SHAPING THE THOUGHT PROCESS

Spring 2017

CSD Newsletter

Issue 2

CSD Center for Sustainable Development

ULAB University of Liberal Arts Bangladesh

Inside this Issue

Message from the Vice Chancellor

The University of Liberal Arts Bangladesh (ULAB) is devoted to developing young minds to their fullest potential through free and creative pursuit of knowledge. Alongside harnessing intellectual growth, we are also firmly committed to help the young become competent in leading the development processes. It is, according to me, the foremost duty of a university to build a society around the young women and men by ensuring growth, development, peace and happiness. Here at ULAB we have recognized the need of an education system; Liberal Arts, that would give students the right momentum and tools to lead their lives. The world has recognized the need of development molded in the philosophy and practice of 'sustainability' and with that notion in mind ULAB also incorporated sustainable development within its core values since it started off its journey as a University.

The Center for Sustainable Development (CSD), is the oldest of the six research centers of the university, is bestowed the task of incorporating 'Sustainability' as a core value in the academic curriculum, co-curricular programs, operational activities within the university. CSD provides a wide range of courses addressing the current day needs of understanding and nurturing sustainability among the students and their extended networks. The Center also gives opportunity to students for active learning by going to the study field and thus gather a better understanding of the realities and challenges that might come across their way forward.

CSD is comprised of several researchers covering different dimensions of sustainability, where they investigate macro and micro concerns of the country. This center has regularly published important research findings in different local and international journals, while also focusing to inform the lay person by publishing in newspapers and magazines. The faculties of CSD has been excellent ambassadors of the University and the country by representing at national and international conferences, seminars, workshops, public lectures. As a University we have opened our doors to government, private, and NGOs in creating a collaborative-multidisciplinary environment and thus have been able to address social-environmental issues in the society'.

As part of our ongoing urge to inform and educate a wide range of people in the society, CSD has now published their second newsletter, which contains a wide range of issues related to different aspects of sustainable development. It is my utmost pleasure to share the array of knowledge created at CSD.

ULAB
UNIVERSITY OF LIBERAL ARTS BANGLADESH

Professor Imran Rahman
Vice Chancellor
University of Liberal Arts Banglades

Message from the Director of CSD

Dear Readers,

It is my pleasure to share with you the Second Edition of the Biennial Newsletter of our Centre for Sustainable Development (CSD). In 2016, we have celebrated a decade of existence as the oldest research centre here at University of Liberal Arts (ULAB). This also coincided with my appointment as the new Director of CSD in July this year. It has been an exciting six months as we took on six new academic and non-academic projects, re-launched the Greening ULAB Program, along with organizing a series of seminars and hosting three field trips for our students. We successfully ended the year with preparation for CSD's 2nd Annual Conference on Sustainable Development that will take place on 10-11 February 2017.

In this second edition, we have incorporated a wide range of articles which includes the three academic research projects where CSD faculty members are involved in areas of climate induced migration, farmer's adaptation related to drought, and poverty alleviation and along with an action research on the assessment of Disability Service Providers. All of these are planned for publishing in peer reviewed academic journals. At the same time we have partnered with international NGOs and the private sector on sustainability related projects around food security and environmental impact assessment.

I look forward to expanding and growing CSD team and taking on new exciting projects focused on sustainability, climate change and natural resource management. In 2017, we will be actively working around the UN SDG Goals starting with CSD's 2nd Annual Conference on Sustainable Development 2017. Following the conference, we will work to develop a series of policy briefs on achieving the targets of the SDG goals in the context of Bangladesh. At the same time, we will continue our own academic researches using a blend of top down and bottom up approaches. The scope of the work in the context of climate, encompassing grassroot level as well as incorporating private sector industries for improving their carbon footprint, is wide here in Bangladesh. Increasingly, we are more interested in collaborating with overseas institutional partners. In 2017, we will be working with the Leibniz Centre for Tropical Marine Research (ZMT) in Bremen as well as the Future Cities Laboratory at the Singapore – ETH Centre to foster such international partnership that will allow mutual benefits for students and faculty here and abroad.

CSD envisions a society, where all stakeholders will work together to combat the impacts of climate change, halt biodiversity loss, and allow for positive growth and sustainable development in the country. I am pleased to share the second edition of our Newsletter that captures the essence of how we are working towards these goals here at Centre for Sustainable Development, ULAB.

Associate Professor Samiya Ahmed Selim, PhD

Director of Centre for Sustainable Development
University of Liberal Arts Bangladesh (ULAB)

Editorial

Alternative Understanding of Climate Economics: The Essence of Environmental Decision Making for Sustainable Development

There are now widespread scientific evidences that the earth's atmosphere is getting warmer as well as changing the climate which is mainly attributable to human activity. Increased global attention is being paid to combat climate change for sustainable development. Despite having differences in strategy and ideology, climate change is now the top issue that the world is currently concerned about. One of the main questions of debate is whether to embrace or reject certain aspects of capitalism. Presently, there is an ongoing debate about climate change between two departments: namely climate science and climate economics.

Though it is already proved that climate change is not value neutral and we ultimately have to pay for it in ways these facts are poorly understood by our policy makers as well as economists. There are some renowned economists and climate skeptics who talk in favor of "business-as-usual" strategies that undermine climate science. Some renowned economists, such as William Nordhaus, Sheila Olmstead, Robert Stavins, Robert Haln, Paul Joskow, Richard Schmalensee and Milton Friedman, were being criticized for their arbitrary statements in favor of "business-as-usual" strategies. However, some economists have already raised their voices and strongly criticized the stance taken by conventional economists and climate skeptics. They felt the need to "identify mistaken assumptions" on environmental decision making and offered "alternative understanding of climate economics."

One of the renowned economists Frank Ackerman, known for his work in environmental economics, particularly in the areas of climate change and development, analyzes this issue in his book "Can We Afford the Future? The Economics of a Warming World" and lays out the argument for a proactive approach in lucid style. Despite being an economist, Ackerman looks ahead of his discipline and takes a skeptical look at approaches like Cost-benefit analysis, Market equilibrium, Free Market, Laissez-faire policies which have been developed on a utopian ideal rather than real world. He also criticizes Bjorn Lomborg, Director of the Copenhagen Consensus Center, and a writer against active climate policies arguing that Lomborg's limitations are "questions of accuracy, bias, and authority; cost-benefit analysis of climate change versus other priorities; and understanding of economics." Ackerman also criticizes the long process of developing better frameworks at the global level.

In fact, the current world needs ethical and political judgments in complementing economic modeling for climate policy making. Though there are several policy proposals for environmental decision making like the "Kyoto Protocol", "Contraction and convergence"; "Green house development right"; "Cap and trade"; "Carbon Tax" etc. but it is being noticed that our world leaders are actually spending much time on discussions for developing better frameworks. At this point, it would be better for us if we can start with one recent policy proposal through international coordination rather than spending more time for negotiation and criticism.

The essence of the argument is, in order to have a better world for us to live in and our descendants to enjoy; we need proactive environmental policymaking that can reduce global environmental catastrophes. Considering endangered biodiversity, health and environmental damage for climate change, and finally the value of human lives associated with these problems; strong ethical and political judgment is needed for climate policy making rather than concentrating only on economic modeling.

As it happens, the problems due to climate change that we are facing today, started years, even decades back when our ancestors started emitting greenhouse gases. Similarly our descendants will face the consequences of our actions today. In light of this problem, our leaders should consider the costs associated with climate policies in a holistic manner, rather than only the present cost of the climate policy. We should think differently: like the way we think about giving high premium to the insurance company with a high interest rate or in case of early start to a destination to avoid delay and other uncertainties on the road or in case of investing in the financial market.

The sensible option is to propose that for implementing climate policy, government initiatives, financing for the low and clean emission equipments and establishments, public understanding of controversial events and a total mobilization of people are required. It is, therefore, advisable that we can follow the four guiding principles, proposed by Frank Ackerman, on climate economics for the future: "Your grandchildren's lives are important"; "We need to buy insurance for the planet"; "Climate damages are too valuable to have prices"; "Some costs are better that others".

As a final point - in the context of this climate change debate, we know that, Bangladesh is being ranked as one the top most vulnerable nations to the impacts of climate change in the coming decades. On the other hand, we have also noticed that Bangladesh has recently been upgraded from low income country (LIC) to lower-middle income country status. Thus, such circumstances demand the policy makers of Bangladesh to think about their role now in climate policy making as well as continuing the current development progress.

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Organizational News

International Conference on Sustainable Development February, 2016

Sustainable Development comes as a wave of modern environmentalism heralding a new approach to tackle environmental issues. Global warming, forest degradation, soil erosion, rising sea levels reflect not only ecological changes but also the political processes at the local, national and international levels. Political-ecological forces will mediate a 'common future' in unprecedented ways in the future.

The year 2015 was pivotal for sustainable development as we moved from the MDGs to the SDGs. To mark this momentous transition the Center for Sustainable Development (CSD) at the University of Liberal Arts Bangladesh (ULAB) organized an International conference on Sustainable Development (ICSD). The SDGs are a set of global goals and targets for sustainable development and the political declaration on the post-2015 development agenda. The aim of the conference was to identify and share empirical research findings or practical, evidence-based solutions that can support the Sustainable Development Goals (SDGs). The ICSD provided a unique opportunity to bring together stakeholders from government, academia, international agencies, NGOs, and grassroots organizations to share practical solutions towards the achievement of more sustainable and inclusive societies. The conference was attended by 200 participants, with 41 presenters lead by young researchers who shared their research findings and deliberated on key issues related to sustainable development. The themes of the conference included (i) Sustainable Livelihoods, (ii) Climate Change Adaptation, (iii) Migration, (iv) Gender and SDGs, (v) Coastal Zone Management, (vi) Disaster Management, (vii) Disability and Development, (viii) Public Health and Nutrition, (ix) Sustainable Agriculture and Food Security, (x) Green cities and human settlements, (xi) Integrated Water Resources Management and (xii) Business and Sustainability. ICSD had an international body representing the advisory committee with academicians from UNSECO-IHE, Wageningen University, Kyoto University, University of Cologne, BUET, University of Dhaka, University of Paradeniya among others.

Additionally, the conference marked the 10th Anniversary of CSD which began as a development and social research center of the University of Liberal Arts Bangladesh and has evolved into a global platform to share research and inform policy decisions about the most important issues facing the world. This conference encourages young researchers and practitioners to submit papers appropriate in achieving sustainability. Positive reception of the conference and spirited exchange of ideas on an important issue of sustainability has led ULAB to support the conference as an annual CSD event. The International Conference on Sustainable Development 2017 will be held on the strengths of the first conference and focus on the UN Sustainable Development Goals. Involvement of researchers, academicians, policy makers and development organizations will address eight of these goals – Zero Hunger, Water and Sanitization, Clean Energy, Sustainable Cities and Communities, Sustainable Production and Consumption, Climate Action, Life below Water and Life on Land and provide deliberation along with possible solutions or way forward in achieving our goals. We will develop series of Policy Briefs around achieving these SDG Goals in the context of Bangladesh.

Re-launch of Greening ULAB: Revamping First-ever Campus Sustainability Program in Bangladesh

Campus sustainability is an important part of the global sustainability initiative due to the impact of the activities and operations of universities on the environment. Universities today bear the same responsibility to confront environmental challenges as any other organizations. However, a university can make unique contributions through research, teaching, outreach, and student initiatives in helping society to make the transition towards sustainability.

The sustainable university campuses' address environmental awareness and social wellbeing. Globally, a range of efficient environmental management initiatives are being considered and implemented by over 400 universities. For instance, University of Liberal Arts Bangladesh (ULAB) a recognized University for its liberal arts based curricula and academic research, enhances the learning process of its students through instilling socio-environmental knowledge. The Center for Sustainable Development (CSD) at ULAB, launched the '***Greening ULAB'*** initiative in 2006. Greening ULAB aims to make the operation of the university more sustainable and environmentally friendly. The Greening ULAB framework is organized into four broad categories that complement the existing operational and academic structure of the University. These four categories include efficient energy consumption, water conservation, waste minimization and recycling, and promoting healthy living. These four categories are

energy and resource conservation, biodiversity management, waste reduction, reuse and recycling, use of renewable raw materials, minimization or elimination of use of toxic substances are actively pursued. Campus sustainability is a continuous process where environmental sustainability practices are improved and evaluated.

