

2021

Publication abstract based on Thematic Area



COMPILED BY RESEARCH DIVISION

BARD, Kotbari, Cumilla

1. Agriculture Technology and Extension

1.1 Chowdhury, Masusul Hoq et.al. (2021). Effects of Climate Change on the Livelihoods of Coastal Areas of Bangladesh, BARD, Cumilla.

The study was conducted to determine the productivity and farm income that affected by the extreme events of climate changes over the years and to identify coping mechanism for extreme events of climate change. The study was carried out through sample survey and field observation method for which the extreme event affected areas of the selected coastal areas of the country viz., Barguna, Pirojpur and Patuakhali were selected. Crops, fisheries, livestock, and forestry affected by salinity, flood and cyclone were taken into consideration. The numbers of the respondent were 600 (200 from each district). A semi-structured questionnaire had been prepared and validated by pre-testing and then it was administered to collect information for the study.

Study results showed that storm was found as a major natural disaster in the case of overall scoring (28.46%) in the study areas. Patuakhali is more vulnerable to tidal surges, salinity intrusion and storm, Pirojpur is more vulnerable to storm and floods and Barguna is more vulnerable to floods, storm, and tidal surges and also problem of salinity intrusion is emerged. Findings indicate that all areas are more vulnerable to storm where flood is also concerned at Barguna and a tidal surge is also concerned at Pirojpur and Patuakhali. The study findings suggests that appropriate measures should be taken to combat storm and tidal surges in the coastal study areas for impeding other climatic disasters like salinity intrusion and floods.

It was also observed that Average working days and availability of pure drinking water hampered due to extreme events of climate change in the study areas. Maximum damage incurred from crops sector compared to fish and livestock in all study areas. The maximum damage was found in crop sector at Pirojpur followed by Barguna and Patuakhali. The maximum loss found in livestock sector at Barguna that was followed by Pirojpur and Patuakhali. The most adopted strategy was found as 'Loan taken from bank and rich man' in all study areas (37% in Barguna, 39% in Pirojpur and 42% in Barguna) followed by 'Taking relief from Govt. and non-Govt. organizations' (31% in Barguna, 21% in Pirojpur and 23% in Barguna). The analyses indicated that these events damaged livelihoods basics like farm production, fish and livestock cultivation. These created reduction of working days, damage of physical and educational infrastructures. People of the study areas had exercised and adopted some coping steps but these were not good enough. The study suggests to construction of more multistoried and multipurpose cyclone shelters, introduce saline and flood tolerant varieties of rice, vegetables and other crops, strengthening the weather forecasting for awareness creation, provide adequate credit and livelihood training, construct green belt and special development plan for the study areas.

1.2. Azad, Abul Kalam et.al. (2021). *Effect of Conservation Agriculture based Tillage Options and Different Nutrient Management Practices on the Yield of Aus Rice-Aman Rice-Maize Cropping Pattern in Middle Meghna River Floodplain in Bangladesh*. BARD, Cumilla.

The main focus of the research is to introduce CA practices particularly various tillage options, and SSNM and NM based fertilization practices along with incorporation of water saving crops like kharif-1 maize, rabi maize in to the existing rice based cropping system. The research was carried out at farmer's fields of two villages such as Jhalgaon and Pomtala under the Upazila Barura of Comilla district during 2009 to 2013. Tillage options are Permanent Bed (PB), Fresh Bed (FB), Strip Tillage (ST), Zero tillage (ZT), Minimum Tillage (MT) and Conventional tillage (CT). Single factor experiment was laid out in Randomized Complete Block design (RCBD) with dispersed replications. Data were taken on filled grain panicle-1, unfilled grain panicle-1, 1000 seeds weight and grain yield of rice and grain cob-1, 100 seeds weight and grain yield of maize.

The experimental results showed that Minimum tillage (MT) found superior for the yield of Aus rice over the four years of experiment where CT and FB found superior for yield and yield component of Aman rice. Minimum Tillage (MT) had closer yield potentials of Aman rice for which MT can be recommended for aman rice cultivation in principle of conservation agriculture. Because MT gives less soil disturbance compared to CT and FB. CA-based tillage options ST, ZT or MT found superior compared to conventional tillage and fresh bed for rabi maize cultivation in terms of grain cob-1, 100 grain weight and grain yield during the entire period of the experiments. In the case of SSNM and NM based fertilization practices, NPKSZn treatment gave significantly greater grain cob-1, 100 seed weight and grain yield that was followed by NPK and -P+NK treatment for rabi maize. In 2012-13, NPKSZn treatment gave significantly greater grain cob-1, 100 seed weight and grain yield that were followed by NPK, Decision Tool (NM) treatments and Nutrient Expert (NE). The experimental results suggest that NPKSZn, NPK and Decision Tool (NM) treatment are superior for rabi maize cultivation. In kharif-1 maize, NPK gave the higher yield over control plots in 2009. In 2010, grain yield was greatest in NOPK (9.09 t ha⁻¹) and smallest in High N, P and K (7.46 t ha⁻¹). In 2011 and 2012, on an average of both year stands, significantly greater and closer yields were obtained from BARI recommendation and NM-based recommendation with higher yield. In 2013 trial, grain cob-1, 100 seed weight and yield were significantly greater in NM-based fertilizer recommendation than farmer's fertilizer practice. The results suggest that computer based Nutrient Manager could be assessed appropriate fertilizer dose considering the residual fertilizers effect of previous crop potato. BARRI recommendation gave significantly greater grain yield (4.35 t ha⁻¹) of aman rice compared to NM-based recommendation in 2009 but in 2011, FP gave the highest grain yield (4.45 t ha⁻¹) compared to both BARRI and NM-based recommendation. T2 treatment resulted in greater grain yield and contribution of K and S was also important for boro rice production in 2009-10. In 2010-11, SRDI recommendation gave the greater yield (6.5 t ha⁻¹) followed by BARRI recommendation (6.2 t ha⁻¹) and NM- based recommendation (5.9 t ha⁻¹). The experimental results suggest that BARRI and SRDI recommendation for nutrient management for boro rice cultivation is superior in terms of yield and yield components compared to FP and NM-based recommendation. Permanent beds exhibited a significant yield advantage over conventional tillage for maize. BARRI recommendation found superior in aman rice in the year 2009 and FP was better in 2010. Despite the yield of NM-based recommendation was closer to BARRI recommendation and FP, NM fertilizer recommendation system could be fine-tuned and

developed in order to ensure site specific nutrient management and avoid over or under use of chemical fertilizers with safe environment. BRRRI and SRDI recommendation for nutrient management for boro rice cultivation is superior in terms of yield and yield components compared to FP and NM- based recommendation. Based on study findings, CA-based tillage options could be implemented to the farmer's fields for sustainable intensification of rice-rice-maize cropping system. At the same time, Decision Tool (NM) and Nutrient Expert (NE) could be fine-tuned as fertilization package for rabi maize, Aman rice and Boro rice cultivation to avoid over and under application of chemical fertilizers for future research. NM-based fertilizer recommendation can be recommended to the farmers for kharif-1 maize cultivation after potato.

1.3 Munshi, Shishir Kumar, Ahmed, Benzir, & Rahim, Junaed (2019). *Challenges and Prospects of Jute Cultivation in Bangladesh*, Cumilla: BARD

Jute as one of the most significant export items, played a dominant role in the world market. Jute alone contributes about 1.58% to the national GDP without involving any foreign investment. But at this moment the golden fiber lost its footing in the economy and in the farmer community as well. To revive the role of jute in national economy and to overcome the myriad problems in jute sector the study was attempted to: i) examine the present socio-economic status of the jute farmers; ii) identify the causes of losing interest of the farmers in jute cultivation; iii) identify the factors contributing to price fluctuation at different levels; iv) explore the opportunities of promotion of jute products. The research was based on both qualitative and quantitative method. To fulfill the objectives of the study both primary and secondary data were used. The study was designed to comprehend and highlight the perception of two sections of people: a) farmers who are directly involved in jute cultivation, and b) market agents who are involved in trading of jute and jute products. Data was collected through random sampling by administering semi-structured questionnaire from different socio-cultural zones i.e. Rangpur, Pabna, Faridpur and Jessore where jute is grown more. The study unraveled the fact that among the problems, 83.5% respondents stated that lack of getting fair price of jute was the most important problems of jute cultivation. It was evident that the syndicate controls the market chain and price. As a result the farmers are deprived of getting fair price. The study revealed that 46% dealers mentioned that they did not get fair price due to the existence of a middle man between mills and dealers. It was observed that 73% of the respondents sell their jute to the mills, which indicates that the large portion of produced jute goes to the mills for further use or export. The unnecessary influential factors in the market play some negative impact and therefore farmers' association can be formed to overcome their problems. Government should play a supportive role in jute production, marketing and price control.

1.4 Islam, M. S., Bhuyan, M. A. H., & Karmakar, B. C. (2019). *Agricultural Practices, Problems and Potentials of Farmers in Cumilla District*, Cumilla: BARD.

The agriculture sector is the single largest contributor to income and employment generation and is significantly recognized as a vital element in the country's challenge to achieve self-sufficiency in food production, reduce rural poverty and foster sustainable economic development. But there are some common problems of agriculture. The study objectives were to: (i) highlight the present situation of agricultural practices in the study area; (ii) investigate the extent of adoption of the agricultural technologies developed in the country; (iii) Analyze the extent of development occurred in cereal and vegetables production, pond fish culture, dairy and poultry rearing and the interventions in social forestry covering some success case stories; and (iv) Identify the problems faced by the farmers and find out the possible solutions thereof. Primary, secondary, quantitative and qualitative data were accumulated for the study. For collecting primary data at farmer's level survey method was adopted and a structured interview schedule was developed. Using standard formula, the sample size was 1071 farmers from four Upazilas of Cumilla district. The quantitative data were supported by Participatory Rural Appraisal (PRA), Case Study, Focus Group Discussion (FGD) with the Upazila level officials of Department of Agriculture Extension, Department of Fisheries, Department of Livestock, etc. was used for triangulation of research methods. Moreover, one workshop was organized at BARD with different types of farmers along with Faculty Members of BARD to investigate their existing farming practices, types of problems faced by them and their desire to improve the farming practices. The findings of the study revealed that average land under cultivation of rice is decreasing day by day. The farmers usually do not use cow dung or compost in their land as organic manure, to a certain extent they mix only residue of rice plants, locally known as nara (straw) in their rice field. The farmers use Deep Tube Well (DTW), Shallow Tube Well (STW) and Low Lift Pump (LLP) as means of irrigation in the rice field. Currently on an average 25% irrigation is given by DTW, 70% is given by STW and only 5% is given by LLP. But there is exception in case of low laying Upazilas, in such low laying Upazilas 50% irrigation is given by LLP. Now-a-days the farmers use hand weeder (50 percent farmers) as well as weedicides (50%) for weeding the rice field. At present almost 100% of the farmers use either manual or power driven paddle thrasher for thrashing the rice. The farmers frequently face the problems in cultivating the rice. These are: low price of rice during the harvesting time, lack of labour during transplanting and harvesting time, high price of labour, irregularity of irrigation water supply by the owner of DTWs and political influence during procurement of rice by the Government. It was found that only a few farmers grew wheat, maize and potato in rabi season in Cumilla. It was found that they had been growing 27 different types of vegetables. The highest number of farmers grew tomato followed by brinjal and bean. The farmers in Cumilla grow different types of spices like chili, mustard, garlic, onion, ground nut, turmeric, coriander leaves etc. The highest number of the farmers reported pest infestation (virus, rotten etc.) as a serious problem followed by high price of fertilizers, seeds and pesticides. Many of the farmers reared cattle, poultry and cultured indigenous carps, exotic carps, catfishes etc. in their pond. Inappropriate knowledge and experiences regarding poultry rearing, high price of poultry feed, lack of quality chicks, inappropriate selling price of poultry and

egg and lack of capital were the major problems. Importation of rice, wheat and maize; price of fertilizers, seeds and pest should be controlled by the government to ensure rational price of rice and it is important to ensure procurement of rice directly from the rice farmers instead of vendors. Training could be arranged for wheat and maize growing farmers to promote wheat and maize cultivation in this area. To rationalize vegetable price, effective market channel should be developed and mechanism should be developed for supplying of good quality pesticides. Price of imported fish feed should be reduced by adopting suitable. In poultry rearing, quality, feed, medicine with low price should be ensured. Subject-wise training in rice, maize, wheat, fish culture, poultry rearing, should be arranged to address the problems faced by these sectors of agriculture. Posts of veterinarians should be created so that more service on poultry and cattle rearing can be ensured. Interest free loan or low interest loan can be started for dairy and cattle development.

1.5 Ahsan, K. et.al. (2013). Cattle Rearing and Use of Manures in Agriculture: Situational Analysis of Selected Areas, Cumilla: BARD.

The study was carried out to assess the cattle rearing scenarios, management practices, and use of cowdung as manure in the agricultural field. Farmer's practices in dairy farming and their knowledge and their adopted technologies on dairy farm practices were also identified. Data were collected from three Upazilas of Comilla district like Sadar, Sadar South and Barura in 2013. Both qualitative and quantitative methods include sample survey through questionnaires, and face to face interviews with the farm households and FGD with relevant stakeholders of the study areas respectively were administered. The study showed that most of the dairy farmers use cowdung as manure in their agricultural land but they do not exactly know the dose and how to prepare manure for crop land. It is also observed that use of organic manure in combination with inorganic fertilizers can increase soil fertility and productivity. Sixty three percent farmers rear cattle in intensive farming system. Both natural and artificial insemination is practiced in dairy farming practices in the study area but the farmers are not much aware about the time of insemination. Farmers know the benefit of using anthelmintic after a certain period but they fail to maintain the dose as required. People know that milk is very nutritious food but few people use to take milk regularly. Farmers are compelled to sell milk at low price for which they could not get fair price. The study suggests that farmers need intensive training on modern cattle rearing, compost preparation from cowdung for crop production. Development of cooperative marketing channel can be the solution for the milk producers to sell their milk at reasonable price.

Key words: Cattle Rearing, Organic farming

1.6 Islam F.A.M. Nurul (2005). Socio-economic study of Rice Sheath Blight Disease, BARD, Cumilla.

Bangladesh is densely populated country and her economy is based on agriculture. Among the agricultural crops rice predominates the cultivation in total cropped area. Farmers grow rice in Aus, Aman and Boro as a common crop. There are 31 rice diseases in Bangladesh of which ten are commonly important reducing rice yield by about 10% annually. Sheath blight disease has been recorded every year. Farmers have very shallow idea about rice diseases. But over a period of time

DAE through its extensive activities provides training to many farmers as well as the dealers how to protect the crops from various diseases. Moreover, farmers can also gain knowledge different media about how to use pesticides, fungicides and insecticides to control the rice disease themselves. Farmers may be sufficiently able to protect their rice from this disease through the use of chemical control measures and other cultural practices depending on their educational level, source of income, IPM training, getting information from radio, TV and communication with the extension personnel, newspaper if they are aware of the above measures. It is highly important to understand the farmer's perception of the sheath blight complex, its significance and current practice along with the future options for the disease management. The specific objectives of the study was: to know the socio-economic profile of the farmers, to assess the prevalence of sheath blight disease of rice and its effect on rice production and to analyze the opinions of farmers about sheath blight disease. This study was conducted in two upazilas of cumilla districts (i.e. Chandina and Debidwar). For the purpose of data collection 100 farmers of different land categories like small, medium and large farmers were selected from four villages with 25 farmers from each village. A pretested questionnaire was used for data collection purpose. It is reported by the respondents that rice sheath blight disease is now common in Bangladesh. It incurred a yield loss of about 6% to 11% per acre to the farmers. For prevention and control of rice sheath blight disease and to reduce the yield loss, farmers training programme on this diseases should be introduced before Boro, Aus and Aman cultivation. The rice sheath blight disease complex is one of the common disease in Bangladesh. Therefore the preventive measures should be taken into the consideration to cope with the problem through biological and chemical amendments. Varieties selection, crop rotation and use of recommended dose of fertilize can be strictly followed during cultivation of rice.

1.7 Islam, F. A. M. Nurul; Chowdhury, M.H & Banu, Tahamin (2001). *Shrimp Cultivation in Fresh Water Ponds: Problems and prospects*, BARD, Cumilla.

The shrimp sector makes a significant contribution in the form of income, employment, human nutrition and foreign exchange earnings to the national economy. It could contribute even more to more accelerate development and of popularization of the fresh water shrimp farming among the farmers and improve its performance. This study is likely to provide some useful findings which may be used in the formulation of future policies of fresh water shrimp farming in Bangladesh. The general objective of the study was to know the potentials and constraints of fresh water shrimp cultivation in Bangladesh. The specific objectives of the study were to know the socio-economic conditions of the fresh water shrimp cultivators of the study villages and their involvement in various institution; the shrimp cultivation practices, income earned, its use and change of social status the respondents; the problems of shrimp cultivation faced b the farmers of the study villager; and the opinion of the farmers to make recommendations ofr improvement of the fresh water shrimp cultivation. The study was conducted in two districts namely – Cumilla and Chandpur in Bangladesh. One thana from each district was selected for this purpose. A list of farmers who were involved in Shrimp cultivation was collected from the Than Fishery Officers. Respondents were selected randomly equally from Laksam (15) and Hajigonj (15) thanas of Cumilla and

Chandpur districts respectively. A pretested questionnaire was administered for each farmer to collect information. Besides these, personal observation was also incorporated in this study. The data were collected and processed by the researchers themselves. This study concludes that the rate of production of fresh water shrimp through traditional method of aqua farming is low in comparison with international and national average. But the production could be increased many times if the semi intensive shrimp culture is introduced. The farmers could easily learn the technology of semi-intensive prawn culture through short training. The shrimp cultivation is now being done under polyculture system. This may be intensified providing skill training to the cultivator. The shrimp marketing is now a monopoly business of some people and they do not give fair price to the cultivators. So, government interference is very much needed to overcome this problems.

1.8 Ahsan, K & Munshi, S.K (2000). *Rice Seed Scarcity and Abundance*, BARD, Cumilla.

Most of the seed demand is mainly met up from open market and from farmers own sources. The qualities of those seeds in most cases are not up to the mark. The proposed study is an inventory of the extent of availability of improved MV rice seeds, their quality, generation of seed used and their sources i.e., DAE, BADC, dealer, own and others. The objective of the study was to assess the extent of availability and use of MV seeds of Aman and Boro rice; and their sources, using pattern, quality, production techniques and procurement by the farmers. The study was conducted in six villages of Cumilla and Bogura districts taking three villages from each district. The villages were selected purposely keeping in mind the objective of the study. Out of these three villages in each district one where TCTIP is present, one where CG of BADC exists and other from where such programmes do not exist. Data collected through these questionnaires were mainly concerned with sources of their rice seed, extent of availability of certified rice seeds, methods of rice seed production by their own, quality of rice seeds available from different sources etc. Researchers consulted various issues like planning and methods of implementation of rice seed production; problems faced for MV rice seed production; opinion of improving rice seed situation etc. with officials of DAE and BADC. Quality seed is a very scanty item in agriculture. All inputs for rice production were not equally to the farmers. Inadequate availability of improved MV rice seeds was an acute problem in this regard. The present study made an attempt to find out the availability MV seeds from DAE, BADC and other sources in the study villages. The trend of seed production by DAE and BADC was not increasing in all cases. So, added emphasis is essential to be given by these two organizations to gradually meet up the demand of quality seeds vis-a-vis same time environment might be created for production, promotion and distribution of improved seeds by the NGOs and private sector.

