

DEVELOPMENT OF AGRICULTURAL EDUCATION IN SRI LANKA

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Agricultural education is nearly a hundred years old in this country. The earliest recorded activities were in the 1880s even before the Department of Agriculture was formally set up. At that time the organization that existed in Peradeniya gave its attention to the investigation of the flora of the country. Subsequently it introduced large numbers of exotics and helped to build up a prosperous plantation agriculture. It was then called upon to deal with pests and diseases of those crops. Later it made experimental investigations into the cultural and manurial requirements of the various crops; began work on the improvement of existing varieties of cultivated crops and took up the furtherance of agricultural education.

SCHOOL GARDENS

In the early part of 20th century agricultural education received further importance and the entire school garden movement came under the guidance and management of the organization at Peradeniya. All pupils above standard II were expected to do at least 30–45 minutes work in these school gardens three times a week. The purpose of this was to train the pupil's powers of observation and to acquaint him with some of the cultivation problems in the raising of fruit trees, economic plants and ornamental plants. It was soon realised that the value of this training depended entirely upon the teachers and with a view to assisting teachers in vernacular schools to learn agriculture, the first training course for teachers was commenced in Peradeniya in 1916.

Thus, the first School of Agriculture commenced functioning in 1916 for training teachers, village headmen, and sons of well to do farmers. The Director of Agriculture was the Principal with four other lecturers and a registrar. The school subsequently developed three courses of instruction—a 2 years course in English for the training of Agricultural Learners intended for service as instructors in the Department of Agriculture, a one year course in Sinhala for teachers and village headmen and a practical farm course for others. The practical training for these students was provided on the Experiment Station which had a total of 25 ha under rotational crops, fodder and pasture grass, plantation crops, orchard, dairy and poultry units. The School of Agriculture moved to its permanent buildings in 1938.

In the 1920s the shortage of foodstuffs during the war, directed attention to the need for cultivation of essential food items within the country. A large number of Agricultural Instructors were recruited to assist farmers in the

improvement of cultivation of paddy and other crops. Supervising Officers were appointed, demonstration plots opened, competitions begun, school gardens and cooperative societies expanded and a Board of Agriculture established with a view to bringing practical agriculturists into close contact with the Department of Agriculture and to thereby provide the Department with the assistance and advice of those connected with all branches of agriculture. Research staff was also increased.

PRACTICAL FARM SCHOOLS

Since peasant cultivation was the ultimate target of all such development activities, the Department and the Board of Agriculture then took a decision to expand training opportunities for farmers. Thus the Practical Farm Schools were set up in the provinces as a result of this need. The earliest schools were established at Labuduwa, Jaffna, Anuradhapura, Wariyapola, Wagolla, Mapalana, Karadian Aru and Horana.

The Farm School at Jaffna was run for many years on the same lines as the School at Peradeniya for the benefit of educated sons of landowners but later converted to the same type as other practical farm schools. All practical farm schools conducted the one year practical course for sons of peasant farmers. The instruction was mainly practical and covered a broad range of subjects. Special subjects were emphasised in special localities eg. irrigation in Jaffna, plantation crops in Labuduwa and Wagolla and so on. The Jaffna School had in addition a 4 months course for vernacular teachers and shorter courses for students during vacations. The students were paid 50 cents a day each for the work they did and for running their own mess. The objective of these schools was to train rural youths to settle in farming and during the early years nearly 75% of the trainees went back to the land.

After the grant of Independence in 1947, agricultural policies placed greater reliance on domestic agricultural production, to provide help to the small farmer to increase the production of essential food commodities and to reduce imports. The late Honourable D. S. Senanayake as the Minister of Agriculture and subsequently as the first Prime Minister initiated several far sighted measures towards achieving these goals. In the field of agricultural education, agriculture was introduced as a subject in teacher training colleges, the Faculty of Agriculture was set up in the University of Peradeniya, a Girls Farm School similar to the Boy's School was set up at Peradeniya for a 2 year course and later moved to Kundasale. Several more Practical Farm Schools were also established at Vavuniya, Karapincha, Bibile, Ambepussa, Pelwehera, Bindunuwewa, Batangala and Sammanthurai to train farmers.

In the years that ensued, successive governments realized the importance of developing particularly the research, extension, and education sectors in

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agriculture not only for increased production to meet local demands but also as a means of raising the income levels of the large majority of people who were dependent on agriculture in this country. Farmer education was recognised as a crucial input and extension services were reorganized in the sixties. Annual Implementation Programmes were introduced in the districts and this gave direction and purpose to extension work. Clear programmes of work and training were defined within the framework of the implementation programmes.