Worldwide, universities have ratified declarations designed to strengthen their pledge to the commitment and the number is increasing annually. Unfortunately, a commitment is lacking in most universities in Bangladesh. Many universities do have some environmental management or safety measures in place. However, a more integrated approach in decisions making, investments and management is required.

incorporated in teaching, research and encouraging behavioral change towards sustainability within our campuses. In 2016 we are witnessing a '***Re-launch of Greening ULAB'*** as the initiative completes a decade at the University. The aim is to renewing the ideas of sustainability and implement innovative ideas to make the campus green. To achieve this we carried out a baseline study across campus to gauge the current use of energy, water consumption and waste generation. We also assessed perception of students and faculty towards issues around sustainability. At the same time we collected data on electricity and water bills and paper usage. The findings from this study will be used as a baseline for measuring the changes that the Greening ULAB program will bring about.

Green Ambassador Program

The Green Ambassadors Program is an initiative launched by the Center for Sustainable Development at ULAB as part of the Re-launch of Greening ULAB in 2016 to create awareness and promote 'Go green' activities among the students in the campus. The aim of this program is to provide the tools, knowledge and leadership skills to inspire sustainable practices in a fun and engaging environment. The activities under the four main categories of Greening ULAB (efficient energy consumption, water conservation, waste minimization and recycling, and healthy living) will be promoted and managed by the Green Ambassador Program. The Green Ambassadors will be trained and provided with a manual on how to actively engage students, faculty members and administration in doing their part to promote sustainability and being more environmentally conscious.

Role of the Green Ambassador

The Green Ambassador program gives independence and flexibility that is needed to tackle some of the most compelling issues of our time. By becoming a Green Ambassador, one joins the global family of volunteers working together to build a positive and sustainable future. Commitment to sustainability and dedication of a few hours from their weekly schedule will help reach out to people in the University and make a huge difference to the future of Bangladesh and our planet.

The Green Ambassadors would gain communication and University activation skills as they participate in one of the following in an effort to put on an event that educates the others at the University on the issue and provide solutions. Currently we have 20 Green Ambassadors working across campus to bring about behavioral change towards reducing carbon footprint.

Activities that could promote Greening ULAB

Academic Research (Ongoing)

Farmers' Perception on Climate Change and Adaptation Related to Drought : The Case of Northern Part of Bangladesh

Md. Shafiqul Islam

Both weather and climate are confusing words to the farmers. Climate is usually based on the weather in one locality averaged for at least 30 years (ADPC and FAO, 2007). Climate change, therefore, is a change in the typical or average weather of a region or city. This could be a change in Earth's average temperature, for example. Or it could be a change in Earth's typical precipitation patterns (NASA, 2011). Climate change pretenses significant risks for Bangladesh, yet the core elements of its vulnerability are primarily contextual. The societal disclosure to such risks is further enhanced by Bangladesh's very high population and population density. Many projected climate change impacts, including sea level rise, higher temperatures, evapo-transpiration losses, potentially reduced dry season precipitation, and increased in drought intensity. These would in fact reinforce many of these baseline stresses that already pose a serious impediment to the economic development of Bangladesh. A subjective ranking of key climate change impacts and vulnerabilities for Bangladesh identifies water and coastal resources as being the highest priority in terms of certainty, urgency, and severity of impact, as well as, the importance of the resources being affected. Bangladesh suffers from many climate dependent natural hazards, such as: riverine and coastal floods, riverbank erosion, tropical cyclones and droughts. The low income people are affected by climate change impacts like drought. In particular, the small farmers lose their occupation during severe drought. Wage laborers and farming communities are affected mostly by drought. Drought impact increases the risk to food security, illness, reduces the sources of water (both drinking and domestic) causes migration and loss of livestock. This research intends to investigate the effects of climate change due to drought at the grassroots', the community peoples' perception and adaptation to changing in climate. This will helps to have a better understanding of the communities' perception on climate change and existing adaptation strategies. The main objective of the study is to explore farmers' perception on climate change and adaptation related to drought and best suited knowledge perceived by the farmers. This exploratory study was conducted over a period of times starting from September 2015 and ended by December 2016. The study was carried out using several tools including household interview, key informants interview, focus group discussion and case studies. Depending on the research objectives the study was concentrated in northern part of Bangladesh. In selecting study locations multistage sampling were followed.

RESULTS

Drought frequency using 3 month SPI

The SPI values for three months (April-June) from 1976 to 2014 imparted the results that Gadagari and Nachole upazila experienced maximum 19 times mild dryness. In that time Tanore upazila observed 6 times moderate dryness and 2 times severe dryness (Table 1). It was also observed that the Shibganj upazila has been experienced an extreme dryness during the April to March from 1976-2014.

Table: 1 Months (April-June) SPI Values

Year/Period	SPI Values	Location						Reminds
		Niamatpur	Nachole	Godagari	Tanore	Shibganj	Porsha	
1976-2014	0 to –0.99	18	15	19	13	13	19	"Mild Dryness"
1976-2014	-1.00 to -1.49	5	4	4	6	5	4	"Moderate Dryness"
1976-2014	-1.5 to -1.99	0	1	0	2	1	0	"Severe dryness"
1976-2014	< -2.0	0	0	0	0	1	0	"Extreme dryness"

Source: BWDB, 2015

Number of hot days

Bangladesh has a subtropical monsoon climate characterized by wide seasonal variations in rainfall, high temperatures and humidity. According to Weather online (2016), generally maximum summer temperatures range between 30°C and 40°C and April is the warmest month in most parts of the Bangladesh. The analysis of secondary data found that the average temperature of the study area was 25.22 degree Celsius during the period of 1976 to 2014. Considering long term average temperature, 35 degrees and above daily temperature was considered as a hot day. Analyzing the daily temperature for the period of 1976 to 2014, 113 days found as the hot days in 2010 followed by 108 days in 2014, 107 days in 2012, 98 days in 2009, 97 days in 2013 and 85 days in 1979 (Fig 1). The minimum numbers (only 13 days) of hot days were recorded in 1981. According to linear line graph, there is an increasing trend of hot days but the R-square values (R^2= 0.355) indicated that there is no significance difference in temperature during the period of 1976 to 2014.

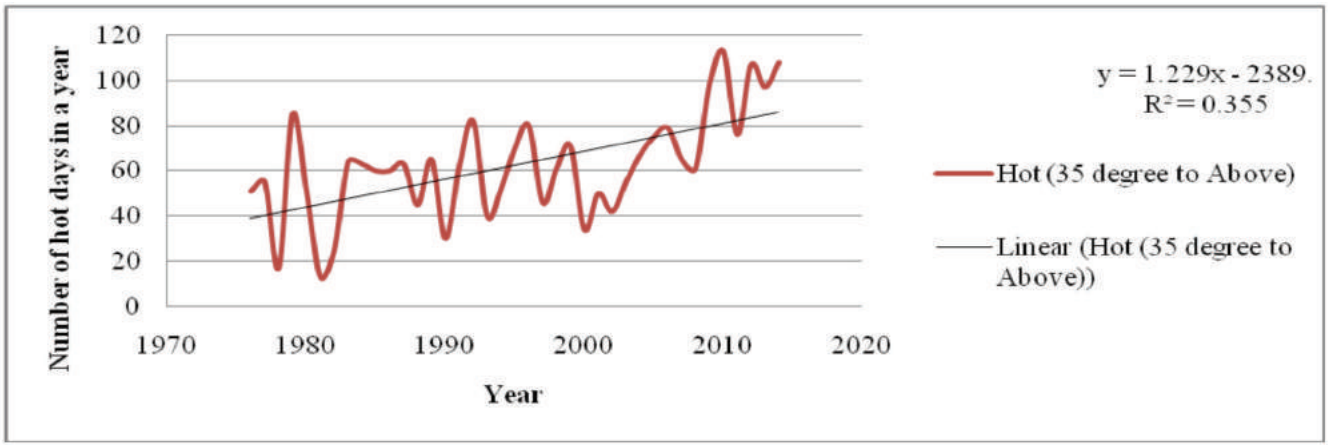

Figure 1: Number of hot days

Farmers perception on climate change

According to the ecolife dictionary, Climate change is the long-term shift in weather patterns in a specific region or globally. Unlike global warming, which refers to just one aspect of climate change - a rise in the surface temperature of the earth's surface – climate change refers to changes in a regions overall weather patterns, including precipitation, temperatures, cloud cover, and so on. But there is no firm definition and clear understanding of climate change as perceived by the respondents. They just understand climate change means the changes of average weather of long time (79%), but they have no clear idea about the period of time. About 21% respondents perceived that climate change means the average weather of 20-30 years (Fig 2).

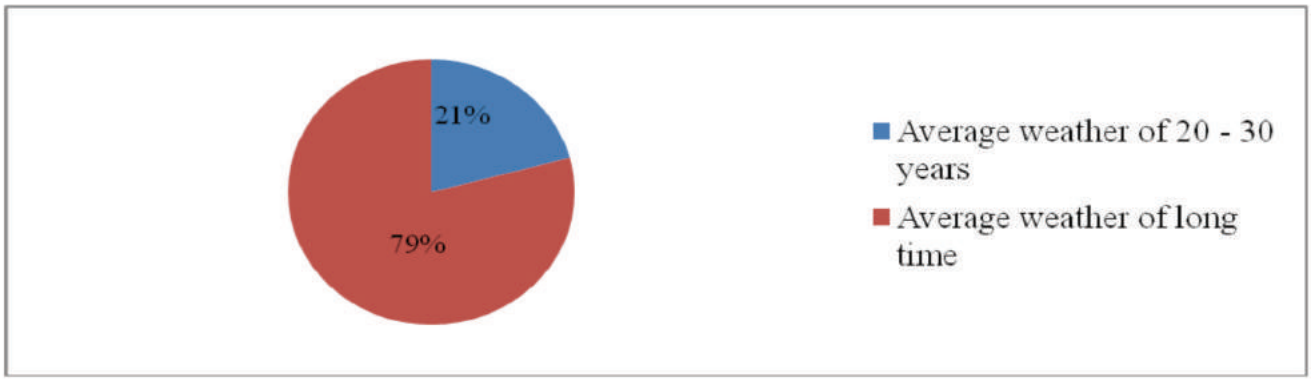

Figure 2: Perception on climate change

Weather and climate change indicators perceived by the farmers

Respondents are the permanent resident of the study area; thereby they have long experience in the area about the weather and climate. For this reason, the respondents were asked to know about the changes of weather and climate. All the respondents of the study area said that from their long experience, the weather and climate is changing day by day. They also identified numerous numbers of weather and climate change indicators including temperature, rainfall, soil fertility, ground water level, soil rupture, drought, flood etc. 86.44% respondents mentioned that the temperature is increasing day by day and during the summer those feels warmer weather compared to the past few years and 55.59% respondents of the study area noticed that the average rainfall is decreasing during the rainy

season. This is the reason the intensity of drought (28.14%) and flood (23.05%) is increasing year by year. People also said that decrease of soil fertility (21.36%), crack down of top soil (21.02%) and ground water layer goes down (17.63%) caused by weather and climate change (Fig 3).