1.9 Rahim S. A. (1961). *Voluntary Group Adoption of Power Pump Irrigation in Five East Pakistan Village*, BARD, Cumilla.

This publication is the outcome of a study on introduction of power pump irrigation in the experimental area of the Pakistan Academy for Village Development, Comilla. In East Pakistan large areas of cultivable land remain idle during the dry season for lack of to study the process of

adoption of the power pump for irrigation and the social and economic implications of its adoption in the experimental area of the Pakistan Academy for village Development, Comilla. The actual process through which the village passed in adoption power pumps, the organized activities for successful operation, relationship with introducing agencies change in attitude and economic changes were systematically observed and analyzed. This was conducted in five co-operative villages namely Tangirpar, Hemjora, Alampur, South Rampur and Sreemantapur, of the Academies 80 sq mile experimental development area. The region where these villages are located suffers regularly from monsoon floods and almost every year the major rice crops Aus and Amon are heavily damaged. In winter almost the total cultivable area remains idle. Constant natural calamities have reduced this region to a most desperate condition. People are disorganized and demoralized. Because of its limited resources and due to the experimental nature of the programme the Academy concentrated its attention on a small number of villages from which good responses were received at the initial stages of the programme. The power pumps were utilized jointly by means of village organizations developed along with the introduction of the pumps. The programme for introducing power pumps for irrigation was launched in early 1960. Agricultural irrigation by a machine was a completely new innovation to the people of the area. The findings of the study shows that since the introduction of power pump the number of Boro rice growers and acreage under Boro crop have increased rapidly. From the 1958-59 growers doubled. The acreage under the Boro rice crop was increased by three times. In 1958-59 only 23 percent of the potential land available for Boro cultivation was actually cultivated. In 1960-61 this figure rose up to 70 Percent. Power pumps replaced the traditional method of irrigation by land. In 1958-59 twenty six persons cultivated Boro rice on about 20 acres of land by hand irrigation. None used the power pump. In 1960-61 twenty nine persons cultivated Boro rice by hand irrigation on only 16 acres of land. Thus there was a decrease in acreage of land irrigated by hand. It may be noted here that some persons used both the methods of irrigation. The yield obtained from the farmers show that total production from Boro cultivation was increased by more than 20 percent. In 1958-59 total production from 1974 acres was 348 mounds of unhusked rice. Per acre yield was 17.6 acres was 1173 mounds of unhusked rice. Per acre yield was 19.3 mounds. Thus it seems that use of power pump also increased the yield per acre. The economic significance of power pump use was that farmers could get an additional crop from land which otherwise remained idle during the most lean period of the year. This life-saver food-grain crop was a great help to the farmers whose major rice crops Aus and Amon were continually damaged by floods.

1.10 Zaidi, Wiqar H. (1961). *Adoption of Improved Methods of Paddy Cultivation in Comilla Development Area III (Amon 1960)*, BARD, Cumilla.

Adoption of Improved Methods of Paddy Cultivation in Comilla Development Area III (Amon 1960) was written by Wiqar H. Zaidi this book describes an attempt that has been made to find out the motivational aspect of the problems of agricultural improvement. This is not to look at the benefits in terms of increase in production but mainly to find out the implications of the adaption of new practices. This study is on the adoption of Japanese method of paddy cultivation, popularly called line-sowing. The aim was to find out the progressive adoption of this practice and its effect on the

opinion and attitude of the persons. The number of adoptions in one year increased by about ten times mainly due to the introduction of Crash Programme.

With the increase in the number the late adopters generally are these who have lesser education, fewer land holdings, smaller families and lower in occupational status. Although the number has increased but the proportion of persons using other improved practices for example manures and fertilizers, insecticides, weeding and interculturing etc, decreased. There were fewer persons proportionately, who had received training consequently, the yield from the farm has relatively gone down. The yield of line sown plots in the previous year was, on the average, much higher than this year. Crash programme was not identified by the persons with this name but those who knew it has a favorable attitude towards it. About 50% felt that they were under pressure to adopt this practice. It seems that the wide scale introduction of a new technique is not the answer to the agricultural problem of the country. Proper training and education and guidance of the people is necessary to achieve the maximum benefit from a new programme. This was lacking in the sudden spread of the new technique and that resulted in not-too-good yield obtained by the farmers. The loan for seed, fertilizer and other purpose was promised but could not be distributed to a large majority of persons. However, people did adopt this practice on a wider scale and a resistance to new technique has been overcome.

1.11 Rahim S. A. (1961). *Diffusion and Adoption of Agricultural Practices A study in a Village in East Pakistan*, BARD: Cumilla.

The present study was the first of its kind in this country. It was designed along the lines of American researches on adoption of improved farm practices by farmers. The central framework of the study was the concept of "Adoption Process" developed by American rural sociologists. Four improved agricultural practices were selected for the study. They were i) Sowing or transplanting paddy in lines, ii) use of insecticides, iii) use of chemical fertilizers and, iv) cultivation of wheat. The population covered in the study was 63 farm families residing in a single village of Dhanishwar, 2 miles away from the district town of Comilla. It was found that a very few channels of communication were available through which farmers of Dhanishwar could learn about improved agricultural practices. Observation of demonstrations of improved practices and trial use of such practices by other farmers were the most frequent means through which the farmers came to know about and got interested in the improved practices. Such observations were made mostly in the observers own or neighboring village. A farmer's progress through the adoption process was found to be associated with some of his personal social and economic characteristics. Farmers who progressed more through the process of adoption of improved practice owned more land and more of them were literate and belonged to organizations. They had higher contact scores indicating that they were more informed and had more personal contacts with the agencies and the officials. They received more citations from their neighbors and co-villagers as best farmers. They were better farmers than the rest who progressed less through the process of adoption. The findings of the present study provide a general framework for the rural development worker who is seeking

to raise the standard of living of villagers through introduction of better means of production new ideas and practices.

2. Environment and Climate Change

2.1 Ahsan, K. et.al. (2015). *Farmers' Response to Natural Disasters in Chittagong Coastal Zone of Bangladesh*, BARD, Cumilla.

Bangladesh is one of the most climate vulnerable countries of the world and will become even more so as a result of climate change. Floods, tropical cyclones, storm surges and droughts are likely to become more frequent and severe in the coming years. So, it is important to assess the livelihood pattern of the people specially the different category farmers of those who under constant pressure owing to climate variation in coastal areas of Bangladesh. The study would provide information about the present conditions and adaptation strategies taken up by the farmers in the coastal region affected by natural disaster including climate change. As not many studies have been taken up on this issue, this studies have been taken up so far on this issue, tis study would add new dimensions in the existing knowledge. The general objective of the study is to assess the coping strategies of the farmers with the recurrent natural disasters in Bangladesh particularly in the coastal areas. The specific objectives are to: i. videntify the socio-economic conditions and present livelihood pattern of the farmers by category; ii. Inestigate the farmers coping strategies with various natural disasters in the locality by category; and iii. Examine the extent of vulnerability to natural disasters and derive the farmers-led possible suggestions for better co-habitation with natural disasters. The study was conducted in four Upazilla and one/two villages were selected from each of these Upazilas along the Chittagong coastal zone for accommodation the required number of different categories of farmers. One set of selected subtopics was developed for key informants for conducting semi structured interview and another set of detailed questionnaire was developed for household data. During the last five year intrusion of saline water was seen most frequent in Anowara upazila whereas flood, flash flood, cyclone, salinity intrusion, damage of dam were seen most frequent in Bashkhali. Excessive rain, flood and flash flood were also seen predominant in Chokoria and Cox Bazar during the last five years. All categories of farmers like landless, small, medium and large farmers cultivated three main crops (Aus, Amon, and Boro) in the flood prone, salinity prone and flash flood prone areas. This indicates the habitual resilience of the farmers to cultivate paddy. Required facilities in disaster management particularly during, pre and post disaster situation should be developed at the local level. Well protected embankment should be established on the basis of need and maintained the same on regular basis in the coastal belt.

2.2 Hamid, M. A. (2004). *Factors in Environmental Degradation due to Technological Interventions*, Cumilla: BARD.

The study was planned to compile the factors of environmental degradation due to technological interventions giving thrust to people's perceptions to prepare an action oriented strategic plan to cope with the situation. The study was conducted in intensively cultivated and relatively advanced areas. For the study both primary and secondary data were used to assess the impacts of modern technological interventions. The findings indicated significant increase in total rice production and so as there is little way to neglect negative consequences. Agro-employments created extensively;

lower price of rice motivated farmers in intensive vegetables cultivation and appeared as a vital cash crop. Environmental concerns had been growing slowly but increasingly. Homestead plantation, social forestry and increased vegetables production emerged as a social movement. Irrigation ensured land utilization effectively and invariably. Fertility, water pollution, biodiversity and other hazards concerned had been slowly but increasingly being realized. A remarkable change was observed in closed water fish under serious stress of open water fisheries. Mass media information technologies mostly played a recreational role. The sequences of impacts are higher in Comilla than that in Chandpur, Feni, Brahmanbaria and Noakhali respectively. It was found that development and its consequences on environment had a negative relationship with level of education. Therefore, with the higher level of education in Comilla had more consequential developments and its consequences on environment in all aspects, which was followed by Chandpur, Feni, Brahmanbaria and Noakhali sequentially. Likely, hazardous were more on agriculture, water (arsenic), health and other factors. Dependency on agro-chemicals due to non-availability of bio-fertilizers, less service facilities regarding toxicity/residual effects and controls over cum feedback mechanisms was found. There were few training and local institutions for dealing with the issues and control over VCP show. There is an essential need to popularize slogan on agriculture, hygiene and environmental soundness for sustainable development and social harmonies. The policy guidelines extracted from the study are expected transpire the planners, policy makers and development workers in effective action oriented policy and measures.

2.3 Ali, E. et al. (2000). *Environmental Management in Rural Areas: Role of Union Parishads*, BARD, Cumilla.

In Bangladesh, no study has yet been conducted regarding management of Rural Environment by Ups, though they have some responsibilities to manage RE as their civic functions. The Ups have a long historical tradition of being a sustainable local level self-government institution at the door-steps of the rural masses. They may be given extended authorities to preserve and promote RE by raising their managerial efficiency. As this study will focus on the present functional aspects of the Ups related to rural environment, it may bring out issue where possible interventions may be made to preserve and protect the environment. The general objective of the study is to assess the present environmental situation prevailing in the rural areas and to know the role of Ups in managing and promoting Rural Environment (RE). The specific objectives are: i. to know the environmental hazards prevailing in the rural areas and their main reasons. ii. to review the performances, responsibilities and legislative issues as well as constraints of Ups in rural environment management. iii. to explore new areas where, and more legal rights by which, the Ups can contribute significantly for better and sustainable management of rural environment through community participation. iv to identify the possible assistance of Government sector and other donor agencies for preserving and promoting rural environment through Ups. The study was a survey of the purposively selected Ups to know in details about the various aspects of the rural environment. The study was basically conducted through applying the survey, observation and focus group discussion methods together. The Environmental hazards are: reduction or extinction of wild animals and birds (71%), extinction of country fish (69%), deforestation (69%), decrease in

depth of water bodies (63%), squeeze of water bodies (62%), water pollution (54%), and flood (46%). It was found that wildlife animals and other living organs have disappeared or drastically reduced day by day which contributes to the balance in the eco-system of the rural areas. It is necessary to involve all Ups and other formal and non-formal organization at the grassroots level to preserve, promote and manage rural environment by enhancing the capability of Ups. The study suggests recovery of distributed khas land which are still water bodies and forest areas from the occupying households/individuals. A special programme can be undertaken for raising awareness about responsibilities of UPs and the community people for conservation rural environment through mass media.

3. Cooperatives, Credit and capital Formation

3.1 Rahman, M. M., Dasgupta, S. K., Guha, R. K., Syed, S. U. I., & Rahim, J. (2020). *Microcredit Operation by the Government Sector in Bangladesh: Origin, Performance and Replication*, Cumilla: BARD.

The study aims to explore to: i) document the operational process of microcredit delivery by GO and NGO-MFIs and Grameen Bank (GB); ii) critically analyze microcredit operations of the above MFIs; iii) compare the management efficiency of microcredit operation of the same; iv) investigate microcredit history in Bangladesh and the difference among the various types of MFIs; and v) identify existing problems of microcredit operation. Four types of MFIs were selected as sample MFIs such as in public sector Upazila Central Cooperative Association (UCCA), Small Farmers Development Foundation (SFDF) and Pally Daridro Bimochon Foundation (PDBF) and in NGO sector, Bangladesh Rural Advancement Committee (BRAC), Thengamara Mohila Somobayo Somity (TMSS); and from specialized financial institutions, GB were selected for the study. Both qualitative and quantitative techniques were used for data collection regarding credit operation of the sample MFIs. Individual level quantitative data were collected following survey method. The sample districts and Upazilas were selected from different socio-economic zones and based on the 2010 Poverty Map of the Bangladesh Bureau of Statistics. The respondents of the selected MFIs were chosen following sampling formula and thus the total number of respondents was 1056. The qualitative data were collected through extensive interactions, organizing 6 Focus Group Discussions (FGD) and Key Informant Interviews with relevant stakeholders (microcredit experts, researchers, officials of the MFIs, field staff etc.). In addition, various secondary sources of data such as reference books, official publications, annual reports and relevant research reports etc. were reviewed. The findings of the study revealed that to get loan more documents are needed in public sector MFIs and it is cumbersome and tardy. On the other hand, NGO sector MFIs need less paper works, easy and the applicants get loan quickly. NGO-MFIs employed more field visits than those of GO-MFIs. NGO-MFIs enjoy more flexibility and control than GO-MFIs in microcredit operation. It appears that NGO-MFIs have developed own techniques to deal with defaults, drop-outs, duplications and overlapping of credit of their members. But it is difficult to tackle such cases by the GO-MFIs operated under the projects of GOs. Savings money can be utilized as credit fund by NGO-MFIs which are hardly seen in case of GO-MFIs. To get a new loan, on average it takes 8 days in NGO-MFIs while GO-MFIs take on average 25 days. GO-MFIs emphasize on asset building for the beneficiaries. But the NFO-MFIs emphasize on microcredit recovery rate. As a result, the GO-MFIs hardly allow another microcredit before completion of full recovery of the microcredit. The GO-MFIs try to follow the criteria of beneficiary's selection more strictly than the NGO-MFIs. As a result the coverage is lower in case of GO-MFIs than NGO-MFIs. GB provides more than one microcredit simultaneously. But the beneficiaries of GO-MFIs and other MFIs do not have such type of opportunities. This encourages the poor and vulnerable people more to be beneficiaries of GB than their counterpart GO-MFIs and other MFIs. The interest rate of

microcredit under MRA is 15% but in case of microcredit regulation for government sector the interest rate of microcredit is 12%. But due to rigidity and complexity, a lower interest rate fails to attract the poor and vulnerable to become beneficiaries of GO-MFIs more than the NGO-MFIs and GB. Donors have become biased to NGOs instead of GOs in financing microcredit programs since late 1980, which helped greater coverage of micro credit in Bangladesh by others than GOs. Uncertainty of job after the project period of government micro credit programmes hampered smooth operation of micro credit programmes. On the contrary the benefit and welfare package of NGO-MFIs and GB became lucrative to the poor than government programmes. GB and other NGOs-MFIs accumulated huge savings and thus they created a handsome amount of credit fund. The government programmes introduced less number of saving products for creation of credit fund. As a result the expansion of government programmes of microcredit became slower than NGOs-MFIs and GB. The NGO-MFIs and GB operate micro credit programmes in a more professional way following the standard rules of banking sector compared to government sector micro credit programs. BRDB and PDBF constituted 83% of beneficiaries of micro credit operated by the government sector and these two organizations provided 68% credit under government sector. Among the government sector organizations PDBF had more than five lakh beneficiaries compared to other four sample MFIs of the government sector. SFDF covered six percent of beneficiaries and provided 26 percent of credit in government sector. Seventy two percent of micro credit of NGO-MFIs was distributed by ten bigger NGOs while BRAC and ASA distributed 55% of total credit. It was found that 8.22 percent of total source of fund for microcredit delivery was through PKSF. Sixty eight percent of credit fund come from savings of beneficiaries and cumulative reserve fund of microcredit operation. Products of NGO-MFIs and GB were more diversified than the government sponsored microcredit delivery organizations. This diversification helped to motivate different kinds of clientele that eventually helped to expand the market of micro credit operation. GO-MFIs should diversify their financial and savings products and they should deal with the microcredit more professionally like NGO-MFIs. Currently there is lack of political and bureaucratic commitment in considering microcredit as a vehicle for development. In the name of voluntary organization the NGO-MFIs and GB enjoy certain facilities more than the GO-MFIs. More and more microcredit fund should be mobilized from beneficiary's savings account, Bangladesh government and development partners to the GO-MFIs to meet the practical needs in real situation introducing flexibility in the expansion of outreach by government project personnel. A standard micro-credit operation manual along with an efficient and a transparent accounting system needs to be developed for both GO-MFIs and NGO-MFIs by Bangladesh government to deal with the credit defaults and auditing problems under GO-MFIs and NGO-MFIs equally.

3.2 Rahman, Md. Mizanur (2019). *A Case Study of Deedar Comprehensive Village Development Cooperative Society Ltd.: Past, Present Context and Future Potentialities*, The Journal of Rural Development, 41& 42(1-2):69-104.

In the realm of cooperative movement, Deedar Comprehensive Village Development Cooperative Society (hereafter DCVDCS) earned ample name and fame in Bangladesh and abroad. In 1960, Deedar Cooperative Society began working with a view to ameliorate poverty, illiteracy, unemployment, malnutrition etc. This study is aimed at: i) reviewing the past activities and chalking out the reasons behind the financial crisis of Deedar Cooperative Society; ii) assessing present situation; and iii) identify future potentialities of the society. To conduct this case study, data were collected using primary and secondary sources. Primary data were collected through interview method using a semi-structured questionnaire and a short checklist. For primary data, face to face interview was done with the Chairman, Manager, Cashier, general members of the cooperative society and villagers. To record interview in details, the whole discussion was recorded using a voice recorder and thereafter, a transcription was prepared in English from Bangla. Apart from that, 2 Focused Group Discussions (FGDs) – one with women and another with male members were conducted. Employing content analysis method through a heuristic search in BARD library, secondary data were collected consulting books, journal articles and research reports and cashbooks of the cooperative society and resolutions of the Annual General Meeting of the society. Following democratic governance, Deedar Cooperative Society undertook many productive investments such as rickshaw project, truck project, brickfield project, tractor project, construction of cooperative store and cooperative market, duck farm project and setting up mustard oilseed grinding machine etc. As a successful cooperative society Deedar society was crowned with lots of national and international awards namely: i) President's Award in 1976 for increasing agricultural production in Bangladesh; ii) Magsaysay award for Md. Easin in community leadership in 1988. In wake of its investment project Deedar society was able to obtain huge resources. Started with only 9 anas capital, Deedar Society became owner of huge assets in 20 years valued at Tk. 10 crores. At present the society had one concrete office building, one auditorium, one cooperative market, one big cooperative store building, few ponds and 4 acres of land, 3 tractors, one TV set, 2 microphones, 30 agricultural implements/tools, one brick field, 3 deep tube-wells with turbine, one fertilizer and pesticides shop, one model high school, a primary school and one madrasa. But within a short span of time, the society started to become inactive in every aspect. Gradually it started incurring loss in rickshaw project, truck and tractor projects, brickfield project, duck farm etc. After one and a half decade the society again started functioning and recovering the loss. To overcome the current stalemate and to improve the condition of the DCVDCS, several initiatives can be undertaken. General cooperative practices such as regular weekly meeting, share and savings deposits should be ensured properly to develop capital formation. New investment plan such as transport, real estate, and large scale livestock farming can be undertaken. Some need based training can help the members to undertake new investment. Training can be given on entrepreneurship development, rural

industrialization and food processing industry etc. The villages should be equipped with modern amenities and for doing this local authorities should be empowered with more authorities.

