"Knowledge in Action for Poverty Solutions"

4th National Knowledge Convention Poverty and Development Realities of Grassroots

12-13 December 2012 BRAC Centre Inn, Mohakhali, Dhaka











act:onaid

4th National Knowledge Convention Poverty and Development *Realities of Grassroots*

12-13 December 2012 BRAC Centre Inn, Mohakhali, Dhaka

Organised by: ActionAid Bangladesh, Plan Bangladesh, and Practical Action Bangladesh This is jointly published by ActionAid Bangladesh, Plan Bangladesh and Practical Action Bangladesh as a part of organising *4th National Knowledge Convention on Poverty and Development: Realities of Grassroots* during 12-13 December 2012 in Dhaka.

Contributors: Abu Said Md. Juel Miah Amina Mahbub Avaya Dutta Faruk-Ul-Islam Nafisa Rahman Khan Reefat Bin Sattar Rubayat Ahsan Saikat Shubhra Aich S.M. Alauddin Zinat Hasiba

Design & Print: Arka

ActionAid Bangladesh

House-8, Road-136, Gulshan-1, Dhaka-1212, Bangladesh Tel: (88-02) 8837796, 9894331, 9894216, 8835632, 8835398 Web: www.actionaid.org/bangladesh

Plan Bangladesh

House-4, Road-35, Gulshan – 2, Dhaka-1212, Bangladesh Tel:+ 880-2-9861599, 9860167 Web: www.plan-international.org

Practical Action, Bangladesh

House 12/B, Road 4, Dhanmondi, Dhaka-1205, Bangladesh Tel: (88-02) 8650439, 9675236, 9675243 Web: http://www.practicalaction.org

Section-1 Research Papers

Disaster and Climate Change

1. Community Based Risk Assessment in the Coastal Region of Bangladesh: A Case Study from Rampal, Bagerhat

Imtiaz Ahmad, Md. Hashan Ali, Kaniz Fatema and Sk. Adnan Islam

Inclusivity brings the issues of the most vulnerable into limelight to understand the nature, pattern and severity of the population who requires Target Oriented Approach to deal with. This paper presents community based framework to assess the risk and the adaptation practice as response to natural disasters and climate change. Rampal, Bagerhat was selected as the study area. A qualitative research approach was used in the study. Data were analyzed through qualitative content analysis. A historical changechronology was constructed using focus group discussions and questionnaire survey along with the tools like problem census, seasonal calendar, livelihoods mapping, problem matrix and problem scoring to identify and prioritize the risks faced by the community. The community's experience suggests risks are shifting along with prolongation of hydrometeorological events and its irregularity is threatening adaptation capacities as it is affecting the sensitivity and production of the ecosystem of the region. Government and researchers need to understand the nature of community adaptation and perception of climate change if we want to stride forward to negotiate climate change in the country.

2. Water logging and sufferings of Antaja communities in Satkhira

Lipika Biswas, Bhumija Foundation, Satkhira

During 1960s, construction of dam project was implemented to proterct the coastal areas from the effects of salinity. Since then the water carried sediment to the banks of rivers, which gradually filled in the river and caused water logging. Such a village is Thanpur under Tala upazila of Shatkhira district. This research aims to find out the ways out and advocacy initiatives to lessen the loss and damage of the goods and lives of dalit people living in water logging areas. The study selected 100 families randomly and collected data through questionnaire survey, FGD and case study. Findings of study show that 79% people can identify water logging as a result of humanmade intervention. But 21% people consider it as a natural flood. But most of the people claim that water logging is natural. Water logging damages not only crops but livestock, fish, vegetation, homes and so on. As the homes are affected, the families take shelter on roadsides school/college premises. But several difficulties arise at the shelters among which problems of drinking water, sanitation, cooking, living, movement and bathing problems are the main. Most of the family members take two meals a day. Only a few family members take one meal a day. School remains closed for a long period of time. The respondents also said that during the period of water logging day labouring, relief, snail gathering and fishing become the ways of livelihoods. But most of the people do not find any work. They suffer from various diseases but medical services are not provided in the shelters. The school going students do not get the environment to continue their education. At the shelters the girls face sexual harassments. No security system works for the girls and women.

3. The Drivers of Chronic Poverty in the South-West Coastal Belt of Bangladesh

Caitlin Macdonald, SOLIDARITÉS INTERNATIONAL

The south-west coastal region of Bangladesh was once a prosperous agricultural hub. A unique ecological tidal wetland of both saline and fresh water, farmers were able to produce strong and diversified crop yields round the year. Since the 1960s, the introduction of the embankment system, the proliferation of shrimp farming and the increasing pressure of natural disasters and climate change have had devastating effects on the region. This report outlines the findings of an indepth livelihoods vulnerability and climate change assessment in four Upazilas, each affected by and still recovering from cyclones Sidr (2007) and/or Aila (2009) to varying degrees in the south-west. What revealed is a fragile environmental landscape with highly vulnerable livelihood options under increasing pressure. Shrimp farming has in many parts decimated agricultural farming forcing paddy farmers out of business or to convert to shrimp. As a result, daily labour work opportunities have been significantly reduced and large shrimp farming enterprises have consolidated regional wealth into the hands of a few. Resulting salinity levels have affected homestead gardening, livestock rearing and jeopardized safe drinking water sources. Adaptation options for households in this region are extremely limited. The need for diversified, saline-resistant crop varieties and innovative rice farming techniques is clear. Supporting the reintroduction of paddy farming to the region has the potential to have significant positive flow-on effects. The reduction of salinity levels to the region is critical to strengthening livelihoods and resilience of communities to what will undoubtedly be increasing pressure from climate change and salinity over the coming years. This paper proposes several options to facilitate this transition and support the move back to a pattern of diversified, resilient livelihoods in the region once again.

4. Impacts of Climate Change on Water and Sanitation System in Bangladesh

S. M. Helal Uddin, Senior Lecturer, Department of Civil Engineering, World University of Bangladesh

Climate change will have significant impacts on water resources, as there is very close connection between the climate and hydrological cycle. Rising in temperatures will lead to increase evaporation and precipitations, frequent and extreme floods and droughts in different regions at different times. Variable precipitations pattern and snow melt will influence water availability, water supply, sanitation, water contamination and drainage congestion. Climate changes are likely to lengthen the transmission season of vector-borne diseases and alter their geographic range; floods, droughts, cyclonic storms will disrupt water supply, sanitation. Both the water quality and quantity may be affected due to the impacts of climate change such as sluggish flow of groundwater due to reduce hydraulic gradient, intrusion of saline water in the coastal groundwater, lowering of water table due to lower recharge. Sluggish groundwater flow due to climate change and sea level rise is likely to increase arsenic contamination. In Bangladesh, 30 million of people drink arsenic contaminated water beyond the acceptable level (0.05mg/L) and more than 50 million beyond the WHO standard (0.01 mg/L). More than 38,000 Arsenocosis patients have been identified by national screening. 85% and 60% people have access to safe drinking water in rural and urban areas, respectively. On the other hand, floods in the monsoon will increase dilution factor and aeration of water causing a decrease chemical and organic pollution but submergence of sanitation and sewerage facilities during high floods and cyclones may cause increased microbial contamination of water. The two diseases- diarrhoea and dysentery are the main cause of death during floods due to drinking of polluted water. Microbial activities become double for each 10°C increase of temperature. The increase of 1.4 to 5.8 °C temperature will result in 14% to 58% increase in microbial activities and dissolved oxygen content of water reduction at higher temperature. This study suggested to consider more technological options for both urban and rural areas considering both eco-sanitation and raising of mass awareness about climate change for improved water and sanitation systems.

5. Role of Mass Media in Disaster Management in Bangladesh: A Critical Analysis

Sabina Yeasmin, Assistant Professor, Bangladesh Open University, Gazipur and Khan Ferdousour Rahman, Independent Researcher

The geophysical position, high density of population and rapid climate change has made Bangladesh vulnerable to different types of disasters. By disseminating knowledge and information about the coping strategy during and in aftermath of disasters, mass media can also make people pro-active. It should also play the role in developing public opinion with regard to disaster management. The mass media, especially, the print media in Bangladesh need to play an effective role as the main actor in building disaster communication. So, the integration of mass media with disaster management is a must, but effective interaction among these two elements is yet to be observed so far. This research put emphasis to critically analyze the existing role of mass media for raising awareness among the large number of people to protect and save themselves from the risks of all types of hazards and disasters. This is basically a qualitative study with a touch of quantitative techniques, where the data will be collected mainly from the secondary sources. The study aims to recommend a 'model role for the journalists' of print media with regards to disaster management.

Child Protection

1. Street Children and their Situation: Opinion from Children, Parents and Community

Nafisa Rahman Khan, Program Monitoring Coordinator, Plan Bangladesh

Street children are perhaps the most vulnerable section of the society, who suffer from human deprivations of all forms. According to a survey, the numbers of street children in Bangladesh is around 380,000 of whom 55% live in Dhaka city alone. The study aims to explore the situation of street children, their relationships with their families and their perceptions on street children interventions. In order to carry out the study, qualitative data collection methods have been executed with street children, their parents, employers and PNGO staff. The study revealed that poverty is not the only reason for children to be in the street. Family violence, remarriage of parents and trafficking are major reasons as well. The children who ended up on the streets to support their family income maintain good relationship with their families but those who came on the streets as a result of family violence and exploitation rarely maintain contact with family. On the streets, children are faced with threats from passengers, police, mastans, and also from their

employers and customers who harass them in various ways. On the streets, the peer children are the best friends of street children. The children on the street have no access to shelter, education, health, safe water, sanitation and hygiene. The children who are enrolled in different drop-in centers have some access to non-formal education, basic health services, water and sanitation. The street children as well as their parents do not know much about the Government interventions but they appreciate the interventions of NGOs to support street children. Protecting children in the streets should be the prime responsibility of the families. The Government needs to also support the families and should strengthen the capacity of the local Government to build mass awareness in the rural areas about the facts of street life. Poverty, social exclusion, lack of access to guality education, violence or family exploitation - whatever the reason is for a child to be on the street - programs and policies to generate improved public and official attitude towards such children would unlock greater opportunities for the street children to acquire knowledge about their own rights.