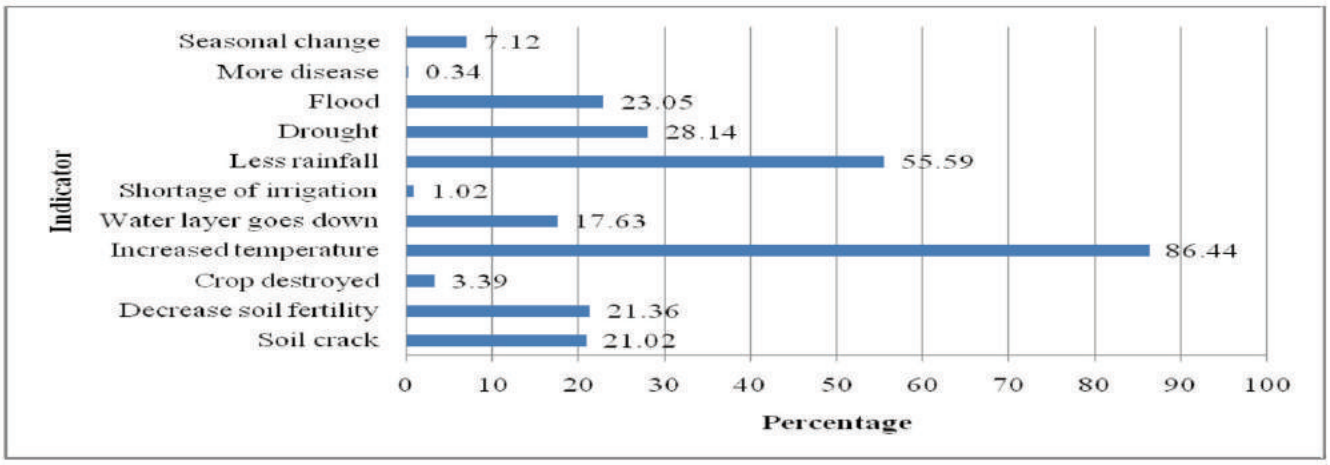

Figure 3: Weather and climate change indicators

Farmers' perception of rainfall, temperature and ground water level than ever before

The respondents were asked to know about the present status of rainfall, temperature and ground water level than ever before. The results showed that all the respondents of the study area perceived - temperature is increasing day by day but the rate of rainfall is decreasing and the ground water level goes down as a result the shortage of irrigation and drinking water occur during the summer (Fig 4).

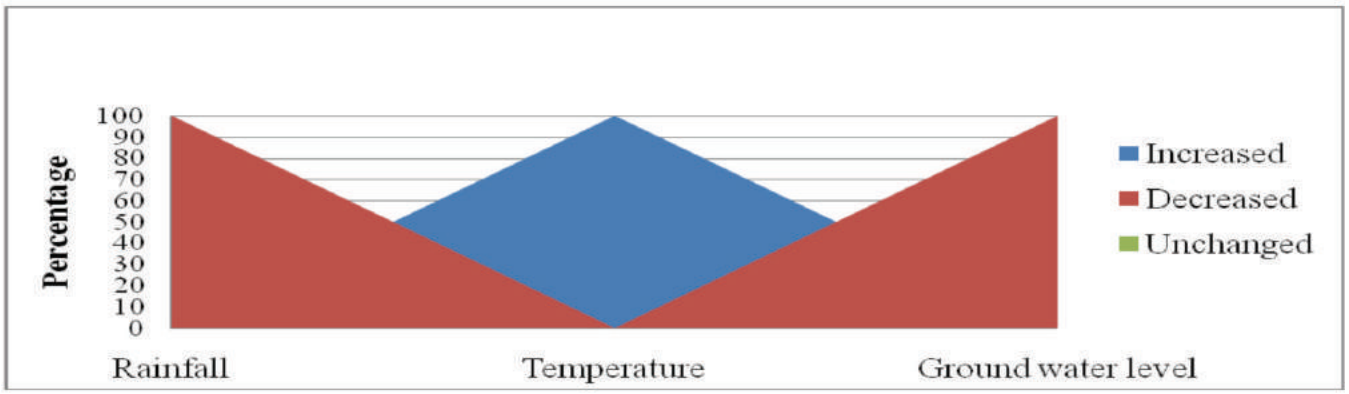

Figure 4: Farmers' perception on rainfall, temperature and ground water

Perception about land and crop damage due to climate change

The perception of the respondents on land and crop damage due to climate change was explored through semi-structured questionnaire survey, focus group discussion and key informants interview. Analyzing the collected qualitative data on respondent's opinion about the damage related to land and crop damage, it was observed that the respondents of the study area identified mainly five causes which are inter-related to each other. They perceived ground water level goes down during dry season. For this reason, the top layer of soil become dry and cracks are created on the ground. As a result, soil fertility decreased and the lands become unsuitable for cultivation (Fig 5).

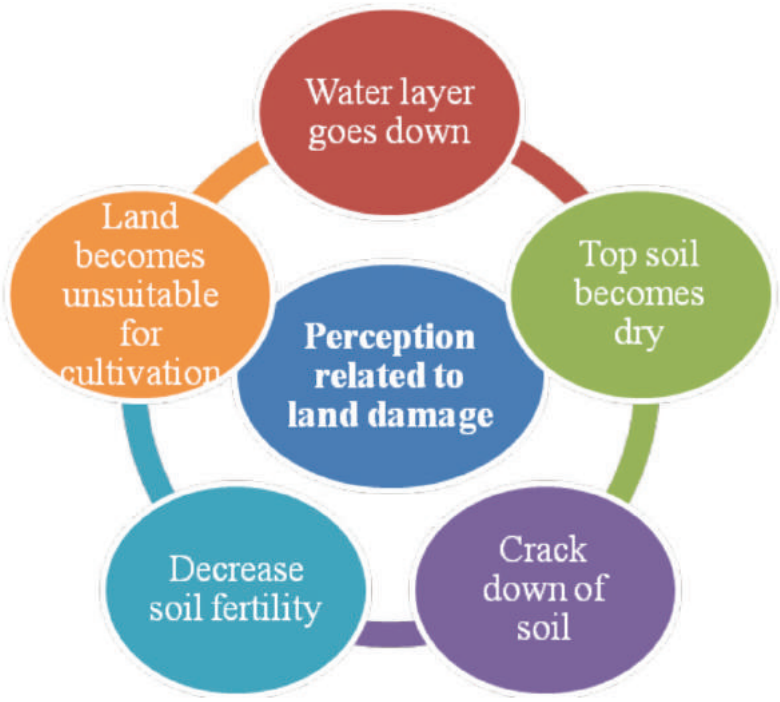

Figure 5: Perception about the damage related to land due to climate change

Adaptation measures to mitigate drought impact

Several measures were adapted by the respondents to mitigate drought impacts. These may be at the farm level, household level or at individual level. The measures depend on several factors including drought frequency, intensity and scale of drought loss (Fig 6). The primary concern of drought is shortage of water, most of the planned activities aim at reducing the effect of such shortage, through measures that are taken before, during and after drought.

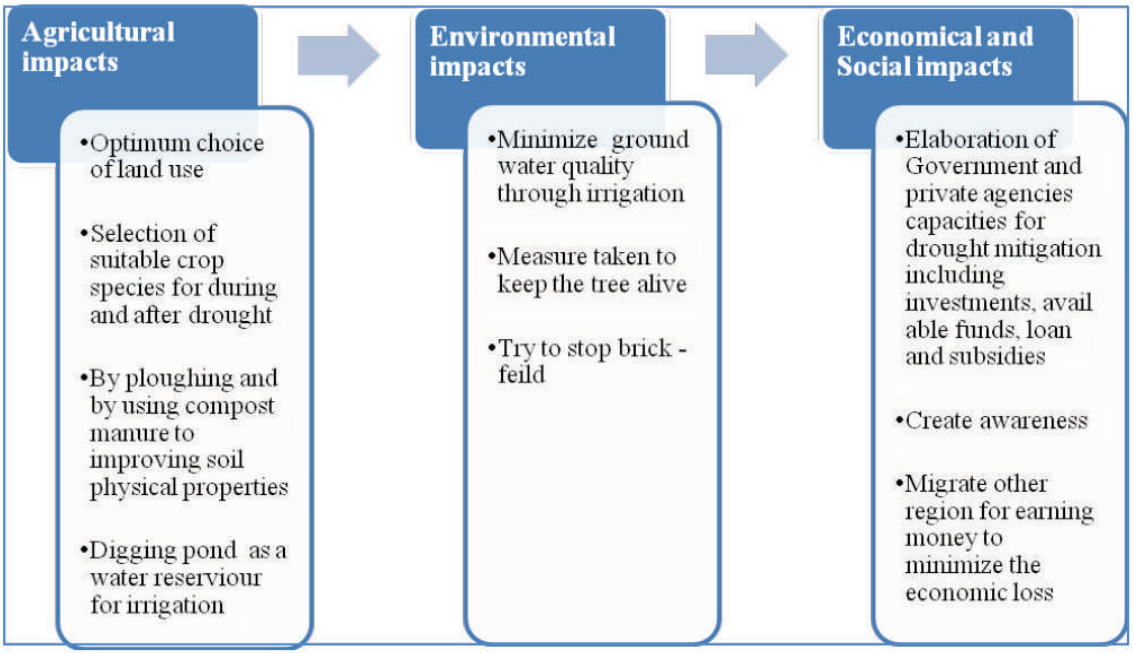

Figure 6: drought mitigation measures

It was mentioned that the people of the study area were taken some of the measures to reduce the harmful effects of drought on agriculture and their livelihoods. The measures included optimum choice of land use, selection of suitable crops for cultivation during and after the drought, plow the land before the drought and using compost manure to improve the physical properties of soil and digging pond as a water reservoir for irrigation during the drought. The people of study area just try to keep ground water quality intact through irrigation, measure taken to keep the trees alive and try to stop brick field to minimize the harmful environmental impacts. To mitigate the economical and social impacts due to drought the people of the study area elaborate themselves to Government and private agencies for investments, available funds, loan and subsidies. They also create awareness about ways to mitigate drought and migrate other region for earning money to minimize the economic loss.

The way to minimize the drought problem

Drought impacted on agriculture, livelihoods, health, environment and society. Drought caused huge damage to the crops depend on season, scale and crops and hence it reduced crop production and impacted on food security issues. For this reason, respondents were asked to know about the way to minimize the problems which are arising during the drought period. 74.24% respondents noticed that they can solve the problems and manage drought by their own initiatives with the use of their local knowledge (Fig 7). 37.29% respondents reported that they can manage drought with the consultation of neighboring people followed by discussion with experienced farmers (elderly people) and do necessary actions according agriculture officials (Advice, training etc).

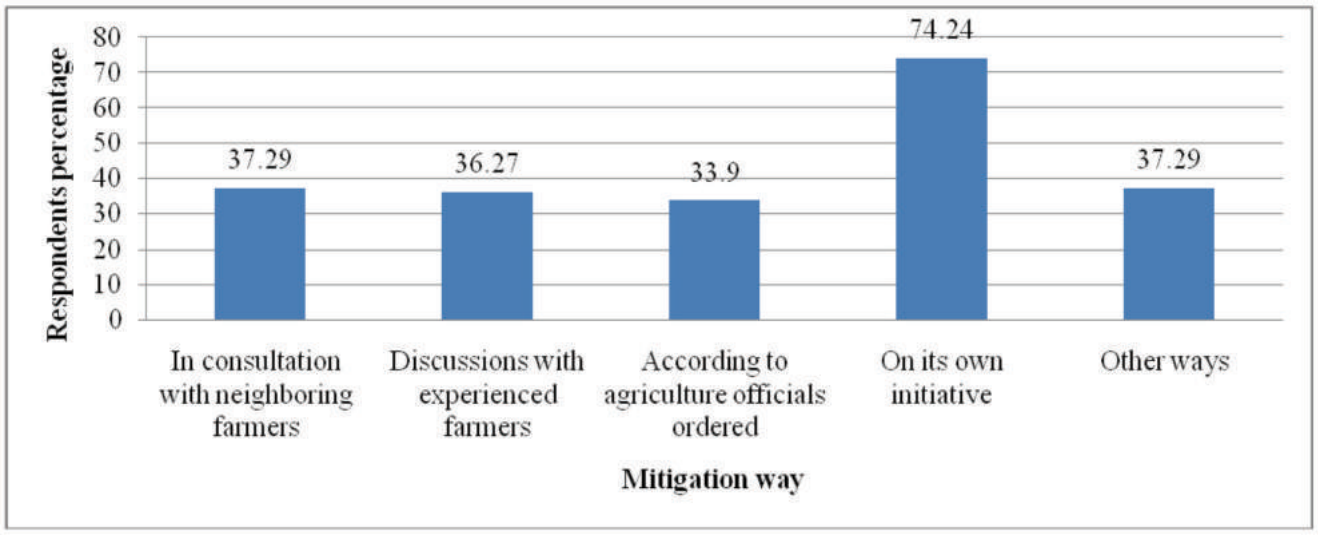

Fig 7: Way to minimize drought problem

Discussion

The respondents of the study area were not aware about the firm definition of climate and climate change. They perceived weather as a day by day environmental condition which is related to the temperature, rainfall and natural disasters and they perceived climate change as the average weather of long time, but they were not clear about the time period.