3.3 Chowdhury, N. A., Roy, M. K., & Azim, A. (2008). *Livelihoods and Water Resource Management Scenario under Co-operative Association Interventions in Bangladesh*, Cumilla: BARD.

The study was undertaken to examine participatory water resource management issues as well as the existing natural resource utilization pattern in cooperative association of Small Scale Water Resource Development Sector Project (SSWRDP) being implemented by LGED. It was conducted in four water management cooperative associations (WMCAs) of the first phase of the project. In total 822 beneficiaries along with WMCA management committee were interviewed. Both primary and secondary data were collected along with nine case studies to have a better picture of the overall situation. It was found that percentage of large farmer in Jabusa Beel and Badurgacha was higher than the national average (2.3%), where as it was lower in Nabaganga and Thrimohini respectively. Conversely, the percentage of landless farmers was much lower in Jabusa Beel and Badurgacha. The percentage of food surplus households was highest in Badurgacha (40%) followed by Jabusa Beel (18%), Nabaganga (15%) and Thrimohini (10%). Indeed, poor involvement was higher in Jabusha beel and Nabaganga, whereas non-poor involvement in construction of different structures was higher in Badurgacha. By gender, male participation was higher than female member in Jabusha Beel and Badurgacha respectively. In fact, process of dissemination of information was mostly held through the weekly meetings. In Jabusa Beel as weekly meetings were not held regularly, members could not know the information or get the services. Most of the members agreed that they were getting all sorts of cooperation from the respective water management cooperative association. Finally, it could be said that the credit and savings management of the association created a sensation among the beneficiaries for their self-reliance. But the quantum of credit was not sufficient to meet the emerging demand of the members.

4. Rural Economy

4.1 Nahar, Saifun (2019). *Agro-based SMEs in Bangladesh Government Policy Strategy and Applicability of PPP*, Cumilla: BARD.

Agro-based SMEs are playing very important role in the economic development of Bangladesh. But there are dearth of empirical study to investigate the success factors of agro-based SMEs and applicability of PPP to foster those factors in Bangladesh. Based on such a reality this study is undertaken to: i) assess the current status of Bangladesh agro-based SME sector and its products with special emphasis on export performance; ii) analyze government's policy strategies for fostering the agro-based SMEs to achieve growth using relevant theories; iii) explore the applicability of PPP for the development of agro-based SMEs; and iv) provide policy recommendations for developing agro-based SMEs in Bangladesh based on findings. Both quantitative and qualitative methods have been used for data collection, sampling, interpretation and analysis. Quantitative data relating to agro-based SME products was based on United Nations COMTRADE database. The findings of the study revealed that in the last four decades, the number of trade partner for selected agro-based products has increased from 40 partners in 1976-1980 to 154 partners in 2010-2016 and total trade value has increased from 194.20 million US\$ in 1976-1980 to 8678.04 million US\$ in 2010-2016. But the product diversification is very low which need special attention. The number of product items increased from 83 to 115 in 2006 to 2016 which is insignificant in terms of diversification of product, and the volume of export earnings was US\$ 570.33 in 2006 for 84 products item and US\$ 947.51 in 2016 for 115 product items. Among 59 selected products for 2016, top 10 products of high PRODY value lie in marginal class according to RCA classification, which indicate the shortage of sophisticated product export by Bangladesh. The study also found that most of the export partners are from European countries and the Middle East. Bangladesh need to expand its export in Africa and Latin American countries to minimize the risk of squeezed market for facing the global economic crisis. From the study it has been found that agro-based SMEs have a significant role to promote rural employment which can prevent rural to urban migration problem. The study also found that for overcoming the current problems of agro-based SMEs, public-private partnership can be a better option. As government has favorable policies, rules, regulations, institutional setup both for government and private level and there are many potential entrepreneurs who are ready to promote this sector and PPP can play role to promote these enterprises. After maturation of the enterprises by initiating PPP, agro-based SMEs can be a big sector with its own potentiality by spillover effect.

4.2 Ahsan, K., Rahman, M. M., & Syed, S. I. (2018). *Value Chain Analysis of Pineapple and Poultry: Case of Bangladesh*, Cumilla: BARD.

The study aimed at assessing the value chains of broiler, egg and pineapple. The study focuses on two specific region of Bangladesh where the production of poultry and pineapple is high. Sreepur Upazila under Gazipur and Modhupur Upazila under Tangail districts were purposively selected for the study considering the subject of the research. The study findings revealed that measures relating to production cost, regulations to certain extent in value chains, credit provision, and capacity building of farmers are essential requirements to rationalize profit distribution among different stakeholders in the value chain. The study would be helpful to the policy planners, market analyst and academicians to get a clear scenario of value chains of poultry and pineapple in Bangladesh. The study tried to assess the opportunities in value chains to reduce the level of poverty. The findings revealed that 37% respondents had poultry farms as their main occupation and 62% respondents have poultry farms as secondary occupation. In case of pineapple, 57% pineapple producers mentioned agriculture as their main occupation. More than 40% of the respondents had agriculture as the secondary occupation. Highest benefit realizes by broiler farmer for 1000 broilers (BDT. 17,009 or US\$207.4). Local purchaser realizes the second highest benefits (BDT 15,293 or US\$186.5) whereas retailer gets the third highest benefit of the chain (BDT 7,356 or US\$89.71). In case of layer the highest percent of benefit in the value chain of egg was realized by farmers (49%) which was followed by petty shop keeper (10.15%), whole seller (5.20%), retailer (3.38%) and agent or dealer media (1.58%). But the highest quantity of egg in terms of number was dealt by wholesaler which was followed by retailer, farmer and petty shop keeper. An analysis on value chain for 100 Honey Queen Pineapples show that farmers realized the 2nd highest benefit in terms of percentage with respect to its cost of production, which is 41.6%. Whole seller realized 18.6% who sold around 50,000 pineapples in a day. The purchaser at local market got 25.67% who buys 5,000-6,000 pineapples and retailer's benefit was 35.39% who sold 400-500 pineapple in a day. The vendor benefit was 44.25%. So, higher profit in terms of percentage was realized by vendor (44.25%) who sells pineapples from 60 to 70 in a day which was followed by farmer (41.6%) who commonly sales pineapples to the local market (100 to 500) in a day. Local purchaser got 25.66% of benefit who sales from 5,000 to 6,000 pineapples in a day. Retailer got 35.39% of benefit who sales 400-500 pineapples in a day. So, percentage of profit in the value chain and number of fruits handled determine the volume of total benefits by different actors. The study suggested that to promote poultry industry, it was required to control prices of DOC, poultry feed and medicine. Credit facilities for the farmers with low interest should be ensured through credit giving organizations both at the government and private sectors; and Veterinary services should be ensured for the farmers through both government and non- government set up. Capacity of farmers should be developed to create direct linkage by themselves with wholesale market; and it is needed to establish poultry meat processing industry and initiatives should be taken for exporting the same. In case of pineapple production and marketing development, government should

provide necessary credit facilities to the pineapple farmers to lease in land, purchase of inputs like seedling fertilizers etc., to meet up the costs of labour, transportation and marketing. Farmers should be trained up and motivated to use chemicals and hormones which are not harmful to human health and at the same time they should be encouraged to use organic manures for producing pineapples. Department of Agriculture Extension (DAE) should extend better facilities for developing production and marketing of pineapples. Market linkage between farms and cooperative markets should be developed. Cold storage should be established at the local level to preserve pineapples when the local price is low. Pineapple processing industry should be established at the local level for more value addition to the fruits in the chain; and adopt special measures in exporting both processed and fresh pineapples in abroad.

4.3 Ahmed, Alauddin and Hasan, Kamrul, (1998). *Migration and Rural Labour Market Situation: A Survey of Two Villages in Bangladesh*, Cumilla: BARD.

Rural areas are characterized mainly by poverty, unemployment and lack of various support-services for the socio-economic development of the inhabitants. On the other hand, employment opportunities and other facilities are available in the urban areas which urbanites are enjoying. The push and pull factors prevailing in the country compel rural people to shift their place of origin and professions. Considering these views, the Academy under Took a study to know the situation of migration and labour market in two villages of Bangladesh. The study was conducted in two villages namely chowara in comila district and Nishan Baria (South) village in Patuakhali district to represent the high agricultural growth area and low agricultural growth area respectively. The argument was that the average per acre yield and cropping intensity in chow are village were much higher than those of the Nishen Baria village. Besides these, the Nishen Baria village is situated in the river bank erosion area. The river-bank erosion makes the people homelier and unemployed pushes the rural people to migrate to other places for survival. The findings of the study indicates that the young adults of age between 15-29 years in high agricultural growth area have migrated from their native village. Majority of the emigrants of low agricultural growth area and high agricultural growth area have level of education between class I-v and class VI-X respectively when other characteristics like monthly income and land size of the migrants of the study villages are concerned then most of them belong to the group of income less than tk. 5000 and land size less the 0.50 acre. It also shows that landless families and small farmers are the producers of labourers. For earning high wage, the skilled labourers have migrated to other places, which resulted in shortage of labourers in the local labour markets, particularly, in peak periods of crops cultivation. Although it could increase the wage rate, but due to having regular supply of migrant labourers in the study villages the wage rates remained the same on even less than the normal rate that prevailed in the two local labour markets.

5. Education

5.1 Sarwar, H., & Akhter, N. (2007). *Social Mobilization for Education with Emphasis on Role of Food for Education and Female Stipend Programmes*, Cumilla: BARD.

The broad objective of the study was to assess the influence of social mobilization strategies on education with emphasis on Food for Education and Female Stipend Programmes. The specific objectives were to review the social mobilization strategies of FFE and FSSP for promoting women's education, its influence on empowering women, and problems of the programmes and make recommendations based on the findings of the study. The study was conducted in Comilla Sadar and Shaharasti Upazila. From each Upazila three primary and three secondary schools were selected on the basis of FFE and FSSP programmes introduced initially to Shaharasti Upazila and later in Comilla Sadar Upazila. Eighty nine percent girl students of Comilla Sadar Upazila and eighty three per cent girl students of Shahrasti Upazila received the incentives of FFA and FSSP. Parents opined that due to FFE and FSSP, negligence in child education of poor families especially for the girls has reduced; parents were motivated to send their girls to schools instead of engaging those in house works. Female empowerment had improved and early marriage practices had reduced. In FSSP, there was a provision of stipend for girl students only. As a result, the boys of poor families and meritorious boys were out of this benefit. Parents and students suggested that there should have provision of stipend for poor and meritorious boys. Parents and students opined that the stipend was not given in proper time. Classroom attendance (75%) and 45 per cent marks in the terminal examination were the major constraints for maximum utilization of the benefits of FSSP. Opportunity for stipend to girl students inspired the poor families to continue their education and even to obtain higher degrees. The amount of stipend could not meet their actual educational expenses. The implementation and financial management of the programmes by the teachers hampered their teaching responsibilities. Regarding improving the quality of education, the parents suggested that experienced and qualified teachers should be recruited in the school, coaching Classes should be organised in the school and the teachers should be imparted training to improve their teaching skill. Non-enrolment and dropout rates of boys were more than that of girls. In this situation, stipend programme for poor and meritorious boys may be introduced. The teaching system should be more classroom oriented rather than home oriented for improving the results of girls. More diversified and need based skill training should be imparted to the teachers which may improve their teaching and managerial capabilities with high level of morale and strong commitment. Integrated Lesson Plan developed by BARD may be introduced in the schools to improve the maximum utilization of the resources of FFE and FSS Programmes and to improve the quality of education of the students.

5.2 Quddus, Abdul, Chowdhury, A. Masuda (1994) *“Community Participation in Primary Schools the Case of Chittagong Division, Bangladesh”*, BARD, Comilla.

Community participation is a concept which emerged after the Second World War under the name of community development, partly to combat communist threat and partly to accelerate planned development. The chameleon of community participation came up in full force in mid-seventies. Community participation in primary education and rural development has gained an increasing prominence in Bangladesh because of their integrated nature with community life. The main objective of the study was to derive lessons from the history of development of the primary schools in this country with particular reference to community participation in them with emphasis on findings regarding contributing and constraining factors. Primary education is the base of the education system of the country. Like in many other developing countries, establishment and maintenance of schools to a large extent has been the result of initiative from the community people in Bangladesh. The situation greatly changed after nationalization of primary schools in 1973 creating an adverse effect on community participation. As per the Compulsory Primary Education Act 1990, the Government of Bangladesh introduced the Compulsory Primary Education (CPE) Programme in the country in two phased, first in 64 thanas in 1992 and then in all other thanas in 1993. For implementing it effectively the government introduced various committees at district, Thana, ward and school levels delineating their functions and responsibilities with the provision of a lot of community participation. An assessment of the functioning of these committees has revealed that these committees have initiated some actions as per their terms of reference though number of meetings held, proceedings written and distributed, review, co-ordination and guidance responsibilities of the committees discharged have been much less than what were expected. The guidance and supervision functions of the Thana Primary Education Implementation and Co-ordination (TPEIC) Committee includes formulation of guideline for conducting the meetings of the Ward Committees, clarification of issues related to the activities of the Ward Committees, organization of the meetings of the guardians for motivation, formulation of policies for conducting the cluster survey and inspection of the activities of the Ward Committees through visits. Supervision and management role of the School Managing Committee (SMC) includes helping the teachers in organization of co-curricular activities, overseeing the attendance of teachers, helping in record keeping of the schools and organizing the practical or productive activities of the students. The Compulsory Primary Education Programme, however, has created positive impact on increasing the net rate of enrollment of 6-10 year Children to 90.9 per cent and decreasing the drop-out to 57.4 per cent in 1993 against the national averages of 83.0 per cent and 59.0 per cent respectively for the same year. Participation of community leaders in the primary schools was manifested in their involvement in three major areas of activities like

development of physical facilities and the campus, enrollment and retention of students and resolving the local problems through only less than 50 per cent of the respondents participated in any activity under any of these three major areas. The case of Shashanka Mala Primary School, however, reveals an exceptional example of community participation. For improving the situation of community participation in primary schools, the respondents gave a number of suggestions which include, among others, reducing the number of committees at the village level and giving more power and authority to SMC, strengthening the co-curricular activities at the school, increasing the role of local bodies in management of schools, construction or repair of schools through local committees, integration of Food for Education Scheme with the VGD programme and use of school building as the community learning and extension centre.

It has been recommended that under the prevalent system of nationalized primary education system, community participation has to be a mobilized one and it should be geared up by using the Thana Education Officer (TEO) and Asstt. Thana Education Officer (ATEO) as the change agents for which they should be properly trained. On the other hand, for achieving a self-determining community participation in primary schools, the whole system will require overhauling under a decentralized administration system through formation of local agencies like Thana Primary Education Board with necessary power and resources. Of course, much will depend on the motivated and committed teachers.

6. Rural Sociology and Demography

6.1 Begum, Showkat Ara. (1990). *Demographic Processes and Literacy in four Villages of Cumilla*, Cumilla: BARD.

Bangladesh, where vast majority of the people live in dire poverty, is facing serious population problem. High population growth has been recognized as the number one problem of the nation for more than a decade. In this situation, there is a great need to examine the trends of fertility and mortality patterns in the rural area where more than 80 percent of population live for better understanding of the issues and future planning it is necessary to have an adequate understanding about demographic changes over-time and how the most important social variable-literacy effect the demographic variables like age at marriage fertility mortality, contraceptive behavior etc. Accordingly the study was designed to focus on the four board objectives i) to study the trends in demographic processes like fertility and mortality, ii) to examine the association fo age at marriage, fertility and mortality with the literacy level of respondents; iii) to assess the level of contraceptive practices and its association with the literacy level of respondents; and iv) to identify the causes of deop-out of contraceptive practices. A total of 841 respondents were selected for the study from the four viallages of Comilla Sadar Upzilla namely Lampur, Srimantopur, Srinibash and Banasua. The respondents were all the married women of the selected villages within 15 to 44 years of age living with their husbands. The percentage of younger population under 14 years of age lower in 1987 than in 1980 and the percentage of adults over 60 was higher in 1987 than in 1980. It is an indication of declining the birtes rate and raising the life expectancy. After 1984, a declining trend in birth and death rates was clearly observed. The average annual rate of natural increase in population during the period 1980 to 1984 was higher than during 1985 to 1987. In 1987 the median age of population in the study villages was 19 years which was 5 percent higher than that of 1980. In 1987 there were 104 males per 100 females and the age dependency ration was 81 percent. The mean age at first marriage was 18 years in 1987 was against 16 years in 1980. There were 52 deaths to intents under 1 year of age per 1000 live births in 1987 as against 98 in 1980. Twenty five percent of the currently married women under 45 years of age were using modern contraceptive and tubectomy was the most popular method of birth control in 1987. The findings of the study suggest concluding that the up gradation of literacy level of women can significantly contribute to slow-down the high birth rate.

6.2 Islam, Md. Nurul, (1966). *Report of the Family Planning Seminar*. Cumilla: BARD.

Report of the Family Planning seminar is a seminar report on Family Planning which was held at the Pakistan Academy for Rural Development at Comilla on February 2, 1966. There were altogether seventeen papers presented at the three day conference. In addition to the experts presenting papers there were delegates and observers from government agencies and other organizations who also participated in the discussions. This report is a summary of the main themes of the seminar. It includes the highlights of the papers as well as of the discussions which they stimulated. There were four specific objectives which the seminar aimed to achieve:

- 1) to exchange ideas and information among the various agencies working in the field of family planning in Pakistan;
- 2) To consolidate current thinking so as to provide a base line and an out shoot for the planning of future work in this field;
- 3) To publish a summary report of the conference for the information of the both government agencies and private organizations interested in family planning work;
- 4) To stimulate, generally, interest in family planning work of East Pakistan.

6.3 Choudhury, A. Moqbul, (1965). *The supply of Family Planning contraceptives to Different Unions of Comilla Kotwali Thana*. Cumilla: BARD.