2. Intra-familial Child Physical Abuse in Northern Bangladesh: An Empirical Study

Md. Rokon Uddin, Grantee of Plan Research Grants, Plan Bangladesh

Cultural practice and conventional wisdom in Bangladesh approve the infliction of physical pain as a mean of disciplining and upbringing children in families. However, to ensure protection, dignity, rights, and to prevent negative consequences on children, child physical abuse has been drawing special concerns of global, regional and national authorities for its control and prevention. The present research intends to conduct an empirical study in order to identify various aspects of child physical abuse (except sexual abuse) at the family level and to resolve some identified research gaps. The study covers three villages from three Union Parishads, namely Khutamara, Golmunda, and Dharmapal, at Jaldhaka upazila in Nilphamari district comprising 150 households who have children ranging from 11 to 16 years of age where children were the principal respondents. A multi-stage random sampling was performed from the lists of households made for local sanitation projects. Data collection took place during August-September 2011. The prevalence of intra-familial child physical abuse in the area under study was very high. About 58 percent of respondents experienced physical torture and 72 percent were victims of physical deprivation and/or neglect. Associational factors for reasoning behind child physical abuse varies in terms of gender, religion, occupation of parents, income of family, number of siblings, respondent's position among siblings and parental characteristics. There are physical, psychological as well as behavioral consequences of the physical abuse experienced by the victimized children. Efforts to improve the socio-economic condition of the families, promoting parenting skills, counselling victimized children and encouraging parents to restrict themselves by not more than 2 children are some of the recommendations to prevent such physical abuse among children.

3. Climate Cahneg Impacts on Children in Bangladesh

Nazria Islam, Bangladesh Centre for Advanced Studies (BCAS)

Climate change is the greatest threat to humankind in the 21st century. With a population of over 148 million in a small country of 1, 47,500 sq km and density of more than 1,000 persons per sq km, Bangladesh is faced with an increasing vulnerability to aggravated climate change as more and more of its poor and marginalized people is being exposed to climate risks and natural hazards. In a poverty inflicted Bangladesh, climate change is only worsening the situation. It is negatively affecting children to a greater extent than any other age segment of the population. However, there is dearth of research to particularly understand the negative effects of the changing climate on the marginalized and vulnerable children. The study specifically probed into the impacts of climate change on children's rights in the areas of health care, safe drinking water & sanitation, education, protection, food and nutrition security, in identified climate-vulnerable ecosystems of Bangladesh, and looked into existing various coping mechanisms and barriers in adapting with the changing climate in those ecosystems. The research gave a voice to children and they provided us with valuable insights. Despite their different geographical circumstances, the findings of the study revealed common concerns and experiences. The formulation of ecosystemwise pilot-scale projects with a common programmatic framework was recommended as a means of promoting children's adaptation to climate change. The concerned national policy, strategy and action plan cover important aspects that are necessary to implement child-based climate risk reduction programmes but there is need to give more weight to issues specific to children and related to climate change. Again, the implementation of these policies remains much below the desired level. We need to ensure that these government initiatives build on existing efforts by child rights organizations in partnership with research organizations.

4. Asia Child Marriage Initiative (ACMI) Research: Bangladesh

Mst. Sanzida Parveen, Research and Evaluation Coordinator, Plan Bangladesh

Asia Child Marriage Initiative (ACMI) of Plan Asia has been identified as one of the flagship programmes that aim at preventing child marriage and mitigating its negative consequences on girls, families and communities in countries of Asia. ACMI Research aimed to assess the country responses to address child marriage. International Centre for Research on Women (ICRW) partnered with Plan Asia for ACMI research and facilitated a process of research and reflection to develop more effective program and advocacy strategies with the expectation that the robust ACMI program will effectively prevent, mitigate and ultimately end the practice of child marriage in Asia region. The findings of the research in Bangladesh show that the childcentred approaches, practiced in Plan's child marriage interventions, have contributed to increased awareness and created certain level of knowledge of the issue within families and communities. For instance, almost all the respondent knows the negative consequences of child marriage and what is the legal age at marriage both for girls and boys. As a result, there has been remarkable reduction in incidence of child marriage in the Plan intervention areas. Through Child Organization (CO), Plan has created a model where children and youth are empowered to contribute to delaying or preventing child marriage in their communities. Beyond family and community levels, Plan's programming and advocacy work has created good examples of preventing individual cases of child marriage and has set good practices that are helping to foster local ownership. For instance, there are unions which are declared as child marriage free union. The findings also suggest that although successes have been made, there are certain challenges to be considered to bring an end in the practice of child marriage; for instance, the intricate nature of societal perceptions, poverty etc. These issues need to be addressed if we want to stop child marriage.

Agriculture

1.Problems in developing agro machinery sector in Bangladesh and its solution

Md. Masum Talukder, Chief Executive, INSTITUTE OF SME

This paper highlights the problems in developing agromachinery sector of Bangladesh and strategies to overcome the same. As the country's population continues to increase and amount of cultivable land to decrease, the only way to ensure food security is to adopt agriculture mechanization

on wider scale. Virtually, mechanization in Bangladesh agriculture started in 1960s with the introduction of tractor, power tiller, and deep tube well, shallow tube well and low lift pumps. This paper indicates brief overview of current status of agriculture mechanization in Bangladesh and agro machinery sector in Bangladesh. The agro machinery sector in Bangladesh consists mostly of a large number of small enterprises, producing agro machinery, spare parts and offering repair services. Currently, available agro machinery and tools are such as seed drill, pedal thresher, auto thresher, shallow tube well, grain dryer, spare parts of Power tiller and tractor, withering machine, hand pump, centrifugal pump, insecticides sprayer, crankshaft, gear & pinion, piston & piston ring, liner, spare parts of diesel Irrigation engine. This machinery sector primarily uses conventional technology (welding, lathe, milling, shaper and boring machine) and locally available cast iron and ship scarp in its production process. Local agro machinery sector face some problems. Poor buying capacity of farmers, inadequate skilled manpower, backward technology, limited access to bank loan, weak branding, absence of clustering and un-favourable tariff treatment on imported machines and raw materials are the key problems to produce quality and large quantity of agro machinery. This study suggests some necessary actions (forming farmers group, technology up-gradation, funding availability, development of cluster, more skilled manpower) for solving the present problems in agro machinery sector. Local efficient agro machinery sector will create the hope of extensive mechanization in the years to come, leading to sustainable agriculture development and food security.

2. Importance of privatization of Artificial Insemination (AI) for improvement of cattle in Bangladesh

S. M. Alauddin and Dr. Faruk-Ul-Islam, Practical Action Bangladesh

The importance of privatization of Artificial Insemination (AI) is revealed highly indispensable in improving the livestock resources of the country in the study conducted by Practical Action Bangladesh in 2011. But, the country's restrictions and statutory control on expansion of AI is the major barrier for expansion of AI services. Low productive local cattle, low production of milk and meat and low investment are the major challenges for improvement of the livestock sector. Low productive local cattle variety. The production of milk in the country's low productive local cattle variety. The production of milk in the country is only about 20% against its total demand, while, the rest is imported. The coverage of AI service is only 43% in the country (33% by Government and 10% by private sector/NGOs) while, the 57% remains un-served. Privatisation of AI services and its extension may effectively and successfully ensure replacement of the native low productive cattle stock by different hi-yielding cross-breed variety stock, if the restrictions and statutory control on expansion of AI services is removed by amending breeding policy and allowing more players for a competitive environment to ensure AI coverage at a maximum level following need based door-step services against the govt. subsidy and centre based service approach. Privatisation of AI along with the provision of service providers can complement the govt. services in the grassroots level and contribute largely to replace the low productive cattle, enhance growth and increase production of milk and meat in the sector to meet the country's huge unmet demand and employment creation, specially, for the rural smallholder households. Collaboration between govt. and NGOs/private sector for extension of AI services, undertaking advanced researches, technological sophistication, improving genetic potentiality and quality of cows by selective cross breeding program is essential. Monitoring of services of the sector, maintaining its quality and accountability under a regulatory body is important for expected growth and improvement of the sector.

Education

1. A Study on the Effectiveness of SBA at Secondary Level in Bangladesh

Dr. Sk. Md. Rezaul Karim, Associate Professor, Education, Govt. Teachers Training College, Dhaka

School Based Assessment (SBA) is a critical tool to conduct formative assessment in educational institutions. Due to lack of gualified professionals in the school level and shortage of different required facilities conducting SBA has been found challenging. To make SBA as an effective tool for assessment in secondary level, the present performance level must be known. This study has been focused on identification of present situation of SBA system in the secondary level to measure its effectiveness. Traditional system of assessment has been found not satisfactory to uncover the hidden truth in understanding the progress of learners in the educational institutions in the country. Hence, in place of traditional summative type assessment new type of assessment is to be installed; like SBA system, which belongs to formative type assessment. But every system or procedure must be effective otherwise expected results could not be achieved. For better outcome and to review the existing methods & tools, rate and quality of progress, SBA has been started in the country in the year of 2007 in the secondary level. The aim of this study is to measure the effectiveness of the SBA system from which limitations, drawbacks, loop holes and pitfalls of this would be understood. These findings and understating would enhance the quality of the secondary school assessment system in the country, both qualitatively and quantitatively. The proposed research work has been designed to explore the following areas- i) To identify the various assessment tools at secondary level in Bangladesh; ii) To evaluate the effectiveness of SBA; iii) To measure the gap between the actual results generated and results obtained by the SBA; iv) To identify the form of support extended by the top management.

