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# Social Change

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Editor - in - Chief  
**Md. Arifur Rahman**

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**YPSA**

Young Power in Social Action

(An Organization of Social Development)

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**Editor-in-Chief**  
**Md. Arifur Rahman**



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# SOCIAL CHANGE

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**Social Change** is a journal for social development published two times a year- January to June and July to December. The Journal welcomes original contributions from all viewpoints on various aspects of social development. It is designed to promote understanding of the society at its depth touching upon both theoretical and empirical dimensions of research. This journal is a major forum for those wishing to deal directly with the methodology and practice of social and environmental perspectives and future. Social Change is a podium for the exchange of ideas among scholars, policy makers and development practitioners, their intellectual and constructive ideas would smooth the way to social transformation in a de-sired manner. Appreciating their consecrated commitment to people and society we earnestly believe that they will make vital contribution through projection of ideas and views embellished with their sagacious policy recommendations. Readability and good writing style are important criteria for publication.

**Social Change** is a peer reviewed Journal devoted to the advancement of the research and social studies. The Journal entertains articles from the grassroots activists and researchers and appreciates learning from the field situation. The content and quality of papers should be in accordance with scope and nature of the Journal. All research articles are to reviewed by at least one expert. Also they are subject to an in-house examination in editorial / Advisory board. This is in the pursuit of excellence and strict adherence to professional standards. We look forward to getting feedback from our valued readers and contributors on how this publication can be further improved and expanded to better serve the cause of social reform in the country. Given the importance of the journal, we would also like to invite analysis/study on further add to the dimension of the journal and this will be possible only with the thoughtful support of our valuable readers and contributors

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## **Climate Displaced Persons: The New Protection and Assistance Principles**

Md. Arifur Rahman\* and Mohammad Shahjahan \*\*

Climate Change induced displacement has got vast importance in recent years as one of the major consequences of climate change impact. Climate change is one of the greatest challenges facing the world today and the individuals and communities displaced from their homes and lands as a result of climate change are the human face of this tragedy. Climate displacement is already underway in many countries such as Bangladesh, the Maldives, Papua New Guinea, Solomon Islands and elsewhere, and expected to affect many tens of millions of people in coming decades.

Most estimates indicate at least 200 million people face the possibility of displacement due to changes in the climate; in places as diverse as the Caribbean coast of Panama, the coastline of indigenous Alaska, the islands of the Maldives and the Pacific and the river areas of Bangladesh. Bangladesh has ranked fifth among 10 countries most vulnerable to climate change-induced natural disasters in the last two decades from 1993 to 2012 according to the Global Climate Risk Index (CRI) 2014 developed by Germanwatch. During this period Bangladesh suffered damages worth US\$1,832.70 million, wrought by 242 types of natural catastrophes. According to the Maplecroft's Climate Change Vulnerability Index (CCVI) 2014, the economic impacts of climate change will be most keenly felt by Bangladesh (1st and most at risk).

Due to its unique geographic position Bangladesh suffers from regular natural hazards that lead to loss of life, land, homes, livelihoods and to the forced displacement of individuals and communities across the country. But there is no comprehensive national policy in Bangladesh that specifically targets climate displacement. Resettlement for the displaced peoples should be a last resort in climate change adaptation, but the reality is that it is already occurring in some countries and this trend is likely to intensify. The climate-induced migrants are often discriminated and face different problems during or after the displacement. In many cases, the policies and institutional frameworks are not sufficient to protect the displaced people.

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To set the rules to assist governments to provide solutions for climate change induced displacement recorded countries, representatives from Australia, New Zealand, Alaska, Bangladesh, Netherlands, Switzerland, UK, Germany, Egypt, Tunisia and the US came together in Red Hill, Victoria. After months of preparatory work around the world, an eminent group of international lawyers, UN officials and climate change experts, from the above mentioned countries, have agreed on new global rules, that considered as "Peninsula Principles on Climate Displacement" (a name inspired by the Mornington Peninsula of Australia where the meeting took place) outlining the rights of people and communities who lose their homes, land and livelihoods due to the effects of climate change. In the meeting participants shared their backgrounds and expertise in International Law, migration, forced migration, environmental change and UN policy creation to strengthen and stand behind the Peninsula Principles as the first formal policy of its kind in the world.

The Peninsula Principles are developed on the basis of current international law; several thousand interviews carried out over the past five years in heavily affected countries and were most recently influenced by comments received from the public at large who had access to the draft Principles on the internet.

These Peninsula Principles provide a comprehensive normative framework, based on principles of international law, human rights obligations and good practice, within which the rights of climate displaced persons can be addressed within a State and not cross-border climate displacement. This principles set out protection and assistance principles, consistent with the UN Guiding Principles on Internal Displacement, to be applied to climate displaced persons.

### **Peninsula Principles consisted of 18 sub titles as follows**

- | Principle-1: Scope and Purpose
- | Principle-2: Definitions
- | Principle-3: Non-discrimination, Rights and Freedoms
- | Principle-4: Interpretation
- | Principle-5: Prevention and Avoidance
- | Principle-6: Provision of Adaptation Assistance, Protection and Other Measures
- | Principle-7: National Implementation Measures
- | Principle-8: International Cooperation and Assistance
- | Principle-9: Climate Displacement Risk Management
- | Principle-10: Participation and Consent
- | Principle-11: Land Identification, Habitability and Use

- | Principle-12: Loss and Damage in the Context of Displacement
- | Principle-13: Institutional Frameworks to Support and Facilitate the Provision of Assistance and Protection
- | Principle-14: State Assistance to those Climate Displaced Persons Experiencing Displacement but who have not been Relocated
- | Principle-15: Housing and Livelihood
- | Principle-16: Remedies and Compensation
- | Principle-17: Framework for Return
- | Principle-18: Implementation and Dissemination.

**The key features of the Peninsula Principles are:**

- v States shall not discriminate against climate displaced persons on the basis of their potential or actual displacement, and should take steps to repeal unjust or arbitrary laws and laws that otherwise discriminate against, or have a discriminatory effect on, climate displaced persons. Climate displaced persons shall enjoy, in full equality, the same rights and freedoms under international and domestic law as do other persons in their country, in particular housing, land and property rights.
- v States should provide adaptation assistance, protection and other measures to ensure that individuals, households and communities can remain in their lands or places of habitual residence for as long as possible in a manner fully consistent with their rights.
- v States should incorporate climate displacement prevention, assistance and protection provisions as set out in these Peninsula Principles into domestic law and policies, prioritizing the prevention of displacement. States should ensure that durable solutions to climate displacement are adequately addressed by legislation and other administrative measures.
- v States that are otherwise unable to adequately prevent and respond to climate displacement should accept appropriate assistance and support from other States and relevant international agencies, whether made individually or collectively.
- v With regard to climate displacement risk management, monitoring, and modeling, States, using a rights-based approach, should identify, design and implement risk management strategies, including risk reduction, risk transfer and risk sharing mechanisms, in relation to climate displacement as well as undertake systematic observation and monitoring of, and disaggregated data collection at the household, local, regional and national levels on, current and anticipated climate displacement.



- ✓ To enable successful preparation and planning for climate displacement, States should ensure that priority consideration is given to requests from individuals, households and communities for relocation. And no relocation shall take place unless individuals, households and communities (both displaced and host) provide full and informed consent for such relocation.
- ✓ Recognizing the importance of land in the resolution of climate displacement, States should identify, acquire and reserve sufficient, suitable, habitable and appropriate public and other land to provide viable and affordable land-based solutions to climate displacement. States should also plan for and develop relocation sites including new human settlements on land not at risk from the effects of climate change or other natural or human hazards and, in so planning, consider the safety and environmental integrity of the new site(s), and ensure that the rights of both those relocated and the communities that host them are upheld.
- ✓ States should develop appropriate laws and policies for loss suffered and damage incurred in the context of climate displacement.
- ✓ States should strengthen national capacities and capabilities to identify and address the protection and assistance needs of climate displaced persons through the establishment of effective institutional frameworks and the inclusion of climate displacement in National Adaptation Programmes of Action as appropriate.
- ✓ States have the primary obligation to provide all necessary legal, economic, social and other forms of protection and assistance to those climate displaced persons experiencing displacement but who have not been relocated. Protection and assistance activities undertaken by States should be carried out in a manner that respects both the cultural sensitivities prevailing in the affected area and the principles of maintaining family and community cohesion.
- ✓ States should respect, protect and fulfill the right to adequate housing of climate displaced persons experiencing displacement but who have not been relocated, which includes accessibility, affordability, habitability, security of tenure, cultural adequacy, suitability of location, and non-discriminatory access to basic services (for example, health and education).
- ✓ Climate displaced persons experiencing displacement but who have not been relocated and whose rights have been violated shall have fair and equitable access to appropriate remedies and compensation.

- v States should allow climate displaced persons experiencing displacement to voluntarily return to their former homes, lands or places of habitual residence, and should facilitate their effective return in safety and with dignity, in circumstances where such homes, lands or places of habitual residence are habitable and where return does not pose significant risk to life or livelihood.
- v States, who have the primary obligation to ensure the full enjoyment of the rights of all climate displaced persons within their territory, should implement and disseminate these Peninsula Principles without delay and cooperate closely with inter-governmental organizations, non-government organizations, practitioners, civil society, and community based groups toward this end.

These Peninsula principles are guided by the Charter of the United Nations, and Reaffirming the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, the International Covenant on Civil and Political Rights as well as the Vienna Declaration and Programme of Action. Assuming that the international community has humanitarian, social, cultural, financial and security interests in addressing the problem of climate displacement in a timely, coordinated and targeted manner and finally States will bear the primary responsibility for their citizens and others living within their territory, but recognizing that, for many States, addressing the issue of and responding to climate displacement presents financial, logistical, political, resource and other difficulties.

Bangladesh has signed and is bound to respect many key international human rights treaties that provide important human rights protections to climate displaced persons. The UN Guiding Principles on Internal Displacement define an "internally displaced person" as "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of.....natural or human-made disasters, and who have not crossed an internationally recognized state border." Further, although non-binding, Bangladesh is bound to respect the UN Guiding Principles on Internal Displacement as they reflect and are consistent with international human rights and humanitarian law.

The Government of Bangladesh has clear responsibilities as per the Constitution to provide rights-based - and particularly housing, land and property rights - solutions to climate displaced persons.

## **The Constitution of the People's Republic of Bangladesh states:**

Article 27 "All citizens are equal before law and are entitled to equal protection of law".

Article 15 "It shall be a fundamental responsibility of the State to attain, through planned economic growth, a constant increase of productive forces and a steady improvement in the material and cultural standard of living of the people, with a view to securing to its citizens (a) the provision of the basic necessities of life, including food, clothing, shelter, education and medical care; (b) the right to work, that is the right to guaranteed employment at a reasonable wage having regard to the quantity and quality of work.

Article 18A "The State shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens"

Article 19 (2) "The State shall adopt effective measures to remove social and economic inequality...and to ensure the equitable distribution of wealth among citizens, and of opportunities in order to attain a uniform level of economic development throughout the Republic".

Article 25 "The State shall base its international relations on the principles of respect for national sovereignty and equality...and respect for international law and the principles enunciated in the United Nations Charter.

