

AGRICULTURAL EDUCATION IN BANGLADESH OPEN UNIVERSITY

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Abstract: This paper discusses the status of agricultural education in Bangladesh Open University. The need for transfer of updated agricultural technology is at the top of the agricultural policy of the country. Research institutes usually generate technology; it is transferred through different extension approaches and mass media to the learners and farmers. The Bangladesh Open University (BOU) is to expand all levels of education in different fields. The School of Agriculture and Rural Development (SARD) of BOU is to impart education through distance mode comprising formal and non-formal programs in the field of agriculture and rural development. The learning procedure also includes tutorial supported audio and video programs. The School of Agriculture and Rural Development is offering four formal programmes namely, Bachelor of Agricultural Education (B.Ag.Ed), Diploma in Youth in Development Work (DYDW), Certificate in Livestock and Poultry (CLP) and Certificate in Pisciculture and Fish Processing (CPFP). Learners' participation in the tutorial classes at tutorial centres (TCs) of SARD programmes is not satisfactory and missing practical sessions seriously hampers the learners. To improve the overall situation for ensuring quality of the SARD programmes that includes imposition of compulsion on the students to attend the practical sessions, emphasize on research facilities of faculty members, updating the study materials, timely distribution of learning materials, broadcast of media programmes and result publication.

Keywords: Open University, Agriculture, Distance education, Bangladesh

INTRODUCTION

The opportunity for higher education in agriculture is extremely limited in Bangladesh, and therefore, even students, who can afford to finance their studies, it is very difficult to get admission into the universities due to limited capacity [1]. Prime objective of Bangladesh Open University (BOU) is to transform the country's vast human resources into an educated and trained work force by formal and non-formal through distance education [2]. The Bangladesh Open University is to expand all levels of education in different fields. The School of Agriculture and Rural Development (SARD) of BOU is to impart education through distance mode comprising formal and non-formal programs in the field of agriculture and rural development. Field trails or demonstration is a very effective way for dissemination of technology in presence of scientists, extension workers and farmers. Field demonstrations on improved practices through media programs are most effective to affect adoption behavior of farmers. Traditional commodity oriented agricultural research does not necessarily consider these realities. As a result, many of the technologies developed by different research institute have not been adopted by the farmers or else they have not been successful in promoting equitable socioeconomic development. Transferring new findings and technologies to rural farmers remain a promising strategy for increasing agricultural productivity. The new idea must reach farmers' farms and homes through effective extension the technologies and put them into use [3]. Using the mass media has caused an increase in the knowledge level and the output of educational system in recent decades. It seems the main reason for the popularity of television lies in its simplicity for the audiences. Since people intend to choose the easiest way for learning the simplest way can be found in television educational programs [4]. ICTs in delivering course materials of BOU and other academic institutes to promote distance education in Bangladesh [5]. The paper is an overview of agricultural education programmes in Bangladesh Open University.

MEDIA PROGRAMME AND AGRICULTURE

There is no doubt that information and communication technologies (ICT) have influenced educational circumstances more than any other categories [6]. Many researchers and educators have tested the understanding of farmers and other clients toward the delivery of educational information [7- 13]. The outcomes of their studies indicate that extension educators to communicate new and emerging technologies to farmers use different media and methods. The information sources in different topics of agriculture for the farmers are radio and television, the propagation publication, daily farm newspapers, agriculture exhibitions, practical education, and consultation services, respectively [3]. North California, newsletters are the most important information source in the agricultural sector. Among the media, utilizing scientific conferences, computer and other new media are the least preferred; so, few of the farmers use them [14]. Video, radio and television are the major sources of information for the farmers in Nigeria, and print media have a specific situation in transferring agricultural information as well. Among the mass media, regarding informal education, radio and television have a specific situation. Due to the vast use, the media are among the best educational and cultural instruments [15]. The

success of agricultural development programmes in developing countries largely depends on the nature and extent of use of mass media in mobilization of people for development. The planners in developing countries realize that the development of agriculture could be hastened with the effective use of mass media [16]. Radio and television has been acclaimed to be the most effective media for diffusing the scientific knowledge to the masses.

SCHOOL OF AGRICULTURE AND RURAL DEVELOPMENT OF BOU

School of Agriculture and Rural Development of the BOU is actively engaged in educating people of the rural areas of the country with the help of modern technology of agriculture to boost up production of different agricultural commodities including field crops, poultry, dairy and fish. Agriculture contributes more than 50% of the output of the economy and employs approximately two thirds of the labor force of the country [17]. The primary emphasis of development efforts in agriculture since independence has been to replace the age old methods of agriculture with modern technology capable of sustainable growth. Farmers in the country, mostly uneducated, are still following the traditional practices of agriculture. Government and non-government organizations (NGOs) in the country are working tirelessly to educate the farmers with modern techniques of production. Agricultural Universities along with other universities of the country has been producing agriculture graduates who join the Department of Agriculture Extension to work as extension officers in order to transfer the updated technology to farmers. There are several research institutions in the country to do search in finding out solutions of local problems of farm production. But to reach the huge mass associated with so diversified fields of agriculture is not an easy task [18].