Household Dynamics and Capabilities Approach: Understanding Climate Induced Migration and Remittances in Coastal Bangladesh

Basundhara Tripathy

Introduction

Global environmental change has led to movements of people within and between various world regions. Cyclones, tidal surges and riverine flooding in the coastal areas along the Padma, Meghna, Jamuna rivers of Bangladesh have been a feature of the countries climate vulnerability for centuries (Nicholls et al., 2007). The coastal flooding in 1970 was one of the most devastating natural disasters in Bangladesh's history, taking the lives of over 400,000 people. In 1991, a cyclone resulted in the death of 140,000 people. More recent severe cyclones, including SIDR in 2007 and Aila in 2009 led to less loss of life but caused huge property and livelihood

losses. The increased vulnerability of the coastal population could be due to a host of factors including environmental changes, extreme weather conditions, disasters and economic pressures (Piguet, 2011). A complex interaction between social variables and climate change shapes the vulnerability of the communities and influences migration flows. The issue of climate induced migration requires investigation to understand the complexities especially within environmentally fragile regions.

The links between migration and household development need to be re-examined. Extreme poverty is increasingly concentrated in remote, resource poor and climatically fragile regions, namely, the north-eastern Haor region, areas in the North-West including river islands (Chars region) and the cyclone-prone South and South West coastal region. Regionally, the southwest coastal belt of Bangladesh is an intricate system of biodiversity which includes the Sundarbans, the largest mangrove forest in the world. According to the World Bank (2012), 'Sixty-two percent of coastal land has an elevation of up to three meters and eighty-three percent up to five meters above mean sea level' making this region extremely vulnerable to sea-level rise. Southwest coastal Bangladeshis exposed to environmental threats, such as, salt water intrusion, floods, cyclones, tidal surges and other recurrent shocks. The area which was once known to be a prosperous agricultural zone is today inflicted with increased environmental degradation and chronic poverty where 32.1% of the population in the Khulna district in the Southwest region lives below the poverty line (BBS, 2010).

The current study will examine the dynamics within Bangladesh, which has been recognized as one of the most vulnerable countries in the world to the impacts of climate change (Huq 2001, Huq and Ayers 2008). The aim of this research is to study the impacts of climate induced internal migration and household dynamics (sending communities) at a micro level in Southwest Bangladesh (Khulna Division). The concept of capability and its relationship with migration is being probed in the context of coastal Bangladesh. Vulnerability and risk in Bangladesh associated with climate change and migration will be further probed. Labour migration is on the rise in the Southwest Coastal region of Bangladesh and this has social and economic impacts on migrants and

their household, the non-migrant households, and possibly the wider sending communities (villages). Globally, and in Bangladesh, international migration from developing countries and the impact of international remittance have been of intense interest to policy makers and researchers, but not much research has been carried out on the internal aspects and the household systems.

The drivers and impacts of internal labour migration, remittance patterns, inter and intra household dynamics in the context of coastal Bangladesh are the key ideas being analysed in this research. Social vulnerability will be mapped mainly by identifying the most vulnerable members of society and households within the region, examining variations in vulnerability within geographical units that may experience similar hazards. The findings will be investigated through a conceptual framework which will utilise concepts from the capabilities approach, intra and inter household dynamics, migration impacts and drivers, and social anthropology.

The remittances received from internal migration are equally important, as the more highlighted and studied, income received from international migration for an economy's structural change and social process. This research will aide in the understanding of the domestic migration of coastal population linking it to the dynamics of the local communities and their development, which is rarely included in the country strategy of Bangladesh. Internal labour migration in Bangladesh has been insufficiently explored by social scientists and research institutions stressing more on international migration and the role of remittances. Globally, movements from developing countries to other parts of the world are of intense interest to policymakers and researchers, yet relatively little is known about internal labour mobility and the impact of remittance from this source on the migrant sending communities. This research would academically contribute to the impact of internal remittances on sending communities and resilience to climate risk in coastal Bangladesh.

The study seeks to explore the following **key research questions**:

1. What impact does internal labour migration, remittances and household dynamics have on the coastal villages in Southwest Bangladesh?
    a. How does vulnerability and risks affect migration in these areas?
    b. What are the impacts of remittances (non-economic) on households of the migrant sending communities?
    c. Are household dynamics changing with increase in migration?
    d. Does migration reduce vulnerability (increase people's capabilities to protect themselves) from climatic shocks and stresses?

The change in livelihood dependency from agriculture to aquaculture in the rural coastal areas of Bangladesh, along with an increasing trend in human mobility makes this research crucial for academicians and development practitioners studying the impacts of migration. The key question would lead to an analysis of the household factors (livelihood, assets, kinship, education, access to resources) and contextual factors (climate variability, geographic location, policies, markets) dependant on remittances and its linkages with household relations or community development. The role of remittances will be explicitly studied using the household dynamics theory (NailaKabeer) and capabilities approach (Sen, 1999). It will take into consideration an intersectional analysis (Bastia, 2014) of migration enabling the research to examine across class, gender, age and marital status.

Research Objectives

The objectives of the research are as follows:

- To analyse the relationship between risk, vulnerability and remittance
- To examine the impact of climate induced migration on the social development of the sending communities (individual and household level)
- To understand the role of remittance in reducing vulnerability to climate shocks and stresses

Background Literature

The impacts of climate change on human mobility have been a significant discourse in academia since the mid 1980's. The earlier literature suggested that migration was a negative impact of the changing climate (Myers 2001, Tickle 1989, Homer Dixon and Percival 1996), while more recent theoretical approaches have viewed it as an effective adaptation strategy (Tacoli 2009, Black et al. 2011, Foresight 2011).The multi-causality of climate change and migration nexus indicates the complexity and indirect linkages between the two, leading to high uncertainty and local variability in theoretical and practical approaches to internal migration in climate sensitive areas (Piguet, 2008). The increased vulnerability of the coastal population could be due to a host

of factors including environmental changes, extreme weather conditions, disasters and economic pressures (Piguet, 2011). Rapid-onset phenomena such as tropical cyclones, storms and floods impact the movement of the population away from

coastal areas (Ibid.). In Bangladesh, human mobility has been widely acknowledged as an outcome of climatic shocks and stresses apart from other factors, supported by certain existing policies that favour international migration as a means to improve livelihoods (Martin et. al., 2013). This research intends to address the issue of climate change and migration in the broader contexts of vulnerability and development based on social theories.

The dynamic between internal migration and household development in Bangladesh is under explored, amidst the growing and changing patterns of internal migration (Afsar 2003; Chaudhury and Curlin, 1975; Islam and Begum, 1983; Krishnan, 1978). The drivers of domestic labour migration in Bangladesh can be categorized under „push and pull models", which are governed by a balance of attracting and repelling factors (Lee, 1966) and economic productivity rooted in productivity and livelihood differentials (Lewis, 1954; Harris and Todaro, 1970). This investigation intends to provide much needed insight into the impact of remittances on the capabilities and well-being of the migrants, their families and communities. It is focusing on the relationship between the remittances received and the development of the migrant sending communities or desh-e-badi (hometown/village in Bangla).

A number of theoretical perspectives are being used to understand the complexity of climate migration, remittances and development nexus. Household dynamics theory (Kabeer, 1999) looks at the intra-household gender dynamics and its linkages with growth. Access to resources, agency and the decision-making powers of women from the sending communities will be analysed using this approach in changing climate of migration. This approach would look at both inter household and intra household dynamics extending Kabeer's research primarily done on women in the labour market, to the migration analysis which would provide robust findings. This will be coupled with an overlapping gender based approach of intersectional analysis which will focus on women in the sending communities and their relationship with remittance and development. The contribution of migration through remittances has been established economically, but this research would concentrate on the non-economic impacts of migration and whether they contribute to development or not and why?

The capabilities approach by Amartya Sen highlights "the ability – the substantive freedom – of people to lead the lives they have reason to value and to enhance the real choices they have" and removing sources of "unfreedoms" such as poverty and inequality (Sen, 1999: 293). Using this theoretical framework, migration, poverty reduction and inequality can be better conceptualized in the construction of a development paradigm. The concept of capabilities demonstrates the ability of individuals to achieve meaningful outcomes for themselves and their families which could be utilized by this research. Protecting and enhancing individual and family capabilities could provide a theoretical understanding of climate induced migration and the connections between remittances and development.

These approaches to the vulnerability of the coastal communities and the dynamic between migration and development will be an insightful addition to the academic debate concerning climate induced migration (De Haas, 2010). The local development context will be probed to understand the significance of these interactions and their localized impacts. This knowledge can be used to inform how academic scholars and development practitioners (Government, development partners, private sector and civil society) plan for and evaluate the development of the Southwest coastal region of Bangladesh and similar contexts.

Methodology

This is an empirical research study; a random sampling method (assigning numbers to each household and using a number generator) has been adopted to conduct in-depth interviews (semi-structured- 200nos.), focus group discussions (6 nos.) and exploratory observation of labour migrants and their families. Primary data has been collected from the Khulna division, Satkhira district, MunshigonjUpazila targeting 2 villages. Scholarly literature review on migration, remittances, vulnerability and poverty will also be a part of this research analysis. Lack of availability of primary research data on internal migration is a key reason for opting for the qualitative approach.

Conclusion

This research is exploring the changing household dimension linked to migration and remittances through empirical methods and testing their relationship in the context of a developing country vulnerable to increased climate change impacts. The internal migration patterns need to be reassessed, as emphasis has always been on quantitative studies and international migration leading to a dearth of insights and research on the finer details of internal climate induced mobility. Research on migration and development can improve the understanding of the migration processes, risks and resilience and the changing scenario in the local context. This research attempts to provide a rich analysis on migration and the role that it can play in community solidarity and the contribution that this can make to the development process. The research findings are intended to address the lack of academic knowledge on internal migration and its effects on the communities left behind.

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[This is an ongoing project of CSD. Papers and report will be available by April 2017. For any feedback or request regarding this project please email: *basundhara.tripathy@ulab.edu.bd*]

Impact of Dairy Cooperative on Poverty Alleviation among Rural Poor: A Case Study of Panchagarh District in Bangladesh

Dr. Shantanu Kumar Saha

Introduction

At the end of the 20th century, poverty alleviation still remains as one of the main challenges to achieve sustainable development. In fact, poverty itself works as a trap because when poverty is very extreme, the poor do not have the ability to get out of that situation by themselves. The poor people mostly need their entire income just to survive. It is very hard for them to save money which can be invested for the future to buy an asset to increase income. They are too poor to save for the future and thereby accumulate the capital (Sachs, 2005). This situation has nicely been explained by Vijay Mahajan (2007) as "poverty begins with low investment, which leads, in succession, to low productivity, low income, and low or no savings, thus leaving no scope for investment and continuing the vicious cycle".

Traditionally, governments implement different poverty-alleviation programs through social safety nets. However, it is now well established that these sorts of programs are intended to provide some temporary relief for the poor, but cannot alleviate poverty (Attanasio & Székely, 1999). However, an injection of capital (if possible by borrowing it from someone with a surplus) can help the poor people to break this vicious cycle of poverty by "increasing the level of investment, thereby enhancing productivity and eventually income". Then that additional income can enhance savings, which then can be used to invest in the next cycle (Mahajan, 2007).