2. Measuring Effectiveness of School Improvement Plan (SIP) of Plan Bangladesh

Goutam Roy, Research and Evaluation Coordinator, Plan Bangladesh

The intention of the School Improvement Plan (SIP) is to improve learners' achievement by creating a positive environment for learning, by establishing an effective school management system and by increasing the involvement of parents and community. The aim of this study was to measure the effectiveness of SIP of Plan Bangladesh in order to ensure the quality of primary education. The study employed the mixed method approach to explore the exact scenario of the interventions through data collection from both primary and secondary sources. The primary data was collected from teachers, students, local bodies and community members using different techniques i.e. testing procedures, in-depth interviews, FGD and observation while secondary data was collected from project documents. A total of 15 intervention and 5 control schools were selected randomly for students' tests and achievement scores. It was revealed that intervention school students perform evidently better in tests. Students who came from preschools also scored higher in the tests compared to the performance of students without any pre-school experience and gender disparity was minimized. Teachers received different types of training offered by SIP focusing on knowledge and skill development, quality teaching and student learning. It was observed that most of the SIP schools had adequate teaching and learning aids, teachers created learner-friendly and joyful environment in the classrooms, and assessed students to facilitate their learning. The teachers were also found to be conscious about inclusive practice in classroom teaching-learning activities. The SIP program established a learning network and child ministry in the school which created opportunities among students to share their views and knowledge and also developed leadership among the students. The study revealed that local community, parents, school management committee, and Union Parishad leaders were active in school activities to ensure quality education including the monitoring of school activities and providing feedback. The SIP as a

program proved to be an effective model that can fill the need for such kinds of Government and Non-government projects in Bangladesh.

3. Promoting Rights in School: Situation and Challenges of Quality Primary Education in Bangladesh

Fharia Tilat Loba, Mohammad Nurul Alam Raju and Khandaker Lutful Khaled, ActionAid Bangladesh

Despite many achievements over the recent years, major improvements are still needed in order to achieve quality education for all in Bangladesh. The challenges to promoting rights in schools include poor quality of education, lack of educational facilities, inadequate learning materials, high dropout rates, inequity in accessing education, centralized education administration, lack of trained teachers, discriminatory and violent environment, and lack of education for children with special needs. Traditional and dominant ways of teaching in most schools tend to focus on role of learning with little or no emphasis on developing analytical, practical or vocational skills. Right to free and compulsory education is also far from becoming a reality. Many schools are being shifted further away from the locality due to continuous river erosion, which has resulted in commuting difficulties and this is regarded as one of the factors leading to dropouts from school particularly in hilly areas. Given the poor qualification and lack of motivation among teachers, the schools are far from being inclusive. Gender discrimination and gender-based violence, particularly violence against girls, are also issues persistent in the area leading to higher rates of early marriage and dropout from the schools. In this backdrop, this research reveals an alarming scenario of rights in schools from a humanitarian perspective. It shows that education expenditure and types of expenditure have decreased at family and individual level. Dropout rate is still alarmingly high with 60.10 percent at the government primary and 60 percent at the registered nongovernment primary schools. It has been found that on the ground, 15 percent of teachers start teaching without any induction and 65 percent don't have any idea about inclusive education. Only 35 percent of female teachers are found in the Registered Non-government Primary Schools.

Empowerment of the Marginalised

1. Risk Analysis of the Women in Cities: Role of the Duty Bearers

Sandiza Akter and Helal Uddin Dhali, Women and Gender Studies Department, Dhaka University and Tahmina Huq, ActionAid Bangladesh

Violence against women is one of the major key concerns in the area of gender justice and rights. As part of patriarchal traditional societies, many women in Bangladesh experience violence at home and outside, at workplace and street. This violence takes many different forms like sexual harassment, assault, acid throwing, beating and other forms of domestic violence. The impact of violence against women is huge. It lessens women's productivity and in many cases, reproductively, it can create physical disability of women, stigmatize them and so many. Ultimately, the sufferers of violence against women are not only women themselves, but also families they belong to, societies and nation. Most importantly violence against women is a human rights issue which needs to be taken seriously. In the context of Bangladesh, violence against women takes different pictures in urban and rural areas, in cities and villages. It is no less frequently happened incidence in cities of Bangladesh than that of villages. As mobility of women is greater in cities, cities need to be safe and women friendly. This research identifies the risk factors that women experience and perceive regarding violence against them as well as the strategies survivor women suggest to minimise the incidence of violence against women. The research covers seven district towns, where ActionAid Bangladesh's Stop Violence Against Women networks are operating.

2. Empowerment of women and local development: Impact of gender responsive budget in Union Parishad

Feroz Hossain, WAVE Foundation, Chuadanga

For the overall development activities of the state the role of local government is very important. The objective of this research is to assess how women empowerment and local development take place as a result of women-friendly participatory budget at union parishad (UP). According to a government Act, union parishad formulates its budget every year through consultation with people at ward level. But the needs and priorities of people are not reflected in that budget due to lack of people's awareness about the process. Even the UP members, especially, the women representatives do not know about the process of participatory budget. Among the local government institutions, union parishad is the oldest closest institution to people. Therefore, people show their utmost expectations and aspirations from this institution. Effective development plans and budget at UPs if made through active participation of people and respecting the opinion and priority of the women, women empowerment and local development is feasible. This model could be followed in all 4500 union parishads. This research reveals that women-friendly budget and women's participation in planning and budgeting process can effectively promote women empowerment and local development which benefits all including the people living in poverty and injustice.

3. Role of private extension agents in grass roots knowledge management and their potential in contributing to decision making process: A case study from Bangladesh

Dr. Faruk-UI-Islam, Saikat Shubhro Aich, A.M Shamsuddula, Practical Action Bangladesh

A dynamic flow of knowledge and information among development practitioners, end beneficiaries and decision makers is vital in extension service and decision making processes. The authors have worked through the INGO Practical Action to deliver a technical enquiries service in Bangladesh over the last three decades, and have more recently established a series of knowledge centers with associated networks of private Rural Technology Extensionists (RTEs). This study aims to understand the role of private extension agents in grass-root knowledge information and decision making processes, a group of private RTEs, their associated beneficiaries and stakeholders were studied over four months between March to June 2011. The study focused in 4 villages around two Local Knowledge Centers in two districts of Bangladesh – one in the northwest and one in the south. The study explored 1100 farmer enquiries on agricultural problems from another 8 districts of Bangladesh (excluding above mentioned first two districts) covering different agro-economic zones. Finally, the field findings were shared among a group of national level experts in a consultation and validation workshop. The workshop also explored perceptions of national level experts on grass root problems of farmers and their views, on institutionalizing RTEs through government and private systems. Capturing enquiries of farmers was found to be a strong tool in identifying the problems, knowledge gaps and demands of farmers. The technical enquiry process of the grass root farmers and end users was practiced in different ways than usual ICT based inquiry services using internet and cell phone. In the study villages, RTEs were found to play significant role in providing ,doorstep knowledge information service but they lacked the skills to become good advocates on farmers' issues and demands. A mobility mapping exercise further confirmed that they were engaged with advice, information, inputs (e.g. seed, fertilizer, vaccine) selling and some

institutional functions. Agriculture RTEs mainly provided advice on plant nursery management, pest control in fruit plants and rice fields, insect identification, use of appropriate pesticide, supply of medicine and some good quality seeds, and demonstrated some skills for their clients. The livestock RTEs provided advice on poultry and cattle disease treatment. supplied medicine and vaccine, supported improved cattle rearing practices (including breed selection, improved management, minor operations such as castration, treatment for injury, etc.). Fisheries RTEs mainly advised farmers on pond/farm preparation, budgeting, fish disease management, soil and water quality management and protecting the loss of fish seed. In spite of their positive role in knowledge and extension service, the study identified an identity crisis for the RTEs, a lack of institutional accountability to maintain quality of their services, a lack of participation in local planning, and a missing institutional link at district and national level. From the perception analysis with different level stakeholders, the study found some gaps in understanding specific priorities and problems of farmers among end beneficiaries and decision makers. However, there was some good common understanding on some problems such as agricultural input crisis among different level stakeholders. The RTEs and other stakeholders believed a farmer enquiry system is a very important instrument in knowledge management and extension service. It concluded that a dynamic enquiry system led by local Knowledge Centers and their attached RTEs can play a significant role in reflecting the needs of the poor. It can also support decision making at a national and local level.