To face the challenge of mass displacement as a result of climate Change, Young Power in Social Action (YPSA) has been implementing Bangladesh Housing, Land and Property (HLP) rights initiative with the support of Displacement Solutions (DS) since 2012. The main focus of this initiative is to protect the rights of climate-displaced communities, including activities to secure new housing and new land for people forced to flee their homes and lands.



## **Contemporary Bangladesh: some reflections on the dynamics of social violence**

Md. Shairul Mashreque\*

Violence has an adverse effect on society and economy thus aggravating crisis situation. The propensity to crisis is inherent in uneven distribution. Crisis acquires a 'pervasive character of instability, disequilibrium and conflict'. Crisis tantamount to the worsening conditions of inequality in terms of income distribution, growing level of poverty and malnutrition. Marginalization of deprived class in crisis-ridden areas eventually leads to the intensification of violence.

Crisis syndrome, violence and terrorism interact with each other in a society passing through the stage of transition. Socio-economic and political factor contribute to crisis. Crisis culminates in violence/terrorism. What seems to be stable and harmonious in appearance is disturbing and deplorable in reality. The crisis is more grave than is at first apparent<sup>1</sup>.

In transitional societies inherent contradictions in role relationship and governance shortage in the implementation of public policies and enforcement of laws provide sufficient ground for societal degeneration in absolute terms that jeopardizes human rights-all to the disenchantment of the vast body of commoners.

In view of extremely complicated nature of man-made crises resulting in malfunctioning of social and economic relations it is not easy to go deepest into pathological situation-we mean violence. It presupposes the gravity of the crisis situation revealing disruptive tendencies in conflict and competition for 'the benefits of the state.'

### **Contextual Realities**

Public policy on substantive areas of development contemplates some desirable changes. Nevertheless policy outcomes resulting from lack of governance in the implementation of the projected goals under a variety of policy sectors and sub-sectors do not favour the disadvantaged lots. The dominant interest groups in the community power structures concentrate

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<sup>1</sup> Md. Shairul Mashreque, *Dynamics of Social Conflict in the peasant communities of Bangladesh*, Asian Affairs, vol5, no 3, July-Sept, 1993, P.51

benefits of development. They do it through subtle mechanism and manipulative design in a deceptive manner. By dominant interest groups we mean the coalition of interest among governing elites, fortune-seeking political entrepreneurs and upstart businessmen. It is seen that governing elite expands various opportunities for economic concentration including rent-seeking ones that ultimately aggravates 'humanitarian crisis' and threatens the legitimacy of regime and increases the probability of regime turn over'<sup>2</sup>.

One of the critical view-point is that policy framework has been of a bureaucratic character. The crisis has been compounded by bureaucratically manipulated allocative decisions. A plethora of associations based on similar configuration of interests are not effective instrument of articulating legitimate and genuine demands of the deprived social class as policy inputs. Trade unions like peasants' organization, weaver associations, and so forth have more or less become the 'ploys of intensive political hobnobbing.'

Increasing alienation of the deprived class is the outcome of the introduction or continuation of programmes under such policy frame work. Social protests in favour of backward community are the culmination of perpetual deprivation and negligence. Many a time the movements of the victims of state policy become *raison d'être* for open confrontation<sup>3</sup>.

More often than not such movements pose a threat to peace and tranquility when protestants think that physical pollutions, deforestation, installation of buildings and plants, brickfield and other form of environmental terrorism threaten to displace/dislodge the original inhabitants.

Backwardness and wanton exploitation of the deprived class is a motivating factor for a series of protestant movements. They create social tension and political instability. For, policy intervention reflects lack of 'a coherent plan, purpose and direction'.

In certain circumstances, ethnic conflict is shaped by 'artificial or negative perception about the deprivation of a particular ethnic group'<sup>4</sup>. In Bangladesh, for illustration, social protest against development priorities in favour of the tribes in Chittagong Hill Tracts (CHT) echoes negative frame of mind. It tends to impair homeostatic balance of power in tribal areas.

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<sup>2</sup>EW Nafzige and J. Auviren, *Economic Development, Inequality, War and State Violence*. World Development vol. 30 no 2 Feb. 2002, p. 153-164

<sup>3</sup>Rajvir Sharma The Indian Journal of social Conflict and *Social Assimilation: Constitution, politics and administration Public administration*, vol. 11, No.4 OCT-December, 2002, P.619

<sup>4</sup> Ibid, P.619

However, recent tribal scenario was the expression of perpetual tension. Slow or delayed implementation of CHT peace treaty aggravated such tension rather than alleviated it.

Structural tension is a common feature of complicated social life. It is expressed quite through conflict latent or manifest. Uneven development affects stable equilibrium and thereby strengthens such tension. Heart burning and frustration among the disgruntled groups in electoral constituencies is a continuing process as the bottom end of distribution profile is caught up by deprivation trap.

Outcome of development policy is likely to produce manifold contra-indications thus providing a background of confrontation. Catastrophic human problems, labour exploitation and vulnerability of women and children are the predicaments of contemporary Bangladesh<sup>5</sup>.

The changing economic scenario appears to be detrimental to the interests of the toiling masses-we mean working forces. Politics of scarcity characterized by exorbitant rate of essential commodities, hoarding, black marketing, and artificial crisis of agriculture inputs characterizes the grave crisis of development. More low purchasing capacity of the proletariat class living below market level, the plight of primary producers having little access to market facilities, withdrawal of agricultural subsidy and the vulnerability of the marginalized class to the misfortunes of competition in an era of globalization add to the crisis of poverty upsetting macro-economic stability.

The hitherto existing base of destitution caused by man-made economic crisis and natural disasters like flood, draught and river erosion has been reinforced by phenomenal growth of terrorism under the protection of godfathers. Toll extortion, illegal occupation of family assets, managing tender for contracting or subcontracting by force, penetration of terrorists in trade, and commerce impair economic resilience seriously affecting low and fixed income groups.

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<sup>5</sup> For understanding contemporary Bangladesh in the state of humanitarian crisis and economic stringency; see: Harry Blair *Rural Development, Class Structure and Bureaucracy in Bangladesh World Development vol. 6, No1, 1978*; Peter Gillespie *The Crisis in Bangladesh: Critical Question for Canadian Aid, Paper prepared for OCIC Asia's Working group 1990*; Md. Shairul Mashreque *Participatory Rural Development in Bangladesh: an Overview Asian Profile Vol. 26, No3, June, 1998*

The emerging comprador class with lumpen interest receiving patronage resources from governing elite is responsible for increasing poverty severity<sup>6</sup> and economic stagnation. The legitimacy of the ruling class is thus put to question. Another eventuality is the alleged repression of the minority and other deprived class. Discriminatory treatment meted out to religious and ethnic minorities and sects, women, and children by dominant layer trigger social mobilization on the part of these groups. 'Humanitarian crisis' is in fact man made that provides enough ground for perpetual tension and restlessness.

The phenomenal growth of such crisis leads us to take a look into the character of the state. Diagnosing socio-economic maladies necessitate analysis of this phenomenon as political factor.

Crisis and conflict bedevil otherwise peaceful social life in a 'soft' and 'predatory state'<sup>7</sup> like Bangladesh. Here the ruling structure is subservient to 'extensive rent seeking'-an omnipresent policy to obtain private benefits from public actions and resources. Protracted fuzzy governance<sup>8</sup> that leads to policy failure is a foregone conclusion emanating from the deliberate attempts of the policy actors to formulate and implement policy clusters to serve vested and coterie interests on the alter of public interests. Political elite and those in policy communities may not benefit from the enforcement of rule of law, transparency and implementation of ombudsman. Instead political leaders may gain from extensive unproductive and profit making activities in a political system they control than from long-term efforts to build a well functioning state in which economic progress and democratic institutions flourish<sup>9</sup>.

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<sup>6</sup> Increasing poverty severity in Bangladesh as an insurmountable challenge has been discussed in some research works; see: A. Khan *Poverty in Bangladesh: A Consequence of and Constraint on Growth*, SR Osmani *Structural Change and Poverty in Bangladesh, the Bangladesh Development Studies*, Vol. 18, No.3, 1990; AKM Jahangir *Strategies in Alleviation of Poverty In Bangladesh : Government and NGO complementarity*, Development Review, Vol.5 No.2, 1993

<sup>7</sup> Rent seeking activities of the ruling structure -both *political incumbent and bureaucracy are featured by a close association between the 'state actors' and 'societal actors' in the predatory nature of the state*; see: Anne O Krueger *The political Economy of the Rent Seeking Society: American Economic Review* , vol. 64, No.3, 1974; EN Nafzige and Auvien op.cit; Rehman Sobhan ed. *Towards a Theory of Governance and Development; learning from East Asia (chapter 2 State , Society and Economic Performance)*UPL, Dhaka, 1998

<sup>8</sup> George Bernstein, *Fuzzy Governance in Bangladesh*, UPL, Dhaka, 2001

<sup>9</sup> EN Nafzigeo and Auvien, op.cit, P. 155

Non-institutional and erratic behaviour of the governing communities in a 'soft' and 'predatory state' accounts much for disastrous policy outcomes. Besides, governing elites are environmentally constrained facing limitation in ensuring social justice (constitutional obligation) and dispensing benefits to the masses and to 'wide ranging coalition of ethnic communities and economic groups' and in ensuring apt management of policy implementation.

Predatory character of the state of Bangladesh looms large in 'personality politics'. Institutional foundations of democracy at the national and sub-national level are crumbling. The governing elites as patrons and their loyal supporters as clients are found using power as scarce recourse to plunder 'bounties of the state through graft, corruption, extortion, and participation in private business activities'<sup>10</sup>.

At the community level there emerges societal factionalism involving 'competitive and intra and inter group relationship' centering on the 'small size of the cake to share'<sup>11</sup>. The dominant community actors are vying with each other for scarce valuables, possessions, amenities and strategic positions. Overt expression of conflict centering on community undertaking is manifest in apparent animosity<sup>12</sup>. Lopsided accesses to receiving mechanism and patronage resources like projects, license, permit, dealership and contractor ship adversely affects commoners' participation in development<sup>13</sup>.

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<sup>10</sup> *ibid*, p. 155

<sup>11</sup> Rajvir Sharma, *op.cit*, P. 618

<sup>12</sup> Societal factionalism centering on politics of scarcity has become a pervasive phenomenon in crisis-ridden developing areas. Here fierce factional antagonism sometimes delays/stop construction work, see: M. Sharma *The Politics of Inequality: Competition and Control in an Indian Village*, Hindustan Publishing Corporation, 1978; Narayan Reddy, *Rural Elite and Community Work: A Socio-Political Perspective*, Chugh Publication, Allah bad 1988; Md. Shairul Mashreque, *Dynamics of Social Conflict*, *op.cit*.

<sup>13</sup> This is a prominent feature of the politics of scarcity in transitional rural communities described in some empirical research works, See: GW Wood, *The Politics of Rural Development : A Study of Class and Power from a Comilla Village*, Ameerul Huq ed. *Exploitation and the Rural Poor*, BARD, Comilla, 1975; Md. Shairul Mashreque *Politics, administration and Participation: An Empirical Profile of Rural Bangladesh*, CBS, Chittagong, 1995



There are divisive forces affiliated at large to various segments with 'varying socio-cultural perceptions and varying perceptions about economic discriminations and policy flaws. One may come across different religious and sectarian groups somewhat expressing primordial loyalties. Each communal and quasi-communal group is eager to zealously guard its own arena of interests and identities in a society characterized by the struggle for allocation of jobs, recourses and power'<sup>14</sup>. The masses in each group have been considerably influenced by their organizers and exogenous forces spearheading neo-social movement against the violation of human rights.