REORGANIZATION

In the early seventies it was realised that the main activities of the Department of Agriculture, namely research, extension, education and seed production needed reorganization, expansion and intensification to cope with the new land settlement policies and with the fiscal policies in agriculture. The Agricultural Lands Law and the Agricultural Productivity Law transferred the responsibility for production largely to the small farmer within the framework of a national system of farmers' organizations, the Agricultural Productivity Committees which were expected to plan and implement programmes for agricultural development and servicing the farmers in respect of agricultural credit input supplies, marketing of farm produce and for providing effective farmer education.

The role of the Department of Agriculture was in the context of these changes that of efficiently servicing the farm units on the one hand and the Agricultural Productivity Committees on the other.

In agricultural education and training high priority was given to the development of a strong inservice training programme to provide the necessary technical back up for the expanding extension service to develop a system of permanent training institutions that would not only undertake the preemployment and inservice training of field staff working in the agricultural development programme, but also provide a course of training for farmers and youths, and to expand the information service. To effectively implement these programmes, a new Division of Agricultural Education & Training was created in 1975.

INSERVICE TRAINING

Decentralization of research on the basis of agroecological regions and the expansion of extension services with field staff deployed in Agricultural Service Committee areas focussed the need for closely linking these two activities. The new technology developed by an expanded research had to be rapidly communicated to the extension staff while field problems had to be conveyed to the research staff to make research programmes more relevant and farmer-oriented.

In-service training became an absolute necessity in order to keep the field staff regularly updated, to raise their professional competence and at the same time to keep research aware of the field problems. In order to bring about this close linkage, Inservice Training Institutes began to function. Five such centres are now functional at Peradeniya, Maha Illupplama, Bindunuwewa, Angunakolapellesa and Kilinochchi. Two more at Bombuwela and Karadian Aru are expected to function shortly. The eighth centre at Makandura is due to function by end of 1983. Being located in close proximity to the Regional Research Centres they offer excellent opportunities to communicate and train field staff in new technology developed by research.

Over the years the scope of training has been widened to meet the needs, and today inservice training programmes (usually 1 week in duration) cover topics ranging from production of a wide range of crops to specializations in water management, plant protection, extension methodology, communication, beekeeping, and so on. This could perhaps be described as the best inservice training facility in the country in the field of agriculture. These services are now used not only by the staff of this Department but by several other governmental departments and non governmental agencies. The benefits of a strong inservice training programme are clearly evident in a more competent and confident field staff particularly in the area of rice production where strong supportive research and other facilities are available.

A specialised inservice training in the field of farm mechanization is now provided by the Farm Mechanization Training Centre. Courses of 1-2 weeks in operation and maintenance and repairs of farm machinery, workshop technology and management are offered by this centre.

SCHOOLS OF AGRICULTURE

With rising standards of agriculture and the demands for increased staff and better trained personnel pre-employment (diploma) training courses had to be re-examined and improvements made. A strong foundation before recruitment was considered to be as essential as a strong inservice training. A second School of Agriculture was opened for boys and girls in the premises of the Girls Farm School Kundasale in 1958 with Sinhala and Tamil as media of instruction. In 1967 the two Schools of Agriculture were amalgamated and the general two year course was changed into a specialization course offering part specialization at the end of the first year in any one of five areas: Crop Husbandry, Animal Husbandry, Horticulture, Agricultural Engineering, and Rural Home Management. The persistent demand for general competence however, necessitated the re-establishment of the general course in 1975.

The demand for diplomates kept rising as a result of the developmental activities pursued by the government and the interest shown by the private

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sector, particularly in providing the supporting services. This led to the development of two additional Schools at Pelwehera and Angunakolapelessa in 1981. The numbers of trainees admitted to these diploma courses increased as a result from about 150 to about 300 per year. Roughly half this number are already employed in this department as village level extension workers and as officers in other departments. This upgrading in training would help to raise their competence and enable them to provide a better service. The curriculum has been updated, additional staff recruited, the standards of admission were raised and a competitive examination was introduced to select better quality candidates.

VOCATIONAL TRAINING

The Practical Farm Schools established in the 1930s for the purpose of training youths for farming served their purposes in the early stages. Later on, with recruitment of the trainees to the village level extension worker and other similar cadres, these courses soon turned out to be a means of getting paid employment. Attempts at providing them land and credit facilities to settle in farming failed to attract a sufficient number and surveys indicated that only about half the number of trainees took to farming as an occupation due to various factors.

These schools were used by the Ministry of Education from 1965 to 1973 for training a large number of agricultural teachers who were in charge of the newly introduced scheme of teaching agriculture as a prevocational subject in the rural schools.