Livelihood

1. Integration of technical, social, economic and technological issues can promote food security and livelihoods of resource poor farmers of rural Bangladesh

Dr. Faruk-Ul-Islam and S. M. Alauddin, Practical Action Bangladesh

'Food Security for Sustainable Household Livelihoods (FoSHoL)' project was implemented by Practical Action Bangladesh during 2005-2009, supported by the European Commission (EC). It aimed at bringing sustainable improvements in the food and livelihood status of Resource Farm Poor (RFP) households of riverine and flood-affected areas of Jamalpur and Greater Faridpur districts by improving their farming system, increasing production by diversification and demonstrating livelihood options. The impact assessment was conducted after two years of implementation of the project keeping two objectives in focus - i.e. critical lessons of food and livelihoods improvement strategy practiced and capturing post project lessons on Rural Technology Extensionist (RTE) and sustainability of CBOs. The assessment followed both quantitative and qualitative methods to see how the technical, social, economic and institutional factors contributed in achieving the food and nutritional security of the RFP households. The integrated and partnership approaches with local PNGOs and introduction of RTE and CBOs were the important approaches of the project. These were effective and useful. Improved management practices and use of different technologies increased intensity and production of rice crop and vegetables, including significant achievement in livestock and fisheries sector. Access to credit and savings generation increased remarkably and enhanced the purchase of agricultural and household assets of RFP households. The project successfully promoted 12-18 need-based technologies with skilled RTEs that greatly contributed in generating employment, increasing production and incomes of the RFP households. 90% of households came out of poverty and achieved food security for nearly the whole year i.e. 11 months against 6 months of the baseline situation. CBOs performed well in delivering services during the project implementation period. However, after project implementation, except for limited savings and credit activity, it was not able to perform social and rights-based activities, or influence Local Government Institutions (LGIs) in the interest of community benefits. Some RTEs (livestock/poultry, aquaculture/fish nursery, agriculture, tree nursery and grafting) performed very well in attaining technical and input supports from LGIs that largely contributed to extending services to RFP households and their economic enhancement. The integrated and partnership approach of the project were helpful in implementing the project and achieving its goal through demonstration of technologies and providing services by RTEs. CBOs/partner NGOs have yet to play a role in accumulation of results of the project to carry those for sustenance in the long run.

2. Poverty Reduction through Microenterprises: Some Selected Areas of Bangladesh

Md. Tanjil Hossain, Assistant Professor of Economics, Jatiya Kabi Kazi Nazrul Islam University, Trishal, Mymensingh

The objective of this study is to examine the socio-economic situation of some selected urban area's of Bangladesh to find out ways of reducing poverty through micro-enterprises. The study area is Rajshahi City Corporation (RCC). The data will be collected from the primary and secondary sources with the help of well-structured questionnaire. The questionnaire consists of questions on socioeconomic, demographic and health indicators. According to World Bank, poor are those whose per day income is below \$ 2. Poverty is a regular phenomenon in rural and urban

areas. Urban poverty shows the mixture of self-employment and wage labour. Self-employment is common as vendors, petty traders, tea-stall owners, beggars, shoe-shine boys, garbage sifters, potters, rickshaw pullers, and roadside hawkers. Wage employment is often on a causal basis and not subject to minimum wage laws. Most of the people in this area largely depends on small and medium enterprises or simply called micro enterprise as their main occupation. A micro-enterprise is a type of small business, often registered, having five or fewer employees and requiring seed capital, not more than \$35,000. An Australian organization, defines a micro-business as one with five or less employees. This definition is often used in the United States. In Europe, a business with less than 10 employees is officially considered as micro-business. It is expected to measure the poverty line of the study area. This paper will find out the ways to increase income and try to bring the people out of poverty line.

Natural Resources

1. Development of sustainable livelihood improvement strategy considering integrated char resources management (ICRM) in Riverine Char

Mohammad Arifur Rahman,, PhD Fellow at the Institute of Water and Flood Management, Bangladesh University of Engineering and Technology (BUET)

Bangladesh is mainly composed of the floodplains and delta of three rivers, the Ganges (Padma), the Brahmaputra (Jamuna) and the Meghna. The main focus of this study is to develop livelihood improvement strategy considering integrated char resources management (ICRM) by assessing economic condition of char dwellers and their livelihood practices. The research has been conducted using interdisciplinary approach. Different socio-technical tools have been used to analyze the problem. Local people's participation in the research process has been ensured by using Participatory Rural Appraisal (PRA) tools. This study reveals that the char dwellers' livelihood is more vulnerable in the frequently eroded chars than the comparatively stable ones. The daily per capita income of both stable and eroded char is below the poverty level. Different types of consequences result in the poverty of char people, which include lack of ownership of land, natural disaster (flood, land erosion), poor communication, lack of educational facilities, and lack of employment opportunities. The research paper recommends some livelihood improvement strategies, both short and long term, considering integrated char resources management (ICRM) to eradicate poverty in char areas.

2.Environmental Education and energy efficiency (EEE): Road towards sustainability and its aspect in Bangladesh

M. S. Hossain, M. A. Alam, Krishnandu Barman

Renewable energy technologies may possibly progress in its own way depending on many factors such as market development, technical development and decisions made by government. This paper presents a new concept, which, shows the inter relationship between energy, environment and efficiency. To achieve the objective of success in Bangladesh, these three items should be implicated in such a manner that the socio economic development can be gained easily. This paper focuses on the energy crisis of Bangladesh along with a guideline to overcome the obstacles which may be encountered while using this method. Although the pathway or the guidelines to introduce new energy sources are available in Bangladesh, the reduction of awareness program has hindered the growth of Renewable energy. A policy for the promotion of renewable energy requires across-theboard initiatives encompassing a wide range of policies: energy, environment, employment, taxation, competition, research, technological development and demonstration, agriculture, regional and external relations policies. A central aim of a strategy for renewable energy will be to ensure that the need to promote these energy sources is recognized in new policy initiatives, as well as in full implementation of existing policies. In fact, a comprehensive action plan is required to ensure the necessary coordination and consistency in implementing these policies at community, national and local levels. These require different networks in regions and cities aiming at 100% energy supply from renewable energies; networks of universities and schools pioneering renewable energies; technology research and technological development networks of renewable energy; renewable energies twinning of cities, schools, farms etc; temporary networks for specific tasks and the virtual centre for the collection and dissemination of information on: regulation, calls for proposals, community and government programmes, technical state-of-art, training, financing, assistance.etc.

3. Land rights movements in Bangladesh: Challenges and opportunities

Dhritabrata Sen and SM Waliuzzaman, ActionAid Bangladesh

People living in this subcontinent have been struggling for their land rights since 1793. After the independence of Bangladesh, few changes have taken place in land laws and policies. Mode of struggle has changed in different regimes but achievements are very few. Most of the agro-based families

become land-poor or landless. Landlessness has increased at almost the same rate of growth as the population in Bangladesh in the recent times. Land-ownership patterns in Bangladesh show significant social imbalance. In rural areas, influential people grab the government owned khas land by creating fake documents. According to laws and policies, all agricultural khas lands should be distributed among landless families for cultivation. But they do not get the khas land due to the power practice of land grabbers in association with some government officials. For the right to land, grassroots people raised their voices at different places of the country. In order to look into the challenges and opportunities of the land rights movements, the study focuses on three types of land rights movements: (1) NGO-led (2) political party-led and (3) grassroots people-led. Participatory tools and techniques have been used in this study such as interview, focus group discussion, key informant interview, case study and literature review. The findings of the study will be helpful for programme designing and policy campaign on land rights issues.

Health, Hygiene and Nutrition

1.Nutritional status of mothers and neonatal children in rural areas: An anthropological investigation in Barkatpur village under Gazipur district

Nayona Ahmed, Plan Bangladesh

In the context of Bangladesh, malnutrition is a common phenomenon. The lactating mother and neonates are mainly suffering from malnutrition. The study aims to understand the situation of malnutrition of the lactating mother and neonates in a rural area of Bangladesh. The study was conducted among ten mothers and ten neonates in Bakterpur village of Kaliganj Upazila. Data collection took place in June to August 2011. Data were collected through free listing, in-depth interview and case studies. Various secondary sources were also utilised for this purpose. Data revealed that the mothers were aware about intake of nutritious food during pregnancy as it would keep them healthy and help their babies to grow properly. Nevertheless, due to socioeconomic condition and traditional beliefs, most of the mothers did not take nutritious food during their pregnancy. They perceived that if they took nutritious food the size of their babies would be big and they would have difficulties during delivery. In addition, some taboos were observed related to food intake. As a result, it was seen that traditional beliefs and practices influenced food intake practices of the mothers that affected the health of their babies. We should address these issues to improve the health of the mothers to get healthy neonates.

2. Effectiveness of 'Promotion of Exclusive Breast Feeding through Mother Support Group (EBFMSG)' Project of Plan Bangladesh

Mohammad Awlad Hossain, Research and Evaluation Specialist, Plan Bangladesh

Though Bangladesh has made progress with regards to certain health indicators over the last few decades, prevalence of child malnutrition still remains high. Initiation of breastfeeding within one hour of delivery and exclusive breast feeding has positive effects in improving health and nutritional status of children. In order to improve exclusive breast feeding, Plan Bangladesh implemented a project titled "Promotion of Exclusive Breast Feeding through Mother Support Group" (EBFMSG) in its program areas. The main objective of the evaluation is to understand the effectiveness of the community-based Mothers' Support Group intervention in Plan program areas. A cross-sectional survey was conducted with 440 lactating and pregnant women. In addition, FGDs, in-depth interviews and key informant interviews were conducted to collect the information. Data collection took place in May and June, 2012. The model of the mother support group has been identified as effective to some extent in terms of increasing knowledge and practice related to breastfeeding and complementary feeding. While knowledge is almost universal among the mothers, the level of practice is still far from the level of knowledge and higher among mothers in project areas. Initiation of breastfeeding within one hour of birth was recorded as 86% which is considerably higher than the national average (43%). Almost all the lactating mothers provided colostrum to their child after birth. Although the rate of exclusive breastfeeding has increased to 65%, it is still equivalent to national average. Significant improvement has been observed in complementary feeding. Qualitative findings also show that the model is more effective than regular BCC activities. Replication and extension of this model with some modifications can be done to further improve project outcome.

Section-2 Best Practices

Disaster and Climate Change

1. Climate Resilient Cluster Village

AM Nasir Uddin, ActionAid Bangladesh

Climate resilient cluster village is an innovation carried out by the People's Research Group (GonoGobeshona Dol) in Shahjadpur upazila under Sirajganj district. River eroded landless people living in poverty are the members of this group. This model is a proven integrated disaster risk reduction option, which increases adaptive capacity of shelter-less households in flood prone areas. As a result of implementing this model, ten river eroded landless households become owners of land with houses, safe drinking water sources, sanitary latrines, and homesteads with additional income generating options and skills. Ten women have been empowered through this process. It has been tested in Faridpur and Patuakhali, which is also replicable in other flood prone areas, where prevalence and impact of climate change is obvious.

