society, and to some extent, the administrative structure of the Ministry. The modification virtually eliminated the intended functions of the T&V Extension System. It eliminated the exercise of developing and carrying monthly messages to the farmers. Subject matter specialists and research officers were no longer required to meet on a monthly basis to generate messages. Field officers no longer had to meet fortnightly to receive messages to be relayed to farmers.

The advantage of the modified T&V Extension System is that it offers an administrative structure where the four regional extension staffs can plan, develop, implement, and evaluate extension education programs based upon the farmers' needs. With this modification, the field officers now have the flexibility to address the farmers expressed needs by planning small group meetings, doing demonstrations, scheduling field days, visiting homesteads, conducting field trials, and engaging in other methods of disseminating information.

Planning Process

After the Ministry implemented the modified T&V Extension System during 1989, the next logical step was to develop an annual planning process for a regional and national agricultural extension education program. While the modified extension system was being implemented, the CSRET Project team with the assistance of consultants, began the long and tedious process of advising and guiding Ministry officials in developing and executing a bottom-up extension program planning process within a traditional top-down governmental administrative system.

Following many meetings, the Ministry officials developed and adopted the following four step agricultural extension planning process: (1) extension field officers meet with farmers within their respective units to identify and determine the issues that can be addressed through extension education programs; (2) extension officers identify their common subsection needs; (3) senior extension staff identify and prioritize the common subsection needs within their region (these collective needs then evolve into regional agricultural extension plan); and (4) the regional plans collectively become the national agricultural extension plan.
Each regional extension plan includes these components: Goal, Priority, Situation Analysis, Objectives, Extension Activities, Executing Personnel, Time Table, Activity Dates, Venue and Monitoring/Evaluation. The components give direction and “raison d'être” to the overall extension education program in Swaziland (Jansma, 1990).

In-service Education

In-service education for extension personnel in Swaziland is typically a three-day period each quarter. Extension personnel are released from their daily duties to attend a Ministry-sponsored program intended to enhance their capability to deliver agricultural information to farmers. However, according to Trail (1985), "... in-service education in the past was left to the individual subject matter specialists and their desire to provide it. The shortcoming was that it was not systematic and timely in most cases.” During 1987, a systematic approach to extension in-service education was developed and implemented. The objective of the program was to give breadth and depth to a diversified knowledge base, to enable extension field officers to be more effective agricultural generalists.

Between April, 1987 to May, 1991, all extension field staff in Swaziland were offered an in-service education curriculum composed of 219 hours of instruction (Diamond, 1990). Topics were selected based upon the observations of subject matter specialists, research results, the Easter (1985) study, Trail (1985) report, and non-formal staff surveys. The implementation strategy focused on having the national subject matter specialists and research officers teaching their extension colleagues. The curriculum was aimed at broadening the knowledge base of the extension field officers while at the same time, increasing the perception of national subject matter specialists and research officers as the Swazi experts.

Summary

Swaziland's Ministry of Agriculture officials in 1984 recognized that the old British extension system was not adequately addressing the needs of farmers. They then looked at an alternative extension system in another country. In 1986 the officials decided to adopt a different extension system for Swaziland. After three years of endeavors with the different system, they recognized there were problems. The officials evaluated the problems and concluded that the T&V Extension System they adopted needed to be modified to ameliorate Swaziland's agriculture. They modified the Train and Visit Extension System to enable their extension staff to develop extension plans to implement programs aimed at the expressed needs of rural people, as opposed to just delivering untimely messages. At this writing, the Swaziland's Modified T&V Extension has succeeded in enabling extension field officers to develop local extension education programs, and farmers to have greater access to well trained extension field officers.

Implications

Based upon the issues that unfolded in Swaziland after the Train and Visit Extension System was introduced, it appears that the efforts of adopting an extension system from another country is not always successful. Donald C. Pickering of the World Bank (cited in Rivera, 1987) supports this conclusion by saying "... there is no single blueprint for the best extension approach. Each must be tailored to meet particular conditions. Blind adherence to a successful system elsewhere could be a recipe for disaster." Perhaps blind adherence to a successful system in Kenya was the recipe for disaster in Swaziland. Nevertheless, the success of Swaziland's "modified" Train and Visit Extension System can best be attributed to tailoring its extension system to amalgamate with the Swazi rural and national administrative structures.

There are basically five elements that have to be addressed if an extension system is to be successful according to Niels Roling from Wageningen Agricultural University (cited in Rivera, 1987). Those five elements are mobilization, organization, training, technical and resource support, and replication and...
maintenance. In varying degrees, the modified extension system that unfolded in Swaziland included these five elements. However, as in many nations around the world, the degree of Swaziland's government technical and resource support has established financial parameters that constrains the scope of needed extension education programs.

**Recommendations**

Because of Swaziland's Ministry of Agriculture experiences in their endeavors to adopt an extension system that seemly was successful in another country, and the implications of this scenario, the following recommendations were made: (1) when adopting or reorganizing an extension system, address the five elements described by Roling (cited in Rivera, 1987): mobilization, organization, training, technical and resource support, and replication and maintenance. (2) there is no single blueprint for the best extension approach and each must be tailored to meet particular domestic conditions. (3) an extension system should be flexible so modifications can be made to address the expressed and changing needs of people. (4) issues that affects extension staff performance should be promptly defused to reduce frustration and resignations. (5) expatriate change agents should involve all the appropriate indigenous people and enable them to have total ownership of a change process. (6) systematic in-service education programs should be an integral component of an extension system to improve the extension field staff capability to teach and advise farmers and to accurately disseminate research based information. (7) extension systems should have strong linkages with research institutions, universities, and other private and governmental agencies. (8) expatriates working with extension programs in other countries should be sensitive to cultural traits that bias counterparts, extension clientele, and curriculum content. (9) people at the local level should have major input in the extension program planning process.

**References**