Women have come to constitute another 'reference group' affiliated to various feminist organizations. Recently a plenty of women groups have been formed to provide important genesis for neo-social movement against gender discrimination and social violence<sup>15</sup>

Value conflicts in transitional societies have given rise to various ideological groups. Transitional societies per se are permeated by the process of sharp polarization. On the one hand we see fierce antagonism between fundamentalist and newly emerging social forces, on the other, skewed pattern of access to benefits, hypocritical behaviour of the governing elites, and deeply entrenched corruption badly affects the 'bottom end of the distribution profile'. The situation, as such, provides a genesis for sharp polarization between 'have' and 'have-nots'. Ultra leftist's movement is now beginning to mushroom in many areas of north and south Bangladesh where piercing economic crisis, through artificial price hike, torments community life.

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<sup>14</sup> There are various such groups in Bangladesh waging crusade against discriminatory public policies as well as against domineering majoritarian. Hindu Christian Buddha Okka Parishad (Hindu Christian Buddha alliance), Ahmedia Nobuat, Ahmedia mission, Parborta Chattogram Jana Sanhati Sangstha (PJSS), Adibhasi National council are among such groups. Aboriginal and tribal groups are also instrumental against environmental terrorism and wanton exploitation of forest resources.

<sup>15</sup> Neo-social movement against gender discrimination is now spearheaded by some prominent women and civil organizations such as Bangladesh Mahila Parishad, Bangladesh Nari Pragati Sanstha (BNPS), Nagorik Uddog (NU): See; SR Qadir *Women Leaders in Development Organizations and Institutions, Polk Publishers, Dhaka, 1997*; BA Alam and SR Begum *Violence and the Union Parishad Leadership Local Government Quarterly Vol. 3 no 2 1980*

Many opine that rising militancy of fundamentalism coupled with emerging radical movement is the inevitable outcome of simmering discontent of the masses entangled by serious deprivation trap. In India, for illustration, fundamentalists capitalize on inherent weakness in governance in an attempt to rise to ascendancy. Social mobilization of the deprived and disgruntled is entailed by inept policy management in poverty alleviation rhetoric. In poverty stricken backward areas of Bangladesh left outs have shown an extensive recourse to either fundamentalism or left radicalism-a sort of negative reaction to state policy. If the crisis of fast growing pauperization in such areas is not properly addressed the destitute will be smoldering to take fire at the instigation of underground radicals.

Now-a- days the structureless power of the unruly youth, mostly politicized and derailed students, has become a formidable threat to the established institutions that have gained strength overtime<sup>16</sup>. Dominant political elites mostly godfathers pander to the evil passions of the reckless youngsters who have come to form new bastion of power.

Student politics has degenerated into mastani culture<sup>17</sup>. There is a common saying that student politics is a lucrative trade without investment-a short cut way to privileged position through patronage and spoils. Many among them are armed cadres earning bad names as extortionists using muscle power to illegally occupy land, abandoned properties, and vacant places with signboards. They are found muscling out bonafide contractor in the race for tender. Campus disturbance happening now and then disrupts normal academic life. Student halls have become a mini cantonment and dens of criminal activities. There are reports describing stalemates in the varsity/college campus out of armed clashes either between the two rival student groups or between two hostile factions within the same groups<sup>18</sup>.

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<sup>16</sup> Mokhdum\_e-Mulk Mushrafi *Pakistan and Bangladesh: Political culture and Parties*, Uppal Publishing House, New Delhi, 1993; Mokhdum\_e-Mulk Mushrafi *Concealed anarchy and Reckless Individual Discretion: Bangladesh Perspective*, Bangladesh Political Association, 1985

<sup>17</sup> See: Md. Shairul Mashreque *Higher Education in Bangladesh: A Study of Contemporary Development and Paradoxes* Journal of Public Administration, Vol. X1, 2001; Siraj UD Dowlah *National Politics and Student Politics* (in Bengali) Lokprashan Samoiki, Issue 10, 1999; Government of Bangladesh (ministry of education), *Report of the Enquiry Commission* (1976-79); Emdadul Haque, *Terrorism in Educational Institution in Bangladesh: A political Analysis*(in Bengali), Chittagong University Studies(Social Science) Vol. 12, 1991

<sup>18</sup> Arafat Ara *No Let Up in violence against House Wife*, Observer Magazine, August 2, 2002. p.12; Rifat Fatema *Laws Not Enough to Stop Violence against Small Girls* , Observer Magazine, December 20, 2002, p 5

Armed cadre was well equipped with weapons and bombs to panic the innocent students. Even police with inadequate infrastructural facilities and logistics faced difficulties in tackling armed hoodlums. Mentionably, mastani culture of student politics is exposed to public criticism. . The new young bloods -a decisive factor in electoral victory-- have completely discarded it. They want a positive change in student politics resembling a modeled behavior as found in its glorious past

This realization should have come when it was a dominant group ridding on the back up support of the then ruling party. But the student organization now dominant in the changed political scenario has gone crazy to the extent of displaying power and strength in the higher educational institutions. Tension thus building up disturbs normal academic activities.

This ominous sign of degeneration was also true of trade union politics of working class. Yet, the intensity of mastani (hoodlum) culture here is much less compared to student politics.

### **Dynamics of Social violence**

Violence against the powerless having no political blessings is on increase in Bangladesh despite stringent laws. The loopholes in laws and obsolete criminal procedures may be blamed for heinous crime and violation of human rights. Even then the potent factor is the clever tactics and craftsmanship of the professional criminals. Only professional criminals gained protection from godfathers and they commit crime leaving no evidence. Penalties are there. In most cases the criminals were acquitted by court for lack of evidence. The criminals hold money and muscle, which in turn help buy support politician, police and administration. The instances of withdrawal of cases by victims in the face of threat and liquidation from the criminals are many. The terrorists dare to go ahead with their terrorist activities since they know they would not be punished for such activities...a sense of immunity from trial and punishment<sup>18</sup>. Many victim families are poor to afford court cases: some might belonged to and were affiliated to the political party/group that lost power because of defeat in general/ local election.

Undesirable sets of circumstances prevail in transitional villages where informal rural court is now rendered dysfunctional. Rural court once existed as a symbol of social integration exercising social control to keep peace and order<sup>19</sup>.

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<sup>19</sup> Md. Shairul Mashreque, *Kinship and Power Structure in Rural Bangladesh: A case Study*, Homeland Press and Publisher 1995; Van Burden and Aren, *Jaghrapur: Peasant classes in a Village of Bangladesh, an Unpublished Draft*, 1977; M Abdul Quader *The Functioning of Village Court in Bangladesh*, BARD, Comilla, 1995;

Segregation in the name of parda (curtain), forced child marriage, denial of remarriage of widow, polygamy, manifold persecution of women and other weak groups. Dowry-related torture and many other such actions are approved by the village court under the maze of Fatwa (wrong interpretation of religion). As a result social violence against vulnerable class, especially women and marginal farmers, has become a rural phenomenon. Some conscious otherwise knowledgeable citizens advocate for secular laws to stem social violence against the vulnerable. Secular laws discourage all such verdicts of rural court with reference to disadvantaged groups that are repugnant to the provisions of human rights. For, rural adjudication process is influenced by unauthorized fatwas (sacred values often distorted by the fake ulemas (religious practitioners) serving vested interests of the ruling clique<sup>20</sup>.

A veritable manifestation of gender inequality is 'assertive masculine prejudice'. In a patriarchal society everything is predominantly controlled and influenced by gender biased mind- set, which has been 'fueled by mass ignorance among woman folk. Ignorance about health is profound.' This is due largely to lack of information about access to health care, maternity service and reproductive health. What is badly needed is benignity of patri-virilocal authority to show full charity and sympathy to mother nourishing her baby. Powerlessness of mother caused by inequality tends to threaten babies. Each year almost eight million stillbirths and early neonatal deaths occur due to malnutrition of women during pregnancy, inadequate care during delivery and lack of care for the new born. More, the babies of physically and sexually weak mothers are more likely to be malnourished and less likely to be immunized or to receive oral re-hydration therapy for diarrhea.

Gender based violence has been expressive in the traditional order of relations existing in changeless rural communities. Cognitive orientations deeply rooted over there since time immemorial are gender biased running counter to gender equality. Women here are restricted within four walls with a little incidence of mobility. Even their movement outside homestead courtyard is looked at with suspicion and contempt.

Domestic violence entrenches gender-inequality, denial as well as threat to health care as a basic human right. Reports about domestic violence revealed that most cases of female homicide are the women killed by their partners.

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<sup>20</sup> see:Ridwanul Haque *Court Declares any Unauthorized 'Fatwas' Illegal*, Law Vision, Clinical Legal Education Program, Issue6, December 2000

The notorious custom like dowry continues to be fatal for those unfortunate women whose fathers belong to low income group unable to redeem the 'demands for gifts or money. Non-payment or part payment of money may result in either suicide or homicide. Dowry related violence also include serious injuries.

There are several incidences of social violence and the violation of human rights with a plenty of right focused organizations, civil societies in other words, raising voice against such violation<sup>21</sup>.

Violence against women may result in 'unwanted pregnancy'. Either through rape or by affecting a woman's ability to negotiate contraceptive use with her sexual partner for fear of being beaten or abandoned. Those who cause violence to women are mostly habitual criminals and others are influential by different ways due to their social status. It is difficult to prove these elements guilty before court above and any doubt, with the compliance of the codes of evidence act which is inevitable to award punishment as per our judicial system. It happens because the independent witness does not dare come forward to prove the case fearing revenge from the accused culprits and even the close relations of the victims of violence give up legal battle, fearing loss of lives, property, modesty and prestige in the wake of threat from the accused criminal or their accomplice.

Violence against mothers may be equated with violence against children injuring/even killing mothers and under mining child survival. It creates health problem and behavioral disorder on the part of child. The rights of mothers are violated by the acts of both verbal and psychical aggression at home and out of home.

A number of national and international organizations including state department of USA, Amnesty International, Transparency International and various human rights groups regularly publish annual reports on human rights violation. Fierce persecution against women has featured prominently in the annual reports. It does seem that human rights situation has deteriorated in Bangladesh with women folk being the worst victim various forms of violence.

Many young women, we mean unmarried daughters, have been victims of one of the worst forms of violence like eve-teasing.

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<sup>21</sup> There are reports of the various right-based groups protesting social violence against women see: Md. Shairul Mashreque and Shakwat Ullah Chowdhury ***Women Victims of Social violence***, *Daily Sun*, 2012([www.daily-sun.com](http://www.daily-sun.com))

Some human rights groups rose to the occasion grossly protesting such atrocities<sup>22</sup>. This social problem is taking a heavy toll as spoilt and unruly youngsters are simply unmanageable. There happens to be a moral crunch spoiling and derailing the youth and the present generation. Moral lesson is the need of our with child's parents and teachers playing a vital role. The government ought to control all means of modern information and communication technology (ICT). Negative use of ICT gradually, pornography destroy all our good instincts. Mobile phone should be used only for information not for taking snaps, recording songs/music and enjoying music and uploading any obscene ultra-modern dance for publicity. The miscreants are ruling the roost all to the detriment of public safety and security. Any body raising protest against eve-teasing is either injured or killed. Chapa Rani, a mother and Mizanur Rahman, a school teacher really died a heroic death leaving a message of social movement against the deluge of eve-teasing. Episode around their supreme sacrifice created sensation with wide media coverage. There are thousands of incidences in country's nook and corner where the girls were compelled to commit suicide as there was none to rise to the occasion against the power of the miscreants.