2. Low cost 'Inter-linking Slabs' technology to mitigate river bank and coastal erosion

Md. Noor Alam, Geologist

Bangladesh, the low lying and riverine country frequently experiences annual flood, river bank erosion and damage of coastal embankments that affect livelihoods of millions of people every year. 'Global Climate Change' in recent years, causing increase of climatic events (floods, storms, sea level rise with greater intensity) and sufferings of the affected people. These are causing increase of landless people annually, and ultimately, they take refuge in the towns and cities like Dhaka for their survival. Interventions by the Govt., NGOs and donors/UN Agencies are extremely inadequate and not much effective. We have been watching that the embankments and so called hard-points (RCC Blocks, etc.) are being destroyed/ washed away so easily. This is the point where my research started and I started designing a RCC Slab that can be built in-situ, put into place easily (by human) and are linked with each other. When they are in place and they are not separated from each other, even, when the soil below the blocks are removed to some extent, they are still capable of providing some resistance to hold the ground below and protect river bank/coast from erosion. The technology and invention seems to be useful. But, unless it is tested and recognized, no one will be interested to using this technology. But to test the usefulness of this "Interlinking RCC Slab (I name it "Noor Slab")", I would like to use it in a small pilot project, for example in a One Kilometer/or half a Kilometer of any river bank area, where erosion is common, and use the Slabs for bank protection. Results will be revealed in one season only, if we experience annual flooding and river bank erosion. I strongly believe that this "Interlinking RCC Slab" will be very effective in solving our River bank erosion and coastal area protection programme. Since testing of "Interlinking RCC Slabs (Noor Slab)" requires lots of fund for testing, which the researcher, is not in a position to do by his own. It requires supports from the outside sources from Government, donors and NGOs. I would like to present this technology to the local and international NGO's and approaching them for support to test this technology under any of your Development programme.

3. Sustainable Sanitation Model Latrine for Disaster Prone Char and Hard to Reach Area

Masud Ali Choudhury

In Hatibandha upazila under Lalmonirhat district a significant number of households are living in charland. Flood and river erosion are the common phenomenon in these areas. Sanitation coverage is very poor there. Most of the households use low cost latrine and only 9.8% households have ring slabs with water sealed latrines. Given the context, Plan Bangladesh introduces glass-fiber latrine, which is reusable and easily transferable and non-degradable. This type of latrine is easy and convenient to use for children. As it is reusable and transferable, flood and river erosion cannot damage it.

Child Protection

1. A successful Campaign on stop child marriage by Plan Bangladesh

Nirendra Nath Sarkar, Program Monitoring Coordinator (POVC), Plan Bangladesh

Child marriage is a common issue of child right violation in our country. Bangladesh, as a signatory country of UNCRC, has laws to prevent and protect children from this rights violation. However, due to lack of awareness and initiative child marriages continue to occur in our community on a daily basis. Plan Bangladesh, as child-centered organization, implements programmes to protect child rights in 5 upazilas of Nilphamari, Lalmonirhat, Dinajpur and Gazipur districts. The campaign to stop child marriage is one of the key initiatives towards child protection. Plan Bangladesh started Stop Child Marriage campaign under POVC programme from FY 2011, which included awareness, sensitization for consensus building of duty bearers (parents, elite, UP representatives, religious leaders, marriage registers, GOB officials) through advocacy and networking, workshops, TFD show and lifeskill training for rights holders (children) to negotiate with parents and other stakeholders to protect from rights violation.

2. Protesting corporal punishment

Kaykobad Hossain, Udayankur Seba Sangstha, Nilphamari

Mahina Begum, a conscious mother living in a village under Ketkibari union, Domar, Nilphamari raised her voice in the entire locality against corporal punishement that her son experienced at school. She went to the school authority to seek remedy for her son's torture but they rather threatened her. As she was aware of the suspension of physical punishment issued by government, she organized other parents and claimed justice from the District Primary Education Officer, Deputy Commissioner, Upazila Chairman and Upazila Nirbahi Officer. Considering their claim the school authority inspected the issue on spot. The parents formed a committee and built consensus to prevent corporal punishment at school. Not only the parents but also the members of Lokokendra (people's organisations), youth groups, journalists, civil society and students supported this movement. Later on the accused Headmaster of the school, Assistant Teacher and Upazila Education Officer begged pardon in front of more than five hundred people in order to settle down the incident. Upazila Education Officer promised to take legal action against the offender if such incidence recurs in the locality. If poor people are in right direction, it is possible to ensure justice - this fact is easily understood from this incidence. People also assessed how to reconstitute social movement.

Agriculture

1. Small scale dairy production model as a livelihood security through participation of different entrepreneurs

N.R. Sarker, M.M. Alam and A. Samaddar

Keeping of dairy animals in Dinajpur district is an integral part of the farming system, and also a major source of household income. Majority of farmers are keeping less productive breeds with low milk production and productivity due to traditional animal feeding practices and lack of technical know-how. Bangladesh Livestock Research Institute in partnership with ILRI tested a small scale community based dairy production model with the integration of chaff cutter, dairy inputs seller and milk collector for increasing the milk production and livelihood security among the rural farmers in Parbotipur under Dinajpur district. In this model, 35-40 farmers were involved. There were four players worked together for their own benefit. The study revealed that a chaff cutter provided the services to small scale community dairy owners by chaffing their cattle feed i.e. straw, and earning Tk. 350.00-400.00 per day. Dairy inputs seller provided support to the dairy farmer through supplying vaccines, medicines and concentrated feeds in cash and/or credit systems. One milk collector worked in one community and he/she usually collected milk from the farmers and supplied to milk chilling centre of BARC. The community farmers provided benefit to milk collectors Tk. 1.00 /kg milk for his or her transportation and income. This type of model may be replicated in other areas of Bangladesh as a livelihood and food security for the rural farmers.

2. Innovation in testing: Small-scale silage-making technology for the ultra-poor of floodplains

Mahfuzur Rahman Khan, Sazzad Hossain Miah and Md. Ashraf Uddin, Practical Action Bangladesh

The acute shortage of feeds and fodder is one of the major reasons for low productivity in livestock. Despite owning a couple of cattle, the ultra-poor of Bangladesh can neither spare land for animal feed (forage) production nor can afford to buy concentrate feed for their animals. Daily harvesting of green forage (cut-and-carry system) is always challenging for the extreme poor with insufficient family labour. In the flood-prone areas of the country, the most severe feed shortage occurs in July-October, when most of the lowlying pasture land gets flooded. High-yielding fodder production, and its processing and preservation (silage-making) can minimize feed shortage in this lean period. Given the long rainy season and flood situation in Bangladesh, regular silage-making in underground pit (concrete silo) cannot be widely practiced in low-lying flood-prone areas. The cost of establishing a concrete silo is also very high for ultra-poor farmers. Little attention has, however, been paid to conserve forages as silage using low-cost methods. Under a vulnerability reduction project of Practical Action Bangladesh, a new, low-cost fodder preservation (silage-making) technology has been developed and tested in 2012 in the flood-prone areas of Sirajganj. This portable, bamboo-mat silo (volume 101 cubic feet) can preserve fodder (0.5 ton grass) to feed 1 or 2 cattle in the rainy months. This innovation has considered the vulnerability of the ultra-poor living in flood-prone areas, their housing condition, their livestock-farming capacity and their ability to invest. This paper shares the initial experience of this innovative model.

3. Beej Bari (Seed Home)

Rasel Mia, AVAS, Kalapara, Patuakhali

Earlier, the farmers of Patuakhali would collect seeds from their own agricultural land for cultivation and did their agricultural works with this. But now, they have to depend on the seeds of several companies as well as unripe seeds of small seed dealers. As a result, their cost in cultivation increases to a great extent. Morevoer, cultivable lands are gradually losing fertility due to excessive use of fertilizers and pesticides. They are also facing the problem of salinity intrusion, which affects their cultivation. Poor management of sluice gates in the rainy season is the main cause of it. For the insufficiency of saline tolerant seeds, the farmers can't make proper use of land. Given all the problems and community needs, shaping a seed home comes out through the discussion among the members of self-help groups and their federations, Krishok Maitree (farmers' alliances) and Gono Gobeshona Dols (people's research group). This activity includes selecting a place for seed home, lifting houses and collecting materials, organising training on seeds collection, processing and marketing, promoting seeds using poster and leaflet, collecting seeds and processing from good crops etc. With the help of this initiative, the farmers are getting benefitted. With the increased local seeds collection and preservation, the farmers can now avail seeds as per their needs in time. Women farmers can produce vegetables in their homesteads.

Education

1. Multimedia Classrooms and Smart Schools: Bangladesh Perspective

Khan Md. Mainul Hoque, Training Specialist, National Academy for Educational Management (NAEM)

Smart school with multimedia classroom can play a vital role for ensuring effective teaching learning. It is an approach of expansion of knowledge shifting towards a knowledge based society. Improving the quality of teaching learning environment to cope with the global world is major agenda of Bangladesh. Multimedia classroom and Smart school concept is an inevitable part for ensuring quality education and ensures congenial teaching learning environment. It helps the student to develop themselves as a global citizen. The school level is very important because at this level the foundation for future life is built. Bangladesh is known for its rural society. A good number of first generation learners from disadvantaged families are living in the rural area. Their dreams fully depend on effective teaching

learning. MULTIMEDIA CLASSROOM means a classroom with projector, laptop and internet connections or at least modem. Smart school is a learning institution that has been systematically reinvented in terms of teaching and learning practices and school management in order to prepare children for the information and communication technologies era. There are four important elements in Smart School that are Smart Learning, Smart Teaching, Smart Assessment and also Smart use of Technology. Using ICT in classroom can make students to be the best future knowledge worker in order to be prepared to accomplish the country's vision of becoming a middle income country in the world by 2021.