TUTORIAL SERVICE OF BOU

The BOU follows curriculum based courses which are offered through different tutorial centre's located in different geographical districts. Actually tutorial centres are the well-reputed institutions located outside of Bangladesh Open University main campus. There is a memorandum of understanding between Bangladesh Open University and the said institutions for tutorial services. Remuneration is paid to the tutorial centre for tutorial services. The tutor's qualification, training especially training in distance learning and experience play an important role in the learning process [19]. Modules are handed over to the learners and tutorial support is provided for each subject by experienced tutors (facilitators) from the localities where the TCs are situated. Theoretical classes are held in the traditional class rooms. Practical classes are held in the field laboratories of the TCs. Strict regulations are followed during enrolment, tutoring and evaluation for quality assurance of the learners. Print and electronic media are used to support students. Books are printed in modular formats. It has been observed that proper guidance, especially through practice teaching is difficult to provide to the learners, though theoretical aspects are easily dispersible. Various methods are in trial to identify the better methods of practical demonstration with interactive approach [18].

MODE OF DELIVERY

The BOU has a rich media centre where video and audio teaching aids are produced for broadcasting through national TV and radio channels. As such student support in print forms as well as through TV and radio are provided to the learners. In conventional system of education, learning is greatly influenced by the dynamic interaction process that goes on between a teacher and his/ her students. The learning procedure also includes tutorial supported audio and video programmes [20]. In distance education system such face to face interaction is almost absent. Besides the use of electronic media for delivering lectures, Bangladesh Open University supports with face to face interaction between learners and tutors at the tutorial centres located outside of the main campus. Several factors like conditions and infrastructure of the tutorial centres, tutor's qualification, experience and training in distance learning, teaching style and strategies are of importance in the process of acquiring education through distance mode [19]. Importance of ODL has recently been focused as a useful tool for transfer of agricultural technology from the researchers and academics to the farmers who are the end users. Mass education through formal and non-formal programmes in ODL is well recognized today throughout the world. But it is difficult to teach science subjects specially the practical oriented courses of agriculture, in distance mode.

SARD ENSURES THE PRACTICAL COURSES

Conventional universities have the advantage to offer laboratory or field facilities for practical demonstration. But it is always difficult to demonstrate distance learners any sort of actual operations to practice and learn. Only reading of printed material is not sufficient for attainment of knowledge of practical oriented subjects because the quality of a programme depends on the process and outcome. The School of Agriculture and Rural

Development of the BOU has taken up an ambitious project to offer several programmes and courses of agriculture mainly for transferring the updated technologies to the rural people [18]. SARD ensures the practical courses for learners through using the laboratory and field facilities of recognized tutorial institutes.

EXAMINATION PROCEDURE OF FORMAL SARD PROGRAMMES

Examinations both theoretical and practical are held after end of each semester. Objective and broad type questions are set and scripts are examined by external examiners. Practical demonstration and oral are the part of practical examination. Result of every examination is centrally published by the Controller of Examinations at the BOU after each semester. The entire system of examination is quite smooth except that it takes about 2 months to complete the examinations and another few months for evaluation and publishing the results. Unusual time is also taken to distribution of scripts to the examiners and again received the scripts from the examiners by registered mail. Then getting them back for tabulation and finally for the publication of results.

FORMAL PROGRAMMES OF SARD

At present the School of Agriculture and Rural Development is offering four formal programmes namely the Bachelor of Agricultural Education (B.Ag.Ed), the Diploma in Youth in Development Work (DYDW), Certificate in Livestock and Poultry (CLP) and Certificate in Pisciculture and Fish Processing (CPFP).

B.Ag.Ed

This is a graduate programme designed to provide proper education in agriculture to the teachers of schools and madrasahs (religious school) who are engaged in teaching agriculture to the secondary level students. Agronomy, horticulture, nursery management, fishery, poultry, dairy etc. along with language proficiency and some pedagogical courses are the core courses of the programme. Diploma in Agriculture or higher secondary level of education is the required qualification for enrolment in the programme. In the country, agriculture is taught as an important subject along with other compulsory subjects. But there is a dearth of qualified teachers in agriculture. It was rather impossible for any other university to take the task to train such a huge number teachers of agriculture without following the proven method of ODL. The BOU was given the responsibility by the government to offer the B.Ag.Ed. programme in the year 1996 and the first batch of students graduated in the year 1999 [21]. It is a six semester programme with six months for each semester. The programme is offered through 15 Tutorial centres (TCs) covering the entire geographical area of the country.