The report is prepared on the basis of the examination of records, particularly, agents supply cards and monthly check lists maintained by Thana Family Planning officer, Abhoy Ashram, and covers a period of six months from March to August 1965. The enquiry aimed at finding out differentiated level of contraceptive supply (condoms and foam tablet) to the 12 unions of kotwali Thana. It was also intended to select a specific research study on the basis of this enquiry. As the report is mainly based on the study of agents supply card and monthly check list, a brief description of each one of them were described in the report. From the analysis of the supply it is found that a) condoms have a greater sale then tablets in the rural areas, b) the supply of contraceptives vary in both extremes (high and low) in different union. c) the males are the more effective distribution agents in the rural areas then the females.

6.4 Khan, Akhter Hameed, (1964). *Islamic Opinions on Contraception*. Cumilla: BARD.

“Islamic Opinions on Contraception” was written by Dr. Akhter Hameed Khan. He translated the Arabic texts into English as several groups of officers and some of his colleagues displayed showed great interest in the opinions of Muslim Ulema (theologians) on the control of birth. This text consists of two articles on Islamic Opinions on contraception and control of birth. The first article gives translations from two celebrated theologian Al-Ghazzali (1058-1105) and Ibn kaiyim al Jawziya (1292-1350). The second article contains a general discussion of the old traditions in the context of the present social and economic situation. Al-Ghazzali deals with

the subject as a professor of canon law and a traditional theologian. He first gives the various controversial views, and gives this own verdict in the true legal style. Then he analyses the underlying motives for contraception. Finally, he quotes the traditions. Ibn Kaiyim relies more on the traditions, and after a searching analysis comes to the same unequivocal conclusion as Al-Ghazzali, that contraception is not improper. The second article pointed out that Islam began as a militant faith and for several centuries Islamic communities were expanding politically and economically. The institution of the large family was much encouraged, and was justified by success. The old conditions no longer exist: wars of conquest and virgin lands are ruled out. Modern trends demand smaller families. But the customary adulation of the large family still prevails in our society. The religious leaders of Islam must do some fresh thinking for the welfare of their communities, and they would be helped by the fact that the practice of contraception has been approved by the consensus of ancient ulemas.

6.6 খান, ড. আখতার হামিদ (১৯৬৪), *জন্মনিরোধ সম্পর্কে ইসলামী মতবাদ*, কুমিল্লা, বার্ড

জন্মনিয়ন্ত্রণ সম্পর্কে মুসলিম ওলেমা সম্প্রদায়ের মতামত জানতে ড. আখতার হামিদ খান রচিত পুস্তিকাটি খুবই গুরুত্বপূর্ণ। এ পুস্তিকায় দু'জন বিখ্যাত আলেম আলগাযযালী ও ইবনে কাইয়েম আল জাওজিয়ার 'আযল' বিষয়ক বিশ্লেষণ তুলে ধরা হয়েছে। তাঁদের মতে গর্ভনিরোধ অন্যায্য নয়। ড. খান এ দু'জন ইসলামী চিন্তাবিদেদের বিশ্লেষণের আলোকে স্পষ্ট করেছেন, জন্মনিয়ন্ত্রণ ইসলামী মূল্যবোধের সাথে সাংঘর্ষিক নয়। বাংলাদেশের সংখ্যাগরিষ্ঠ মুসলিম সমাজ জন্মনিরোধে আযল প্রথা জীবনের স্বাভাবিক প্রয়োজন হিসেবে গ্রহণ করতে পারেন।

ষাট-এর দশকে ড. আখতার হামিদ খান যখন বার্ডের প্রতিষ্ঠাতা প্রধান নির্বাহী হিসেবে দায়িত্ব পালনরত ছিলেন, তখন বাংলাদেশে জনসংখ্যা সমস্যাটি ছিল প্রকট। তৎকালীন বাঙালি মুসলমান সমাজ পরিবার পরিকল্পনার আধুনিক পদ্ধতিগুলোর ঘোর বিরোধী ছিল। ড. খান বাংলাদেশের গ্রামীণ সামাজিক মনস্তত্ত্বে ইসলামী ভাবধারার প্রভাব বিবেচনায় এ সংক্রান্ত ইসলামী ব্যাখ্যা অনুসরণের প্রয়োজনীয়তা অনুভব করেন। এ প্রেক্ষিতে তিনি কুরআন ও হাদীসের আলোকে 'আযল' প্রথার উপর গুরুত্বারোপ করে 'জন্ম নিরোধ সম্পর্কে ইসলামী মতবাদ' নামক পুস্তিকাটি রচনা করেন।

আলগাযযালী ও ইবনে কাইয়েম আল জাওজিয়া ইসলামের অন্যতম মৌলিক চিন্তাশীল ব্যক্তিও শ্রেষ্ঠতম আলেম। তাঁদের মতে আযল গর্ভপাত বা শিশু হত্যার মত নয়। পক্ষান্তরে উহা হাদিছ দ্বারা সমর্থিত এবং অধিক সংখ্যক ওলামা কর্তৃক অনুমোদিত। সত্যিকার প্রতিবন্ধক হল পুরানো রীতিনীতির প্রভাব ও রক্ষণশীল মৌলবাদীদের অপরিজ্ঞাত জ্ঞান। সমাজের মঞ্জল দাবী করে নতুনভাবে চিন্তা করা। এজন্য চিরাচরিত সংস্কার দ্বারা যেমন প্রভাবিত হওয়া যাবে না, ঠিক তেমনি সমসাময়িক জ্ঞান থেকেও বঞ্চিত হওয়া যাবে না। ড. খান কুরআন ও হাদীসের আলোকে তথ্য-প্রমাণ ও যুক্তি-তর্কসহ জন্মনিয়ন্ত্রণের বিষয়টি উপস্থাপন করেছেন। যে কোন মুসলমান পরিবার সুন্দর জীবন যাপনের জন্য, স্ত্রীর সৌন্দর্য ও শক্তি রক্ষা করবার জন্য অথবা বড় পরিবারজনিত বহুল উদ্বিগ্নতা থেকে অব্যাহতি পাবার জন্য গর্ভনিরোধমূলক সাবধানতা অবলম্বন করতে পারে। জন্মের সপ্তম স্তর অতিক্রান্ত হওয়ার আগে কোন শিশুহত্যা হতে পারে না। পুরাকালের ওলামাগণ গর্ভনিরোধের প্রশ্ন স্বাধীনভাবে আলোচনা করেছেন ও শ্রেষ্ঠ আলেমদের বেশিরভাগই এটি ন্যায্যসঙ্গত ও যুক্তিযুক্ত বলে ঘোষণা করেছেন।

6.7 Zaidi, Wiqar Husain, (1961). *The supply of Family Planning contraceptives to Different Unions of Comilla Kotwali Thana*. Cumilla: BARD.

This study was conducted as a part of training of medical officers and the action research programme of the Academy for family planning in order to get an idea of the extent of readiness in rural areas for the acceptance of a programme designed to limit the size of families. It was also designed to get some important demographic data about the villages in

East Pakistan where a majority is illiterate, conservative and orthodox in religious beliefs and practices. A village adjacent to the Academy was selected in which the study was conducted. The village consisted of 308 males and 254 females in 113 families. All married couples were interviewed on a detailed questionnaire. The findings of the study shows that a majority of the persons did not want to have additions in the families both in case of the males and in case of the females. None of them mentioned that they know anything about the methods of family planning; a majority were prepared to learn such a method; the ideal number of children desired by them was between 3 and 4, and very few wanted to have permanent sterilization there is a general belief that the contraceptive practices are not permissible in religion, but most of the respondents attributed their opinion to no authentic sources. It is mostly hearsay. When asked whether they would practice contraceptive methods for limiting the family if somebody convinced them of its permissibility in religion, a large majority said they would have no objections. This gives on understanding of the problems to be initially faced in a wide scale introduction of family planning programme in the rural areas of East Pakistan. The responses made by the individuals give an idea not of how much this programme will gain ground but of how people express their opinions. Later on, when an attempt was made to introduce the family planning programme by providing initial training in the methods for controlling births, the responses were not the same as stated at the time.

6.8 Zaidi, Wiqar Husain, (1961). *A Survey of Attitude of Rural Population toward Family Planning*. Cumilla: BARD.

This study was conducted as a part of training of medical officers and the action research programme of the Academy for family planning in order to get an idea of the extent of readiness in rural areas for the acceptance of a programme designed to limit the size of families. It was also designed to get some important demographic data about the villages in East Pakistan where a majority is illiterate, conservative and orthodox in religious beliefs and practices. A village adjacent to the Academy was selected in which the study was conducted. The village consisted of 308 males and 254 females in 113 families. All married couples were interviewed on a detailed questionnaire. The findings of the study shows that a majority of the persons did not want to have additions in the families both in case of the males and in case of the females. None of them mentioned that they know anything about the methods of family planning; a majority were prepared to learn such a method; the ideal number of children desired by them was between 3 and 4, and very few wanted to have permanent sterilization there is a general belief that the contraceptive practices are not permissible in religion, but most of the respondents attributed their opinion to no authentic sources. It is mostly hearsay. When asked whether they would practice contraceptive methods for limiting the family if somebody convinced them of its permissibility in religion, a large majority said they would have no objections. This gives on understanding of the problems to be initially faced in a wide scale introduction of family planning programme in the rural areas of East Pakistan. The responses made by the individuals give an idea not of how much this programme will gain ground but of how people express their opinions. Later on, when an

attempt was made to introduce the family planning programme by providing initial training in the methods for controlling births, the responses were not the same as stated at the time.

7. Information Technology

7.1 পল, জিল্লুর রহমান ও রহমান, কাজী সোনিয়া (২০১৮)। *ইউনিয়ন ডিজিটাল সেন্টারের জনসত্ত্বুষ্টি ও কার্যকারিতা বিশ্লেষণ: চট্টগ্রাম বিভাগের উপর একটি সমীক্ষা*, বার্ড, কুমিল্লা।

বর্তমান যুগে প্রযুক্তি এবং আধুনিক তথা উন্নত প্রযুক্তির প্রয়োগ ছাড়া উৎপাদন ও মেধাখাতসহ একটি দেশের সামগ্রিক উন্নয়ন সম্ভব নয়। কিন্তু অর্থনীতি, রাজনীতি ও সামাজিক অবস্থার নিরিখে উন্নয়নে প্রযুক্তির যথাযথ প্রয়োগ প্রয়োজন। এ কথা অনস্বীকার্য যে, 'ডিজিটাল বাংলাদেশ' সরকারের একটি অন্যতম উন্নয়ন নির্দেশনা। এর মাধ্যমে সর্বক্ষেত্রে তথ্য ও যোগাযোগ প্রযুক্তি ব্যবহার করে ২০২১ সালের মধ্যে এদেশকে মধ্য-আয়ের দেশে পরিণত করার পরিকল্পনা নেয়া হয়েছে। এ লক্ষ্যে সরকার নানা ধরনের পলিসি নির্ধারণের পাশাপাশি মাঠ পর্যায়েও কর্মকা- পরিচালিত করছে। জনগণের সন্নিকটে (Doorstep) এসব ই-সেবা পৌঁছে দেয়ার ক্ষেত্রে প্রয়োজন হলো তথ্য-প্রযুক্তিতে জনগণের প্রবেশযোগ্যতা (Access to ICT/e-Services)। এটি বিবেচনা করে সরকার সারাদেশে প্রতিটি ইউনিয়নে একটি করে মোট ৪,৫৪৭টি ইউনিয়ন ইনফরমেশন সার্ভিস সেন্টার (UISC) স্থাপন করে। বর্তমানে একে ইউনিয়ন ডিজিটাল সেন্টার (টউসি) হিসেবে নতুনভাবে নামকরণ করা হয়েছে। আলোচ্য নিবন্ধটিতে ইউনিয়ন ডিজিটাল সেন্টারের বর্তমান অবস্থা এবং কার্যকারিতার ক্ষেত্রে সমস্যা ও সমাধান বিশ্লেষণ করা হয়েছে। জরিপধর্মী (Survey type) গবেষণাটির সাধারণ উদ্দেশ্য হলো চট্টগ্রাম বিভাগে পরিচালিত ইউডিসি এর জনসত্ত্বুষ্টি ও কার্যকারিতার সামগ্রিক বিচার-বিশ্লেষণ। গবেষণাটির সুনির্দিষ্ট উদ্দেশ্যসমূহ হলো: ক) ইউনিয়ন ডিজিটাল সেন্টার (ইউডিসি) এর সার্বিক কর্মকা-র উপর জনসত্ত্বুষ্টির ধরন ও মাত্রা বিশ্লেষণ; খ) ইউডিসি এর কার্যকারিতা সম্পর্কে সার্বিক পর্যবেক্ষণ ও বিশ্লেষণ; গ) ইউডিসিসমূহকে আরো কার্যকর ও সেবামুখী করার লক্ষ্যে এর সমস্যাসমূহকে চিহ্নিতকরণ; এবং ঘ) কতিপয় সুপারিশ প্রণয়ন। দীর্ঘ প্রায় এক দশক পূর্বে প্রতিষ্ঠিত এসব ইউডিসি এর জনসত্ত্বুষ্টি ও কার্যকারিতা নিয়ে একাডেমিক পরিপ্রেক্ষিতে উত্থাপিত কিছু প্রশ্নের নিয়মতান্ত্রিক উত্তর অনুসন্ধান করা হয়েছে। প্রাথমিকভাবে গবেষণাটির জন্য চট্টগ্রাম বিভাগের ১১টি জেলার ১১টি উপজেলা হতে ২২টি ইউনিয়নকে উদ্দেশ্যমূলক নমুনায়ন পদ্ধতির মাধ্যমে নির্ধারণ করা হয়েছে। এসব ইউনিয়নের ২২টি ইউডিসি হতে ২৮৬ জন সেবা গ্রহণকারী ও ২২ জন উদ্যোক্তার নিকট হতে তথ্য সংগ্রহ করা হয়েছে। গবেষণার প্রাপ্ত ফলাফল সার্বিকভাবে বিশ্লেষণ করে বলা যায়, ইউডিসি এর কার্যকারিতার ক্ষেত্রে একটি ইতিবাচক অবস্থা বিরাজমান। ইন্টারনেটের গতি ও বৈদ্যুতিক অবস্থা বিষয় দুটি ব্যতীত প্রায় অন্যান্য চলকসমূহ বা ইস্যুতে ইতিবাচক তথ্য পাওয়া যায়। এসব তথ্যে ইউডিসি এর কার্যকারিতার মাত্রাকে নির্দেশ করে। গবেষণায় রেটিং স্কেলে পাঁচ মাত্রায় কার্যকারিতাকে সর্বোচ্চ মাত্রায় তথা 'খুব কার্যকর', কার্যকর' মোটামুটি কার্যকর', কম কার্যকর' বা 'খুবই কম কার্যকর নয়/ অকার্যকর' এর মধ্যে 'কার্যকর' মাত্রায় মূল্যায়ন করা যায়। অর্থাৎ, চট্টগ্রাম বিভাগের ইউডিসি এর কার্যকারিতার মাত্রাকে আরো উন্নত করার সুযোগ রয়েছে।

7.2 পল, জিল্লুর রহমান ও রহমান, কাজী সোনিয়া (২০১৮)। *আর্থ-সামাজিক উন্নয়নের হাতিয়ার তথ্য প্রযুক্তিঃ বর্তমান অবস্থা, সম্ভাবনা ও সমস্যার স্বরূপ বিশ্লেষণ*, বার্ড, কুমিল্লা।

বর্তমান যুগ তথ্য প্রযুক্তির যুগ। তথ্য প্রযুক্তি ছাড়া এগিয়ে যাওয়া সম্ভব নয়। এটি একদিকে যেমন মানুষের জীবনযাত্রাকে সহজ করে দিয়েছে, তেমনি অন্যদিকে মানুষের আর্থ-সামাজিক উন্নয়নেও কার্যকর হাতিয়ার হিসেবে ক্রমাগত স্থান করে নিয়েছে। দেশের প্রতিটি সেক্টর যেমনঃ স্বাস্থ্য, শিক্ষা, যোগাযোগ, শিল্প, কৃষি ইত্যাদি তথ্য প্রযুক্তির ছোঁয়ায় এগিয়ে যাচ্ছে। আলোচ্য নিবন্ধটিতে তথ্য প্রযুক্তির বর্তমান অবস্থা, এর অমিত সম্ভাবনা এবং এক্ষেত্রে বিদ্যমান সমস্যাসমূহ বিশ্লেষণ করা হয়েছে। এজন্য মাধ্যমিক উৎস থেকে প্রাপ্ত তথ্যের আলোকে গবেষণা নিবন্ধটি রচিত হয়েছে। গবেষণার প্রাপ্ত ফলাফল বিশ্লেষণে দেখা যায়, সরকারের প্রতিটি বিভাগ সেবা-পরিসেবা প্রদানের জন্য তথ্য প্রযুক্তিকে ব্যবহারের সর্বাঙ্গিক প্রচেষ্টা নিয়েছে। এখন দেশের আপামর জনগণ এসব সেবা যেকোনো সময় যেকোনো জায়গা থেকে পেতে পারেন। এতে মানুষের অর্থনৈতিক কর্মকাণ্ড গতিশীল হয়েছে। কিন্তু তথ্য প্রযুক্তিকে কাজে লাগিয়ে আরো সুবিধা পাওয়া সম্ভব। কাগজ বিহীন অফিস প্রবর্তন, প্রযুক্তি নির্ভর সরকারি ক্রয় কার্যক্রম ও অফিস অটোমেশন

নিশ্চিতকরণ, উন্নয়নমূলক তথ্যের বিচ্ছুরণ ইত্যাদিতে তথ্য প্রযুক্তি আরো কার্যকর ভূমিকা রাখতে পারে। এজন্য প্রয়োজন যথাযথ সমন্বয়, সম্পদের ব্যবহার, অবকাঠামোর উন্নয়ন, সার্বজনীন প্রবেশযোগ্যতা বৃদ্ধি ইত্যাদি। এসব বিষয় নিশ্চিত করা গেলে তথ্য প্রযুক্তি আর্থ-সামাজিক উন্নয়নে তথা বর্তমান সরকারের 'ডিজিটাল বাংলাদেশ' বাস্তবায়নে ইতিবাচক ভূমিকা রাখতে সক্ষম হবে।

7.3 Rahman, Kazi Sonia and Paul, Jillur Rahaman. (2009). *ICTs in the Field of Education in Bangladesh: Some Salient Features*, The Journal of Rural Development Vol. 36, No. 2, July 2009, pp. 99-127, Cumilla: BARD.