Apart from the government initiatives, some non-governmental organizations also work on poverty-alleviation. They either provide resource/asset support or help the poor people getting access to resources. Among the non-governmental initiatives, the micro-finance programs are quite familiar. The Nobel Committee awarded the 2006 Nobel Peace Prize to Muhammad Yunus and Grameen Bank, declaring that microcredit is "an ever more important instrument in the fight against poverty." Besides, the State of the Microcredit Summit Campaign Report 2006 states that "microcredit is one of the most powerful tools to address global poverty" (Karnani, 2007). However, despite the hype over microfinance, the analysis of the macroeconomic data suggests that "although microcredit yields some noneconomic benefits, it does not significantly alleviate poverty. Indeed, in some instances microcredit makes life at the bottom of the pyramid worse" (Karnani, 2007). Further, Hickel (2015) asserts that "microfinance usually ends up making poverty worse" because "most microfinance loans are used to fund consumption – to help people buy the basic necessities they need to survive". Poor people can hardly use the money to start a venture. Leaving aside the conventional micro credit administrations, some non-profit organizations are working on poverty-alleviation through other means. Rather than providing cash, they provide assets and services. According to program manifesto, these sorts of programs are not only giving emphasis on the premise of the abilities but also trying

to open doors additionally on the capabilities to reimburse. ***On condition that, this research intends to explore the prospect of asset based approach to poverty alleviation***.

Statement of the Problem

Even though extreme poverty rates have been cut by more than half since 1990, about 836 million people still live in extreme poverty. Specifically, the overwhelming majority of the poor people are living mostly in the Southern Asia and sub-Saharan Africa region. In fact, Bangladesh is one of the world's most densely populated countries located in the Southern Asia. Though Bangladesh has made progress in reducing population growth and improving health and education; the poverty situation of Bangladesh is still deep and widespread (BBC, 2016). As a matter of fact, the poverty level in the northern part of Bangladesh is one of the highest in the country. The rural people of this region have a very limited access to income generation activities apart from extraction of sub-surface sand and stone.

Panchagarh is a district in the extreme northern part of Bangladesh under Rangpur division. In Panchagarh district, Kazi Shahid Foundation (KSF), which is a non-profit social organization, has been executing a contractual dairy program with a plan to help in expanding earnings and reasonable occupations of the focused on landless and smallholdings through supporting sustainable agricultural processes. According to the organization, their Dairy Model is a wonderful flight from the conventional micro credit administrations. The exercises of this venture could be best seen by sub-classifying into three real fragments: cattle feed, milk and dung. To get maximum yield, they also require cultivating high yielding fodder to nourish dairy animals with bigger amount and better quality grass. Additionally, KSF Dairy Model encourages organic tea plantation, natural vegetable cultivating and supply, bio-manure creation and instruction programs (Chowdhury & Ali). ***This research aims to assess the impact of dairy cooperative on poverty alleviation among rural poor using the case of Panchagarh District in Bangladesh***.

Research Questions

This research sought to provide answers to the followings:

a) What impact has the poverty alleviation programs of KSF Dairy Model made on the lives of rural dwellers in Panchagarh District of Bangladesh?

b) What sorts of poverty alleviation programs package would best be suited and easily implementable at the rural level?

c) What is the linkage between poverty alleviation programs, living conditions of the people and rural development? What other factors affect rural development and rural poverty?

Statement of the Hypotheses

The following general hypothesis form the basis upon which this research study will be undertaken:

Ho: The KSF Dairy Model has positively impacted poverty alleviation of the rural poor people.

A Framework for Analysis

An assessment of how "Contractual Dairy Farming" can reduce poverty in the rural areas of developing countries (using the Panchagarh case as an apparatus) needs to start from the widely accepted broad conception of poverty and its determinants (Smith, 2004). However, poverty is very dynamic, its determinants varying both seasonally and from year to year. On the other hand, poverty is normally measured using income as welfare indicator. The reason for using income as an indicator is that the income provides some indication about the capability of individuals to achieve a certain standard of living. Furthermore, the information on income is more readily available than for other variables (Attanasio & Székely, 1999). Whilst income level is an important determinant of poverty, it is not sufficient as a measure. Indeed, many poor people in rural areas of developing countries may depend largely on their own productive activities for subsistence and have very little cash income. People may also be poor for structural reasons, lacking the resources and opportunities to establish a viable livelihood, and always having to struggle to meet basic needs. Alternatively they may be vulnerable to livelihood failure, falling into poverty during times of crisis such as periods of illness, crop failure or high livestock mortality. Poverty can also be considered in terms of lack of access to goods and services, for example health, education, roads, public transport and utilities; or in terms of deprivation of economic, political, social and cultural rights (Smith, 2004).

Therefore, it is necessary to consider impacts of KSF Dairy Model on the varied dimensions of poverty, whether any changes are in absolute or relative terms, and whether they are long lasting or just transient (Smith, 2004). To simplify the framework and make the analysis tractable from an empirical point of view, this research aims to focus on the "Capital Assets". According to Upton (2004), "a capital asset is something that has been produced but has not yet been used up. It should produce a return, in terms of increased income, or welfare, in the future. Livestock fit this definition; they have been produced and should yield returns in the future".

Further, it is also important to have a wide conception of the resources that people need to access in the process of composing a livelihood, perhaps especially in a context

where peoples livelihoods shift from being directly based on natural resources, to livelihoods based on a range of assets, income sources and product and labor markets. This leads me to consider livelihoods in terms of access to five types of "capital" asset produced, human, natural, social and cultural capital (cf. Bebbington, Kopp and Rubino, 1997; Bebbington, 1997; Scoones, 1998; Carney, 1998). Therefore, the proposed framework will try to understand them in terms of: (a) people's access to five types of capital asset; (b) the ways in which they combine and transform those assets in the building of livelihoods that as far as possible meet their material and experiential needs.

Methodology

The study will combine both quantitative and qualitative data collection techniques.

- In carrying out this study, a total of 400 respondents made up of both beneficiaries and non-beneficiaries from all villages will be administered with questionnaires, and their responses will be collated and analysed.
- With regard to the qualitative survey component, 10 Key-Informant Interviews, 20 (10 + 10) in-depth interviews of successful and unsuccessful cases, focus group (08) discussions will be conducted using purposive sampling technique.
- This field research will be conducted by trained surveyors under the supervision of a research assistant.
- The overall supervision, analysis of data and report writing will be done by the main researcher.

Deliverables

1. Datasets on beneficiaries' perception, impact evaluation of contractual dairy farming will be achieved.
2. A final comprehensive report analyzing the findings

Expected Output

1. Seminar: A seminar will be conducted in ULAB focusing on the issue of poverty alleviation. The study findings will be discussed.

2. CSD publication: A brief report will be prepared highlighting the key findings related to the study

3. Paper presentations & Journal publication: 2 papers will be prepared for international journal publication and for presentation at conferences related to the subject in 2017.

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Assessing Organizational Capacity of the DPOs in Bangladesh: Success and Challenges

Abu Sadat Md. Marjan & Md. Shafiqul Islam

The study deals with the capacity assessment of Disabled Peoples' Organizations (DPOs) as endorsed by the clusters and network organizations in Bangladesh. The DPOs are formed and managed by people with disabilities and they have a representative and advisory role with regard to decision-making in disability matters in grassroots' level as well as through various networks and alliances in national level. The result of this study indicates that while much progress has been made, barriers remain to the recruitment, hiring, retention, and career advancement of adults with disabilities in the workforce that warrant consideration.

In view of the new era of SDGs, there should be a new approach of policy influencing works in regard to contextualization of SDGs, particularly disability associated SDGs planning and target setting. Several initiatives run by the Government of Bangladesh and a range of national and international non-government organizations already exist, but coverage is still very limited and fragmented. This capacity analysis is an initiative to map out the strength, improvement areas of DPOs who are emerged and working since 1990s in Bangladesh. The main objective of the study is to map and assess the present status of the capacity of the DPOs and find out the ways to further strengthening their capacity. Besides the study has some specific objective like, analyze the causes and factor behind the success and failure of the DPOs, identify the key factors and challenges contributing to performance of DPOs and to make recommendations for improve capacity of the DPOs to be more effective and efficient.

Over last 25 years, several Disabled People's Organizations (DPOs) have emerged focusing their work around the protection and promotion of the rights of people with disabilities with the support of various national and international development agencies working for the development of peoples with disability. However, attitude toward people with disabilities continues as integration issue. The ***Assessing organizational capacity of the DPOs in Bangladesh: Success and Challenges*** used qualitative methods for data collection and analysis. Numerous interviews, FGD sessions and workshops were conducted along with the desk study. The study locations have been selected based on the prevalence of majority of persons with disabilities and presence of majority of DPOs in the geographic coverage to cover most of significance of the collected data with a wider coverage of the study. A purposive sample is used in this study where DPOs are selected based on the objective of the study and working area of ADD International as they financed the project.

The study also mentions how the Disabled Peoples' Organizations (DPOs) are responding to the 'Persons with Disabilities Rights and the Protection Act 2013', prevalence of disability in Bangladesh, socio-demographic characteristics of study population, knowledge, attitude and practices on disability in Bangladesh, DPOs' approaches to them and particular problems and gaps.

The relations of disability are reinforced by social ideologies, which are in fact historically constructed. The study recommends that accessibility should be taken as a central and natural quality criterion in infrastructure development and consideration of the disability dimension in policies towards "basic societal services for all". The study revealed that most of the DPOs observed doing well in the initial step with remarkable result and enthusiasm. They have achieved a lot in regards to leaderships, networking and alliance building, advocacy and rights and got empowered. But for the better future and sustainability, still there are scope to support them for making them self-sufficient by providing the

capacity building support on management, fund raising, education, and skill development on financial management and operation. The emerging global commitment to equalizing opportunities for disabled people implies much more than a simple commitment to traditional anti-discrimination principles. It also implies a commitment to removing and preventing social and environmental barriers that have traditionally restricted access for people with disabilities to social and economic opportunities. Fulfillment of this commitment, therefore, requires an expansion of disability policies and strategies to include not only traditional rehabilitation and anti-discrimination measures, but also affirmative strategies to prevent and remove social and environmental barriers.

Academic Outreach of CSD Faculty Members

Dr. Samiya Selim

Dr. Samiya has been working with Bengal Institute, a unique transdisciplinary institution for the study and design of architecture. As place, for advancing the understanding of the lived environment, the Bengal Institute presents a platform for developing ideas and programs to improve the qualities of architecture, landscapes and settlements. Dr. Samiya has given a talk at Bengal Institute in November 2016 on Landscape Ecology, Sustainability and Climate Change at their Seminar Program Series on the Study and Design of

Settlements and Landscapes. The Seminar was attended by students and researchers working in the fields of urban development, design and engineering, environmental studies and the built environment.

Dr. Samiya has also been invited to Bengali Institute as a climate change expert panelist for a discussion on the implications of the fourth industrial revolution on climate change, and what responsible and responsive leadership (the theme of Davos 2017) means in this context. Other panelists included Dr. Atiq Rahman, Executive Director of Bangladesh Centre for Advanced Studies (BCAS), Ferdaus Ara Begum, Chief Executive Officer, Business Initiative Leading Development (BUILD) and Sohara Mehroze Shachi. Ms. Shachi is one of the two young people from Bangladesh who have been selected by the World Economic Forum to participate in the World Economic Forum Annual Meeting 2017 based on her work on climate change. Khaleed Ashraf, Executive Director of Bengal Institute was the Moderator. The panel audience included key stakeholders from various sectors including private, public and NGO sector.

Md. Shafiqul Islam

ACSE Ambassador Program

The Asian Council of Science Editors (ACSE) has launched the ACSE Ambassador Program with the view to engage research community effectively. The community has the role to publish quality scientific research and disseminate results towards wider community. In this regard ACSE called upon the nomination for the Ambassador Program with details CV and interest. After careful examination of curriculum vitae (CVs), the ACSE authority has been taken final decision related to Ambassador Program. The Faculty Mr. Md. Shafiqul Islam, Assistant Professor, Center for Sustainable Development at University of Liberal Arts Bangladesh has been selected as an Ambassador of Bangladesh for 2016.

