Training extension agents in Nepal

The Nepal Agricultural Manpower Development Project was designed to train critically needed extension agents to help farmers increase their productivity. When the project was completed ten years later, it had achieved its physical objectives and helped establish an academic faculty of agriculture, but it had not developed a system for training effective extension agents. The project diverged from its original objectives because of the economic and political processes underway at the time in Nepal and in an effort to respond to implementation problems. By the end of the project, the teaching material and methods had become more academic and training less directed to communication with farmers and practical work on farms.

A recent OED audit* notes that several factors might have helped the project stay on course: involvement of farmers, particularly women and members of hill tribes, in project design to ensure a clear understanding of their needs; close attention to sociocultural factors in establishing selection criteria for students; and an emphasis on links to farmers and practical work, together with consciousness-raising to improve students’ understanding of the importance of close communication with farmers.

To help farmers increase their productivity, Nepal needed more extension agents. In the early 1980s, the prevailing model for extension was the training and visit (T&V) system. That model was based on the view that assistants with several years’ high school education and brief training in agriculture could provide effective technical assistance to farmers. Earlier training programs had produced graduates who were more interested in university degrees and desk jobs than in extension work. Also, at that time, training at all levels was poor, and the facilities were inadequate. The Nepal Agricultural Manpower Development Project, financed by an $8 million IDA credit (approved in 1984 and closed in 1994), and $4 million in US Agency for International Development parallel financing, was designed to address these problems. The project sought to train technical assistants for the T&V system mainly through a terminal one-year diploma program in Tribhuvan University’s Institute of Agricultural and Animal Sciences (IAAS) in Rampur and two satellite campuses.

To enter the program, students had to pass a secondary school equivalency exam, with a focus on science. A special effort was made to recruit women and members of hill tribes. During appraisal, a manpower study was conducted to estimate the demand for trainees. The study based its estimates on the assumption that the government would be able to absorb the trainees.

Implementation proceeded slowly during the first two to three years of the program and then slowed to a standstill. Ministry of Agriculture budgets shrank, and graduates could not get jobs. Students resented being in a terminal diploma course and demanded a degree option, causing campus unrest. The project’s problems were further exacerbated by inflation in the prices of imported goods and by shortages of building materials that resulted from the Indo-Nepalese trade and transit dispute and the effects of the democratic transition. The faculty was in a relatively remote area of Nepal, and one satellite campus was in a hilly area that was hard to reach. Thus supervision and communication were difficult.

By the early 1990s, the problems had become so complex that the project had to be completely revamped or abandoned. The government considered an operation in higher education important, particularly at the sites in the remoter areas of Nepal. It thus wanted to save the project. IAAS sought the advice of an international panel of agricultural educators, who suggested strengthening the faculty so it could provide four-year degrees and conduct research. Project objectives were reformulated accordingly. The terminal one-year diploma program, designed to produce technical assistants, was replaced with a four-year bachelor’s degree in agriculture and veterinary sciences.

medicine. Under student pressure at the time of Nepal’s transition to democratic rule, the government opened the degree program to all enrolled diploma students.

With the democratic reforms came a new campus administration, which managed to implement the project. After receiving four extensions, which lengthened project duration to nearly ten years, IAAS completed nearly all planned original and revised physical activities.

Results

The physical components were well implemented. The campus acquired new and refurbished faculty and staff housing, classrooms, laboratories, student dormitories, and conference halls. Laboratories were equipped and became functional, and school farms were established. Curricula and textbooks were provided, and many faculty members received fellowships. A campus master plan was developed to optimize use of space. But by themselves these achievements were insufficient to provide Nepal with suitably trained graduates who could effectively help farmers increase productivity. Among the reasons:

- Lack of practical training and contact with farmers. Relatively little time was spent on practical work. The extensive school farms were cultivated by laborers, not by students. As a result, many students interviewed by the audit mission felt that they were not being trained to face actual agricultural problems. This lack of practical experience (also found in agricultural faculties of neighboring countries, see Agricultural Higher Education, OED Précis no. 30) was particularly significant because students who passed the institute’s entrance examinations tended to come from middle-class families of small towns and lacked significant exposure to farmers’ lives and concerns.

- Low female and tribal participation. IAAS had difficulty recruiting women and members of hill tribes because few from those groups had the required qualifications. With much effort, the institute was able to increase female participation from about 1 percent in 1984 to 12 percent at project closing in 1994. But the women were from middle-class families and mainly interested in desk or research jobs. Initial project design did not take this sociocultural factor into account.

- Weak instructional delivery. Subject matter was not sufficiently linked to extension work. For example, students learned the Latin names of plants but not the names that farmers use. Moreover, instruction encouraged rote memorization of concepts in English, which most of the junior students understood poorly. Textbooks were available only through the library, which had only one textbook for every ten students. And, professors recommended a multitude of textbooks, without providing a structured set of materials to guide the students in their study.

The project’s change in focus midway through implementation shifted it away from training for extension without adequate development of alternative links to farmers. The result was a project that instead of producing extension agents, as its original objective had intended, ended up developing an academic institute of agriculture. While developing such a faculty is a laudable goal in itself, its priority within the country strategy had not been clearly established. What had been determined was Nepal’s critical need for transferring technology to farmers. But weaknesses in project design and pressures of dealing with daily implementation problems appear to have obscured the operation’s long-term goals.

Lessons

- In any extension project, an understanding of farmers’ needs is critical. Project design should then be tailored to meet those needs. That means close links to and open communication with farmers, a faculty operation geared toward systematic practical work on farms, relevant curricula design and material, and if needed modification of school calendars to coincide with agricultural work.

- Sociocultural factors should be factored into project design to ensure that the training program focuses on attracting students truly willing to work with farmers and on farms. In Nepal, the gap between the students and farmers might have been bridged through better selection criteria, greater attention to consciousness-raising among students, systematic links with farmers, and much practical work. Despite expert recommendations, this all-important aspect of training was not developed.

- Examination of outcomes against the benefits initially expected should be a clearly outlined part of Bank supervision. Nepal’s experience showed that project outcomes can veer off course even though physical activities are substantially completed. Bank supervision focused more on whether the project had acquired the tangibles rather than on assessing whether those were actually meeting the project’s purpose.

- Government commitment, backed by a dedicated and determined project management team, can sometimes turn a failing project around. Both these factors were weak during the early stages of the project. Government ownership strengthened with the revised project, and a new campus administration brought renewed determination to the project management team, helping it resolve the obstacles slowing implementation.

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