The education system of Bangladesh is broadly divided into three stages. These are primary, secondary and higher education. To meet up the demand of education of the country, the government has the highest responsibility. The government of Bangladesh is trying to play her role since its inception. Doing her duty, many methods and techniques of providing education have been using. In the modern age of 21st century, Information Communication Technology (ICT) is one of the latest techniques around the world including Bangladesh to use in the field of education. It is said that the present time is the blessing of ICT. All the sectors of a country like, education, health, agriculture, business, travel, transport, industry etc. can't work properly with expected outputs without use of technology. Many applications are now being used in all those sectors. Bangladesh is also on the track to utilize the application of ICTs. As a matter of it, Bangladesh has established an ICT policy in 2009, to implement and engage ICTs for some definite purposes. In education sector of Bangladesh, ICTs have been using for many purposes. Computer and internet based technologies have been using in a scattered and limited way for e-learning & distance learning such as in storage of data, video documentary production etc. But the prospects of ICTs in education sector comprising primary, secondary and higher level are multidimensional. Establishing e-learning or online education system, adopting modern educational management, ensuring equal opportunity of education, increasing global connectivity among the educational institutions, providing education for distanced and distressed people etc. could be able to achieve with the help of ICTs. Bangladesh is far behind in the field compared to other countries in the world. Some problems are also identified in this regard. These are lack of computers and lab facility with internet connectivity, inadequate infrastructure, lack of fund and comprehensive policy etc. which hinders to get the maximum benefits from ICTs in education sector. If all these hinders would quickly be minimized, the education system of Bangladesh, especially the secondary and higher stage could be able to produce its outcomes quickly and the government would be able to manage all the education sectors very effectively and efficiently. The present article deals with all these factors and important issues in detail with due attention.

8. Poverty Focused programme

8.1 Biswas, T. K., Kabir, M. K., & Roy, M. K. (2010). *Impact of Micro-Credit on Poverty Reduction and Family Planning*, Cumilla: BARD.

The main objectives of this study were to assess the impact of micro-credit on poverty reduction and adoption of family planning methods and their related factors. The study made an attempt to test the hypothesis whether micro-credit programme has a significant relation with poverty reduction and population control. The study was conducted in Manikganj Sadar Upazila of Manikganj District and Sagalnaiya Upazila of Feni District. These two locations were selected by using simple random sampling from the list of Upazilas having the Grameen Bank and PADABIK of BRDB under the above-mentioned two districts. To assess the impact of micro-credit programmes, after with control design was followed. Moreover, respondents' opinions regarding the changes due to micro-credit programme were assessed by before and after situation through recall method. A total of 600 respondents were interviewed. Of which 400 from programme area and the remaining 200 from control area were selected through simple random sampling. The study revealed that Grameen Bank and BRDB covered higher proportion of landless households compared to control area. On an average each member in programme area had received credit 5.35 times with an average of Tk. 44,000 from the date of their joining in the society. A significant number of members used their credit in unplanned areas. The respondents opined that due to involvement in micro-credit programme, average food provision of Grameen Bank and BRDB members increased by approximately 10 and 20 per cent respectively. The calorie intake method revealed that 6 per cent poverty reduced due to micro-credit, which was statistically insignificant at 54o level of significance. Percentages of hardcore and ultra-poor in programme area were significantly lower compared to control area. Ninety three per cent of the respondents under Grameen Bank and 94 per cent under BRDB mentioned that their economic condition improved to some extent due to the involvement in micro- credit programme. Micro-credit had also positive impact on changing the housing condition. Access to micro-credit and incidence of poverty were inversely related, but it was not statistically significant at 5 per cent level of significance. Improvement of economic condition assessed though self- assessment was positively related with the duration of membership in micro-credit programme, number of credit received and amount of credit received and these were statistically significant. Impact of micro-credit on human poverty related indicators was relatively less compared to the income poverty related indicators. Contraceptive prevalence rate in programme area was about 73 per cent compared to 70 per cent in control area indicating the three percentage points higher in programme area. This means that access to micro-credit could not increase the contraceptive prevalence rate significantly. The study recommended for establishing elective monitoring and evaluation systems on utilization of micro-credit by the beneficiaries, appropriate training to the beneficiaries, increase credit amount. The study also revealed that in micro-credit programmes, there should have provision for creating awareness among the beneficiaries about the use of contraception.

8.2 Begum, N. N., & Guha, R. K. (2009). *Process of Coping Poverty by Gender and Age*, Cumilla: BARD.

The general objective of the study was to explore the consequences of poverty on the poor people from the psychological perspectives and look into the poverty concept from their own perception and reaction to poverty by male, female and different age groups. Around 1,620 respondents from 672 households from different socio-economic status (SES), gender and age group in eight villages of four districts namely from Nilphamari, Sirajganj, Comilla and Cox's Bazaar under Chittagong and Rajshahi Divisions participated in FGDS. The unit of analysis was the household. The respondents were divided into three categories namely very poor (VP), poor (P) and near-poor (NP). The psychological effects that poverty is imposing on the children caused serious problem. Children from VP households were more disadvantage in facing mental distress and subsequently the poor group. Deprivations from child rights, isolating them from children bring unbearable shocks and mental anxiety. Absence of the male's support in the household was the major reason for mental deprivation of females. Females become happy if they could manage food for the household. Older people felt happy when their children are settled and when their children look after them. Dependency on children's income makes parent very unhappy. Socially prescribed roles for male and female and age were barriers for old and children to entitled credit support. A number of poor group respondents borrow money from the money lenders. For the very poor and poor household it was found difficult to use social capital. Credit and banking systems were found working against the interest of the poor people. The credit system intensively by passed very poor group and poor group received small amount of credit from NGOs. The degree of risk was found higher among the poorest, higher among the poor and lesser among the near poor. From age group analysis it was found that females of adolescences age faces greater risks and vulnerability in all areas. Males get preference over females, child over adult and young over old. Among male or female or children the person who earns for the household get top priority. Across the study area very poor respondents cope with poverty by marrying their daughter to aged person having children and even with one or more wives who are still alive. There are significant disincentives for females to file criminal cases, particularly against male household members. Settler people, very poor and female throughout the study exercise least power and privileges than native, male and near poor respectively. Coping with poverty includes adaptation with the situation silently as well as depended on the social capital of the poor households. Resilience capacity of poor especially, females are found unique in nature. In case of divorce and separation females have to bear poverty disproportionately. During FGDS and in case studies a number of push and pull factors respectively for pulling down people to poverty line and push up from poverty line were identified. Psychological factors identified as pull factors to poverty line at the individual level were work-shy, idleness, lack of initiative, lack of inventiveness, belief in fate, negative attitudes to work, work discrepancy, feeling guilty to live on female and children members earning, especially, on girls, frustration

etc. Criticism for work reinforced the situation through lowering the psychological, moral strengths and social support.

8.3 Islam, Shafiqul et al., and (2005). *Resource Use Pattern and Poverty Magnitude in a Typical Village Of Bangladesh*, Cumilla: BARD.

The broad objective of this study was to generate information regarding existing individual as well as common resources utilization pattern in the village and future potentials of the same so that the villagers can participate in preparing the future development plan to be initiated and implemented in their locality.

The study was conducted in Chowknandi, a typical village of Perol Union of Laksam Thana in Comilla district of Bangladesh. Both quantitative and qualitative methodological techniques have been used to collect primary data. All the households in the village were considered as research elements. The household (117) heads were interviewed face to face aided by pre-structured questionnaire. The average family size of the village was found 5.23 members. The male-female ration was found 55:45. The main occupation agriculture was found dominating in the village. The possible ways and means for utilizing the unemployed and underemployed human resource as mentioned by the respondents were: providing training along with capital, providing capital for small-scale business, establishing small-scale mill-factories, boosting up agricultural production and creation of easy opportunity for going abroad. The villagers of Chowkdandi reared indigenous cattle and goat as livestock. They also reared indigenous duck, chicken and pigeon as poultry. None of the villagers reared hybrid of improved varieties of livestock and poultry. Most of the boro rice-growing farmers in the village grew BR16 rice variety. The average yield of this rice variety was found 4.21 ton.

On the basis of the findings,

Some of the farmers of the village chowknandi cultivated other Rabi crops like wheat, potato, kalai, (desi pulse), sweet potato chili, radish, brinjal, bean, coriander, tomato, cabbage, sweet gourd and water gourd. Among all these, potato chili, bean and water gourd were found the domination Rabi crops in the village. Sixty five percent of the household had ownership of pond. Food consumption cost (Tk. 1988.00) the village chowknandi was less compared to national rural food expenditure cost (Tk. 1988.00) of the village Chowknandi was less compared to national rural food expenditure cost (Tk. 2300.00/month) (HIES, 2000). The total monthly expenditure of the households (Tk. 4044.00) and per capita expenditure (T,. 801.00) of the village Cowknadi werealso found lower than that of national rural average. The major sources of institutional credit of the villagers were (i) Alishar Agrani Juba Kallyan Parishad; (ii) Grameen Bank; (iii) Krishi Bank; (iv) Association for Social Advancement (ASA); (v) Rickshaw Samabay Samity; (vii) Palli Unnayan Parisad (PUP) (a local NGO) and (viii) Babsay Samabay Samity (Business Society). Most of the loanees (12 persons) tookloan from Alishar Agrani Juba Kallyan Parishad and Grameen Bank (7 persons). The rests of the loanees took loan fromrests

of the sources. Maximum of the loanees took loan for meeting up their household expenditure. Many of the villagers took loan for investing in business or in petty business.

(i) Before initiating any development programme to be implemented in any village, an arrangement must be made to identify the local demand of technology/development activities.

(ii) Before any development intervention at the village level, the first priority should be given for development of village access road.

(iii) Necessary policy should be developed/implemented to ensure the facilities of modern and improved agricultural inputs, treatment and medicine for livestock-poultry and fisheries at the village level.

(iv) Appropriate and adequate irrigation as well as drainage facilities should be developed to increase the production of rice and crops,

(v) Appropriate IGA based credit facilities to be enhanced at the village level with easy terms and conditions.

(vi) Credit facilities may be developed for sending household members abroad.

(vii) Small scale agricultural and cottage industries may be developed to create employment opportunities at the village level.

8.4 Barua, Bijoy Kumar et al., and (2004). *Bhabanipur: Processes of Graduation among Resource Poor Farm households in a Bangladesh Village*, Cumilla: BARD.

The study is the outcome of an action research “Pathways from Poverty: Processes of Graduation among Resource Poor Farm Households in Bangladesh”. For the study, Bhabanipur village was selected which represented the scenario of graduation in poor farm households that is still the basic social unit of our agrarian society. By using qualitative data, the pictorial views of the village were presented and it was found that the process of graduation among poor household represented some positive changes over the time. In the village, social capital played an important role for graduation among the poor families. Middle class families were being graduated by their entrepreneurial quality using their human capital. In the village, 36 per cent of the total households were living below the poverty line and fifteen years ago that was 59 per cent. The diversification of occupation made the villagers more stable economically than before. The improvements were visible in housing structure, sanitation, household assets, better facilities like gas, electricity, water resources, transport, communication, schooling etc. The female education had increased due to government initiatives, which helped qualitative changes in the life and livelihood strategies although the female-headed households suffered a lot due to lack of suitable self-employment opportunities in spite of NGO’s interventions in the village. It was found that dowry system continued to be the cause of poverty for those who have daughters not sufficiently educated for independent income

earning through self-employment schemes. In the village, 23 families moved from moderate to middle poor and overseas migration was one of the best livelihood strategies adopted by those households. On the contrary, the main causes of moving down from moderate poor to extreme poor were: decreased income from agriculture, investment of overseas migration without suitable job placement and increased population within the family. The study concluded that more avenues, both farming and non-farming, should be created to harness better livelihood strategies and outcome of the people living in the village.

8.5 Quddus, Md. Abdul (1993). *Poverty Focused Rural Development: A Hand-book on An International Training Course*, Cumilla: BARD.

The booklet in a handbook form of a three-week International Training Course on Poverty Focused Rural from the Commonwealth Fund for Technical Co-operation (CFTC), Commonwealth Secretariat (COMSEC), London. The course was organized by BARD from June 09 – 29 May 1993. Twenty participants from 6 (six) Commonwealth Countries in Asia and the Pacific region namely Bangladesh, India, Malaysia, Sri Lanka, and Western Samoa Participated in the course. The author in this handbook gives a brief introduction to the Bangladesh Academy for Rural Development. Besides some important issues like poverty situation in Asian countries, poverty alleviation strategies in Bangladesh, local Government in Bangladesh, Role of Cooperatives in poverty alleviation program and other program related issues were comprised with this book. The participants also presented their Country cases elaboration particularly their efforts for alleviating poverty. The editor compiled the content of the course very nicely. The country cases and outputs of the workshop sessions and the content can be used as training materials for conducting such training courses in the future.

9. Rural Administration and Local Government

9.1 Rahman M. M, (2019). *Paradox and Dynamics of Women Leadership at the Grassroots Based Local Government: The Case of Union Parishad in Bangladesh*, Cumilla: BARD.

In a traditional society like Bangladesh, apart from huge women members, 23 women were directly elected as UP Chairpersons in the UP. But there is hardly any work with these Women Chairpersons (WCs). Against such backdrop, this research study aims to unravel the research questions: i) what factors have helped them become leaders at the community level? ii) Are there any common patterns or factors for their leadership process in the UP of Bangladesh? The specific objectives of the study are: i) to analyze the socio-economic characteristics of these Women Chairpersons (WCs), ii) To unravel the leadership process of the women leaders in the UP. The study was basically based on case study method which was substantiated by content analysis and observation method. It was observed that in most of the cases, the women Chairpersons entered into political space by using their family network and dynastic political legacy, being surrogates for their husbands or fathers or ancestors. Women's work experiences with NGOs helped them flourish their leadership potential and empowerment which in turn helped them assuming their leadership role in the community. Concerning socio-economic characteristics it was found that that most women Chairpersons had better socio-economic base having better income, family status and land ownership, were married and moderately educated. The common factors that helped these women Chairpersons becoming leaders were NGO background, political network and networks with socio-political elites, i.e. MPs and local administration. Their family support gave them a supportive base for assuming their leadership role at the grassroots level. Except one all the women Chairpersons were elected for two times which implied that playing leadership roles in the UP also helped them to be elected as leaders. To overcome patriarchy, purdah, religious superstitions, etc., the role of education, science and technology can be expanded with a view to modifying the cultural norms and practices embedded in the social milieu. Role of political parties and women's organizations are very important for developing women's leadership at the grassroots level. To strengthen women's role in the UP the reservation quota should be thoroughly reorganized. The women leaders in the UP should be involved in those areas where they can contribute their worth to bringing positive changes in the rural governance. Women's entitlement of their rights and shares should be clearly mentioned in the legal framework of the UP governance. In a bid to enlarge women's participation in political space, an inclusive reservation policy should be adopted. To strengthen women's role and participation and to enhance their capacity and knowledge in UP governance, women leaders should be imparted rigorous and frequent training.

9.2 Ahmed, Benzir (2018). *Good Governance Practice at the Union Parishad Level in Bangladesh: A Case of Second Local Governance Support Project*, Cumilla: BARD.

Union Parishad (UP) as the lowest unit of local government in Bangladesh provides necessary services to the rural people by undertaking some development projects and therefore UP

should be accountable for its performance to the general villagers. To make UP more effective and capable institutions in dispensing their jurisdictional responsibilities to the local people, Local Governance Support Project (LGSP) was implemented in several UPs in Bangladesh. The general objective of the study was to examine good governance practices under LGSP-2 project of the Union Parishads in Bangladesh. The specific objectives were to: i) examine the nature of good governance practices in Union Parishads (UP); ii) analyze the factors affecting in achieving good governance in the UP. To conduct this study, questionnaire survey and case study approaches were followed. Semi-structured questionnaire and check list were developed to collect data. Three Union Parishads namely Adra, Laksam East and Sholonol from Cumilla District were randomly selected as sample study area. A total of 102 respondents were selected to collect relevant data for the study where 42 respondents were UP functionaries and rest 60 respondents were villagers who were randomly selected from study areas. The study findings reveals that 83% of the local respondents are aware about LGSP and 70% know about good governance whereas it is found that all UP functionaries are quite aware about LGSP-2 and good governance. The study unearths that about 53% local respondents participated in the ward meeting, scheme selection and implementation process but 47% respondents remain absent in awareness about the importance of participation of local people is the main reason for improper implementation of LGSP-2. With regards to information dissemination and overall satisfaction it was found that only 3t% local people opined that they have seen signboard at the scheme site, but overall satisfaction on UP activities was very low. The findings represents that 75% local respondents mentioned that UP functionaries were reluctant to share information. UP functionaries and local people identified that there were insufficient resources to undertake development projects. This study found number of problems behind low performance of LGSP-2 i.e. lack of publicity, awareness, political influence, ignorance of UP functionaries and limited resource as per demand. Based on the findings, this study suggests following recommendations to male LGSP-2 more effective. In order to strengthen LGSP-2, UP should enhance participation through sharing of relevant information and arranging awareness, campaign and mass mobilization strategy program. Moreover, UP should create conducive environment to raise voice of the local people and thus to ensure accountability of the UP representatives. UP representatives should visit scheme site frequently and ensure active participation of the local people in monitoring and evaluation process. Social audit system could be introduced to ensure quality of the scheme. To ensure transparency in the UP, all information should be shared through setting up notice boards in fat/bazar, growth center or other public places. For side publicity of the information, UP can use poster paper, banner, signboard, street drama, leaflet etc.

9.3 Karim, A., & Rahman, M. M. (2008). *Governance in Union Parishad of Bangladesh: Problems and Prospects*, Cumilla: BARD.

Now-a-days governance- both at national and local level has become a critical issue in many developing countries because it affects significantly overall development process. Governance involves a variety of actors such as government and non-government organizations; local

government institutes; private sector; civil society and individuals. Union Parishad, the lowest and the only representative local government institution in Bangladesh is beset with many problems relating to governance such as financial constraints, weak institutional strength, lack of participatory governance, weak accountability and transparency, lack of responsiveness to community needs and aspirations etc. In a bid to overcome those aforesaid weaknesses or problems of governance in Union Parishad, the study aimed at finding some alternative approaches against poor governance in Union Parishad. To develop and explore improved governance mechanism the study was undertaken with the objectives to: i) study the process of good practices for improving performance of local governance in the affairs of the Union Parishads; ii) assess the impact of good practices in the affairs of local government; and iii) make recommendations based on lessons learnt from good practices of governance. The study unearthed the fact that acceleration of development process depends to a large extent on potential mobilization and collaborative efforts of these different actors. In this regard, Union Parishad has in many respects demonstrated remarkable success in improving local governance through participatory governance. The study caters some case studies on good practices with regard to local government's role in better governance process. The cases present potential capacity of the local government organization in the overall development as well as strengthening local governance. The study pointed out some innovative achievements of local governance, which could provide some essential guidelines for Union Parishads in Bangladesh.

9.4 Karim, A., & Rahman, M. M. (2007). *Governance in Union Parishad of Bangladesh: Problems and Prospects*. Cumilla: BARD.