2. Pre-school education for the slow learners

Syed Abul Farah, SAP Bangladesh, Barguna

This model comes out through a test. As part of the test, ten pre-school aged slow children from ten communities were selected and admitted to ten pre-schools in Barguna sadar upazila. All of them became active to play, friendship and learning through this process. Five slow children were selected from the children with disability. After one year, they were able to change their learning capacity. The process kept record of learners' attendance and assessment information, information of teachers' attendance, classroom decoration and environment, class facilitation skill, using education materials and community participation. It was found that pre-school session facilitation technique is important factor for slow learners. Alongside, pre-school materials, learners' and teachers' interaction and group activities are significant factors for achieving result. It also proves that learners' small group actions bring behavioural change among children.

3. Mobile Schooling for Street Children: An Innovative Model

Dr. Md. Shakhawat Ullah Chowdhury, Programme Coordinator, Department of General Education, Southern University Bangladesh

Children living on the street are the most vulnerable, exploited and face the highest risks in Bangladesh. As a special group of children in grave situation, these children are helpless being deprived of the basic necessities of life, such as food, shelter, and clothing and psychological supports. In the absence of the fulfillment of these basic needs, mere survival of the child becomes impossible and they grow up as unwanted members of the society. Because of the negligence, they continue to suffer these children grow as child labor, beggars, shoplifters, and pick-pocketers, gangsters, low paid domestic servants, and so on. They are often being victim to every physical and moral danger and as they grow older, they often become a danger to others. After such precarious childhoods, most of them are condemned to spend their lives excluded from mainstream society. Mobile Schooling is an appropriate education methodology for street children. The primary object of the mobile school concept is to socialize the street children at different city points with a systematic program of basic literacy and life oriented nonformal education. By expanding the non-formal education program through mobile schooling development, it is expected that a large number of street children could be prodded into positive action. This humanitarian concept professes to inculcate among the non-privileged children lessons of good and civilized community life. It express a strong desire to do something meaningful about these non-privileged groups who do not obtain access to even non-formal educational facilities. Street children constitute nonprivileged groups falling far apart so far as non-formal primary education is concerned. The new method calls for pragmatic perspectives with timely operational strategies specific to the needs of the vulnerable. Its implementation with a revised out-reach approach is capable of producing results. Mobile school is expected to turn non-formal educational policies into effective situational practice.

4. Easy Pump Water Supply System: Pumping Safe Water is child's play

Md. Zillur Rahman, Water Sanitation and Hygiene Programme Advisor, Plan Bangladesh

The water and sanitation condition in the primary schools of Bangladesh is dreadfully poor. A baseline survey under School Sanitation and Household Hygiene Education (SSHHE) conducted by Plan Bangladesh in 2007 revealed that 50% of primary schools did not have the provision of functional and child-friendly safe water sources. The water supply technology installed in schools is called "No. 6 Hand Pump" or "Deep Set Pump." The physical structure and hand operating mechanism of these pumps are not appropriate for children of primary school age; the pump handle is too high to be handled by children and requires the application of substantial strength to operate. Often, the tube well is found out of order. The pumping mechanism of the Easy Pump provides a source of entertainment for children since the pump is designed as a see-saw. The oscillation of the pump piston ejects clean water pumped from an underground aquifer into an overhead tank which stands over the roof of the school. A simple faucet at the school latrine, a drinking water corner and wash basin are connected with the overhead tank, making it easy for children to draw water. Since 2009, about 14,850 students and faculty have been benefitting from the installation of 50 Easy Pumps at the primary schools. The pump is costeffective and economical, installation cost is comparatively low and little operation and maintenance cost is required (called no-cost pump). The installation of Easy Pumps is a step towards ensuring children's right to a quality education and good health. This has resulted in improved quality of running water throughout the school year. In addition, less time is spent fetching water and students get more time for study and recreation. Attendance at school has also improved since the Easy Pump is a fun way for children to play and pump water at the same time. A hand washing facility has been established at school making students aware of personal hygiene practices.

Empowerment of the Marginalised

1. Participatory Municipal Governance and Poor Peoples' Access to Decision-making: What are the Governance Issues of Concerns in Bangladesh?

Uttam Kumar Saha, Dr. Faruk-Ul-Islam, and S. M. Alauddin, Practical Action Bangladesh

Urban slums are heavily populated and characterized by poverty, substandard housing and living environment along with basic infrastructure services (electricity, gas, water and sanitation) including social and other problems (frequent eviction and collection of toll by *mastans*). Bangladesh, since its independence in 1971, has been experiencing rapid urbanization and mushrooming of slums in urban areas. The urban population was only 4% (1.83 million) in 1951, rose to about 8% in the next 2 decades, and grew rapidly after 1971. Currently, the urban population is 28% (42 million) in 2011 (ADB, 2012 and Islam, 2012). The growth rate was high as 6% per annum since independence against the national growth of 2% per annum. The country's urban population, at the existing growth rate, will be almost doubled (79 million or 42%) by 2035 and will be a challenge for the country's sustainable growth and development of urban economy, infrastructure services, etc. for a decent urban life, despite of significant contribution by slum people. Practical Action Bangladesh, in partnership with Faridpur Municipality, Society for the Urban Poor (SUP) and Community Improvement Federation (CIF) implemented two projects on urban environment, public health and poverty alleviation for the slum dwellers of Faridpur town (2006-2010), with the objectives of reducing environmental threats to health, improving livelihoods and alleviating poverty of the slum dwellers. Poor governance and infrastructure services resulting higher deprivation among the slum people in Bangladesh. The project adopted integrated, participatory and partnership approach (multi-stakeholders. multi-organizations and community focused), where the Slum/Settlement Improvement Committee (SIC) took lead role in developing Slum/Settlement Improvement Plan (SIP) and their implementation (infrastructure services, livelihoods promotion -waste management, different IGAs, capacity building of staff of Municipality and CBOs). SIPs endorsed by the Municipality and other Non-state Actors (NSAs) played significant role in implementing activities and achievement of objectives and expected results of the projects and contributed to improve environmental health services and health conditions of slums, reduced incidence of illness and expenditure on health, livelihoods promotion and alleviation of poverty and improved participatory Governance practices in municipality and CBOs itself. CIF co-opted as member of the Steering Committee by the municipal administration in Faridpur and allocated office room permanently in the Municipality Building. The integrated community participatory approach, direct involvement in project activities and collaboration (GO-NGO) with the Municipality, has been able to influence policy and practice change in Municipality Governance, mainstream participatory planning exercise and changing resource allocation practices, which, altogether is considered as a 'best practice, and could be replicated on wider scale to the interest of the urban low income settlement/slum people.

2. Formation of women farmers groups and attaining entitlement and recognition as farmers

Babor Ali, Mukti Nari o Shishu Unnayan Sangstha

Asha and Tori Reflect Circle at Char Thotarpara village in Ramkrishnapur unioin under Daulatpur upazila of Kustia district started discussing the issues of women rights in 2009. At a stage of their discussion and actions the women realised that they do not have recognition as farmers though they perform most of the agricultural activities. Consequently they formed an alliance in their locality, which gave the women farmers a platform to be organized. Through alliance building, they mobilised other women farmers to establish the recognition. They also took different initiatives to pave their economic empowerment. Bangladesh, being based on an agricultural economy, having the significant contributions made by the women should recognise them as farmers and provide all entitlements for furthering agriculture as a profitable and sustainable one.

Livelihood

1. Comprehensive Village Development Programme: A Sustainable Approach to Rural Development

Md. Habibur Rahman, Deputy Project Director, CVDP, Rural Development Academy, Bogra

Comprehensive Village Development Programme (CVDP) started its experimental journey in 1975. Under the programme, an action research was undertaken in 1988-89. The experimental phase of the programme was jointly implemented by BARD and RDA, which ended in 2005. Then, the government took CVDP as a model concept for rural development and decided to implement as a national programme. This phase will continue up to December 2013. The implementing agencies are BARD, RDA, BRDB and Co-operative Department. It is observed that CVDP has been able to develop a strong institutional base at village level having massive participation of the people. Training provided by CVDP has created a huge impact in the areas of technology transfer, employment and income generation. CVDP cooperatives have been able to operate credit programme on their own capital. This model sets the example of how the cooperatives under CVDP are flourished as self-sustained organization at village level. This model proves that co-operators can plan, manage and help themselves, if they are empowered to exercise their rights and wisdom.

2. Homeo Bottle Producing Factory

Bimola Roy, SKS Foundation, Gaibandha

Gaibandha is one of the disadvantegd districts in Bangladesh. There is no work opportunity for women in this area. They rear duck-hen, cow-goat, produce vegetables, sew cloths, etc. But, they cannot spend what they earn on their own. In 2011, the participants of Progati Lokokendra in Fulchhari upazila discussed among themselves about how to initiate income generating activities. They planned to earn through making homeo bottle. According to the plan, they formed a four member committee to communicate with homeo bottle producing factories in different areas. They checked potentials of the initiative, availability of raw materials and machines, and calculated the profit and loss and finally decided to initiate it. They started it with an investment taking from their fund. All the members also individually contributed to the initiative with 200 taka each. They purchased raw materials and machines spending 11,200 taka. They took a 25,000 taka loan from their fund. Now their capital is 50,000 taka. With the help of a two-month training, they themselves can now produce homeo bottle. They have also appointed four labourers. Their daily income from this factory is 3000 taka. They supply the bottle in different areas including Jamalpur, Bogra, Rangpur, Sherpur and Mymensigh.