The Program will provide lot of benefits to the members and Ambassadors. The Ambassador will be benefitted through easy access to:

- *standard bring up to date concerning ACSE events*
- *complimentary, downloadable ACSE Communications that has a great learning content and industry updates*
- *opportunities of networking with national and international editors, scholars and researcher community*
- *Likelihood to join and build associations and affinity groups with other ACSE Ambassadors and ACSE staff.*
- *person accepted as The ACSE Ambassador on the ACSE website and ACSE newsletter*
- *engaging as a panelist or co-presenter at ACSE-sponsored events such as workshops, seminars or conferences*
- *scope to build up other employability skills including confidence, team-work, presentation and creativity.*
- *CV value and a recommendation on LinkedIn*
- *receive own ACSE visiting card and a certificate of appreciation*
- *precedence thought for feedback and suggestions*

The Ambassador can be played following role during his tenant -

Disseminate and share ongoing & upcoming ACSE event among the research communities. Organize workshop and seminar in home countries to disseminate quality research findings. Create and post regular activities related to ACSE in the Facebook page, ambassador blog and web page. He also is responsible to invite other researcher to become members and contributors for the program. Take initiatives to publish research findings in high quality publishing journals. Attend in the annual meeting, conference and seminar organized by ACSE.

Ms. Basundhara Tripathy

IASFM Conference 2016

Forced migration has turned out to be a concern for not only the ones who migrate or are related to them, but also for the states and the humanitarians. These people, who migrate in order to flee war, escape famine, or because of a major development project and who have to move around

within their countries or across the border to survive all the mishaps happening to them, feel the need for protection and/or assistance. Like other grave problems of the state creating a chaos around the world are addressed, this forced migration should also be addressed, as this is giving birth to a massive identity and nationality crisis. The International Association for The Study of Forced Migration, came forward with an idea, where the academics, researchers, practitioners and policy-makers come up with different innovative ideas and findings to grow a consciousness about this problem, to stir a thought among the minds of people regarding this and to come to discuss ways in which this crisis can be dealt with. The IASFM Conference is the one of the largest conferences on migration in the world which promotes and increases scientific knowledge of forced migration. The 16th conference of The International Association for the Study of Forced Migration (IASFM), hosted by the 'The Centre for Migration Studies', 'The Institute of Ethnology and Cultural Anthropology', and 'The Faculty of Law and Public Administration' at the Adam Mickiewicz University, was held in Poznan, Poland from July 12-15, 2016. A total of 390 participants from 46 countries came together in this cerebral conference and the academicians from top universities worldwide, UN agencies, practitioners and decision-makers working on forced migration issues were among them.

All these thoughtful and intellectual minds shared their experience and pioneering findings and ideas and communicated amongst themselves. They talked about those migrants who have to leave their families and home to earn livelihood, and in doing so, they earn so little and lose so much that they are left with a fragile and displaced future.

Ms. Basundhara Tripathy, Assistant Professor and Research Project Manager at the Center for Sustainable Development represented University of Liberal Arts Bangladesh (ULAB) in this conference and presented her paper under the theme Climate Change and Displacement, which is extremely critical in the context of climate change. She presented the paper: 'Climate induced human mobility: Adaptation strategy among rural communities in coastal Odisha'. In the presentation some key findings were discussed, which highlighted on climate change induced forced migration. Some of them were how the flows of remittance to the

household tended to be irregular, despite in many cases employment being waged due to lack of access to bank accounts. Households with both migration income and a Below Poverty Line (BPL) card experienced greater security of income, as following a loss of harvest, they expended less of their household income purchasing rice while extremely vulnerable households were not able to migrate and less vulnerable households migrate, along with many other findings. It was also said that evidence suggests households that are dependent on migration to sustain household livelihoods; such migration may not be adequate to enable households to adapt effectively in the face of disasters. It was felt that there is a need for longitudinal studies on the

consequences of climate induced migration and remittances. Thus **IASFM 16: Rethinking Forced Migration and Displacement: Theory, Policy, and Praxis**, took an initiative to talk about the problem of forced migration and by doing that, it encouraged thoughtful finds to find more information about it and to come up answers for the unanswered questions lying in the blank eyes of the migrants who are lost in despair.

Dr. Shantanu Kumar Saha

Training on Rain Water Harvesting System

The pressure on available water resources is increasing due the rapid urbanisation, industrialisation and agricultural activities as a consequence of growing population and development activities. In addition, the over exploitation of groundwater for agricultural, drinking and other commercial purposes is causing salt water intrusion especially in the coastal belt area. Water quality is further limited by the pollution from industries and other sources. In this situation where supplies are scarce, rainwater harvesting and recycling can increase the availability of water to some extend and become an economical and ecological benefit.

Considering the needs, WaterAid Bangladesh in collaboration with Centre for Science and Environment (CSE), India organize training on **'Urban Rainwater Harvesting System'** in Bangladesh to create wider opportunities. This training course has been designed for civil engineers, architects, urban planners, environmentalists and academicians working in the government and non-government organisations, semi-government organisations, universities and private organizations. People with an interest in the theory, practice (design), policies and legal aspects of rainwater harvesting, in particular, who are interested to learn more about its reuse and recharge to the groundwater mostly join this training course to apply the knowledge in practical fields.

WaterAid has been successfully providing training for the last five years and in the year 2016 they offered this training for the sixth batch in collaboration with CSE. The training for the 6th batch was held from 24-26 July 2016 at Chuti Resort, Joydebpur, Gazipur. Dr. Shantanu Kumar Saha, Senior Lecturer-cum-Research Associate at the Center for Sustainable Development, University of Liberal Arts Bangladesh (ULAB) was been selected to participate in the 6th batch of training on 'Urban Rainwater Harvesting System' with a Full Fellowship.

It was a great opportunity for Dr. Shantanu to learn many important techniques about the Rain Water Harvesting from this training. This training would be helpful to introduce a Rain Water Harvesting project in the university to produce distilled water for research laboratories. It can be expected that taking this type of project we can produce low cost distilled water for laboratories as the cost of distillation of rain water is much lower than ground water (Ground water contaminated by more irons and other minerals). Further, this training creates the opportunity to get introduced with some young and energetic new friends with similar interest.

Abu Sadat Md Marjan

COP22: From the Perspective of a Prey of Climate Change

This year I got the opportunity to attend the United Nations Climate Change Conference (COP22) held in Marrakech, Morocco from 7 to 18 November. COP 22 is set to be a conference of action to put some force behind The Paris Agreement- marked critical turning point towards a zero-carbon, more resilient world by dealing with greenhouse gases emission mitigation, adaptation and finance starting in the year 2020.Almost 200 countries in Marrakech worked out together to perceive ways in order to implement the 2015 Paris agreement. The focus issue this year was about water cleanliness and scarcity, and water-related sustainability which are a key problem in the developing countries particularly in many African nations.

In a side events organized by World Metrological Organization, senior science coordinator Mr Omar Baddour mentioned that all the indicators are red, from increasing levels of drought and heatwaves to Arctic ice melt and rising sea levels worldwide. From his speech what still hits my brain is even after the presence of facts and actions to implement a better world where does the hindrance lay? May be the factthat 'you can't negotiate with the laws of physics' is limiting the satisfactory circumstances. The very proof we get from WMO's statement on global temperatures announcing 2016 to be "very likely" to beat 2015 as the hottest year on record. I observed lots of discussion among the participants on the issue of global funding for adaptation in vulnerable developing

nations and much speculation there in Marrakech that whether or not newly elected US President Trump will try to withdraw from the Paris Agreement or even the UNFCCC. Everybody was almost certain on one thing that he is going to de-fund the UNFCCC and the LDCF.

The COP22 considered several issues, while implementing the climate activities, like use of indigenous peoples' knowledge, gender awareness, existing human rights commitments and related theories, such as the SDGs. There was a dedicated different theme in the Green Zone each day. In the Blue Zone individuals and groups could talk to government delegations and negotiators to seek acceleration on the part of governments to implement the Paris agreement. At an event organised by UNEP Intergovernmental Panel on Climate Change (IPCC) at the conference, President of the COP22 Scientific Committee emphasizes the Signatories to The Paris Agreement to pledge in a robust way to sectors related to the green economy as well as blue economy for taking advantage of related growth and job opportunities.

Panelist on several discussion focuses that most vulnerable nations need to use their resources to finance adaptation. But this is not to say that they should stop pursuing the developed nations to fulfill the pledges they have made over time. Many people I met at COP22 have praised the initiatives of Bangladesh for creating a fund from its revenue budget called Climate Change Trust Fund (CCTF) in 2009. Being a vulnerable developing country Bangladesh did not wait for assistance and donation from the developed countries for such adverse effect of climate change. Rather Bangladesh formed a resilient fund from its scarce resources to combat such vulnerability. Other endangered nations like Rwanda, Kenya, Gambia are making similar national-level funding measures. At the second week of COP22, heads of states and ministers including the prime minister of Bangladesh Sheikh Hasina attended the high-level discussions on reducing the CO_2 emissions and climate finance.
COP22 was an exceptionally remarkable conference to attend to, especially because Bangladesh is in jeopardy of global warming. The conference not only enhanced my knowledge regarding climate change but has also brought about a sense of responsibility to limit and if possible to obviate Bangladesh from the harmful effects of climate change.

Finally, it was really exciting to participate COP22. It is definitely a great place to learn, share and networking. A better future is expected to happen only if the LDCs and other developing nations rotate their attention more towards nation-wide actions and finance and focus more on South-South sharing of experiences.

Visiting Researcher's Report

Visiting Researcher's Report: Oliver Scanlan, PhD candidate at Dublin City University's School of Law and Government

CSD: A home away from home

Having worked as a volunteer in Bangladesh for two years (2008 – 2010), I was no stranger to the country, but just as no one is an island, I was anxious to develop a relationship with a Bangladeshi institution that could help me maximize the potential for my research, and also allow me to interact with leading scholars on issues of environmental sustainability. The Centre for Sustainable Development exceeded every expectation on both fronts, and provided a fantastically warm and welcoming environment for me while I was based in Dhaka; it truly did feel like a home away from home.

The CSD provided outstanding logistical support every step of the way; I had my own desk in the office, together with internet access and use of the library. On its own, this was a major support to my activities in the country, and my time would have been far less productive without it. But more importantly, the office environment was buzzing with shared scholarly endeavour, with researchers operating and the cutting edge in their respective fields, all passionate about how academic efforts can provide essential advice to policy makers in addressing crucial environmental issues that will come to affect all of us more and more in the near future. The ability to bounce ideas off my Bangladeshi counterparts, receive feedback on my research design and methodology, and to have such a wealth of knowledge and insight at hand as a sounding board was instrumental in keeping me on the right track.

What remains particularly striking is the sense of purpose driving CSD's work, a purpose that flows from the complete absence of the complacency that currently typifies attitudes to climate change back home in the United Kingdom. As one esteemed panelist put it at an international conference on sustainability organised by CSD, "there are no climate change deniers" in Bangladesh. The poorest farmer can describe how the rainy season comes later and is more erratic with every year that passes. It is this insight that is so vital to capture, and relay to western policy makers still living in a state of denial about the fate of the planet if we continue in our "head in the sand" approach.

My own research concerns forestry and indigenous peoples' knowledge, focusing on the Garo community in Modhupur, Tangail district. One of the very last forests in Bangladesh,

in Modhupur donor policy has been typically erratic in terms of community based approaches, with the current paradigm clearly failing in its goal of achieving the "active participation" of the indigenous community. With effective approaches to community inclusion a demonstrable essential ingredient to sustainable conservation of the world's rapidly vanishing forestry stocks, once again the trick is bringing decision makers' attention to the views and experience of the world's most vulnerable forest communities. They truly do know best when it comes to the management of their own ancestral resources.

With such a positive experience of working with CSD behind me, I very much hope to continue to collaborate with this excellent institution, and following the completion of my PhD will be looking to foster more permanent institutional links between it and my own university. Only through such effective North-South collaboration, and pooling the enormous experience and insight available at different universities, are truly global solutions to global problems possible.

External Research Projects and Programs with Partners in the NGO and Private Sector

Environmental Impact Assessment Project with Olympics Industries Ltd

Environmental Impact Assessment (EIA) is an important management tool for ensuring optimal use of natural resources for sustainable development. The first step for any organisation's sustainability/carbon management programme is to gain an independent & thorough understanding of its current green-house gas (GHG) emissions. Bangladesh an environmentally fragile and climate affected country has seen organizations and companies including the government move towards green and clean practices. Still at a nascent stage, environmental impact assessments in Bangladesh by the private sector are growing but yet to be an established process. Green growth, sustainable development and the current SDGs make the EIA process imperative for the country's growth.