The study was undertaken to: i) study the innovative practices for improving governance of the Union Parishads; ii) assess the impact of such innovative practices on the UP and community; iii) record lessons learnt from innovative practices of those selected UP. The study was based on content analysis and case studies. The selected 6 UPs were chosen purposively covering 4 UPs from Bhola and 2 UPs from Cox's Bazar districts whose functionaries were imparted training at BARD to increase their capacity with the support of an NGO, the COAST Trust. The analysis of the innovative practices practiced by the studied Union Parishads revealed the fact that following participatory process Union Parishad were able to enhance their tax to a great extent. Practicing participatory tax assessment, open space budgeting helped developing a sense of ownership and increased institutional capacity building, which in turn helped the UPs to enhance own resource mobilization and provide more development services to the communities. Findings of the study reveal that Union Parishad successfully implemented the sanitation and education projects through adopting a number of innovative measures, which indicates that local government in Bangladesh has huge potentialities to deliver services related basic human needs. COAST experience testified the fact that institutional linkage among various development organizations i.e. GOs, NGOs and LGs could be beneficial for boosting up local development in Bangladesh. Creating a data base of the Union Parishads can help deliver quick services to the community people. NGOs can be

involved in providing various capacity development interventions to the UP functionaries. A single Secretary is not enough to help to implement of huge activities of the Union Parishad, so Union Parishad should be equipped with additional staff. Orientations and training courses on the *Salish* process, jurisdiction and conflict resolution methods regarding alternative dispute resolutions could be organised not only for UP functionaries, but also other members of the *Salish Committee*. Union Parishad can employ some development workers from the local community and attach them with the government extension workers so that community and extension workers relationship could be strengthened. To make the Union Parishad more transparent and accountable, local community people should be invited to attend UP monthly meetings in addition to respective Ward members as observers of the meeting. Publishing annual report of the respective Union Parishad is an excellent effort to share information as well as ensure accountability of the Union Parishad. Findings of the study show that the Union Parishad can effectively manage primary schools. Therefore, national policy planners can think to decentralize primary school management to the Union Parishad for better and qualitative primary education.

10. Women in Development

10.1 Mamun, Abdullah Al (2020). *Empowerment and Food Security among Vulnerable Women Group in Selected Districts of Bangladesh, Cumilla: BARD.*

Women under the VGD programme are very much vulnerable in terms of empowerment both in household and social level. The empowerment is significantly associated with the food security, and the dietary consumption of the corresponding households. Based on such a context, the study endeavors to: i) explore the socio-economic profile of the vulnerable women group; ii) assess the empowerment situation of vulnerable women group; iii) find out the Food Consumption Pattern (FCP); iv) appraise the food security in the household of the vulnerable women of reproductive age (15 to 49 years); and iv) explore the influence of empowerment status on household food security and food consumption pattern. The present study was the cross sectional study. Sample size was calculated using standard statistical formula. A total of 220 women were selected from four Upazilas of 2 districts of Bangladesh. A systematic random sampling method was employed to enroll the required number of participants for the surveys from the total list of Vulnerable Group Development (VGD) beneficiaries in each Upazila. Findings of the Study revealed that most of the participants are of Bengali (96.8%) ethnicity; and followers of Islam (71.4%). When the respondents were classified according to their occupation, most of them were found to be housewives (77.3%). The study found an overall empowerment score of 42.61 ± 13.31 (Mean \pm SD) in a range 0-100. 71.81% respondents reported that they can take decision about household budgeting, whereas 77.3%, 43.2% has the power of small and big items respectively. The decision related to use of family planning methods is made jointly in 76.7% respondents' families. The respondents who possess the power of making decision alone about their children's education, sickness, and teaching norms and behavior are 34.9%, 23.9% and 41.1% respectively, whereas egalitarian decision was made in 61%, 65.9%, and 48.5% families. Most of the respondents (84.45%) claimed that they have control over their husbands' income. The study reveals that 41.8% of the households are severely food insecure, whereas 43.2% are moderately food insecure. It was observed that, households with empowered women are more food secure than the households with less empowered women ($p=0.02$). A positive correlation was found for empowered score with food consumption score ($p=0.190$). A statistically significant ($p=0.000$) negative correlation was found for empowerment score with food consumption score ($r=-0.237$). The study reveals that empowerment of vulnerable women group is significantly associated with food security and dietary consumption of the corresponding households. The study suggests further research to determine the cause-effect relationship of these factors confounding factors that may influence the relationship and the specific aspects of empowerment of women that effectively influence the food security, dietary consumption, and nutrition profile at larger community.

10.2 Kabir, M. K., Islam, M. S., & Azim, A. (2008). *Women in Mainstream Development: The Role of Mass Media*, Cumilla: BARD.

The study was designed to accumulate issues for bringing women in the mainstream of development and identify how women were presented in different mass media. People's perception on women and its reflection by choosing or rejecting different programmes on women in mass media like Radio, Television and Cinema was also focused in this study. People's participation in Newspaper reading or subscribing was found very poor due to interventions of a number of private and government radio and television channels. The number of subscribers or readers of newspaper in the study areas were very poor and was found absent in Bogra. In the study areas, cent per cent respondents were the owners of Radio and Television sets. They listen to Radio and watch Television Programmes on regular basis. According to study findings, the respondents opined that women should be given more emphasis in development programmes in Radio and Television. So, women's participation in the Radio and Television programmes needs to be increased. The presentation of women in Radio and Television advertisements needs to be taken care of with due respect. Women must not be presented as commodity. Maximum respondents rejected the programmes where women were presented in indecent way in Radio, Television and Cinema. It was observed that respondents strongly opposed any kinds of indecent scenes in cinema of present era. It was found that 90 per cent of the respondents responded for equal opportunities of male and female in all development issues. Cent per cent respondents of the study areas commented that Radio, Television, Newspapers and Cinema should come forward with different programmes to build positive image of women in family, society and also in national level. A good number of respondents viewed that women could take part in all kinds of programmes in Radio and Television. Cent per cent respondents urged for not having any kinds of discrimination between male and female in Radio and Television programmes. All respondents suggested for building positive image of women in cinema and documentary films. Among all the media, television was found the most powerful and popular mass media. The respondents opined that television is the only mass media, which could play a very important role for removing discrimination of male and female in the society. For bringing women in the mainstreaming of development, television programmes need to be redesigned and emphasis should be given on women issues.

11. Rural Development and Social Development

11.1 হক, মোঃ লুতফুল। (২০০১)। *পল্লী উন্নয়ন ও প্রাসংগিক ভাবনা (ডঃ আখতার হামিদ খানের বক্তৃতা সংকলন)*, বার্ড, কুমিল্লা।

ডক্টর আখতার হামিদ খান। বাংলাদেশের পল্লী উন্নয়নের বিস্তৃত ইতিহাসের সাথে জড়িত একটি অতি পরিচিত নাম। ব্যক্তি হিসেবে তিনি হয়তো আমাদের অনেকের কাছেই অচেনা। কিন্তু তাঁর কাজের ব্যাপকতা ও কর্মচেষ্টার ফল পৌঁছে গেছে-দূর দুরাঞ্চলের গ্রাম বাংলার ঘরে ঘরে। আমরা প্রত্যক্ষ বা পরোক্ষভাবে জড়িত রয়েছি তাঁর কর্মধারার সঙ্গে। বস্তুতঃ ব্যক্তি হিসাবে নিচের প্রচার ও প্রকাশ নয়, বরং পেছনে পড়া পল্লীবাসীর উন্নয়নকল্পে গঠনমূলক কোন অবদান রাখাই ছিল তাঁর মূল উদ্দেশ্য। তিনি যে তাঁর প্রচেষ্টায় যথেষ্ট সাফল্য অর্জন করেছেন, সে কথা আজ বলার অপেক্ষা রাখে না। তাঁর এবং তাঁর সহযোগীদের প্রচেষ্টায় উদ্ভাবিত সমন্বিত পল্লী উন্নয়ন কর্মসূচী, থানা সেচ কর্মসূচী, ওয়ার্কস প্রোগ্রাম, থানা প্রশিক্ষণ ও উন্নয়ন ইতিহাসে ডঃ আখতার হামিদ খানের নাম সোনালী অক্ষরে লেখা থাকবে। প্রসঙ্গক্রমে উল্লেখ করা যেতে পারে, পল্লী উন্নয়নের ক্ষেত্রে একজন প্রথিতযশা চিন্তাবিদ হিসাবে তাঁর খ্যাতি ও সুনাম শুধু বাংলাদেশের নয় বরং বিশ্বেও ছড়িয়ে পড়েছে। বাংলাদেশের জনগণও খান সাহেবকে ভুলতে পারেননি। এখনও তারা তাঁকে শ্রদ্ধা ও ভক্তির মাধ্যমে স্মরণ করে প্রতিনিয়ত। প্রতিদিনের কাজে ও কথায় তার নাম উচ্চারণ করে। আর এই ভক্তি, শ্রদ্ধা ও সম্মানের নিদর্শন হিসাবে খান সাহেবের বিভিন্ন বক্তৃতা সম্বলিত এই পুস্তিকাটি প্রকাশিত হয়। বাংলাদেশে তাঁর কার্য কালের সময়ে বিভিন্ন সভা সমিতিতে তিনি তাঁর বক্তব্য রেখেছেন। আর এ সকল বক্তব্যের মাধ্যমে তিনি তুলে ধরেছেন তাঁর চিন্তাধারা, আশা আকাংখা ও ভবিষ্যত পরিকল্পনার কথা। এগুলোর গুরুত্ব সর্বজনীন এবং এগুলোর প্রয়োজন কখনও শেষ হওয়ার নয়। বিভিন্ন সমস্যার সমাধান, উন্নয়নমূলক কর্মসূচী গ্রহণ ও প্রণয়নের ক্ষেত্রে তাঁর বক্তব্যগুলো বিভিন্নভাবে সাহায্য করতে পারে। এই প্রকাশনাটি পল্লী উন্নয়নের কাজের ক্ষেত্রে খান সাহেবের অভাব খানিকটা পূরণ করতে সমর্থ হবে। এই প্রকাশনায় ডক্টর আখতার হামিদ খানের মোট ১৬টি বক্তৃতা স্থান পেয়েছে। মূলতঃ ১৯৬৩ সাল হতে ১৯৭০ সালের মধ্যে প্রদত্ত বক্তৃতাগুলোই এই প্রকাশনায় স্থান পেয়েছে। বিভিন্ন সময়ে বিভিন্ন সভা-সমাবেশে ও সমিতিতে ডঃ খান এসকল বক্তব্য রেখেছেন। তাঁর প্রতিটি ভাষণেই তিনি কতগুলো সাধারণ বিষয়ের অবতারণা করেছেন। বিভিন্ন সময়ের বিভিন্ন পারিপার্শ্বিক অবস্থার সংগে ডঃ আখতার হামিদ খানের এই বক্তব্যগুলোর একটি ঘনিষ্ঠ সম্পর্ক রয়েছে। তাছাড়া, সময় অনুসারে বিবেচনা করলে এই বক্তৃতাগুলোতে একটি ক্রম বিবর্তনের ধার লক্ষ্য করা যায়। তাই, বিষয়বস্তুর দিক হতে নয় বরং সময় অনুসারে ভাষণগুলোকে সাজানো হয়েছে। প্রকাশনাটির সম্পাদক খুব সুন্দরভাবে এবং প্রাজ্ঞ ভাষায় ডঃ খান-এর বক্তব্যসমূহ তুলে ধরেছেন। এছাড়াও ডঃ খান-এর মূলবক্তব্য এবং বর্ণনার কোন পরিবর্তন যাতে না ঘটে সেদিকে বিশেষ দৃষ্টি রাখা হয়েছে। একটু মনোযোগসহকারে পাঠ করলে দেখা যাবে যে, ডঃ খান এক একটি ভাষণে এক একটি বিশেষ বিষয়ের প্রতি অধিক গুরুত্ব আরোপ করেছেন এবং সে আলোকেই প্রতিটি বক্তৃতায় ভিন্ন ভিন্ন নামকরণ করা হয়েছে। প্রকাশনাটির এ ধরনের বিষয় ভিত্তিক নামকরণ পাঠকবর্গকে খান সাহেবের বক্তব্যের মূল বিষয়বস্তুর প্রতি আকৃষ্ট করবে।

11.2 খান, আখতার হামিদ (২০০৭)। *ট্যুর অব টুয়েন্টি থানাস (বাংলা অনুবাদ) ঃ জল নিষ্কাশন খাল, রাস্তা, সেচ এবং সমবায় কর্মসূচীর পর্যালোচনা*, বার্ড, কুমিল্লা।

পল্লী উন্নয়ন ধারণার প্রবর্তক, আন্তর্জাতিক খ্যাতিসম্পন্ন সমাজ বিজ্ঞানী ও বাংলাদেশ পল্লী উন্নয়ন একাডেমী (বার্ড)-এর প্রতিষ্ঠাতা পরিচালক ড. আখতার হামিদ খান ১৯৭০ সালের ডিসেম্বর থেকে ১৯৭১ সালের জানুয়ারী মাস পর্যন্ত বৃহত্তর কুমিল্লা জেলার (বর্তমানে কুমিল্লা, ব্রাহ্মণবাড়িয়া ও চাঁদপুর) ২০টি থানা (বর্তমানে উপজেলা) পরিদর্শন করে তাঁর অভিজ্ঞতা লিপিবদ্ধ করেন যা ১৯৭১ সালে বার্ড কর্তৃক “Tour of Twenty Thanas” নামে পুস্তক আকারে ইংরেজীতে প্রকাশিত হয়। ড. খান তাঁর পরিদর্শনের পরিধি মূলতঃ চারটি কর্মসূচিতে সীমাবদ্ধ রেখেছিলেন। যথাঃ (১) থানা প্রশিক্ষণ ও উন্নয়ন কেন্দ্রের ধারণা, (২) পল্লী পূর্ত কর্মসূচি, (৩) থানা সেচ কর্মসূচি এবং (৪) সমবায় প্রকল্প। এ চারটি কর্মসূচিতে জেলা পর্যায়ে কিভাবে কাজ করেছিল তিনি তাঁর পরিদর্শনকালে তা নিরূপণ করতে চেয়েছিলেন যা খুব সুন্দরভাবে এই প্রকাশনায় লিপিবদ্ধ হয়েছে। পুস্তকটির এত বেশী চাহিদার মূল কারণ হলো ভূগমূল পর্যায়ের সমস্যা চিহ্নিত করার ক্ষেত্রে সরাসরি সুফলভোগী এবং মাঠপর্যায়ে কর্মকর্তাদের সাথে কথোপকথন ও মতবিনিময়ের সাবলিল ধারাবাহিক বর্ণনা। এছাড়াও পুস্তকটির কলেবর নাতীর্ঘ হওয়ায় প্রায় সবধরনের পাঠক স্বল্প সময়ে এটি পাঠ করে উপকৃত হচ্ছেন। পুস্তকটি ইংরেজী ভাষায় লিখিত ও মুদ্রিত হওয়ায় স্বল্প শিক্ষিত জনসাধারণ এটি পাঠ এবং ড. আখতার হামিদ খানের সরাসরি বর্ণনাকৃত অভিজ্ঞতার অংশীদার হতে বঞ্চিত হচ্ছেন। বার্ডের দুজন অভিজ্ঞ অনুষদ সদস্য গ্রামের সাধারণ মানুষের নিকট ড. আখতার হামিদ খানের ২০টি থানা পরিদর্শন ও বিভিন্ন স্তরের কর্মকর্তা, গণ্যমাণ্য ব্যক্তিবর্গ ও প্রকল্পের সুফলভোগীদের সাথে তাঁর মতবিনিময়ের অভিজ্ঞতা পৌঁছিয়ে দেয়ার লক্ষ্যে পুস্তকটি অনুবাদ করেন। পল্লী উন্নয়ন ত্বরান্বিত করার লক্ষ্যে ড. আখতার হামিদ খানের গ্রাম-গ্রামান্তরে পরিভ্রমণ এবং অভিজ্ঞতা অর্জনের

অল্পান্ত পরিশ্রমের দৃষ্টান্ত হিসেবে এ পুস্তকটি পাঠককুলকে অনেক সমৃদ্ধ করবে। পল্লী উন্নয়নের বহুমাত্রিক সম্ভাবনাকে উন্মোচনের মাধ্যমে সহস্রাব্দের উন্নয়ন লক্ষ্য অর্জনের ক্রমধারায় স্থিতিশীল উন্নয়নের লক্ষ্য অভিমুখে বাংলাদেশের অভিযাত্রায় এ পুস্তকটি বিশেষ ভূমিকা রাখতে পারবে।

11.3 খান, মোঃ আখতার হোসেন। (২০০৮)। *আখতার হামিদ খানঃ একটি স্মৃতিচারণ*, বার্ড, কুমিল্লা।

ড. আখতার হামিদ খান কুমিল্লার পল্লী উন্নয়ন একাডেমির বিশিষ্ট নেতৃত্বের জন্য এশিয়া এবং বিস্তৃত বিশ্বের একটি বৃহত অংশে সুপরিচিত। সফল পল্লী উন্নয়ন মডেলগুলির একজন পণ্ডিত, প্রশাসক, সংগঠক এবং পরীক্ষক-প্রদর্শক হিসাবে তাঁর অর্জন, সাধারণভাবে বাংলাদেশের সাধারণভাবে এবং নিম্ন ঘনবসতিযুক্ত কৃষিনির্ভর সমাজের অবস্থার উন্নতিতে তাঁর অবদান এবং বিশেষত কুমিল্লা অর্জন করেছেন আন্তর্জাতিক স্বীকৃতি।