Village court /salish in a backward society is rather promoting social violence grossly victimizing the poor and the weak women. There are reports that the dominant elements in village politics used this mechanism in the presence of fatwabaz kat mullah (orthodox religious Muslims misinterpreting sacred laws) to inflict severe punishment on women like 50 lashes found guilty of violating taboos. Conflict between what is worth-doing (prescription) and what is not (proscription, tabooed) in terms of differing interpretation of scriptures and social sanctions has reduced rural court to a farce. The notion of popular trust is invoked to manage social conflicts. Nevertheless conflict between sacred and secular laws maximizes social tension. Many a verdict of rural court under the penetrating influence of dominant class served other vested interests, often in a stark violation of human rights.

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<sup>22</sup>. There several incidents of eve-teasing published in a national daily like The Daily Star. According news reports: Students of different educational institutions of Savar took an oath to resist stalking and sexual harassment. They took the oath at an open discussion titled 'Role of youth to resist stalking, sexual harassment and teasing' jointly organised by the Transparency International Bangladesh, Sachetan Nagorik Samaj (Sanak), NGO Samannay Parishad and Mahila Parishad, Savar Unit; at the office of Adesh, a non-government organization; at Savar. A section of women leaders yesterday urged the youths to forge a movement across the country to resist repression against women. Speaking at a press conference at the National Press Club in the city, they said youths have the strength to forge the movement to eliminate stalking and sexual harassment against women as well as dowry system from the country. See: [www.thedailystar.net](http://www.thedailystar.net) (November 25, 2010, December 2, 2010).

Vitiating of political environment in transitional societies by politicians for the furtherance of their narrow interests and immediate gains provide a background of anarchic situation. They pandered to the evil passions of the armed youth gangsters to beleaguer normative political development. The result is fast growing mob violence.

The challenge of the immediate past political government was to ward off terrorist activists of the extreme leftist outlaws in north and south Bangladesh. Encounter or crossfire whatever it might be it used this mechanism frequently to tackle worsening law and order situation in north and south Bangladesh due to killing operations of the extreme leftist outlaws. The High Court issued suo moto on extra-judicial killings. Although the minister concerned claimed that the police fired in self-defence and that should not be deemed cross fire.'

But events that well up sorrows are 'mysterious deaths of the terrorist suspects by crossfire. It was rubbish left by the previous regime. By now there has been a sharp decline in the use of this mechanism as a necessary evil. Amnesty International has repeatedly condemned the RAB, while the Bangladeshi human rights organisation Odhikar has painstakingly documented the RAB's involvement in extra-judicial killings and torture since the creation of the force in March 2004. Wikileaks cable provides some interesting fact about the use of RAB, as elite force to tame violence'<sup>23</sup>.

What has become terrible is increasing events of forced disappearance'<sup>24</sup>.

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<sup>23</sup>. Wick leaks (21 December 2010) reports that successive Bangladeshi governments have promised to end the RAB's use of murder. The current government promised in its manifesto that it would end all extra-judicial killings, but they have continued following its election two years ago. In October last year, the shipping minister, Shahjahan Khan, speaking in a discussion organised by the BBC, said: "There are incidents of trials that are not possible under the laws of the land. The government will need to continue with extra-judicial killings, commonly called crossfire, until terrorist activities and extortion are uprooted." In December last year the high court in Dhaka ruled that such killings must be brought to a halt following litigation by victims' families and human rights groups, but they continue on an almost weekly basis. Most of the victims are young men, some are alleged to be petty criminals or are said to be left-wing activists, and the killings invariably take place in the middle of the night.

<sup>24</sup>. <sup>26</sup> The culture of 'gloom'(forced disappearance) has been going on for a while, with little notice from national and international media, but this has now become the greatest concern after the 'forced disappearance' a powerful leader of BNP along with his driver picked up at midnight about 4 weeks ago by some unidentified persons. Nobody knows about the identity of the miscreants, but it is widely believed that they are members of the security agencies or of a pro-government vigilante group. The Ain-O-Salish Kendra says that at least 22 people have disappeared during the first four months of 2012. According to Odhikar, 30 persons were victims of 'enforced disappearance' in 2011, 18 in 2010 and 2 in 2009; this shows an alarming increase in such incidents. In comparison, extra-judicial killings by law enforcing agencies fell from 127 in 2010 to 84 in 2011. This suggests that "a shift is taking place by which citizens are placed outside legal protection and legal trials by terminating them. The State might have adopted the 'gloom' tactic because of the national and international outcry against extra-judicial killings." See: *The New Nation*. 31 May, 2012 ([www.newnation.com](http://www.newnation.com))

The armed cadres maintained by politicians as god fathers are dare devils creating a reign of terror all over the country. Things become dangerous and out of hand when god fathers more or less associated with ruling party patronize diabolical mischievousness of the armed cadres from behind the scene.

The weak section of the communities lives under the shadow of fear and restrictions. Cruelty to women, children, girl, and custom of dowry, forced prostitution, and trafficking are some example of violence structural violence includes unfair wage, usurious money lending, tutelage, bonded labour, child labour, free services, untouchability and dowry. Non-structural violence includes authorized use of by state agents to maintain law and order, unlawful violence, used against rural poor and violence by the rural poor itself in self-defence.

Trafficking of women and children across the country is the fast growing violence against the vulnerable groups. Most of missing women landed in neighboring countries like India and Pakistan. Some among them were taken to the oil rich gulf countries where they were forced work as camel jockeys

Several manifestations of violence against women and children include: throwing inflammable, corrosive or poisoned substance, causing or attempting to cause death, causing impairment of eye sight/hearing or injuring face, breast or organ, impairment/disfigurement of other parts of body, kidnapping, detention for ransom, sexual harassment like touching sex organ of women or child violating women modesty or making obscene gesture, rape/gang rape, injury or death, attempting to cause death/injury by rape, attempted rape, rape of women in custody and torture of wife by/ on behalf of husband causing or attempting to cause death.

Alarmingly the swell of eve-teasing indicating the state of societal degeneration has increased our tension and apprehension<sup>25</sup>. It was a talk of the town for some time with everyday media flash featuring the victims of eve teasing.

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<sup>25</sup> .There several incidents of eve-teasing published in a national daily like *The Daily Star* (November 25, 2010, December 2, 2010). There are some reports provided by *Daily Star*: Students of different educational institutions of Savar yesterday took an oath to resist stalking and sexual harassment. They took the oath at an open discussion titled 'Role of youth to resist stalking, sexual harassment and teasing' jointly organised by the Transparency International Bangladesh, Sachetan Nagorik Samaj (Sanak), NGO Samannay Parishad and Mahila Parishad, Savar Unit; at the office of Adesh, a non-government organization; at Savar. A section of women leaders yesterday urged the youths to forge a movement across the country to resist repression against women. Speaking at a press conference at the National Press Club in the city, they said youths have the strength to forge the movement to eliminate stalking and sexual harassment against women as well as dowry system from the country. See: *The Daily Star* (November 25, 2010, December 2, 2010).



The Government and civil societies under the compelling situation are pondering over the matter with due seriousness to find way forward to eradicate this mischievous act. The state thinks to mull legal steps through new legislation like mobile court to punish the culprits. Many a civil society formed human chain to protest eve-teasing.

Thing is that eve-teasing will not end as we are going through the stage of depersonalization. There happens to be a moral crunch spoiling and derailing the youth and the present generation. Moral lesson is the need of our with child's parents and teachers playing a vital role. The government ought to control all means of modern information and communication technology (ICT). Negative use of ICT gradually destroys all our good instincts. Mobile phone should be used only for information not for taking snaps, recording songs/music and enjoying music and uploading any obscene ultra-modern dance for publicity. Important thing is to reinforce action against drug trafficking and against trades on narcotics and any harmful tablets and drinks. Some satellite channels produce ugly programmes with reference to sex. Imposing ban on them is a must.

Hill people called either tribal or aboriginal are another reference point. Once they took to arms fighting for self-determination under the banner of Shanti Bahini (rebels) Alleged non-implementation/slow implementation of Chittagong Hill Tracks Peace Treaty along with fierce antagonism between tribal and non-tribal (Bengali settlers) brought new challenges and greater uncertainties hobbling development process with donor's support (UNDP) in this region. Fresh violence in this region-a formidable threat to Chittagong Hill Tracks Peace Treaty-is a disappointing note. Santu Larma, the chairman of PCJSS, a tribal organization, who led the sanguinary arm struggle until peace treaty, expressed grave concern about the recent state of affairs. Various organizations on behalf of the non-tribal Bengali settlers backed by dominant political groups were launching movement raising provocative slogans and placing several demands. Reports are aplenty describing perpetual state of restlessness and disturbance in three hill districts<sup>26</sup>.

26. Alleged non-implementation/slow implementation of Chittagong Hill Tracks Peace Treaty along with fierce antagonism between tribal and non-tribal (Bengali settlers) brought new challenges and greater uncertainties hobbling development process with donor's support (UNDP) in this region. Fresh violence in this region-a formidable threat to Chittagong Hill Tracks Peace Treaty-is a disappointing note. Santu Larma, the chairman of PCJSS, a tribal organization, who led the sanguinary arm struggle until peace treaty, expressed grave concern about the recent state of affairs. Various organizations on behalf of the non-tribal Bengali settlers backed by dominant political groups were launching movement raising provocative slogans and placing several demands. Reports are aplenty describing perpetual state of restlessness and disturbance in three hill districts. Amid this situation tribal organization like PCJSS under the leadership of Larma went out to organize protestant movements staging demonstration, rallies, blockade and strikes, see Pratham Alo (*Begali dailies*) 11 march, 2004, P1. PCJSS enforced indefinite blockade programme in three hill districts demanding the release of its leaders and activists arrested by security force (*Daily Star* 29 July P.1). Also see annual report of the state department (2003) cited in Bangladesh Observer February, 28, P1 that mentioned that the tribes were facing trouble to defend entitlement to landed property. Also see: Pratham Alo (*Begali dailies*) 11 march, 2004(P.1), *Daily Star* 29 July, 2004(P.1) reported that tribal organization like PCJSS under the leadership of Larma went out to organize protestant movements staging demonstration, rallies, blockade and strikes. PCJSS enforced indefinite blockade programme in three hill districts demanding the release of its leaders and activists arrested by security force. The annual report of the state department (2003) mentioned that the tribes were facing trouble to defend entitlement to landed property reported that tribal organization like PCJSS under the leadership of Larma went out to organize protestant movements staging demonstration, rallies, blockade and strikes. PCJSS enforced indefinite blockade programme in three hill districts demanding the release of its leaders and activists arrested by security force. The annual report of the state department (2003) mentioned that the tribes were facing trouble to defend entitlement to landed property

The prevalence of confrontational relationship within the Muslim believers characterized by marked differences among sects and sub-sects and various religious schools of thoughts became a testament of violence. There are two sects-Sunni and Shia. Besides there is a Qadiani (Ahmadiya) group which is a movement rather than a sect. The Sunnis are divided into five sub sects: *Hanafi, Shafeli, Hamboli, Maliki and Ahli-hadi*<sup>27</sup> Celebrated English daily reported a fierce clash between the two rival groups leaving a man dead and others injured. The Qadianis are being treated as non-Muslims by some Muslim organizations. Attacks on Qadiani increased in number and seriousness. They are victims of discriminatory public policy. What the administration had done to Ahmadiya is discriminatory. The policy to ban Ahmadiya literature for the pressure of the religious folks is unjust somewhat reflecting a nefarious design to provoke violence. The Ulemas have also been demanding for years the declaration of Ahmadiyas as non-Muslims<sup>28</sup>.

militant fundamentalists. They declared Jihad(war) against NGOs and progressive social forces<sup>29</sup>.