CSDs carbon footprint business appraisals provide a comprehensive assessment, identifying current major emission sources and opportunities for savings in the future. CSD is working with Olympics Ltd Industries as part of their Corporate Social Responsibility Program to assess the company's environmental footprint, help set realistic targets for improvement, and provide advice on how to reach those targets. This year's main goals are to reduce greenhouse gas emissions, increase the use of renewable energies, and offset the CO2 emissions resulting from inputs, outputs and processes.

Food Security Project with Helen Keller Initiatives funded by GIZ

The Affordable Nutritious Food for Women (ANF4W) project is a strategic alliance which is carried out in Bangladesh since 2013. Jointly funded by the German Ministry of Economic Development and private sector partners, the ANF4W project is implemented by GIZ and HKI. With the overall objective to enhance micronutrient content in rural Bangladeshi diets, the project applies innovative approaches to increase knowledge on nutrition-sensitive agriculture techniques and nutritional requirements. CSD has partnered with Helen Keller Initiative (HKI) to develop two **instructional videos for agronomic biofortification and safety measures for farming practices in Nilpharmari.** Agronomic biofortification aims at increasing zinc content in the grain through application of zinc foliar fertilizers. The application of zinc foliar fertilizers has to follow a standardized way to be effective. Regular monitoring data of the project indicated that farmers' awareness of agronomic biofortification and safety measures increased but adoption of appropriate practices is poorly done.

On this basis, CSD team will be creating two short videos – one instruction for agronomic biofortification of rice with zinc and the other on safety measures including safe disposal of containers. Filming for these projects has already started and the final product will be showcased in May 2017.

Knowledge Generation and Dissemination

Research on Climate Change in Bangladesh

CSD-ULAB chairing 'Coastal Zone Management' session at Gobeshona Conference - Research on Climate Change in Bangladesh.

Workshop on Environmental Art

Center for Sustainable Development organized a workshop on Environmental Art in collaboration with ULAB Art Club. The workshop was held at ULAB at Campus B multi-Purpose room. Tejosh Halder Joesh, Sculptor, faculty of Fine Arts,

Dhaka University attended as the chief guest in the workshop.

Minor Fruit Exhibition

CSD successfully arranged an exhibition of "Minor fruits in Bangladesh" as part of the GED course - "Biodiversity and Nature conservation" at university campus.

Maritime transportation, pollution and its impact on climate change

CSD hosted another successful seminar on "Maritime transportation, pollution and its impact on climate change"

by Mr. Kawsar Mostafa, Mariner by profession & one of the Founding Directors of Nature Study Society of Bangladesh (NSSB). The seminar provided our students a broader perspective on global issues around sustainability, climate change and taking responsibility on reducing carbon footprint.

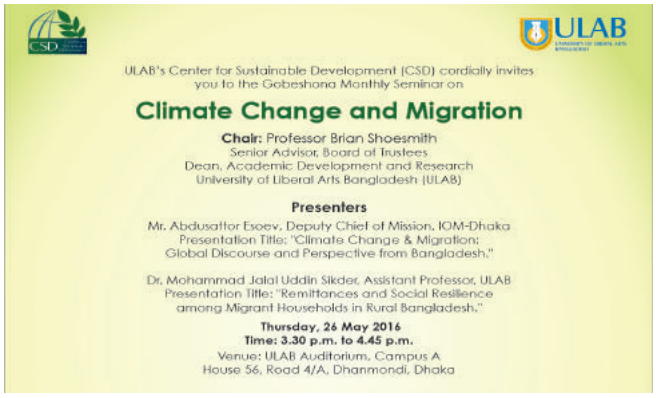
Seminar on Climate Change and Migration

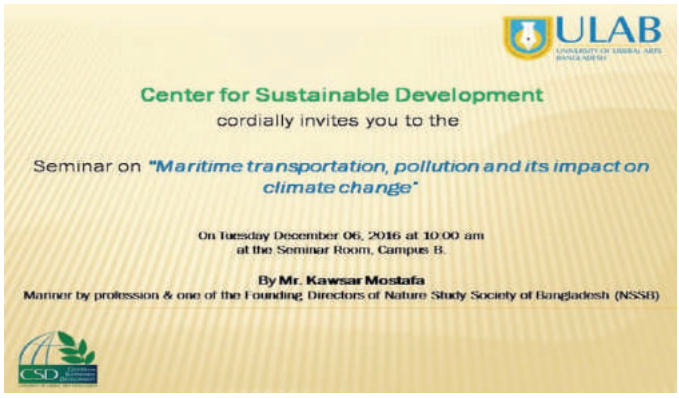
Center for Sustainable Development (CSD) successfully has organized a seminar on Climate Change and Migration. The seminar was held at ULAB campus B seminar room on 26

may, 2016. Deputy Chief of Mission, IMO – Dhaka, Mr. Abdusattar Esoev gave a talk in the seminar as the keynote speaker.

Seminar on Renewable Energy: Its Status , Prospects, and its Challenges

A seminar on Renewable Energy: Its Status, Prospects, and its Challenges was held at ULAB Campus B, Seminar room on November 10, 2016. The seminar was organized by the ULAB Sustainable Development Club with the support of CSD. Mr. Sohel Ahmed, the chief operating officer of Grameen Shakti discussed the status & prospects of renewable energy as the chief guest speaker.





Academic Activities outside of Classrooms

As a part of academic requirements, the students of the "Biodiversity and Nature Conservation" course visited Lawachara National Park, Srimanagl and adjoining garden (rubber & tea) for getting practical knowledge on

species diversity in relation to micro and macro climate and conservation perspectives. In the field, they applied quadrats method for the calculation of plant species and diversity. They have also learned how to locate snake using radio tracking system. The system has been demonstrated by the Creative Conservation Alliance (CCA). The course teacher, Md. Shafiqul Islam, Assistant Professor from Center for Sustainable Development, University of Liberal Arts Bangladesh mainly coordinated and guided this three days long field trip conducted from December 8 to December 10, 2016.

The students from GED-217, Introduction to Climate Change at ULAB visited the Rainwater Harvesting Plant at Independent University of Bangladesh (IUB) in collaboration with Water Aid, organised by the Center for Sustainable Development (CSD). This was a great opportunity for young students to experience practical demonstration of the rainwater harvesting plant. It provided them with an exposure to the interventions practiced in the country linking their knowledge on climate change with the adaptation techniques. This was a successful collaboration between academic institution such as ULAB and International NGO - WaterAid to promote practice or field based approach to education which will improve students understanding of the impacts of climate change and help develop subsequent coping strategies.

Students of the GED 205: Introduction to Sustainable Development had the opportunity to connect their discussions and experience in dealing with organic farming technique and biodiversity issues at KSF Savar Project. They got to have a practical experience on 26 November, 2016. Students also got the opportunity to question and interview beneficiaries and the local community to collect primary data for their report writing.

Other Activities Related to Sustainability at ULAB

SD-Club Activities

Training workshop on making bags out of PVC Banner

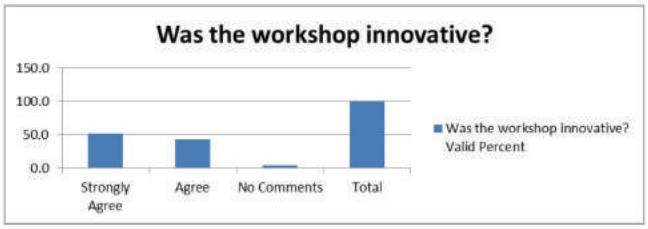
"Greening ULAB" is the first-ever Campus Sustainability Program in Bangladesh taken by the Center for Sustainable Development (CSD) of University of Liberal Arts Bangladesh (ULAB). One of the concerns of this project is *campus sustainability* which has become a global concern in recent

era. "Going Green" - indicates supporting the "preservation of our personal resources" which includes 3Rs- Re-use, Reduce and Recycle. The main purpose of the Greening ULAB project is to give and develop ideas of how friendly we are to our surroundings especially to the environment and how much cautious we can be while using natural resources. This initiative will help the students to know that our activities, like - how we live, what we buy, eat, and use to light our home to office, classroom etc., can have global impact. 'ULAB Goes Green' not only teaches the students wise use of energy and water but also guides them to improve overall lifestyle including behavior to embrace a quality life.

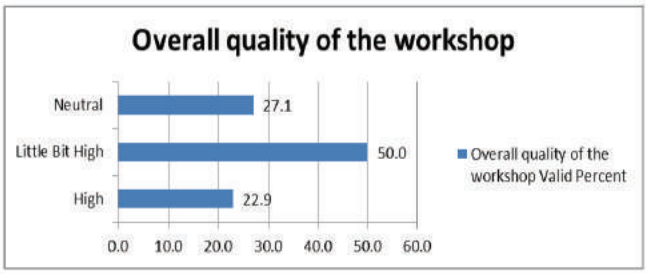
The "Greening ULAB" project was paused down for a couple of years. Then, the Center for Sustainable Development (CSD) took the initiatives to re-launch the Greening ULAB" project this year again. A number of initiatives have been taken to see how effective this campaign can be in near future. This time CSD aims to reach to every student in a more actual way. The project started with a training workshop arranged for the students of ULAB on 28th of July 2016. The training workshop taught the students to utilize used materials again and again.

Every semester, ULAB needs to prepare a lot of banners of different sizes but just for one day use. Just after the event finished theses banners are being dumped or kept in the store room. Focusing on this issue, CSD team planned to reuse all these banners. After a huge collection of banners, CSD team in collaboration with Sustainable Development club of ULAB arranged a workshop where students were taught how to make attractive and useful bags out of PVC banner.

A total of 50 students from different departments such as BBA, MSJ and DEH took part in this training workshop very actively. Later on, they also took part in evaluating the overall management and opportunities arranged during the workshop. A good number of feedbacks have been collected from the



people, participated in the training. Some pie-charts have been added below to show the students' responses regarding the workshop.



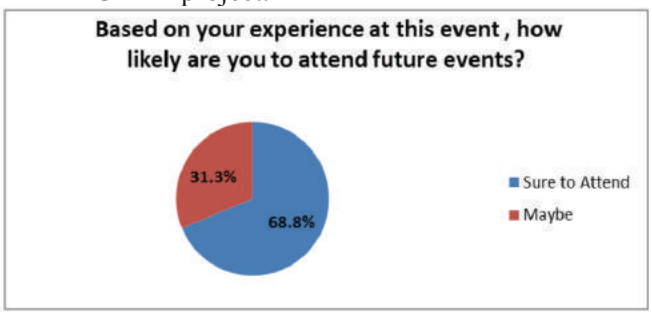
About 50% of the total student has affirmed and strongly agreed that the workshop was innovative.

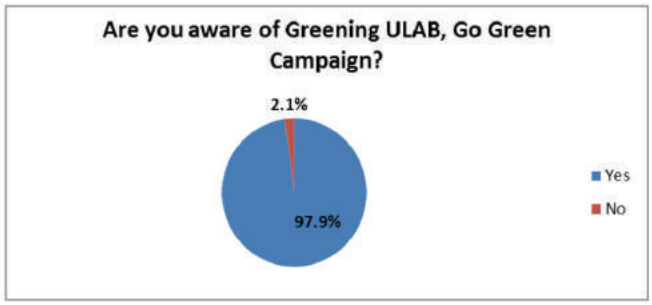
Besides, it was found that 50% students have marked this initiative as a good quality workshop where about 27.1% students remains neutral while rating the quality of the workshop.

Further, students have also given feedbacks for the improvement of the Greening ULAB project. Some of them are given below –

- Establishment of solar panel can also lead ULAB to go green.

- Making/ using and selling of materials made out of recycled materials can be a source of starting a new business plan.
- CSD can introduce having organic food behavior in campus as an initiative of Greening ULAB project.