In view of the earlier experience with trainees seeking paid jobs a pilot scheme was commenced in mid seventies to offer short duration practical training courses to youths and new settlers in agricultural projects. Though this had its merits the one year course was reestablished after 1977. It was however evident that for the money spent on this programme the results were not adequate and that if opportunities could be given to the persons who really needed such training (owners of land) the benefits would be greater. A special committee on Agricultural Education appointed by the Honourable Minister reviewed the subject in 1979-80 and recommended that in view of the large number of youths who are on the job market and the need to help them, the farmers and others, the farm schools should offer short term courses.

Thus from the end of 1980 the schools reintroduced short term courses ranging from a 4 month course for youths and new settlers to courses of a few days to practising farmers. These courses are planned and conducted on the basis of demands identified in the district by the extension staff and are mainly practical in nature. No age and educational qualifications are insisted upon. Anyone interested in a field of agriculture now has the opportunity of learning the necessary skills. These training centres are managed by

the Assistant Directors (Extension) of the districts and provide additional support in the training of farmers, farm women, rural youths, voluntary organizations, local officials, input and marketing sector personnel and so on.

INFORMATION SERVICE

The Agricultural Information Service has been providing support through mass media for agricultural development. It was responsible for publication of a wide range of leaflets for farmers, two quarterly journals in the local languages for farmers, conducting radio programmes in all three languages and producing films on agricultural topics.

With the reorganization and expansion of research, extension, and training activities, there is an increase in the availability as well as demand for information. The need for a wide range of printed materials at different levels to meet the demands of extension, training personnel and of farmers has increased in recent years. In the radio medium, regional stations have been established and these require timely and appropriate information. The recent introduction of TV offers even greater possibilities for dissemination of useful information.

To cope with these needs, a strong information service has to be developed. The initial steps in reorganization have been effected by dividing the earlier information division into two units: a Publication Unit with separate editorial staff and printing facilities is being set up at Peradeniya and the Farm Broadcasting Unit with separate staff at Colombo to work in close liaison with the SLBC and regional broadcasting stations.

To cater to the needs of training staff, a training materials production unit for developing instruction leaflets and audio-visual material has been set up at Peradeniya. These facilities will be extended to the Regional Inservice Training Institutes.

TRAINING FOR T & V

Training is an important component of the Training & Visits (T & V) Extension System. In each agroecological region the SMOO, AII & KVSS receive the 2-3 day preseasonal training with the assistance of the research and training specialists. This is followed by fortnightly training of the AII and KVSS in the districts by the SMOO, and monthly research extension dialogues where SMOO again meet research officers regularly to discuss field problems. Additional inservice courses are conducted during the season to meet any further deficiencies.

Firstly there should be a clear definition of the training needs of different levels of staff if appropriate training courses are to be formulated. These needs are usually identified and finalised at the RTWG meetings. Thereafter appropriate training courses are developed conducted and evaluated for

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effectiveness. The staff at the Regional Inservice Training Institutes thus have a responsibility at all these stages in the training process.

Regional ISTII are being strengthened by the recruitment of additional staff (Subject Matter Specialists), further training of the staff, and improvements to the facilities. Stronger functional linkages have also been established through the mechanism of the Regional Technical Working Groups (RTWG) between research, extension and training. The training is more skill oriented and new technology is demonstrated on the training centre fields so that trainees could see and practise the essential skills. Courses on communication and extension methods are conducted at intervals to improve such skills.

The success of the T & V system also depends on a good understanding of this system by not only the staff of this Department but also by others administrators, supporting services, information personnel, university teachers, related departmental officers and so on. In all inservice training courses conducted for outsiders at the ISTII and DTCC this subject is included as a part of the curriculum but this has to be a continuing activity.

Inservice training will assume greater importance in view of the need to keep the expanding field staff updated with new developments. The Regional Training Institutes will be called upon to provide specialised training to meet the demands of an intensive employment oriented and export oriented agriculture. New skills relating to more efficient land and water management, farm planning and management, processing, utilization and marketing of farm produce are likely to assume greater importance.

Farmer education programmes will have to be intensified to train larger numbers in specialised skills. The scope and nature of nonformal educational activities will have to be widened to cater to the diverse needs of farm youths, farm women and others.

A more integrated approach in farmer education with institutional training and mass media supporting the major component will have to be mapped out to train large numbers of farmers. New approaches have to be sought to reach those farmers not easily reached by the conventional methods.

Preservice education at the diploma level will need further improvements. The staff and facilities should be strengthened, the curriculum revised to meet changing needs and measures devised to train and upgrade the large number of village level extension staff who form the backbone of the extension service.