The role of government in 'soft state' with the passivity of law enforcing forces was liable to public criticism. Most observers and columnists pointed fingers at such role. One could well imagine from the vulnerability of every citizen even VIP in the fast deteriorating security situation how weak the state must be getting to be. Thing is that state was soft to well-oiled conglomerates of the ruling regime happening to cause moral erosion and criminalization of politics. At times it was hard to opposition force and innocent masses reacting with repression and even blackmailing. Nothing concerned the administration so seriously when secular writers and prominent businessmen came under attack. The militant fundamentalists continue their killing spree. Bangladesh went deepest into crisis revealing a formidable trend in the confrontation between two diametrically opposed political groups-leftist radicals and Islamic militants.

<sup>27</sup>. PC Sarker, Social Structure and Fertility Behaviour, CDS, Dhaka 1997, P. 122

<sup>28</sup>. The Bangladesh observer September 11, 1997

<sup>29</sup>. Extreme rights treat NGO activists as anti-Islamic. Experience to-date shows that many a programme of social development intended to conscientize the women has been opposed by them. They show much intransigence resisting any attempt at reformation NGOs like Friends in Village Development in Bangladesh (FVBB) and Bangladesh Women's Health Coalition (BWHC) complained that rightist religious organizations set ablaze a local hospital provoking a section of locals to destroy the offices of FVBB and BWHC. They pressed home demand for the trial of anti-Islamic elements, enactment of law against blasphemy and imposition of ban on NGO activities. See: *Grassroots VO.3, Issue10, April-June 1994(supplement)*. The ambivalence of administration on NGO issue encouraged the fundamentalists to crack down on NGOs-especially political NGOs. Mentinably PROSHIKA was hard hit. The issue was taken with renewed concerns by human rights groups and many development partners

Many backward and poverty stricken areas of northern and southern Bangladesh once turned out to become happy hunting grounds for their operation. Almost everywhere in Bangladesh it was grappling hell with destruction, bomb explosion, killing with fire arms, spilled blood and inhuman tortures. This was because the vigilant orthodox fundamentalists cashed in on the marked inefficiency of the 'soft state' with the incumbents displaying languor in dealing with the miscreants who enjoyed the blessings of orthodox godfathers. The radical leftists or extremists are called outlawed operatives. They extort money; kill local leaders and police at will. The Islamic militants are doing the same thing in the name of crusade. Frightening is the style of their operation that hit the headings of national dailies. The daily star reported a dreadful act of cruelty of the Islamic militants. The body of suspect leftists was dug out of a grave near the Islamic outfit's camp at a small town of northwest region. The body bore multiple marks of torture in captivity. Despite the order of the prime minister to arrest its leader the law enforcing authority continued to make but mere faints. The militants are all out to create a government with government showing defiance and prowess<sup>30</sup>.

### Concluding observations

The seemingly cynical and pessimistic view of state-society interaction holds true of developing countries in general and Bangladesh in particular. In terms of such interaction state plays the dominant role in public policy with political and bureaucratic actors having good intention. A meaningful state-society interaction is woefully missing as the state is overdeveloped and civil society is 'weak and fragmented'. Over empowerment of the state, contrasted with disempowerment of the society results in a lack of 'reciprocal influence' in state-society interaction. Inevitability of state failure altogether with dislocating societies characterizes a realistic picture of Bangladesh.

The consequence is likely to be the generation of catastrophic conditions as well as humanitarian crisis. Violence in terms of massive societal degeneration is a pervasive phenomenon in a transitional society. It tends to dismantle institutionalized relationship weakening the process of social control at the community level. Development intervention under the aegis of the state is thus disarrayed. Governance in a real life operation becomes mixed with pejorative prefix-fuzzy governance.

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<sup>30</sup>. For details see: *the daily star* 29 and 30 May 2004, *Dhaka courier* Vol. 20 issue 44,28 may 2004, *Dhaka courier* 14 May 2004

A gruesome picture of contemporary Bangladesh is straight forward. This is truly demoralizing. Violence has permeated the whole the whole community. This anti-developmental otherwise dysfunctional variable projects the dynamics of transitional societies. Several manifestations of violence like acid throwing, attack on minority and disadvantaged sectors, rape and campus disturbance have become regular several manifestttations of violence like acid throwing attack on women, rape and campus disturbance have become regular features in transitional societies. Poverty alleviation rhetoric and structural adjustment programme (SAP) funded by international donors have proved to be counter productive in most cases. Policy intervention in many instances violates institutional provisions and is not consistent with human rights norms. Free flow of information, independence of judiciary, ombudsman, and independence of anti-corruption commission, the major parameters of good governance are distressingly missing.



## **HIV/ AIDS and Street Based Sex Workers (SBSW) Situation in Bangladesh**

Shamsun Nahar Chowdhury\* and Dr. Md. Shairul Mashreque\*\*

### **Introduction:**

The sex workers spend a considerable time living and working here and there as maverick. They feel they do not have any identification. So they suffer from identity crisis. The community looks at with hatred and negligence. In fact sex workers' children are illegitimate children. The abuse like bastard means the children of the pross or whore.

The daughters of the streets are mostly from the clandestine association of the sex workers surviving in a grave situation. They cannot claim any rights. So they suffer violation of human rights. Living on the margins of the society relying entirely on their own efforts with no one caring for them sex workers' children remain as the most vulnerable children (MVC). As a matter of fact sex workers' children are a special group of children far apart from urban poor children. They are out of reckoning in the definition of the children most vulnerable , exploited facing the highest risks.

The suffer torture and harassment in the red light zone where they live and move with their mothers who are sex workers. The majority of victims have been victims of abuse or sexual assault previously in their lives; most sex workers have had an experience in foster care. Almost all are female, but there are some male and transgender victims. A large number are undocumented women, being promised a better life and tricked into fake marriages, abusive relationships or a guise to bring them to another country before stripping them of their documents and enslaving them. Many traffickers purposely impregnate the women and hold the child hostage in order to continue to coerce the mother.

But, most recently, a large growing number is college students struggling with debt. A number are middle class, some even still in touch with their families, who remain unaware of what their child is experiencing. Professionals working with sex workers will tell you that they never suspected various cases.

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These women look just like your daughter, or your friend - there is no stereotypical face, despite what the media and society leads us to believe. The only thing in common: a vulnerability that has been preyed upon. A pimp once told a detective that how he identifies potential girls is to go to the local mall, approach a young girl and tell her she's very pretty. If she looks him in the eyes and says, "thank you," he walks away. If she looks down and says, "no I'm not," he knows he's got her.

Some people will argue that prostitution is a choice and one has no right to judge someone else for choosing to go back to their pimp or to continue that life. Yes, some women will answer this is a choice - but choice is relative and it is important to remember the types of situations that push a woman into this situation: extreme poverty, a history with sexual abuse, abusive relationships, forced drug addiction. The list goes on. Many sex workers will tell you themselves that she/he is doing this by choice. But months later, when something tips the scale, those same sex workers may reach out for help, and recognize that they were victims. Survivors consistently say that they convinced themselves this was their choice as a means of coping with the abuse. And the first time they were coerced, they weren't thinking about the beatings, or being made to feel like they were stripped of their humanity.

While the sex workers have such a social condition to live with, the children of these female sex workers in Bangladesh are at high risk of many significant threats to their health and wellbeing. While some of these problems are shared with other children of similar social and economic circumstances in Bangladesh, children of sex workers experience a range of problems due to the social stigma and threats associated with their mother's sex work and the resulting discrimination. Even if a mother decides to raise her child, they are frequently kidnapped and abused by pimps and thugs. Furthermore, prostitutes and their children live a precarious existence, with many being evicted from brothels and suffering physical and emotional harassment from police and goons.

If we see the legal obligation regarding the sex-workers we found that the Bangladeshi High Court has ruled, in early 2000, that prostitution as a livelihood is not illegal. Lawyers argue the judgment is highly unusual because it makes Bangladesh one of the few Islamic countries which do not ban prostitution. This judgment means that prostitutes in Bangladesh now have the legal authority to practice their trade. Although the constitution of Bangladesh declares that the state should discourage prostitution, it is one of the few Muslim nations in the world that doesn't make it illegal. However campaign groups were disappointed in August when the Electoral Commission overturned its earlier decision to recognize prostitution as a profession. Many believed that it would reduce the levels of harassment

faced by sex workers, and that it would make it easier for their children to become enrolled in schools.

Prostitution was legalised in Bangladesh in 2000 even though the Bangladesh constitution provides that the "State shall endeavor to prevent gambling and prostitution."

The overall context for children's rights, for all children, has legal, political, social, cultural, economic, demographic, and environmental dimensions. Bangladesh, which is now home to about 63 million children, enacted the Child Act in 1974 while ratified the Convention on the Rights of the Child (CRC) in 1990. The CRC sets forth the rights of all children to health, education, participation, and protection.

The Government is developing laws and policies with a view toward consistency with the UNCRC and Bangladesh's other human rights commitments. Still, however, many of the rights guaranteed in international conventions are not yet supported with legislation, and some laws and policies contradict them. When appropriate laws and policies are in place, they are often poorly implemented and enforced.

In such a situation, the children of the street based sex workers are the most vulnerable, deprived and marginalized part of the society where their mother are treated as garbage and not even treated as human being. Such sordid lifestyles may have a profoundly negative effect on the child's development and well being - and the damage is further compounded if the mother decides to sell her own daughter into the sex trade, which happens frequently due to poverty and a lack of opportunities for education.

HIV Stands for Human Immunodeficiency Disorder. HIV tags on to certain cells and copy's itself. HIV causes slow but constant damage to the immune system. AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is the condition diagnosed when there are a group of related symptoms that are caused by advanced HIV infection or when someone has less than 200 CD4 cells. AIDS makes the body vulnerable to life-threatening illnesses called opportunistic infections. To keep HIV from becoming AIDS There are certain Medicines and injections to slow down the affects and improve life expectancy. Given this information there is still a strong chance (without treatment) that you will still acquire the AIDS Virus. The odds are approximately 50% with treatment 15%. Although these odds don't seem good most Scientists currently working in Africa believe due to recent tests that the AIDS virus is at its tipping point.