In addition, feedback from other students showed that they found the event productive and innovative. They are interested to join such type of events more in near future. Most of the student's common feedback was none of them have such kind of idea that banners can be used to make bags and which seemed very surprising to them. During the discussion, about 3% students from the training workshop have given their opinion to increase the attendance of trainees to get many more ideas. Overall feedback from the students has provided the idea that students are in need of such kind of group activities where different and innovative things can be taught and shown.

Center for Sustainable Development

University of Liberal Arts Bangladesh (ULAB) understood the importance of 'Sustainability' long since its birth as a university. As part of its vision to address and sow the seeds of 'sustainable development' among the future young minds of Bangladesh, Center for Sustainable Development (CSD) was established [on February 1, 2006]. One of the major purposes of CSD is to prepare the students of ULAB to critically look at traditional 'development' and equip them with a clear understanding of 'sustainable development'. To aid the academic purposes, the department focuses on interdisciplinary and collaborative research on core areas defined within the agendas of CSD and ones that complement the concept: 'sustainability'.

The Center, CSD offers courses overarching the issues of sustainable development, while planning on developing curriculum on 'Sustainable Development Studies (SDS)', a draft curriculum for offering major courses and Masters Program.

- Sustainable Livelihoods
- Climate Change and Adaptation
- Agriculture and Food Security
- Disaster Management
- Natural Resource Management
- Integrated Water Resource Management
- Peri-urban and urbanization
- Coastal Zone Management

Profile of the Interns

Mazharul Islam Munna

Mazharul Islam Munna is currently working as a research assistant at CSD. Before joining CSD, he completed his under graduation in Public Relations from Media Studies and Journalism department at University of Liberal Arts Bangladesh. Currently he is studying Masters in Communication. He is a growing up entrepreneur and running his own business as well. In the past, he worked on several research projects such as 'Climate Change Induced Migration in Bangladesh', 'Reputation analysis on Bangladesh Garment Manufacturers and Exporters Association (BGMA)', 'PR research on BGMEA regarding Rana Plaza and Tazrin fire incidents' as well as participated in several campaign programs like Promoting Duke of Edinburgh International Award at ULAB.

Piu Chowdhury

Piu Chowdhury is a student of the Department of English and Humanities (DEH) at University of Liberal Arts Bangladesh. She is an editor of the magazine, MUSE (Mouthpiece of ULAB students of English). She is also working as a Peer Tutor in ULAB's English Zone and Writing Lab. Piu is currently the Vice-President of "Paper Canoe-ULAB Literary Society". Apart from this, she also worked as a research assistant for a translation of a book named *Oedipus Jokhon Colonus E (Oedipus at Colonus)*. Piu is currently working as a research assistant at Center for Sustainable Development, ULAB.

CSD Team

Dr. Samiya Selim

Dr Samiya Selim. is an Associate Professor and the Director of Center for Sustainable Development (CSD). She has studied and worked in the UK the past 12 years in the field of environment conservation, climate change and sustainable development. Her specialization is in the areas of ecosystem based management, sustainable livelihoods, socio-ecological systems, climate change adaptation and resilience, ecosystem services, and science-policy interphase.

Dr. Selim has two Masters in Sustainable Development and Conservation Biology from the University of Leeds and a PhD in Marine Ecology from Animal and Plant Sciences Department, University of Sheffield, United Kingdom. She also has 10 years working experience in research, project management and policy advocacy in the NGO Sector in Bangladesh and England. She has been engaged in collaborative interdisciplinary research projects with DFID, SEI, BUET, and USAID and has several publications in peer-reviewed journals.

Her previous work includes mobilizing hard to reach communities in getting involved in environmental activities – health/ nature walks, food growing, conservation volunteering, green jobs, and environmental education. She has also worked in the textile industry in Bangladesh implementing alternate cleaner technology, use of effluent treatment plants and has organized multi stakeholders meeting to discuss issues of environment and health. Dr Selim is interested in pursuing further research on ecosystem based management and building a green economy that focus on solutions for biodiversity, ecosystem and people.

Md. Shafiqul Islam

Md. Shafiqul Islam earned a Master's degree in Forestry from the Institute of Forestry & Environmental Sciences under Chittagong University in 1997. Mr. Islam is currently working as an Assistant Professor at the CSD, University of Liberal Arts Bangladesh. He has seventeen years of experience in a range of fields, including NGOs, private companies and universities. He has conducted research in natural resources management, climate change adaptation, organic farming, sustainable development, economics, humanities and social sciences. His books, articles and research have been published in both national and international journals. He is interested in research in the field of organics, biodiversity, natural resources management and climate change adaptation.

Basundhara Tripathy

Basundhara Tripathy is a Visiting Researcher cum Assistant Professor at the Center for Sustainable Development. Ms. Tripathy's research interests include climate change adaptation and disaster risk reduction, climate induced human mobility, food security, education, religion, tribal culture, anthropology-development nexus and environment. She obtained her MSc. in Social Anthropology from the University of Oxford in 2012 and completed her undergraduate studies from the University of Delhi in Sociology Hons. (2008-2011). She has worked in India on education projects for tribal communities (Santhals and Mundas) in Jharkhand and developed teaching material for their primary education. Her work in Odisha, a coastal state in India, focused on

climate change adaptation, disaster risk reduction, integrated water management, migration and ecosystems conservation. Ms. Tripathy has carried out collaborative research with the University of Southampton on 'Pathways of Resilience for Future Storms' and UNICEF India ('Mother tongue based active language learning') among others. Her published works include- 'Climate induced human mobility: Adaptation strategy among rural communities in coastal Odisha'. She has experience of working with NGOs in India and has also been an International Development consultant for organizations such as UNDP, Practical Action and WaterAid.

Dr. Shantanu Kumar Saha

Dr. Shantanu Kumar Saha is a Senior Lecturer-cum- Research Associate at the Center for Sustainable Development. Academically he possesses a diverse and multi-disciplinary background. He has completed his Ph.D. and Master degree from the school of Asia Pacific Studies (Social Science), Ritsumeikan Asia Pacific University, Japan. His graduate course work has covered a wide range of topics in the field of Development Studies. Further, the concentration of his master's program was in Environmental Policy and Administration. Prior to his postgraduate study, he completed his Bachelor of Science in Agriculture [B.Sc.Ag (Hons)] from Patuakhali Science and Technology University, Bangladesh.

He has experience in working in with a cross-cultural environment. Throughout the seven years of his postgraduate study, he simultaneously worked as a teaching assistant for both undergraduate and graduate level courses at the Ritsumeikan Asia Pacific University, Japan. He is familiar with both qualitative and quantitative research methodology as well as data analysis. He assisted professors in several research activities in the fields of environmental sciences, rural sociology, and community capacity development.

He has received a number of scholarships and research grants throughout his academic career and has presented several papers in international conferences as well as to the academic society. He has also participated in seminars, workshops, and round table discussions. He served as an Intern with the Centre for Non-Traditional Security Studies, S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU). He is currently engaged in research on rural coping strategies in developing countries affected by extreme weather events. His research interest includes issues related to society, development and the environment.

Md. Saleh Al Mahmud

Md. Saleh Al Mahmud is the Sr. Officer who joined CSD in February 2010. He received his Master of Business Administration (MBA) in 2011 from University of Liberal Arts Bangladesh (ULAB) with a major in Marketing and Human Resource Management. Before joining ULAB he worked as a HR Executive in Liz Fashion Industry, Senior Officer (HR and Compliance) at Sea Tex Limited, and an Assistant Manager (Administration and Compliance) at Harvest Rich Limited. At CSD, he handles all the logistical and administrative issues. In addition, he needs to manage finance, brand communication, organization of seminars and events. Mr. Mahmud has received training on Professional Development, Customer Service, Business English and the German Language.

CSD 2ND ANNUAL CONFERENCE ON SUSTAINABLE DEVELOPMENT 2017

10-11 FEBUARY 2017

Center for Sustainable Development (CSD) at University of Liberal Arts Bangladesh (ULAB) is organizing its 2nd Annual conference focusing on eight of the Sustainable Development Goals. The aim of the conference is to share empirical research findings, identify practical, evidence-based solutions and build public-private collaboration that can help achieve the targets of the Sustainable Development Goals (SDGs.)

The conference provides a unique opportunity to bring together stakeholders from government, academia, private companies, international agencies, NGOs, and grassroots organizations to engage in dialogues around sustainable business models and practical experiences from the field. These are some of the core aims of the conference.

Conference Themes

- End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Ensure availability and sustainable management of water and sanitation for all
- Ensure access to affordable, reliable, sustainable and modern energy for all
- Make cities and human settlements inclusive, safe, resilient and sustainable
- Ensure sustainable consumption and production patterns
- Take urgent action to combat climate change and its impacts
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Protect, restore and promote sustainable use of terrestrial ecosystems, manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss sustainably

Venue: University of Liberal Arts Bangladesh, House: 56, Road: 4/A, Dhanmondi, Dhaka- 1209.

PROGRAM SCHEDULE

10th February 2017

10:00 am -11:00 am : Opening Session

Inaugural Speaker: **Mr. Md. Abdul Karim,** Managing Director, Palli Karma-Sahayak Foundation (PKSF)

Special Guest: **Professor A. Mani,** Professor Emeritus, Ritsumeikan Asia Pacific University, Japan

11:30 am -1:00 pm : Plenary Panel Discussion on SDG 11

Panelists:

Dr. Saleemul Huq, Director, International Center for Climate Change and Development (ICCCAD)

Mr. Khaled Ashraf, Director-General, Bengal Institute – Architecture, Landscape and Settlements

Dr. Md. Akter Mahmud, Professor, Department of Urban & Regional Planning, Jahangirnagar University, Bangladesh

Dr. Khurshid Zobin Hossain Toufique, Director, Urban Development Directorate (UDD) Ministry of Housing and Public Works, Government of the People's Republic of Bangladesh

Mr. Ashekur Rahman, Urban Programme Specialist, United Nations Development Programme (UNDP)

Moderator:

Dr. Debapriya Bhattacharya, Distinguished Fellow, Centre for Policy Dialogue (CPD)

2:30 pm - 4:00 pm : Parallel Sessions on SDG 2, SDG 11 and SDG 12

4:15 pm - 5:45 pm : Parallel Sessions on SDG 6 and SDG 7

11th February 2017

10:00 am -11:30 am : Plenary Panel Discussion on SDG 14

Panelists:

Brian Smith, International Program Director, Wildlife Conservation Society, Bangladesh

Dr. Abu Nasar Abdullah, Deputy Secretary, Ministry of Environment and Forests (MoEF), Government of the People's Republic of Bangladesh

Mr. S. Humayun Kabir, Director, Bangladesh Frozen Foods Exporters Association (BFFEA)

Dr. Md. Niamul Naser, Professor, Department of Zoology, University of Dhaka

Dr. Benoy Kumar Barman, Senior Scientist, WorldFish, Bangladesh and South Asia

Moderators:

Dr. Marion Glaser, Social Scientist, Leader of Social-Ecological Systems (SES) Analysis, Leibniz Center for Tropical Marine Ecology (ZMT), Bremen, Germany

12:00 pm - 1:30 pm : Parallel Sessions on SDG 13, SDG 14 and SDG 15

2:30 pm - 3:30 pm : Science/Policy Dialogue Session and SDG 6/8 and Disability

4:00 pm - 5:30 pm : Closing Session

Closing Speaker: **Professor Carolyn Roberts,** School of Environment Gresham College United Kingdom

Chief Guest: **Mr. Abdullah Al Islam Jakob,** MP, Honourable Deputy Minister Ministry of Environment & Forests (MoEF), Government of the People's Republic of Bangladesh

CENTER FOR SUSTAINABLE DEVELOPMENT (CSD) ULAB UNIVERSITY OF LIBERAL ARTS BANGLADESH


Let's Go Green to Make Our Globe Clean
RE-LAUNCHING of GREENING ULAB
Chief Guest
Dr. A Atiq Rahman
Executive Director
Bangladesh Centre for Advanced Studies (BCAS)
10 August 2016
ULAB
UNIVERSITY OF LIBERAL ARTS BANGLADESH
FIELD

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