DYDW

This is a graduate diploma programme. Modules written in English have been provided by the Commonwealth Youth Programme (CYP). A strong force of youth workers is expected to get proper training in youth development to enrich human resource development after exposure to the courses of this programme. Graduation in any discipline is the required qualification for enrolment in the programme. It is a three semester programme with six months for each semester. The programme is offered through 3 Tutorial centres (TCs) in the country. Learners' evaluation is done by end semester theoretical examinations, assignments and orals.

Certificate in Livestock and Poultry (CLP)

This is a certificate programme having duration of six months. Certified learners are expected to learn the basic techniques of rearing livestock and poultry so that they can start their own farms of dairy or poultry to become self employed. Both theory and practicals are provided through printed modules, TV and radio broadcasts. School secondary Certificate (SSC) level of education is the required qualification for enrolment in the programme.

Certificate in Pisciculture and Fish processing (CPFP)

This is a certificate programme having duration of six months. School secondary Certificate (SSC) level of education is the required qualification for enrolment in the programme. Bangladesh is a land of rivers, ponds and lakes. Fish is a common item in the everyday dietary menu of almost everybody and it is thus the main source of protein. There was a day not long ago when fishes in abundance could be obtained from natural water pools, rivers and ponds. But those days have gone by now with the growth of population. Only recently government has taken steps to boost up fish production in the country by systematic rearing of fishes with modern methods and machinery. CPFP programme has been designed to impart knowledge of modern fish production techniques [21].

Non-formal Programmes

The BOU also offers non-formal programmes to transfer the technology of agriculture to rural farmers. These programmes are dispersed through national TV and radio station. The programmes are produced by the media

centre of the BOU and the scripts are written by the faculty members and imminent guest scientists of the country.

CONSTRAINTS

Dropout of students is one of the main problems. About 30% dropout is noticed in the B.Ag.Ed programme, where as 60%, 20% and 15% dropouts have been noticed in the DYDW, CLP and CPFP programmes, respectively [21].

Distance of the TCs from the residences of learners, uneasy feeling of an unfriendly atmosphere in the tutorial sessions and above all, the far way attachment with the faculty at the BOU bring a feel of loneliness to the learners. These have been identified as the prime causes of irregular attendance in the tutorial sessions [21].

Attendance in tutorial sessions cannot be made compulsory to the learners in the ODL system. But missing practical sessions seriously hampers the learners. It has also been observed that the students who did not attend the tutorial sessions regularly failed in great numbers in the practical part of examinations. Question has also been raised about the effectiveness of the practical sessions [21].

Timely distribution of learning materials and result publication are the main constraint of Bangladesh Open University. Unexpected delay of receiving course materials and results sometimes brings frustrating feeling to the learners.

Lack of research and evaluation makes BOU programmes very much static and backward as times goes ahead. No improvement is made with the courses [22].

Failure of on-time production and delivery of media programme is a problem at Bangladesh Open University. It will seriously hamper the long-term sustainability of BOU programmes [22].

FUTURE STRATEGY FOR IMPROVEMENT OF SARD PROGRAMMES

The School of Agriculture and Rural Development has put forward some suggestions to improve the overall situation that includes imposition of compulsion on the students to attend the practical sessions. This can be done by allotting 10% of total marks for attendance. More effective tutor training has been suggested to motivate the tutors to behave as a tutor not as a teacher for creation of friendlier environment in the tutorial sessions and to make the sessions learner-oriented by more interaction and collaboration [21]. Innovative approaches, such as revision of curricula, supply of audio-visual materials to the tutorial centers, increase facilities for practical sessions, introduce asynchronous electronic technologies (internet, e-mail and mobile phone) for rapid dissemination of information on admission; tutorial session and examination are suggested [23]. BOU authority must take initiatives to enhance professional skilled of the teachers of SARD and should emphasize on research and regular revision or updating the study materials for ensuring quality of the running programmes.

CONCLUSION

The Bangladesh Open University (BOU) is to expand all levels of education in different fields through media and Information communication Technology (ICT). The need for transfer of updated agricultural technology is at the top of the agricultural policy of the country. The School of Agriculture and Rural Development (SARD) of BOU is to impart certificate, diploma, graduate level education through distance mode comprising formal and non-formal programs in the field of agriculture and rural development to boost up production of different agricultural commodities including crops, livestock and fisheries. Student attendance in the TCs is not satisfactory and missing practical sessions seriously hampers the learners. To improve the overall situation that includes imposition of compulsion on the students to attend the practical sessions, emphasize on research and updating the study materials for ensuring quality of the programmes. Timely distribution of learning materials in the learners and result publication in due time are the present challenges of Bangladesh Open University.

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