The HIV Virus is only attained by humans (hence Human in HIV). There are similar diseases for animals and other organisms but the HIV virus is only

found in Humans. The Areas of people most affected by the virus are in areas of poverty; such as the poorest Areas in Africa, The "ghettos" of the United States. Essentially the virus can be found anywhere on the planet but is not transmittable in anyway besides blood and sex. The drugs used to keep the virus contained are very expensive and not available to most of the people containing the virus. The virus is not hereditary so it is not passed down through generations but can be given to a child if the mother is infected with the virus while giving birth. But this like many other cases is preventable. This is such a common disease throughout our world and research has been founded at such a high rate that even with the select amount of organisms with the disease modern scientists are able to research people and figure out all of the needed information.

### **Epidemic in the World :**

The UNAIDS Global Report UNAIDS Global Report on the epidemic estimated that in 2009, 33.3 million people worldwide are living with HIV, the overwhelming majority of whom live in sub-Saharan Africa, that is 22.5 million men, women and children.

Estimates vary as to when and where HIV and AIDS originated. Some speculate there were a number of isolated cases as early as 1930. Evidence suggests that the current epidemic began in the late 1970s, when it began to spread rapidly. This spread created a degree of hysteria around AIDS as no one knew what it was, its cause, how it was spread or what treatments were available or could be developed.

### **Genesis of HIV & AIDS:**

in the early 1980's in the United States of America as an immune-system related disease in homosexual men, AIDS was initially labeled as the 'Gay Related Immune Deficiency Syndrome' or GRID. It was almost immediately changed as it became clear that the term GRID was incorrect as cases appeared not only in heterosexual men, but in women and children also. It was then re-named 'Acquired Immune Deficiency Syndrome' or AIDS, indicating that it was through action that one became infected (through the use of the word 'acquired'), rather than from casual contact. This resulted in AIDS being labeled as a medical problem and scientists began to look at biological components of the disease, with very little emphasis on the social aspects of it. Scientists had agreed that it was most likely a virus that was causing it. By 1983 they had identified the virus. In 1987, it was given the name we know it as today: 'Human Immunodeficiency Virus' - HIV.

It has been almost 30 years since HIV and AIDS was first recognised and diagnosed. HIV and AIDS has since spread at an alarming rate globally and



now affects most countries in the world (where the information is available). Although there have been major breakthroughs in terms of treatments, prevention methods and support for people living with HIV and AIDS, these responses are still inadequate in terms of stopping its spread and easing its impact. Millions of people continue to be infected with millions more still dying. This is especially true in sub-Saharan Africa, the main focus for this section.

Internationally renowned expert and activist on HIV and AIDS, Michael Kelly SJ argues that HIV and AIDS is driven by poverty, gender disparities and power structures, stigma and discrimination and exploitative global socio-economic structures and practices. He believes that: 'the more these thrive, the more HIV and AIDS will flourish. Equally, the more HIV and AIDS prosper, the greater the likelihood that poverty, gender disparities and power structures, stigma and discrimination, and disruptive socio-economic structures and practices will flourish and ensure the continuation of the epidemic' (2006).

As is clear from reports such as the UNAIDS Global Report mentioned above, sub-Saharan Africa disproportionately bears the majority of this great human tragedy. The 2010 Human development report stated that since the creation of the Human Development Index in the 1970s, only 3 countries have dropped down the list - becoming underdeveloped, so to speak. Those countries are Zimbabwe, the Democratic Republic of Congo (DRC) and Zambia. The case of Zambia illustrates how HIV and AIDS can devastate a country in terms of its national growth.

Initial responses to the spread of HIV and AIDS were very technical. Safe sex was encouraged and condoms were provided; safe injecting practices were encouraged; and blood safety was improved. It quite quickly became apparent that this was not enough and that people's behavior needed to change. The eventual acknowledgement of the existence of 'risk groups' and the focus on behavioral change helped reduce the numbers of people becoming infected in North America and Western Europe. However, this was not the case in sub-Saharan Africa as people who were in these 'risk groups' as well as the general populations were becoming infected, mainly through sexual intercourse or mother-to-child transmission.

### **Why HIV & AIDS is not only Health Issues:**

It has been argued that focusing on behavioral change is an insufficient response, that HIV and AIDS is now a question of human rights, poverty, gender, globalization and development - or more accurately, underdevelopment. The epidemic is making bad situations worse. The effect

HIV and AIDS will have on the next generation is substantial. The fact that the disease strikes young adults in their most productive years has a considerable effect not only on families or communities, but on the long-term development of a whole country. In a high-prevalence country, the epidemic touches every sector of its society. Studies have illustrated that HIV and AIDS can cause a reduction in agricultural production, which then leads to food insecurity; it puts massive strains on health care resources; it erodes progress made in education and it weakens the labour force and increases costs for businesses. HIV and AIDS weakens human capital, which then has significant long-lasting effects on a country's social and economic development. The long-term impact of the epidemic is still relatively uncertain, but it is becoming more apparent that it will be the poorest who will bear the greatest burden.

All of these mitigating forces combine to then make HIV and AIDS not only a biological or social issue, but more crucially, a development issue. It is important that we look at HIV and AIDS from a development perspective in terms of the impact it has at the individual level, community level, national and international level. HIV itself is now a major challenge for human beings in terms of what it means to be infected and affected. It is a major challenge for countries with high HIV prevalence rates in terms of the development, or 'un-development', of those countries. It is also a major challenge for all of us in terms of 'what we allow the world to look like Henning Mankell, and how we have allowed it to progress to this stage. This creates a challenge now for each individual to ask themselves if they are happy with the current situation.

AIDS is a justice issue, not primarily a sex issue. Perhaps and even more basic issue than economic and gender relations in the countries most affected by AIDS is the justice of the interlocking local and global economic systems that disrupt traditional societies, displace economic and educational infrastructures, and cut off access to kinds of prevention and treatment of disease whose efficacy in Europe and North America is well established. HIV and AIDS has claimed more than 27 million lives since it was first diagnosed in 1981. It is estimated that 2 million people die every year from HIV related illnesses and AIDS. 33.3 million People worldwide are currently living with HIV.

### **The Effects of HIV/AIDS on Different Systems of the Body:**

AIDS, or acquired immunodeficiency syndrome, is the potentially fatal disease caused by HIV, or human immunodeficiency virus. HIV causes severe damage to the immune system. In addition to harming the immune system, HIV and AIDS damage the other systems in the body, including the

respiratory, nervous, gastrointestinal and skin systems. While no cure exists for HIV or AIDS, the damage caused by these diseases can be treated. Prevention and education can keep the diseases from spreading.

### **Immune System:-**

HIV destroys CD4 cells, the white blood cells that help the immune system fight off disease. The Mayo Clinic reports that left untreated, HIV can become AIDS in as little as 10 years. During the course of this time, HIV damages the immune system to the point where opportunistic infections, or diseases that would be destroyed by a healthy immune system, start to set in. Common symptoms of opportunistic infections manifest themselves in various systems of the body, and include night sweats, fever, chills, shortness of breath, white spots in the mouth, fatigue, skin rash and weight loss.

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**Respiratory System:-** As HIV develops into AIDS, infections such as pneumocystis pneumonia or PCP, tuberculosis and Kaposi's sarcoma can cause severe respiratory conditions. Aids.org reports PCP is the most common opportunistic infection in people with HIV. Without treatment, 85 percent of those with HIV would develop the infection. Frequently appearing signs and symptoms of respiratory conditions resulting from HIV or AIDS related infections include difficulty breathing, dry cough and fever.

**Nervous System:** A weakened immune system allows bacteria, viruses, and fungus to infect the nervous system of people with HIV and AIDS. Common AIDS-related conditions affecting the nervous system include AIDS dementia complex, lymphoma and toxoplasmosis. General symptoms of these conditions consist of headaches, slowed thinking, poor short-term memory, and changes in behavior and coordination. People with HIV and AIDS should see a doctor if any of the those symptoms appear.

**Gastrointestinal System:** Gastrointestinal disorders are among the most common conditions for those diagnosed with HIV or AIDS. Frequently experienced GI disruptions include diarrhea, nausea, vomiting, weight loss, abdominal pain, GI bleeding and GI tumors. Dr. Johannes Koch of the University of California, San Francisco, reports that at least 50 percent of people with HIV will suffer GI discomfort sometime during the course of

their illness. The most common GI discomfort is diarrhea and weight loss.

**Skin System:** Many skin conditions that affect healthy people also occur in people with HIV or AIDS, but a weakened immune system often makes the conditions more severe and more difficult to treat. Common skin conditions associated with HIV and AIDS include dermatitis, psoriasis and hives. Most are treatable with medications. AIDS patients can also develop a rare skin cancer known as Kaposi's sarcoma. This disease is characterized by pink, purple or brown lesions on the skin that develop into tumors. Lesions can be removed with surgery, but if the cancer spreads to lymph nodes or internal organs, chemotherapy and radiation might be required.

### **Social Effect of HIV & AIDS:**

HIV, or the human immune deficiency virus, is the virus that causes AIDS (Auto Immune Deficiency Syndrome). HIV can only be transmitted through blood, contaminated needles or sexual contact. Because AIDS can be deadly and can be spread from person to person---many people in society tend to place a stigma on those who carry the virus and the disease. There are several social effects that are directly related to those who suffer from the illnesses.

**Casual Contact:** Many people who live with AIDS or HIV also have to live with the stigma of how other people may treat them. This may stem from certain individuals not being completely educated on the basics of the disease or the virus. Many people avoid people known to be infected with the illness out of fear that they may contact the disease. HIV and AIDS cannot be transmitted through casual contact. This means shaking hands, kissing, hugging, touching door handles, sharing food and sitting in the same room as someone with the virus are all perfectly safe.

**Employment:** Some people who disclose to their future or present employer that they are HIV positive or carry the AIDS virus may be discriminated against. They may be told they will not be hired or they will be let go for a reason that can not be supported or backed up. However, people with HIV or AIDS are protected under the Americans with Disabilities Act. If someone who feels they have been discriminated against, they should contact the ADA or the Job Accommodation Network to seek help and assistance with their specific matter. A complaint must then be filed, and a thorough investigation will be conducted. The only way an employer could choose not to hire them legally is if they feel they may be a clear risk to others---especially if the job involves direct patient contact care such as phlebotomy, surgery or dialysis. Even if there is a clear explanation, a discrimination case could still be filed against the employer.

## Present World Scenario:

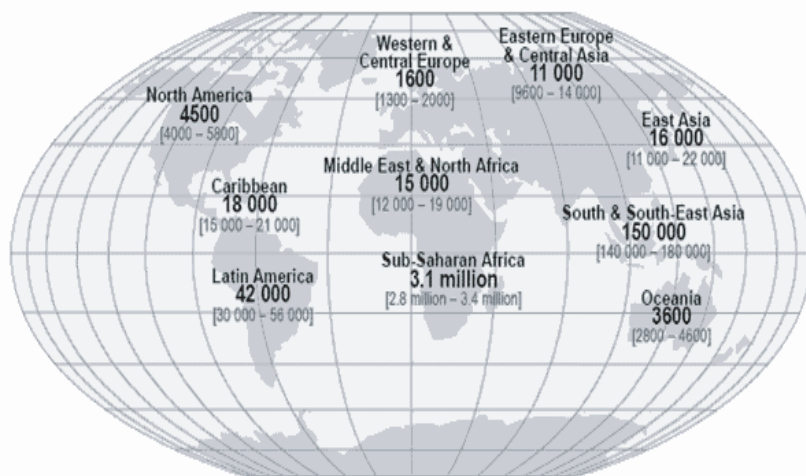
**Sub-Saharan Africa:** This is defined as the countries located south of the Sahara. They include Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Cote d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Swaziland, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe. High HIV prevalence rates: High numbers of people living with HIV in a certain area (see the World Map).