3. Employment generation and poverty alleviation

Zahurul Haque, Department of Youth Development, Puthia, Rajshahi

Employment generation is a prerequisite to poverty alleviation. To enhance employment generation, we need proper planning, clear guidance and skilled management. Considering the reality, an effective development plan can be developed and implemented to generate employment at the grass root level. At the grass root level, a unit can be formed with twenty households in a village. The Unit will be supported to run a project. One supervisor will take care of twenty units. One branch will include twenty supervisors. The branch will have control over the units. There will be a local committee in each of the units. The Units will get loan through these committees. The sell and purchase of the products will also be carried out through these committees. The members of the units will be given the profit of the project after deducting loan service charge. In this way, numerous employment opportunities could be generated.

Natural Resources

1. Land education and food security through land card

Selim Mia, Sundarganj, Gaibandha

All people have relationship with land. But, all do not know the land measurement system and the importance of keeping proper documents as owners. Due to lack of land related education in our education system, people claim ownership on other people's land with wrong and fake documents and records. It creates conflicts among land owners and fake claimers. Involving into case, they also turn into poor and suffer from food insecurity. In order to maintain peace and order in a country, people need to be conscious on land related knowledge, which can be learnt through textbooks. Land education, thereby, can decrease disputes, conflict and poverty. For the sake of national interest, land education and introducing land card are crucial. By maintaining land card, transparent land management and ownership can be easily ensured. It will lessen corruption, conflict and law suit.

2. Sand ball and people's participation in char development

Maruf Khan

Sand ball is a game. It was introduced in 2004. It is to be played with football. The game is 3 to 4 times more dynamic than football. This game was first initiated in Cox's Bazar sea beach. Sand ball can also be played on football ground. The rivers of Bangladesh is drying out in such a trend that very soon Bangladesh will be considered as a char country instead of a riverine country. The reduction of current poverty is only possible by developing the char areas and making the agriculture of char area scientific contributing to food security. The people of village and char area are lagging behind due to lack of education. With sand ball being such a new dynamic game, people can achieve thematic knowledge, get a scope of recreation and preserve rural tradition. Being gathered, they can make the issue of food security and agriculture participatory and thus the rate of poverty can gradually lessen. At the first half of the day of sand ball meeting and seminar on food security and char-based scientific agriculture and its marketing is organized, which is helpful for the people to get knowledge on food security and char friendly agriculture. Through this game, an opportunity is created for the people to learn and plan through participatory exercises and entertainment.

Health, Hygiene and Nutrition

1. Saving mother and children from malnutrition in monga prone areas

Dr. Sazzad Hossain Khandakar, SAVE

Every year due to monga, the poor in Hatibandha Upazila of Lalmonirhat district starve. It hampers the health of the pregnant mothers and their children. Lack of appropriate food affect the health of mothers. As a result they deliver low weight babies, who, eventually, suffer from malnutrition and sometimes become physically challenged. Due to lack of food, the malnourished children as well are unable to regain their weight and suffer from various sicknesses including night blindness. Therefore, a fund will be mobilised in monga prone area for ensuring food security, providing health services to mother and children, preventing night blindness, etc. The entrepreneurs in the area will be encouraged to extend their support. The community will be mobilised to construct healthcare centre. The households will be supported to grow vegetables so that it prevents the children to suffer from night blindness. The household heads will be motivated to bring the pregnant mothers at health centres to deliver their child safely. In this way the monga prone areas can get rid of the vicious cycle of poverty.

2. SaniMart- a community led approach for improving reproductive health of adolescent girls in Bangladesh

Aklima Khatun and Uttam Kumar Saha, Practical Action Bangladesh

The Sanimart approach has been piloted by Practical Action Bangladesh under water and sanitation project implemented in collaboration of Department of Public Health Engineering (DPHE), UNICEF and Municipalities in Bangladesh. It has been found highly useful in promoting low-cost and safe menstrual hygiene behaviors of the adolescent girls and addressing their problems. The objectives of the approach is to enrich knowledge of the adolescent girls on preparation of napkin and its use; promote use of safe water and sanitation, personal and menstrual hygiene practices and develop entrepreneurship to the adolescent girls. The adolescent girls lack experiences and privacy to properly wash, dry, use and preserve napkins. Menstrual hygiene is a major problem for them and the rural women. They can't share their tensions/fears as they feel shy to the elders, which leads them to unhygienic menstrual practices and often cause great challenge to their reproductive health. The Sanimart approach is a service and learning centre to produce and marketing low cost hygienic sanitary napkin along with providing other essential hygiene products (soap, detergent, toilet cleaners, etc.) and primary health counselling services (BP, Weight, Temperature) available at this center. The centre is managed by a group of 10-15 adolescent girls that helps them to earn some money and grow their entrepreneurship. The approach has been highly appreciated by different stakeholders as it brings multiple advantages to the adolescent girls i.e. promotion of safe menstrual hygiene, protection of reproductive health, develop entrepreneurship and scope of employment and earning income by them, which, helps develop their self-dependency and increase their acceptability in the community. Thus, promotion of the Sanimart approach is important to the cause of improvement of the reproductive health of the adolescent girls and to address their problems. Introduction of participatory market system development (PMSD) approach can better contribute to promoting and sustaining the approach.

3. A simple hand washing device can improve the hand washing practice

Sharif Mahbubul Kuddus, Project Manager- Community Clinic, Plan Bangladesh

Keeping hands clean is the best way to prevent the spread of infection and illness. This is the first line of defense against common cold as well as other more serious illnesses. The habit of hand washing can save more lives than

any single vaccine or medical intervention. Knowledge regarding the importance of hand washing is comparatively good in Bangladesh. However, its practice, especially, during critical times, is very low. A study by the ICDDR 'B that was published in May 2010 revealed that only 1.9% of people wash their hands with soap before eating: 1.8% before feeding a child: 24% after cleaning a child's anus and 24% after defecation. As a National Facilitating Agency for the SHEWA-B project, Plan Bangladesh found that the unavailability of water as per requirement (i.e. in terms of ease of access, adequate flow and quantity etc.) is the major reason behind this gap between knowledge and practice. This gap between knowledge and practice can be easily removed by installing a very simple hand washing device. With hygiene as one of its important components, the SHEWA-B project tries to introduce hand washing devices by adding a tap in a bucket, pitcher and even in a piece of bamboo to ensure easy access of water to ensure hygiene practice. Plan Bangladesh also supports this initiative and motivates stakeholders to innovate and promote options of hand washing devices. In Plan's area, after 8 months of facilitation by the Field Agencies, the report of participatory monitoring with 4,285 mothers of <5 years children shows that 78% of mothers wash both hands with soap after defecation; 49% after cleaning a child's anus and 68% before feeding child, while the baseline results were 51.7%, 43.3% and 33.8%, respectively. Improvements were observed particularly in households with hand washing device. Hence, significant change can be achieved by promoting hand washing device at household level.

Section-3 Poster presentation

1.Village Library

Dijendra Banerjy, Founder President, Shashimohan Banerjy Memorial Library, Chirirbandar, Dinajpur

Presently, there is hardly any library facility in the villages. If, with the support of local elites a library is developed in the village that can help the children and adolescents of that locality to be enlightened. The community can take care of this village based library. In the libraries, in addition to reading facilities, there should be opportunities of recreation. In the executive committee, there should be secretaries for culture, literature and drama. They will support the children and adolescents to get training to enhance their skill in these areas. Such a model is Shoshi Banerjy Smrity Pathagar (library), which was established in 1987 in a remote village of Dinajpur district. Since then, this library has been working as an effective model. In addition to enhance reading habit of the children and adolescents the library takes various development initiatives in the locality like tree plantation, organising cultural events for the children, extend support to the flood and clold wave affected people. As a result, it helps the community including children to be enlightened. The model of Shoshi Banerjy Smrity pathagar reveals that a library can help the nation to be enlightened.

2. Creative Method in Developing Question-Answer Skills

Ataur Rahman Sayem, Senior Teacher (Bangla), Saint Gregories High School, Dhaka

Government of Bangladesh has refurbished the secondary and higher secondary education system to modernize and improve the quality of education. A student's talent is uncovered to development with creative method of learning leaving behind his/her memorising technique. But if someone is not well aware of the technique then students' creativeness cannot be assessed appropriately. Hence, teachers need proper training to achieve 100% success from the technique. All the chapters of the textbooks are prepared in line with specific learning results. Question paper can be developed in various ways in line with the learning, where, reflection of knowledge, understanding and application of higher skills will be there. Stimulation will get priority in firs stage and gradually, subjects of higher skills will get priority. The stimulation will be the basic and that can be individual based. On the other hand opinion cannot be taken from student for application and skill part of their learning. The creativeness of the student can be uncovered by this method. Any multiple choice question paper should be developed considering the four stages of thinking skill, where, 40% questions should be to assess knowledge, 30% to assess understanding, 20% to assess gained knowledge and 10% to assess the analysis and evaluation skills. In general subjective exam, there will be a chance to get questions from previous year, which is not likely in creative exam method. But, the teachers should be aware as well about the method of developing creative question papers for students. In this method, students will be able to answer all types of question if they have idea about the learning results of all the chapters of the text book.

3. Biotechnology in Cultivation: Principles, Applications and Results

Md. Mahfuzul Quader B.Sc (Hons.) M.Sc. D.U.