প্রয়াত ড. আখতার হামিদ খানের অবদানের কথা উল্লেখ না করে বিশ্বের এই অঞ্চলে গ্রামীণ উন্নয়নের ইতিহাস অসম্পূর্ণ। দরিদ্র ও দুর্দশাগ্রস্ত মানুষের কল্যাণে নিবেদিত ড. খানের জীবন তাঁর সাথে ঘনিষ্ঠ সংস্পর্শে আসা অসংখ্য মানুষের হৃদয়কে স্পর্শ করেছিল। এর মধ্যে তার সহযোগী, অনুসারী, শিক্ষাবিদ, উন্নয়ন কর্মী, শিক্ষক, শিক্ষার্থী ইত্যাদি অন্তর্ভুক্ত ছিল। বর্তমানে দেশে বিদেশে পল্লী উন্নয়নের যে সকল মডেল বা ম্যাকানিজম অনুসৃত হচ্ছে সেগুলোতে ড. আখতার হামিদ খানকে সঠিকভাবে তুলে ধরার লক্ষ্যেই লেখক এ বইটি প্রকাশের প্রয়াস নিয়েছেন। ড. আখতার হামিদ খান এর লেখাঃ **Akhtar hamid Khan. Orangi Pilot Project, Reminiscences and Reflections** বইটি থেকে কিছু অংশ এবং উদ্দেশ্যমূলকভাবে বইটির বাইরে কুমিল্লা পল্লী উন্নয়ন একাডেমী থেকে সংগ্রহ করে তার লেখা কয়েকটি প্রবন্ধ অনুবাদ করে লেখক বই আকারে প্রকাশ করেছেন। অনুবাদকৃত লেখার সঙ্গে ড. আখতার হামিদ খানের জীবনের সঙ্গে কিছুটা অংশ তুলে ধরে তার জীবন ও অবদানের মূল্যায়ন করা হয়েছে প্রকাশনাটিতে। মূল্যায়নে ড. আখতার হামিদ খানের জীবনের ঘটনাবলী বিশেষ করে কিছু ব্যক্তিগত অভিমত যোগ করা হয়েছে। বর্তমান বইটি অনেক কারণে পড়ার জন্য উপযুক্ত। বইটির প্রথম ভাগে স্থান পেয়েছে আত্মচরিত মূলক লেখাগুলো যা ব্যক্তি ড. আখতার হামিদ খানকে পাঠকের নিকট পরিচিত করছে। দ্বিতীয় ভাগে স্থান পেয়েছে পল্লী উন্নয়নে কুমিল্লা এপ্রোচ সংক্রান্ত লেখাগুলো। এগুলো ড. আখতার হামিদ খানকে এক জন নিবেদিত প্রাণ সমাজ বিজ্ঞানী, পল্লী উন্নয়ন ও দারিদ্র্য মুক্তির পথিকৃৎ হিসাবে পাঠকের নিকট পরিচিত করছে। এছাড়াও কেউ যদি পল্লী উন্নয়নে কুমিল্লা প্রজেক্টকে বুঝতে চান তাহলে তাকে অবশ্যই এই লেখাটি পড়তে হবে যেহেতু আজ বাংলাদেশ ও বিশ্বের কোনো কোনো দেশের বিশ্ববিদ্যালয়গুলোর উচ্চতর অর্থনীতির রূপেও পল্লী উন্নয়নে কুমিল্লা এপ্রোচ পড়ানো হয়। বইটি ড. আখতার হামিদ খানের জীবন, রচনা, চিন্তাভাবনা, পল্লী উন্নয়নে তাঁর অবদান, তাঁর বিশাল মানবিক গুণাবলী এবং জীবন ও বিকাশের বিভিন্ন জটিল বিষয়গুলির ব্যাখ্যা, সমাজের বিভিন্ন বিভাগের ব্যক্তিদের একটি চমৎকার চিত্র রয়েছে। বইটিতে থাকা তথ্যগুলি শিক্ষার্থী, গবেষক, শিক্ষাবিদ এবং পাঠকদের সাধারণভাবে ড. খান এবং তাঁর জীবদ্দশায় উদ্যোগগুলি সম্পর্কে জানার জন্য উপকৃত হবে। এছাড়াও বইটি পল্লী উন্নয়নে কুমিল্লা এপ্রোচের মূল উপপাদ্য দেশে দেশে ছড়িয়ে দেয়ার জন্য বিশেষ সহায়ক হবে। বইটির আকর্ষণীয় দিক হলো আজিজুল হকের একটি বিশেষ সাক্ষাতকার ‘আজিজুল হকের স্মৃতিতে আখতার হামিদ খান’ নামে বইটির শেষ ভাগে স্থান পেয়েছে। তিনি কুমিল্লা পল্লী উন্নয়ন একাডেমীর ডাইরেক্টর ছিলেন, বাংলাদেশ সরকারের উপদেষ্টা ও মন্ত্রী এবং ১৯৭৯ সালে সেন্টার অন ইনটেগ্রেটেড রুরাল ডেভেলোপমেন্টে ফর এশিয়া গ্র্যান্ড দি প্যাসিফিক এর প্রথম ডাইরেক্টর ছিলেন। লেখাটিতে আজিজুল হকের সেই প্রচলিত সেনস অব হিউমার গ্র্যান্ড উইট ধরে রেখে ব্যক্তি ও মানুষ ড. আখতার হামিদ খানকে ফুটিয়ে তুলেছে যা পাঠকের কাছে ব্যক্তি ড. খান এর একটি বিশেষ চিত্র তুলে ধরতে বিশেষ সহায়ক হবে। এছাড়াও, নির্বাচিত উক্তি, ড. আখতার হামিদ খানের প্রথম বয়সের দুস্প্রাপ্য ছবি এবং অগণ্য কয়েকটি মূল্যবান ছবি বইটির আরও মূল্য সংযোজন করেছে।

11.4 Quddus, Md. Abdul ed. (1996) *Rural Development in Bangladesh: Strategies and Experiences*, Cumilla: BARD

The book is a compilation of 23 seminar papers which were presented in an ‘International Seminar on Rural Development in Bangladesh’ held from 15-17 January 1992 at Bangladesh Academy for Rural Development, Cumilla. This is a comprehensive documentation on the strategies and experiences of rural development in Bangladesh and offers an opportunity to examine the socio-economic changes in the country, specifically during 1950-1990. The papers have been divided

into five thematic areas, namely, 1) Keynote and Review Papers, 2) Rural Development Programmes 1950-90, 3) Agricultural Development and Environmental Programmes, 4) Major Target Group and NGO-Programmes, and 5) Human Resource Development Programmes. The book comprises five chapters, each corresponding to a specific thematic area.

The introductory chapter gives an overview of rural development in South Asia and the Pacific region, and in Bangladesh. Chapter-II presents the experiences of Village Agricultural and Industrial Development Programme, the Cumilla Models of Rural Development and Comprehensive Village Development Programme (CVDP) which were implemented in a sequence from 1950-90 in Bangladesh. Chapter-III covers strategies and experiences in agricultural research and extension with particular reference to crop, fisheries, livestock, environment and rural energy. Chapter IV examines the rural poverty alleviation programmes of the post independence era. It captures the distinctive features of these programmes. The evolution of poverty alleviation approaches, emergence of NGOs in poverty alleviation and experiences with the target group approach have been documented in this chapter. The last chapter looks into human resource development and investigates into such issues as women's development, health, nutrition, sanitation, population and finally training and education. The report also adds seminar recommendations with focus on narrowing down socio-economic disparity, attaining self-reliance and sustainable rural institutions.

11.5 Solaiman, M., Bose, T. R., & Biswas, T. K. (1993). *Monitoring and Evaluation for Agrarian Reform and Rural Development*. Cumilla: BARD.

Since Bangladesh is predominantly rural and agricultural in setting, agrarian reform a rural development can play a vital role in its overall development. The main objectives of the research were set on two particular areas: i) people's participation and ii) agrarian reform. The study was conducted mainly on the basis of secondary data. The study helped to visualize the trend in Rural Development and Agrarian Reform with almost total perspective. Some notable improvements have been observed in infant, child and maternal mortality rate, literacy rate and enrolment of children in educational institutions. On the other hand, though the poverty has significantly improved but still it is alarming high. Similarly, per capita income has increased but pattern of distribution is quite unequal. Even though the population growth rate has significantly decreased but it is still high enough to bring the land man ratio down. The contribution of agriculture to totalGDP has fallen down. SO far very little effort was given for implementation of many of the provisions of land reform legislation. This type of study on regular basis may help to develop a mechanism of data based information system in Agriculture Reform and Rural Development.

11.6 Huq, Azizul (1971), *Comilla Approach to Rural Development*, Cumilla: BARD

The booklet in a mimeo form is, in fact, an academic paper presented in a FAO – SIDA symposium held in Rome from June 21 - 28, 1971. The author in this report gives a brief introduction to Bangladesh Academy for Rural Development (the then Pakistan Academy for Rural Development) and later introduces the Comilla Approach to Rural Development.

At the very beginning, Academy realized the importance of development from below by involving the farmers. For effective involvement of farmers, rural institutions in the form of cooperatives were felt necessary. This led to the emergence of a Two-tier Cooperative system which facilitated training of villagers, capital accumulation through savings at the grass-roots level, rural financing for IGAs through credit and technology transfer.

The Thana Training and Development Centre (TTDC) was created as a development organization within easy reach of the villagers. Its functions were two-fold: a) as technical assistance for development, and b) as training of rural leaders. It also worked in collaboration with the Thana Cooperative Federation.

The Academy experimented a third programme called Rural Works Programme with twin objectives of building rural infrastructure and generating additional employment particularly for landless peasants. In implementing this programme, it activated the Union councils and Local people. The programme helped development of rural communication, agricultural modernisation and employment generation.

The next important programme was the Thana Irrigation Programme. Along with introducing modern irrigation facilities, the programme facilitated adoption of HYV seeds, supply of fertilizer, use of simple machinery (weeder, sprayer, thresher, tiller, and tractor) and adoption of improved practices (line sowing, cropping pattern).

The primary thrust of the Comilla programme has been on agricultural modernization. Experiments were also carried out on other aspects of rural life, such as rural industries, storage and marketing of agricultural products, youth activities, women's health and home making, family planning, etc.

Rural Development is a multi-disciplinary task and a continuous process. The approach developed in Comilla includes:

- : Research on problems of rural areas.
- : Experiments with alternative solutions to problems.
- : Acceptance of tested ideas by Government agencies concerned – adoption of tailored programmes.
- : Use of existing institutions where possible for establishment of new ones to serve new needs.
- : Coordinated implementation of component programmes.
- : Continuous evaluation and refinement.
- : Gradual expansion of programme horizon.

The institutional and programmes strategies used by Comilla were not pre-conceived ones. The beginning was experimental and flexible. Success in one experiment created climate for another.

It accepted failures and had changed procedures. Comilla was pragmatic. The Comilla Approach to Rural Development was by no means final. It went through revisions and refinements in the light of new knowledge and experience.

11.7 Chowdhury, N. A., Roy, M. K., & Bhattacharjee, M. K. (2003). *People's Participation in Forest Resource Management in Bangladesh: A Socio- Economic Analysis*, Cumilla: BARD.

The objectives of the study were to: (i) assess the socio-economic conditions of the participants; (ii) measure the extent of benefit derived from the forest; (iii) analyze the level of participation in forest resource management; and (iv) suggest to influence in policy formulation. The study areas were 5 circles of forest department like Bogra from northern region, Dhaka, Cumilla and Tangail from central region; Jessore from western region and Patuakhali from coastal region. The areas were randomly selected to cover woodlot, agro-forestry and strip plantations; Some Statistical formulae were used to determine the level of participation expressed by Participation Level Index (PU). When plantation-wise participation level was calculated, it was found that participation in woodlot was higher following agro-forestry and strip plantation. The participation level was lowest in case of strip plantation. The standard deviation was lower for three-plantation type. As the mean of all plantation type was closer, it means that there was more or less equal level of participation in every individual activity of each plantation type. When t-test was performed to assess the differences between the means of woodlot-agro-forestry, agro-forestry-strip and strip-woodlot, it was found that there were no significant differences between the participation levels of those three associations. Administrative bottlenecks both at local and regional level between among various departments should be resolved according to the mutual contract. The share of benefit to the beneficiaries should be given as soon as the trees are matured and fallen.

12. Project/Evaluation studies

12.1 Islam, M. S., Rahman, M. M., Bhattacharjee, M. K., Karim, A., Chowdhury, N. A., & Ahmed, M. T. (2019). *Amar Bari Amar Khamar Project: Challenges and Potentialities*, Cumilla: BARD.

The Government of Bangladesh has been implementing the 'My House My Farm' project popularly known as 'Amar Bari Amar Khamar (ABAK)' since 2009. ABAK is one of the biggest rural development projects funded by the government of Bangladesh. This study attempted to: i) Examine the operational aspects of the project; ii) Find out the desired outputs and outcomes of the project; iii) Evaluate the impact like household income and incidence of rural poverty along with prospect of institutionalization of VDOs of the project; and v) Find out the governance, overall effectiveness, weaknesses, strengths, potentialities and sustainability of the VDOs as well as project. Cross sectional primary data were collected using different methods and tools i.e. content analysis, Sample Survey, FGDs, Case Study and Field Observation. Multi-stage random sampling technique was followed to select sample Village Development Organizations (VDOs). Data were collected from eight Divisions covering one district from each Division and thus 2 Upazilas from each of the eight districts and two VDOs from each Upazila were selected randomly. According to the sampling formula the estimated sample size was 320. The study revealed that agriculture is no longer the only primary occupation of the beneficiaries. The average family size of the VDO members of ABAK project is 4.98 comprising of 2.37 adult male, 2.29 adult female and 1.16 children under 5 years. The average land size of the beneficiaries is 57.4 decimals. It was found that 82% respondents deposited regular monthly savings, whereas 14.06% were found irregular having saving of Tk. 6,866.00 per member. The average contributory savings varied from Tk. 4,192.00 to Tk. 4,800.00 while the average contributory savings was Tk. 4,610.00. Overtime positive variances were observed concerning the highest and the lowest average loan size by the members. The current loan approval process was time consuming and slow compared to NGOs. The members opined that the initial loan should be increased to Tk. 50,000.00. A sizeable portion of respondents was not fully aware of online based credit operation system of the project. It was found that 37.50% members received training while 62.50% were not imparted training from the project. It was found that on an average, the beneficiaries have increased their monthly household income by 46% within the period of 5 years after being included in the ABAK project. The t-test result shows that after joining the ABAK project, significant changes occurred concerning housing status, safe drinking water, sanitation status and electricity consumption status of the ABAK benefices. It was seen that over the last five years, the VDOs of the study areas were able to increase their initial fund almost three times (from Tk. 4.28 lakh to Tk. 12.94 lakh). Big confusion prevailed among the members regarding the 'incentive bonus' given by the Government. A number of problems were ventilated by the beneficiaries, among which the most serious problems as felt by the beneficiaries are - poor loan amount (88%), shortage of training (52%), no society office (45%) and loan not given timely (17%). Other problems are - shortage of field supervisor, poor monitoring, no provision of loan exemption in case of death of the borrower, etc. Gradually poverty is reducing among the ABAK beneficiaries. Their income is increasing and they are becoming self-reliant. The interest rate of ABAK loans is minimum and repayment system is

also quite flexible. All the participants unanimously agreed that ABAK project has been able to improve the social and economic status of the beneficiaries to some extent. As the number of female members is 40 (out of 60) in each society, women got the opportunity to express their loan demand in the Uthan Boithak. The project has made the loan available at their doorsteps which not only helps to promote women empowerment, but also enhances the capacity to utilize the loan effectively for increasing the household income.

12.2 Chowdhury, N. A., Parvin, I., Syed, S. I., & Khan, A. (2017). *Impact of Women's Education, Income and Nutrition Improvement Project (WEINIP): A Case Study of Haripur Village*. Cumilla: BARD.

This study aimed at i) assessing impact of the project on education, income, health and nutrition status in the project village; ii) assessing impact of poverty reduction of the beneficiaries; iii) comparing socio-economic changes over time. The impact study was conducted in Haripur village of Comilla Sadar Upazila. The survey was conducted following total enumeration and for that all WEINI member households (HHs) and equal number of non-member HHs belonging to the similar socio-economic status in the selected village were covered. Thus the total number of respondent HHs stood at 104 covering 52 members from each group. Comparisons were made between the project members and non-members over some selected indicators to find out the impact of project interventions. Both primary and secondary data were collected for the study. Secondary data were collected from published documents. Both quantitative and qualitative data were collected through questionnaire and PRA tool. The findings revealed that the household size in WEINI project showed an increasing trend (from 6 to 6.10) compared to non-member HH, which was decreasing (from 6.75 to 5.08). But literacy in member HHs increased from 4.02% to 4.79% whereas in the non-project HHs it enhanced from 3.02% to 3.48 %. Main occupation in both member and non-member women were housewives. It was found that 73% members had less than 2000 taka savings and 70% members had less than 1,000 share capital. Around 75% members attended weekly meeting regularly. Net enrolment rates both at primary and secondary level was 100% in member HHs. Dropout rate for boys was more than 10.53% in primary level and 7.7% for girls in secondary level for non-member HHs whereas no dropout was observed in members' HHs. The average income of member HHs was substantially higher (Tk. 9384) than non-member HHs (Tk. 6361). The number of homestead land size having up to 5 decimal had increased from 56% to 58% in member HHs where as it decreased from 48% to 29% in non-member HHs. It was observed that most of the member and non-member HHs were involved with poultry rearing at HHs level. Based on their own value judgment regarding socio-economic status, 29% member HHs and 71% non-member HHs considered them as poor and very poor respectively. The average loan taken ranged from 3000 taka to 14,833 taka in member household. WEINIP regularly provided training to the project members. In case of drinking water, both member and non-member households were found to be solely dependent on tube well water. About 54% in non-member households and 13% of member households used pond water for cooking purposes. Majority (46%) of the member households shifted to fully sanitary latrine whereas 73% non-member households upgraded their latrine to water sealed ring latrine. There were 60% malnourished children in member households and in case of non-member households the same was 72%. It was found that in both the cases, the status of member women was higher than the non-member women. The

study suggested that family planning activities should be increased in project areas. The project beneficiaries should be motivated to become entrepreneurs. It would be better to organize the beneficiaries-led demand-based training at the village level. The amount of credit is not sufficient to generate substantial income and credit amount should be enhanced. The amount of own share and savings of the members were found very poor, so beneficiaries should be motivated to increase their savings and shares. The incidence of malnutrition was quite high in project village and hence more attention on health and nutrition should be employed. Annual General Meeting should be organized on a regular basis. Monitoring and supervision by the project officials should be continued on a regular basis for better execution of the activities. For greater sustainability, mere motivational training would not be sufficient, rather more cost effective home grown IGAs as well as peer learning process might be introduced to reduce poverty and promote human resource development.

12.3 Kashem, M. M., Islam, M. S., Bhattacharjee, M. K., & Mamun, A. A. (2014). Impact Evaluation of Maternity Allowance Programme for Poor Lactating Mothers of Bangladesh. Cumilla: BARD.

Bangladesh has a wide spectrum of social safety net programmes. The Maternity Allowance Programme is relatively a recent one. The programme was introduced to increase nutrition of mothers and newborn babies through utilising the allowance along with raising awareness of pregnant and lactating mothers through training and motivation on health, nutrition and related issues. The programme is supposed to have impact on health issues including antenatal, postnatal and neonatal services in reducing the rate of death of poor mothers and children. The Ministry of Women and Children Affairs undertook an evaluation study in order to learn the impact of Maternity Allowance on the beneficiary women and their newborn babies. Bangladesh Academy for Rural Development (BARD) was assigned the responsibility to conduct this study. The main objective of the study was to learn the impact of Maternity Allowance on the beneficiary women and their newly born babies. The study also aimed at reviewing the targeting, selection and disbursement process of the allowance programme and drawing appropriate lessons for further development of the programme. The study employed a three track methodology: The first track consisted of analysis of available statistics, second track consisted household survey and third track consisted In-depth Interview/Key Informant Interview (KII). The study was conducted in 28 unions from 14 upazilas under 07 districts. The study covered a total of 420 beneficiaries and 196 non-beneficiaries. The study reveals that all levels of stakeholders including beneficiaries of Maternity Allowance considered the support highly important for the extreme poor pregnant and lactating mothers as they were getting some financial support for purchasing and consuming nutritious foods. The two major heads of utilisation of the allowance were food and health care of both mothers and babies. Though food in most cases was shared by the family members, food was also purchased exclusively for mothers and babies. Due to the allowance, many among the respondents of maternity allowance programme were getting better care and attention of in-laws and husbands in the family. It becomes obvious that most of the beneficiaries received the full amount without any reduction. However, the role of selected NGOs for the Maternity Allowance Programme was found unsatisfactory and the monitoring and supervision remained a weak point of the programme. Besides, compared to the huge number of poor pregnant and lactating mothers in each Union, a small number among them could be selected for the Maternity Allowance because of limited opportunities. The recommendations of the study, specially

increasing the coverage of the programme in terms of number of beneficiaries, entrusting the responsibility of training to Upazila and Union level government officials, particularly the field level staff of Department of Family Planning considering their well-established setup as well as accessibility to rural women, reducing the time gap between two disbursements, activating the concerned committees to perform their roles as per guidelines, and above all, further enhancing the amount of allowance considering the importance of health and nutrition of mothers and babies are worth considering for better results from this appreciable initiative.