**Human Development Index:** A measure of human development using three equally weighted human dimensions of human development- life expectancy at birth, adult literacy rates and purchasing power.

## HIV and AIDS Global Scenario 2012:

- ┆ 2.5 million people became newly infected in HIV
- ┆ 1.7 million people died in AIDS related causes
- 8 million people getting access to ART

## Global Scenario of HIV AIDS



**Total: 3.3 million [3.1 million – 3.8 million]**

## **Scenario of Bangladesh**

HIV in Bangladesh has continued to remain at relatively low levels in the most at risk population groups. The main reason for this low prevalence could be the early and sustained HIV prevention programs targeting high risk groups backed by a state-of-the-art surveillance system. Another contributing protective factor could be the high rates of male circumcision. There is, however, a concentrated HIV epidemic among injecting drug users (IDU), primarily due to sharing of unclean syringes and needles. As a result, the rate of new infections is still on the rise and Bangladesh is the only country in the South Asia Region where new infections are rising. The first case of HIV/AIDS in Bangladesh was detected in 1989.

Since then 1495 cases of HIV/AIDS have been reported (as of December 2008). However UNAIDS estimates that the number of people living with HIV in the country may be as high as 12,000, which is within the range of the low estimate by UNICEF's State of the World's Children Report 2009. The overall prevalence of HIV in Bangladesh is less than 1%, however, high levels of HIV infection have been found among injecting drug users (7% in one part of the capital city, Dhaka<sup>1</sup>). Due to the limited access to voluntary counseling and testing services, very few Bangladeshi's are aware of their HIV status. Although still considered to be a low prevalence country, Bangladesh remains extremely vulnerable to an HIV epidemic, given its dire poverty, overpopulation, gender inequality and high levels of transactional sex. The emergence of a generalized HIV epidemic would be a disaster that poverty-stricken Bangladesh could ill-afford. It is estimated that without any intervention the prevalence in the general adult population could be as high as 2% in 2012 and 8% by 2025. Bangladesh is in the unique position to succeed where several other developing countries have not: to keep the AIDS epidemic from expanding beyond this current level by initiating comprehensive and strategically viable preventative measures, avoiding a gradual spread of HIV infection from high-risk groups to the general population.

**State of the Epidemic:** Although it is useful to understand the overall impact that AIDS is having on the Asian region as a whole, there is no single 'Asian epidemic'; each country in the region faces a different situation. Progress has been made in countries such as Cambodia, Myanmar and Thailand, where there has been a 25 percent decline in HIV prevalence between 2001 and 2011. On the other hand, in Bangladesh, Indonesia, and the Philippines the number of people living with HIV has increased by more than 25 percent between 2001 and 2011. There are also huge variations within countries. In China, for example, the six provinces with the highest

HIV prevalences account for 75.5 percent of the people living with HIV.

Asia has had the largest AIDS-related death toll outside of sub-Saharan Africa. 7 Some have warned that epidemics in Asia could escalate to the extent of rivalling those in some parts of Africa. Others, however, argue that Asia's epidemics are on a different trajectory to those found in Africa, as HIV infection in Asia is still largely concentrated among members of 'high-risk' groups.

Bangladesh's latest round of serological surveillance (2011) showed that HIV prevalence among all key populations remained below 1 percent with the exception IDU. Although the overall prevalence of HIV was 1.2% among IDU in 2007/08, there is a concentrated epidemic among male IDU in Dhaka. The prevalence of HIV in this cluster increased from 4% in 2002 to 7% in 2007/08, which fell slightly in 2010 to 5.3%.

**Risk Factors:** In Bangladesh, as in other countries in the region, HIV risk arises mainly from unprotected paid sex, sharing of used needles and syringes by IDU, and unprotected sex between men who have sex with females. Commercial sex work occurs in Bangladesh as it does in other Asian countries. Most married men who have unprotected sex with sex workers continue to have unprotected sex with their wives, exposing them to infection with HIV and other sexually transmitted diseases. Low condom use, risky behavior and general lack of understanding about HIV is not limited to clients of sex workers. In fact these traits are widespread and heighten the chances of a HIV epidemic in Bangladesh. Although many people have heard of HIV, their knowledge is limited in regards to how it is transmitted and how they can protect themselves. Nearly one in five ever-married women who had heard of AIDS did not know if there was any way to prevent it. This was lower for men, at 6% Men having sex with men are largely hidden due to the powerful stigma and discrimination they face in Bangladesh. Many men who have sex with men are bi-sexual and do not necessarily identify themselves as such. Men buying sex from other men rarely use condoms and many continue to have sex with their wives.

Sex workers, along with other marginalised groups such as men who have sex with men (MSM) and injecting drug users (IDUs), are often considered at risk of HIV. However, although sex workers are severely affected by HIV in many parts of the world, they are also one of the groups most likely to respond well to HIV prevention campaigns.

Prevention campaigns aimed at sex workers not only reduce HIV transmissions that result from paid sex; they can also play a vital role in restricting the overall spread of HIV in a country. Proof of this can be seen in



countries such as Cambodia, the Dominican Republic, India and Thailand, where general reductions in the national HIV prevalence have been largely attributed to HIV prevention initiatives aimed at sex workers and their clients.

### **Why are sex workers at particular risk of HIV transmission?**

It is difficult to talk about sex workers as a single 'group', because those involved in the sex industry come from a diverse range of backgrounds and cultures. As a result, the levels of risk that they face in terms of HIV infection varies greatly depending on the country that they live in, whether they work from a brothel or 'on the street', and whether they have access to condoms, among other factors. 1 A wealthy sex worker supplying services to businessmen in London, for instance, may face a very different level of risk to that of an impoverished girl who is being forced to sell sex in a red-light district in Thailand.

There can also be significant variance within countries. For example, in India, HIV prevalence is 4.6 percent among sex workers in Mumbai compared with 24 percent among street-based, and 29 percent among brothel-based, sex workers in Maharashtra.

Despite this diversity, sex workers often share several common factors in their lives, regardless of their background. Some of these factors can increase their exposure to HIV.

**Multiple partners and inconsistent condom use:** In general, sex workers have comparatively high numbers of sexual partners. This in itself does not necessarily increase their likelihood of becoming infected with HIV if they use condoms consistently and correctly.

The reality, however, is that sex workers and their clients do not always use condoms. The 2010 UNAIDS global report found only a third of the 86 countries surveyed reported 90 percent of sex workers using a condom with their last client, while more than half reported condom use by 78 percent of sex workers. 3 In 2012, 44 countries reported higher median condom use; 85 percent, up from 78 percent in 2009.

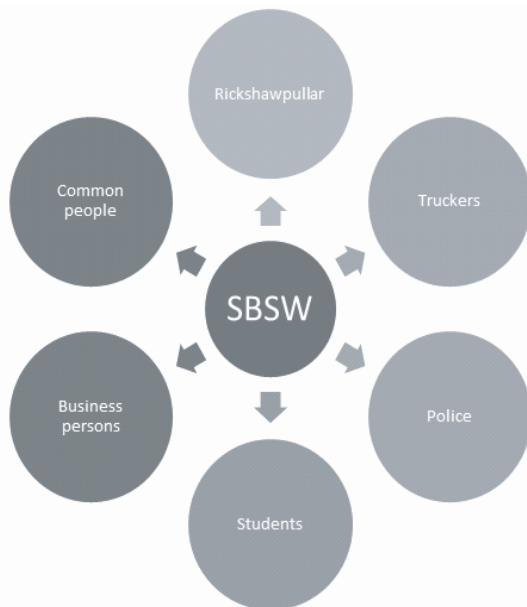
In some cases, sex workers have no access to condoms, or are not aware of their importance. In other cases, sex workers are simply powerless to negotiate safer sex. Clients may refuse to pay for sex if they have to use a condom, and use intimidation or violence to force unprotected sex. They may also offer more money for unprotected sex - a proposal that can be hard to refuse if the sex worker in question is in desperate need of an income.

The clients of sex workers are fuelling HIV transmission, because they act as



a link between sex workers and the general population. Many women do not report using condoms with their husbands and may therefore be at risk of HIV infection if their partners frequent sex workers. This is particularly true for wives of migrant workers who travel long distances and spend extended periods of time away from home. High HIV prevalence among the male clients of sex workers has been detected in studies globally.

### How sex workers for spreading STD & HIV



Sex workers are generally stigmatised, marginalised and criminalised by the societies in which they live, and in various ways, these factors can contribute to their vulnerability to HIV. Even though sex work is at least partially legal in many countries, the law rarely protects sex workers. Around the world, there is a severe lack of legislation and policies protecting sex workers from the actions of clients that can put them at risk. For example, a sex worker who is raped will generally have little hope of bringing charges against their attacker. The lack of protection in such cases leaves sex workers open to abuse, violence and rape, creating an environment, which facilitates HIV transmission.

Non-governmental organisations report that almost two thirds of the countries they work in have laws that make it difficult for them to provide services to sex workers. In some countries, police use the possession of condoms as evidence that somebody is involved in sex work, further

impeding sex workers' efforts to protect themselves.

**IDU:** HIV prevalence has started to increase amongst IDU in Dhaka, rising to 7% in 2007/08 in one neighborhood. This epidemic "hot spot" is clearly a priority.

**International returned migrant workers:** This group accounts for the majority of passively reported cases of HIV in the country and may be a potential source of HIV transmission.

An epidemic may also be emerging among female sex workers (FSW) in towns bordering India. The numbers are small but this area needs careful attention. Genetic analysis found that the HIV strains were different in each of these groups as of 2005. There is some overlap amongst sex workers, as some inject drugs and some engage with migrant workers. A rising epidemic in one of these groups, therefore, could lead to a spread in others.

**Lack of knowledge and awareness:** People aged 15 to 49, account for approximately one-fifth of the total population of Bangladesh. Although the estimated HIV prevalence in this age group is negligible, a national survey in 2008 found that they lack knowledge and awareness about HIV and that many are engaged in risky sexual practices while having limited access to reproductive health information and services. A majority of the people surveyed (90%) had heard about HIV/AIDS but their level of knowledge of the disease was low. Only 38% of the people surveyed could correctly identify two or more routes of HIV transmission and only 40% could identify two or more routes of prevention. A national survey of youth found that almost 20% of unmarried males had premarital sex and one in three of them had their last sex with a sex worker. Around 10% married males reported having sex outside of marriage, half of whom had their last sex with a sex worker.

**Other socioeconomic factors :** The knowledge about HIV transmission in Bangladesh (2004) showed significant difference related to wealth, gender, education, and rural versus urban location. The lowest awareness was found among uneducated women in rural Bangladesh (20%) compared to educated urban males (78%). Homeless IDU have been shown to be more than five times as likely to be HIV positive as IDU living at a fixed address. Besides, IDU from HIV epidemic neighbourhood in Dhaka (in comparison with IDU living in the rest of Dhaka) were less educated, fewer were currently married, and had lower average income.