Bio-technology in cultivation is based on enhancing propagation of selective species of microorganisms in the soil was proposed, followed by farmers' level trial cultivations to observe the effectiveness of the proposition in cultivation, in comparison with chemical fertilizer. According to the proposition, optimum number of selective microorganisms release plant nutrients in the soil as much as available, theoretically adequate for plants metabolic requirements, so that no fertilizer is needed to supplement for a desired crop production. Optimum number of cells of the selective microbial species during cultivations was maintained by providing them a bio-fertilizer (Shamol bangla) of Grade 3.00 1.25. 1.25. 0.50 (Nitrogen, Potassium, Phosphorus, Sulphur) produced from the waste and unused biomass collected using unused labor of the unemployed villagers. In the first phase in 2006, the effectiveness of the fertilizer was observed in rice and vegetable cultivation in the self-trial field. In the second and third phases (2007–2012), the study was conducted involving almost 1,200 farmers in different districts and in different crop varieties. Results achieved from the trial cultivations are summarized as - for high yield (7.5 tons/hector) HYV rice cultivation, it was expected that 500 kgs of fertilizer would require/hector, but actually 250-300 kg of fertilizer required/hector that ensured the high yield of rice. Yield expected to be same as of chemical fertilizer use, but, in reality, the production was increased 25%-75% and reduced the cost of fertilizer by at least 35%; the fertilizer, although, was expected to be effective for rice cultivation, but was also effective for all sorts of cultivation; number of microbial count/gm of soil was expected to be 1x 108 -1 X 109, but in reality, the microbial count was found 1 x109 /gm of soil; and this is not only environment friendly, rather, prevented environmental pollution by 50%. Besides, unused waste and bio-mass are found to be available throughout the country and procurement of only 20% of the biomass can ensure the annual fertilizer requirement (2 million metric tons) of the country.

4. Reproductive Health Rights: Ensure Safe Motherhood and Reduce Child Mortality in Intervention Areas

Reproductive health meant peoples' self-assurance as well as safe sexual life where they would be able to give birth to children and independently decide when and how to do it. Reproductive health rights campaign involves 70 to 75 participants in each of the campaign area. The campaign organizes video shows on adolescent period and Family Planning Officer delivers details discussion on reproductive health. In case of care and support for pregnant mothers, it is observed that a huge number of women are deprived and neglected regarding health, safety and productive rights. During the meeting with pregnant women in the campaign area guidelines on anti-natal care and post-natal care, taking care of the new born, vaccination, nutrition and some iron and calcium tablets are also provided. There are 21 trained birth attendants, who list pregnant mothers in the campaign area and provide different health advices. Apart from this, the birth attendants are equipped with clear perceptive and training on safe child delivery. Quarterly meeting for exchanging thoughts with Upazila Health and Family Planning department are arranged to ensure health and pregnant women's treatment. One river ambulance and two vans have been arranged through the project for the poor of char area, who are unable to get treatment from char area to Upazila health complex lacking money. The poor are now getting good treatment free of cost. But implementation of the project is facing some difficulties. Although, the campaign is old but assumed to be a milestone for the area.

5. Community Participation is the Fundamental of Sustainability

Dr.Razzaqul Alam, Health Program Specialist-CMHS and Dr. Selina Amin, Country Projects Manager, Plan Bangladesh

Bangladesh Government reformed health sector in 1998 through establishing community clinics (CCs) for providing primary health care services. Through community consultation, it was found that most of the deliveries are still taking places in the household level with relatives and untrained birth attendants. At present most of the CCs are being used by community for receiving services but existing Union Health and Family Welfare Centres (UHFWCs) are not being accessed properly by the pregnant mothers for getting maternal services and normal delivery conduction due to shortage of trained human resources, required medical equipments, in some cases, communication are not comfortable for the pregnant mothers for going to UHFWCs and finally, non-functional management committees of UHandFWCs. Based on the signed Memorandum of Understanding (MoU) between Plan Bangladesh and CC project of the Ministry of Health and Family Welfare of Bangladesh Government, Plan provided series of training to community groups (CGs) for operation and regular monitoring clinic activities with a view to ensure primary health care services and strengthened linkages. Plan also in consultation with local health and family planning administration reformed management committee of UHFWCs and oriented them, provided training on human resources, minimum medical equipments to UHFWCs, CCs of Plan working areas has been remaining open in all working days as per government schedule and community people are receiving services. Percentage of antenatal care and post natal care has increased. Referral linkages have also been strengthened than previous and institutional deliveries have been taking place in UHandFWCs. Meaningful community participation is the first and mandatory means of sustainability and that could be achieved through right based participatory working approach (Child Centered Community Development Approach, Plan has been practicing in the community).

6. Protecting the children with disability

Jadab Chandra Roy, Executive Director, Community Development Center (CDC), Dinajpur

Bangladesh government has ratified United Nations' Convention on the Rights of the Child and Convention on the Rights of Persons with Disabilities. By prioritizing Bangladesh Disability Welfare Act 2001 and other relevant policies and by supporting all government initiatives with respect to rights of the child, it is the demand of this time to protect children with disability. Major challenges for the development of children with disability at grassroots level are, absence of schools and trained teachers on disability issues, lack of educational access, lack of support system with regard to the requirements of the children with disability besides reluctance of family as well as society, lack of government-nongovernment initiatives for creating enabling atmosphere where these children could flourish, absence of cooperation for rehabilitation program, lack of inclusive education, and absence of enabling system for enhancing potential of the children with disability. Community Based Rehabilitation (CBR) Program would be timely initiative for protecting rights of these children. It is possible to develop an inclusive social system by eliminating poverty and by protecting rights of the

person and children with different ability through such program.

7. Designing Effective Environment Management Public Awareness Communication to Fight Poverty in Developing Countries

By Wilson Okaka, Email: nupap2000@yahoo.com

The present innovative approaches to assessing and the major challenges of designing and delivering effective public communications campaigns are important for poverty reduction. It uses public awareness of the national wetlands and environment management policy in Uganda. It assesses the influence of the national wetlands policy awareness strategy on the target socio-economic audiences. It considers clusters of communities in the urban and rural Uganda. The problem was based on the assumptions that the campaigns strategies for the national wetlands policy awareness in Bangladesh have been unsuccessful because they did not focus on the audience participation and their demographic (socio-economic) background. A multi-media strategy should be adopted with a mix of electronic, print, and popular media for maximum audience exposure and access to the messages. There is no gender barrier to information uptake. Low income and education levels were barriers to community access to wetlands and environment policy information. The campaigns should emphasize the use of popular and interpersonal communications media. The government, researchers and research institutions, research networks, civil society organisations (NGOs), the citizens' committees, and donors are aware of this fact. Already, less effective multiple communications strategies for sustainable development have been tried. The specific objectives of the strategy were to: identify the types of media communications used in the public campaigns; assess the quality of the media messages received by the intended audiences; establish the extent of audience exposure to the media messages; investigate the audiences' attitudes and behaviour change by the campaigns; investigate audience participation in the public awareness campaigns; determine the impacts of the messages in raising awareness among the audiences. The theoretical framework of the research is the use of the diffusion of innovations theory. The focus of diffusion of innovations theory is creating awareness through information dissemination among the target audiences. Diffusion model identifies the problem as lack of information and the goal (outcome) is behaviour change. The solution to lack of information is information transfer to spur the required knowledge, attitude, and practice. The types of interventions include social marketing, entertainment, and education. The mass media is more influential in spreading awareness about adopting new possibilities and practices of innovations. Diffusion of innovations theory studies how, why, and at what rate new ideas spread through cultures. The relevance of the theory is to justify the importance of information dissemination as a precondition for creating awareness, attitudinal, and behaviour change for adoption of innovations or technologies by the audiences in the research sites. Community radio is a huge asset in popular message design to fight poverty.

8. Agricultural Development is the Key to Employment Generation

Shohag Molla, Executive Director, BDKS, Khulna

By virtue of globalisation rich countries are getting richers. On the other hand, poverty and hunger situation is also increasing in the poor and developing countries. But this is to mention that people at this time are more aware of their rights. They now know how to increase production. About 80% people are living in rural areas. Economic development of Bangladesh can be advanced through agricultural development, infrastructure development, employment generation and enhancing production and savings. This research puts emphasis on two points: agricultural development and creating professional leadership. In agricultural development, vermin-compost farming and oil palm cultivation are emphasised. Vermin compost in soil can reduce using chemical fertiliser. Its usefulnesses are many. It does not create any change in soils that is why the taste, scent and colour of crops remain natural. On the other hand, oil palm cultivation can be a permanent solution to the agricultural development. It can effectively reduce the effects of climate change and pave the way of economic development. For its saline tolering nature, oil palm can be planted everywhere in the country. It also highlights that professional leadership development is not getting that much importance. There are lacks of proper projects and planning. Professional development training can be a solution to this. It will definitely increase the value of labour and by dint of it, labour will turn into power. By developing entrepreneurs and leadership training actual professional leadership can be developed.

9. Farmer's Association in Rice and Wheat Seed Production in Char Areas

SM Kuddus Mollah, Amra Kaj Kory (AKK), Faridpur

In 2009, a farmers' association in Faridpur living in char areas took steps to identify their problems and solutions. They identified lack of irrigation and quality seeds as the main problems. They also decided to collect quality seeds. At the beginning of their initiative, they collected and preserved seeds at household level. At one stage, the participants decided to establish a community-based seed bank. With assistance of the members of farmer association during 2010-2012, AKK took several initiatives to ensure quality

seed production and ownership, food security and sustainable agricultural development for the poor and marginalized farmers of char areas. These included farmers in discussions, plans and activities, organizing various meeting, workshop and coordinating meeting, seed preservation at both household and community level and marketing, demonstrating local seed technologies at agriculture fairs, selection of farmers and blocks for seed production and irrigation projects, etc. It also ensured technical supports from Department of Agriculture Extention, Spices Research Institute and so on. By preserving seeds, the women played active role in production system, which, in turn, contributed to women's empowerment. The farmers' association also created strong relationship with government seed research and service providing institutions.