12.4 Zahid, S. J. A., Hamid, M. A., Dasgupta, S. K., Chowdhury, N. A., & Guha, R. K.(2014). Impact of Vulnerable Group Development Activity in Bangladesh. Cumilla: BARD.

Poverty is endemic in most of the rural areas in Bangladesh in terms of absolute numbers and in proportion of total population. The general objective of the study was to assess the socio-economic impact of VGD programme activities on the beneficiaries. The specific objectives were to: i) identify the role of VGD programme on livelihood of the beneficiaries, ii) assess the benefits derived from VGD programme, iii) review the targeting, selection and disbursement process of VGD programme, and v) document appropriate lessons for further improvement of the programme and suggest some policy recommendations. A total number of 14 Upazilas and 28 Unions from the seven sample districts of the country were selected randomly. From each Union, 15 beneficiaries were selected at random and by this process, a total number of 420 VGD beneficiaries from 28 Unions were covered in the study. It was found in the study that after joining the VGD programme, economic condition of most of the beneficiaries improved. VGD beneficiaries and the FGD participants felt that they were treated better by most of the members of the household and also by others due to improvement of food intake situation and decrease in vulnerability of the household. It was found that there was a remarkable positive impact of VGD programme on improvement of food security of the poor and vulnerable people of the country. It is remarkable to mention that most of the beneficiaries were relieved from uncertainty and tension due to availability of cereal ensured through this programme. The study recommended that the functionaries of Union Parishad could be advised to prepare a complete list of prospective beneficiaries with the help of NGO personnel well ahead of starting of next VGD cycle. Orientation training on VGD programme activities may be organized for the newly elected functionaries of UP. The study also recommended that for better coordination of Safety Net Programme including VGD programme at Union level, a specific agenda could be incorporated in monthly UP meeting where NGO representation should be ensured.

12.5 Bhattacharjee, M. K., Hasan, M. K., Mahmuda, A., & Khan, A. (2012). *Impact of Social Safety Net Programmes on Elderly People in Rural Areas*. BARD, Kotbari, Cumilla.

The study assessed the socio-economic impact of safety net interventions on elderly people who were living in selected rural areas of Bangladesh. The study was conducted in 10 villages from five unions under five Upazilas of five districts. Among the social safety net programmes, beneficiaries of Old-Age Allowance Scheme, Allowance for the Distressed and Disabled persons and Allowance for Widowed and Distressed Women were interviewed. It was observed that 80% of single member families belonged to female respondents. About 46% respondents were sick, disabled

and were not engaged in any income generating activities, whereas about 36% respondents were the main earners. It was found that, in case of expenditure of the allowances for self, the highest amount was spent for medicine and treatment (by 82%) and in case of expenditure of the allowance for the families the highest amount was spent on food (63%). Though, the amount of allowances was tiny (per month tk. 220 only), it expanded their creditworthiness and very often helped the destitute for survival. The study revealed some challenges like- lack of individual bank account and lack of union level database of elderly people. Among the respondents 93% suggested that the amount of allowances can be increased, 31% desired festive allowances while 19% desired additional allowances. The disbursement of allowances was found to be delayed in most cases and the allocation at union level found inadequate. 34% of respondents suggested that the allowance can be distributed through post office or straight at the village level. A significant number of respondents mentioned that they were still able to contribute economically through their involvement in income generating activities. The allowances although small and insufficient gave the recipients a feeling of enjoying security as well as empowered position and trustworthiness. On the other hand, it enhanced not only food security but also mobility, medical care, accessibility to credit and respect from family members.

12.6 Biswas, T. K., Kabir, M. K., Roy, M. K. (2010). *Impact of Micro Credit on Poverty Reduction and Adoption of Family Planning Methods*. Cumilla: BARD. Cumilla: BARD.

Bangladesh has achieved significant progress on social indicators like primary school enrolment, reduction of gender disparity, life expectancy, immunization etc. At the same time national level reduction of poverty is not satisfactory. The main objectives of the study are to assess the impact of micro-credit on poverty reduction and adoption of family planning methods and their related factors. Two leading micro credit organizations- Grameen Bank and Palli Daridra Bimochan Karmashuchi (PADABIK) of Bangladesh Rural Development Board (BRDB) were selected. It was observed in the study that in the programme area, before involving in micro-credit programme, 27% household's main dwelling house was Jhupri and after involving in micro-credit programme it was significantly reduced to 8%. Similarly, percentage of households having semi-pucca dwelling house increased nearly three times in programme area. Both birth rate and death rates were lower in the programme area compared to the control area. The gap between the birth and death rates in the programme area was also lower than that of control area. It was also found in the study that, in the programme area, before involving in micro-credit programme, 7.5% households had hygienic latrine as compared to 8.25% households after involving in micro-credit programme indicating 0.75% increase. But the percentage of households having sanitary latrine was lower in the programme area compared to the control area. The study recommended that appropriate training to the beneficiaries on concerned income generating activities should be the integral part of micro credit disbursement. There is huge number of younger and elder age population who do not have formal education. For them, micro credit programmes may introduce non formal education with credit support. In most of the cases micro credit had helped in generating per time self-employment that had little contribution to poverty alleviation. Therefore, emphasis should be given to generate fulltime employment through micro credit especially for women.

12.7 Quddus, M. A., Ahmed, T., & Ali, M. E. (1996). *An Evaluation of Integrated Community Development Programme for the Chittagong Hill Tracts*. Cumilla: BARD.

The Integrated Community Development Programme (ICDP) was initiated as a project in 1985 for improving the quality of life of the tribal people of the Chittagong Hill Tracts (CHTs) Region. The project was being implemented by the Chittagong Hill Tracts Development Board (CHTDB) with the financial assistance from UNICEF. About 18,019 families were brought under the project activities in 75 *Mouzas* of 03 districts within the project period from 1985 to 1995. This study is an evaluation study of the project. The General objective of the study was to evaluate the project specially the achievement of the project. The study overviewed the development context of the Chittagong Hill Tracts, its land and location, including, population, administration and development efforts. It also included the background, objectives, target population and management aspects of the ICDP. It was conducted in 13 project *mouzas* and 03 non-project *mouzas* of CHT region. The survey covered a total of 1206 respondents of 11 different categories with separate sets of questionnaires. The highlights of the evaluation findings and overall achievement of the project showed that the project interventions brought positive change in the life of the beneficiaries. The project showed remarkable success to fix the target population in one place through formation of grass root level organizations. Some distinctly visible impacts are: the beneficiaries inculcated a regular saving habit, maternal and child mortality rate was reduced, the literacy and school going children increased, loan repayment behavior and utilization was satisfactory and sanitation status was also improved. The project seems to be a right step in a right direction. But for bringing about a tangible change, a feasible time-bound project may be designed for the next phase on the basis of findings of the evaluation. For this purpose, past experiences of the ICD-programme together with those of the Grameen Bank, various poverty alleviation projects of BARD should be used, particularly to increase the repayment rate of credit and ensuring community participation in the project initiated activities. Adequate attention should be given during the proposed new phase to make the grass-root level organizations viable and empowering the people to provide leadership and exercise management skill.

12.8 Zahid, S. J. & Ahmed, K. (1994). *Self-Reliance of the Thana Central Cooperatives Association: Case Study of Two TCCA*. Cumilla: BARD.

One of the major objectives of the Two-tier Cooperative model which has been implemented throughout the country by BRDB, was to make the TCCAs ultimately self-managed and self-reliant. But in practice, grants from BRDB has become the major source of income of the TCCAs and as such TCCAs have become dependent on BRDB. In such a situation, government is much concerned how to make the TCCAs self-reliant and self-managed. In view of this, Local Government and Co-operative Division, Ministry of LGRD&C had requested BARD to make a study in this respect. BARD took this study in response to the request of the Ministry. Considering the limitation of time (two months), two TCCAs one from category A' (Laksam TCCA in Comilla district) and one from category (Sonargaon TCCA in Narayanganj district) were selected purposively for the case study. Data were collected both from secondary and primary sources. As a convention of rapid research, the researchers themselves were involved in the process of collection and tabulation of data. Laksam and Sonargaon TCCAs started their function in 1965 and 1973 respectively. Both the TCCAs started

with only KSS primary societies but later included BSS, MSS and MBSS. Laksam TCCA covered 84% of the total villages and Sonargaon covered 81%. About 60% primary societies belonged to grade A & B of Laksam TCCA while in case of Sonargaon TCCA it was 63%. The amount of share capital accumulated by Laksam and Sonargaon TCCAs were Tk. 9,070 and Tk. 2,200 in the year of inception respectively. In 1991-92 amount of share capital of Laksam and Sonargaon TCCAs stood at Tk. 8, 35,450 and Tk. 8, 48,020 respectively. Savings deposit of Laksam and Sonargaon TCCAs in 1991-92 were Tk. 18, 17,122 and Tk. 20, 56,882 respectively. Average savings per society was Tk. 6,936 and 5,620 respectively. Accumulation of savings deposit by the TCCAs as a whole was not satisfactory. Failure of the TCCAs to provide necessary support and services to the member primaries and very irregular attendance of the managers in the training classes were identified as the major reasons behind this situation. Average amount of loan borrowed by Laksam and Sonargaon TCCAs during the last three financial years (1989-90 to 1991-92) were Tk. 14, 11,367 and Tk. 6, 82,667 respectively. During these years, both the TCCAs showed a declining trend in receiving loan from the financing organisations. Rate of repayment of loan by Sonargaon TCCA was higher than Laksam TCCA. Average amount of loan disbursement to primary societies per year during the last three years, by Laksam and Sonargaon TCCAs were Tk. 14, 11,200 and Tk. 17,267 respectively. The average rate of loan realisation was 17.36% and 25.77% of the average amount of borrowing of loans by Laksam and Sonargaon TCCAs respectively. Repayable overdue loan to the bank was Tk. 38, 74,760 for Laksam and Tk. 46, 67,994 for Sonargaon TCCA. Government declaration to exempt agricultural loan upto Tk. 5,000 has created deadlock in credit operation in both the TCCAs. TCCAs organized both weekly training and special training courses and the areas of training were: pisciculture, livestock, poultry rearing, health and family planning, accounts keeping and irrigation management. Both the TCCAs mostly failed to provide adequate services and assistance to the primary societies. However, Laksam TCCA could provide some services through different business activities, tractor service and marketing programme. Among the sources of income, interest on credit business and deposits were found as the major sources of income. In the year 1990-91 these sources constituted 84.5% and 54.5% of the total income of Laksam and Sonargaon TCCAs respectively. In case of Sonargaon TCCA, if individual heads of income were considered revenue grant would be the highest source of income in the last three years. The major heads of expenditure of the TCCAs include interest on borrowed loans, interest on savings, training expenses, pay and allowances and overhead cost. Pay and allowances was the single largest item of all the heads of expenditures. During the last three financial years (1989-90 to 1991-92), average net profit earned by Laksam and Sonargaon TCCAs were Tk. 4,93,628 and Tk.22,261 respectively. Net profit shown in the profit and loss account against each year was the accrued profit of the TCCAs but not realized profit. As a result TCCAs failed to distribute dividends. Both capital, liabilities and assets of the TCCAs had increased during the last three financial years (1989-90 to 1991-92). Considering the standard ratio, in both the TCCAs current liabilities compared to the current assets/ quick assets, were found larger. Thus, both the TCCAs were running on shortage of working capital. In each of the sample TCCAs there were 4 deputed employees (one TRDO, two ARDOs and one accountant) from BRDB. The number of total staff working in Laksam and Sonargaon TCCAs were 34 and 14 respectively. There was no illiterate

member in both the Managing Committees of the TCCAs. More than half of the members fall under Secondary and Higher Secondary education level. Major portion of the M.C. Members of Laksam had business as their main occupation (about 63%). and service holders constituted the second highest portion (about 27%). In case of Sonargaon, agriculture as the main occupation covered about 67% of the M.C. members and business constituted the second highest (25%). Meetings of the MC and percentage of attendance were satisfactory in both the TCCAs. The Annual General Meetings (AGM) of the Laksam TCCA were held regularly in the last three years and the average rate of attendance in the meetings was 36% of the total number of member primaries. In case of Sonargaon TCCA, they could hold only one AGM. There were 4 special general meetings arranged mainly for the approval of the budget of the TCCA. The strengths of Laksam TCCA were that it had versatile investment, good relation among staff, MC members and BRDB personnel, good primary societies and high rate of interest on savings. On the other hand, for Sonargaon TCCA the strengths lay with efficient leadership by the MC, participation of the primary society in training and higher growth rate of members' savings. The study suggested that the cost of training of the TCCA should be reimbursed by BRDB/Government. A revolving fund be placed to the TCCAs for continuation of training activities. Technical assistance could be provided by BRDB to conduct investment analysis. The moribund primary societies who do not keep regular contact with the central association should be processed for liquidation. The services of BRDB officials may be placed under the disposal of the TCCA. BRDB officials may be withdrawn when their own personnel are adequately trained. As a means of necessary control, funds should be operated under the joint signature of manager and chairman of the TCCA along with counter signature of the accountant in the cheque. For supervision and monitoring, reporting to the BRDB should continue and BRDB authority should make regular visits to the TCCAs. Evaluation of the autonomous TCCAs could be done by BRDB or by a third party. Findings could be used carefully. Old by-laws could be amended to enable smooth operation of the TCCAs.

13. Biography

13.1 Kashem, Mohammed Mir eds (2012). *In Memory of Akhter Hameed Khan*, Cumilla: BARD

Dr. Akhter Hameed Khan is well known in Asia and a large part of the wider world for his distinguished leadership of the Rural Development Academy at Cumilla. His attainments as a scholar, administrator, organizer, and experimenter-demonstrator of successful rural development models, his contributions to the improvement of the conditions of the characteristically low income and densely populated agrarian society of Bangladesh in general, and Cumilla in particular, have earned international recognition.

History of rural development in this part of the world is incomplete without citing the contributions of late Dr. Akhter Hameed Khan. The life of Dr. Khan dedicated to the welfare of the poor and distressed people touched the hearts of countless people who came in close contact with him. They included his associates, followers, academicians, development workers, teachers, students etc.. Expressions of feelings by different persons in different ways could not be bound within the frame of formal presentations in many cases. But BARD felt that all these are rare resources that needed to be compiled for documentation.

The present book is really worthy to be read for many reasons. One can know the different aspects of Dr. Akhter Hameed Khan's life specially from diversified writings, interviews, working style, observations as depicted, on one hand, by many eminent personalities like Aziz-ul Huq, Shoaib Sultan Khan, M. Asafuddowlah, Hasnat Abdul Hye, Dr. Salehuddin Ahmed, Professor Serajul Islam, Md. Abdul Quddus, and on the other hand, by farmers, cooperators, teachers, students who came in touch with him at least once in their lives.

The book is an excellent depiction of Akhter Hameed Khan's life, works, way of thinking, his contributions to rural uplift, his magnanimous human qualities and his interpretation of many complex issues of life and development, by persons from different sections of society. The information contained in the book would benefit the students, historians, researchers, academicians and readers in general to know about Dr. Khan and his initiatives during his lifetime, and in the sixties particularly.

Further, the selected quotations, some valuable pictures and letters written by Akhter Hameed Khan himself added more value to the book for the readers.

15. Training

15.1 Sarwar, H., Mamun, A. A., Rahim, J., Ali, M. E., & Rahman, M. A. (2017). *Post Training Utilization Study on Poverty Reduction Plan through Small Scale Water Resources Development Sector Project of LGED, Cumilla, BARD.*

To conduct post training utilization (PTU) study is a mandated function of BARD. In its wake, this study was undertaken to conduct a PTU study of the training courses on poverty reduction through Water Management Cooperative Societies (WMCAs) under small scale Water Resources Development Sector Project of Local Government Engineering Department (LGFD). The main purpose of this PTU was to: i) find out the educational and demographics characteristics of the participants of the selected program; ii) assess the knowledge of the participants gained from the training courses and its utilization; iii) assess the changes occurred through training among participants in performing project activities; iv) accumulate the opinions of the participants about the training courses; v) assess the areas of improvement in project activities. The study was conducted following a survey method, which covered six project areas. The survey covered two categories respondents where the total sample was 172 out of them, 112 respondents were society members, 40 respondents included project officials and other nation building officials. Quantitative data were collected through questionnaires and qualitative data were collected through Focus Group Discussion (FGD). The study revealed that more than 91% of the society members were found literate. The maximum level of education was within the range of grade VI -X (36%) followed by SSC (24%) HSC (15%) and grade I-V (8%). Among official, 53% had obtained graduate and post graduate degree and 37% had obtained S.S.C to H.S.C. The education level of UP Members and Chairmen ranged from grade VI-X class, which were only 7% of the total respondents. Participant's attended the training course in order to implement their training knowledge in the relevant fields. It was found that 71% respondents opined that their knowledge obtained from the training course was highly satisfactory which was followed by 27% as moderate and only 2% as little. It indicated that the training courses were effective. More than half (56%) respondents opined that they were capable to measure poverty on the basis of ownership of land while 45% respondents measured poverty on the basis of yearly income and 38% respondents measured poverty of the basis of household income and expenditure. It is to be noted that 80%

of the society members opined that they were able to fill up the family data card. It was found that 43% respondents opined that they prepared their plan on the basis of their socio-economic conditions whereas 23% informed that they prepared plan using family data card. About 40% respondents opined that through increasing agricultural production, poverty could be reduced to a considerable degree. Moreover, lack of sufficient capital was the major obstacle in accelerating their agricultural production and poverty. The respondents opined that the duration of the each session, training course and allowance could be increased. The participants opined that agricultural extension, fishery, poultry and livestock, forestry, cooperatives and LGED should assist them to prepare appropriate plan and implement the plan activities according to the available resources with the participation of the beneficiaries. Findings revealed that there was no construction of dam in some project areas and LGED should take care to construct the dam. The participants suggested to organize training course in the project areas, improve the quality of food and hostel facilities at BARD, and to organize more field visits at cooperative societies, finally they requested LGED to organize refresher training course at BARD.

16. Others

16.1 Donough, Peter MC. (1963). *An interim Report for the Communication Section, Cumilla, BARD.*

The Communication section has been in operation since the beginning of the Academy in 1959. Initially, the section concentrated on research into the existing patterns of communication within East Pakistan Village society. In one of the study of S.A. Rahim showed how new ideas were brought into the village through the more substantial farmers and how the actual process of adoption followed a familiar time scale. The immediate value of Rahims study was that it confirmed the need for the credit facilities and training classes which the Academy was setting up under its cooperative project. But the question as to which audio visual devices might be used effectively with the villagers was left open. So, the section began testing various audio-visual devices. A darkroom was set up slides and tap-recorded programmes were produced, picture stories were published. Specific Projects were taken in conjunction with different Government Departments. The section has therefore been involved in the stages of research, interpretation and transmission which constitutes the overall communication process what follows is an analysis of some experiments and projects undertaken from January-1962 through June, 1963. It is a tentative descriptive analysis based mainly on personal experience.