**National Response to HIV/AIDS :** Government: In late 1996, the Directorate General of Health Services in the Ministry of Health and Family Welfare outlined a National Policy on HIV/AIDS. A high-level National

AIDS Committee (NAC) was formed, with a Technical Advisory Committee, and a National AIDS/STD Program (NASP) unit in the ministry. The NAC includes representatives from key ministries, non-government organizations and a few parliamentarians. Action has been taken to develop a multi-sector response to HIV/AIDS. Strategic action plans for NASP set forth fundamental principles, with specific guidelines on a range of HIV issues including testing, treatment, safe blood supply, prevention among youth, women, migrant workers, sex workers, and STIs. While earlier commitment was limited and implementation of HIV control activities was slow, Bangladesh has strengthened its programs to improve its response. The Government of Bangladesh prepared the National Strategic Plan for HIV/AIDS for the period 2004-2010 under the guidance of NAC and with the involvement and support of different stakeholders. As a follow-up to this, the Government recently completed the National HIV Strategic Plan for 2011 to 2015. Efforts to mainstream HIV/AIDS in public sectors outside the Ministry of Health and Family Welfare were initiated through designation and training of focal points on HIV/AIDS in 16 government ministries.

**Non-Governmental Organizations (NGOs) :** More than 380 NGOs and AIDS Service Organizations have been implementing programs/projects in different parts of the country. These initiatives focused on prevention of sexual transmission among high-risk groups involving mostly female sex workers, MSM, IDUs, rickshaw pullers and truckers. NGOs are often better positioned than the public sector to reach vulnerable populations, such as sex workers and their clients and injecting drug users. Building the capacity of NGOs, especially the small ones, and combining their reach with the resources and strategic programs of the government is an effective way to change behavior in vulnerable populations and prevent the spread of HIV. Bangladesh initiated an early response to the HIV epidemic starting in the mid-1980s. Since then, the response has been enhanced considerably, and many HIV-prevention interventions among the most at-risk populations and the general youth are being undertaken. Alongside prevention activities, gathering of data has been a key activity fostered by both the Government and individual development partners. This paper reviews available sources of data, including routine surveillance (HIV and behavioural among most at-risk populations), general population surveys, and various research studies with the aim to understand the dynamics of the HIV epidemic in Bangladesh. Available data show that the HIV epidemic is still at relatively low levels and is concentrated mainly among injecting drug users (IDUs) in Dhaka city. In addition, when the passively-reported cases were analyzed, another population group that appears to be especially vulnerable is migrant workers who leave their families and travel abroad for work. However, all sources of data confirm that risk behaviours that make individuals vulnerable to HIV

are high-this is apparent within most at-risk populations and the general population (adult males and youth males and females). Based on the current activities and the sources of data, modeling exercises of the future of the HIV epidemic in Dhaka suggest that, if interventions are not enhanced further, Bangladesh is likely to start with an IDU-driven epidemic, similar to other neighboring countries, which will then move to other population groups, including sex workers, males who have sex with males, clients of sex workers, and ultimately their families. This review reiterates the often repeated message that if Bangladesh wants to be an example of how to avert an HIV epidemic, it needs to act now using evidence-based programming.

### **Situation of HIV/AIDS in Chittagong:**

Chittagong is situated at southeast part of Bangladesh. Chittagong is the second biggest and main port city of Bangladesh. As a result of the recent growth in export, Chittagong port now handles about 11 million tons of containerized cargo annually. Every month, approximately 100 foreign ships with over 2,000 sailors dock the port. In addition, there are over 5,000 registered Bangladeshi seamen, with about 630 working on the 14 ships owned and operated by the Bangladesh Shipping Corporation at any one time. Another estimated 1,800 are employed on foreign ships. These men come from all over Bangladesh and generally spend only 2-3 months in their homes, with the rest at sea. Hatch workers (200) work at the outer anchorage and there are another 5,000 merchant clearance and forwarding workers. About 3,000 dockworkers live at the dockworkers' colony, Others live in slums around the port area. Most of there living arrangements are male only and an estimated 20% of these men have their wives and families with them.

Out of an estimated 45,000 registered Bangladesh trucks, about 3,000 long distance trucks operate out of the port every week, each with at least two men. Thus, transport workers represent a major population segment of mobile men., Sailors, truckers, and dockworkers are vulnerable to acquiring an HIV infection due to their long absences from primary sexual partners, especially if married. There are 37,000 registered and perhaps more than equal numbers of unregistered rickshaw and 100,000-150,000 rickshaw pullers operate in Chittagong City, Rickshaw puller are also very vulnerable to HIV infection as their access to sex workers is easier compared to many others. As Chittagong is considered to be a conservative city where pre-marital and extra -marital sex is severely chastised among woman, but not among men, the demand for commercial sex is great, A highly organized clandestine sex trade has emerged to fulfill this demand.

As a result of its location, Chittagong port is linked with a number of ports in the Bay of Bengal (Rangoon, Calcutta, Bhubaneswar, Vishakatpatnam, Chennai, Colombo) and with major cities along the most common routes in the region (Singapore, Mumbai, Manila, Bangkok, Ho Chi Min City, Kuala Lumpur, Hong kong, Durban). Many of these ports experienced high HIV prevalence and subsequent epidemic.

### **Street based Sex Workers (SBSW) in Chittagong & YPSA:**

Though Bangladesh is low prevalence country but common border with neighboring countries with high AIDS prevalence rates. Bangladesh has a large number of different types of sex workers. Young Power in Social Action (YPSA), a renowned Non Governmental Organization (NGO) has conducted a mapping & situation analysis in Chittagong in 2002. In Though Bangladesh is low prevalence country but common border with neighboring countries with high AIDS prevalence rates. Bangladesh has a large number of different types of sex workers. Young Power in Social Action (YPSA), a renowned Non Governmental Organization (NGO) has conducted a mapping & situation analysis in Chittagong in 2002. In Chittagong there are around 7000 commercial sex workers including 1,000 Floating & street based sex workers. Sex workers are very vulnerable for HIV infections specially Floating & street based sex workers. Sex workers are very vulnerable for HIV infections. They are stigmatized and marginalized, limited economic options, limited access to health, social and legal services, limited access to information and prevention means, gender related differences and inequalities, sexual exploitation, harmful legislation and policies and exposure to risk associated with life style (e.g. violence, substance use, mobility).

YPSA aims to address the lack of appropriate social support frameworks, appropriate provision of HIV/AIDS and sexual health promotion services to meet the specific needs of the Street Based Sex workers and their client through the development of appropriate advocacy including IEC, social support systems, early and effective treatment of STDs, counseling and health education, outreach workers and peer educators and promotion of condoms among the target people in Chittagong.

Aiming to reduce the risk of STI and HIV transmission among street-based sex workers and their clients in the city of Chittagong. YPSA focuses on prevention of HIV/AIDS prevention through center and -field activities. The activities included regular health education session, advocacy with different stakeholders-police, community people, condom depot holders, local elite, teachers and religious leaders.

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### **How YPSA implementing the program:**

- | Create a supportive environment for HIV and STI prevention through social mobilization.
  - | Policy Advocacy
  - | Awareness Program (Day Observation)
  - | Form Flying Squade& Regional Media Forum.
  - | Collaborate with faith based initiatives for HIV Prevention.
- | Increase competency of project staff on project management and behavior change.
  - | Human Resource Development
- | Promote risk elimination and risk reduction practices among street based sex worker and their clients
  - | Outreach activities by PE & outreach supervisors at field level.
  - | Conduct on site contact client groups,condom depot holder & other stake holders.
  - | Awareness raising meeting with local authority
  - | Convey awareness messages through cultural event
- | Provide quality sexual and reproductive health services including STI management
  - | Promotion of STI clinical services through Outreach
  - | Provide STI case management services
  - | Screening, testing and provide treatment of syphilis
  - | On job support to field team for delivering messages of STI & Syphilis
  - | Ensure partner referral
  - | Ensure drop box in referred agency and collect referral cards

- | Collaboration with other services
- | Create a structured Quality Improvement ( system
- | Provide high quality HIV counseling and testing service.
  - | Provide high quality pre and post counseling
  - | Offer HIV rapid test with same day result
  - | HIV counseling and testing
  - | Ensure workplace safety
- | Strengthen referral networks of their services for their clients
  - | Refer drug using SW & their clients for treatment & rehabilitation
  - | Explore non funded collaboration for economic rehabilitation
  - | Integrate general health & other services
  - | Disseminate information on family Planning to the Target population
  - | Ensure FP Counseling at center level
  - | Ensure STI drugs through leveraging
  - | Collaboration with GO/NGOs for services.
- | Increase Knowledge, skills & access to products for correct use of condoms in high risk sexual encounters.
  - | Provide knowledge for correct & consistence use of condom
  - | supply of condom
- | Improve medical waste management.
  - | Ensure logistics and on the job training for color coding and labeling.
  - | Ensure implementation of MWM SOP.

## **Conclusion**

Commercial sex workers face social disapproval and rampant marginalization. The goal of the Baseline Survey conducted by YPSA is to measure the socio economic condition of children of street base sex worker of selected area which will help the project management to measure the project achievement after completing the project period. The survey thus conducted covers 105 Children of the Street based sex workers (CSBSW). They are sampled from some specific target areas of Chittagong and Comilla cities. It is estimated that there are around 1000 CSBSW in these target areas of these two cities. The survey also includes findings from FGDs (Focus Group Discussions) and KIIs (Key Informant Interview). The children are categorized in two age groups. Group 1 includes the children less than 15 years and Group 2 the children who are 15-24 year. Of age.

Almost 100 percent of the surveyed female children are working as sex workers and they don't live mostly in any permanent places. Most of the children of the SBSW squatter with their mother in small huts, live in train stations, bus stations and on the streets. The CSBSW are often brought up by their relatives like-grandmothers, aunts etc. The children say that they never stay with their father or his place. The Street based sex workers want to live with their children but they prefer to give away their children to relatives as they have financial crisis and to avoid the possible discrimination of their children from the society.

The husband of their mother is not the father of the child; the child is either of a former husband or of a client. 63% of the children, Group 2, of Sex workers living alone and remaining surveyed CSBSW are living with the female friends or husbands/wives and on the other hand, 69% of the surveyed CSBSW of Group 1 lives with their mother in the care of the mother.

The CSBSW has hardly enjoyed pure drinking water and hygiene sanitation systems and most of the time they eat from the street or road side vane.

35 percent of the surveyed children of Group 1 go to schools and 50% of the children never went to schools. Besides, 15% children dropped out from the schools and could only finish grade-2.

100 percent of the surveyed children of Group -2 don't study and don't go to schools. Among them 20 percent of children dropped out from the schools from Class-3.

As they don't have enough scope to play so they become involved with unsocial and minor criminal activities like -helping hijackers, drug dwellers, minor violence, begging , harassing common public etc.

In general most of the children started their income when they are 10-12 year old. The common jobs for these children are sex-work, waste picking, rail oriented jobs, and begging. 53% of the surveyed children of, Group -2, are involved and started their income by Sex-trade which is 89% of the female children are involved with this profession. The income of them depends on their physical appearance, particularly how beautiful and youthful she is. Some of these girls are already having kids but they don't have any husband.

It can be said that the children of SBSW face discrimination in society as soon as their background is revealed. In contrast to acceptance experienced by the children living in houses, the women who live with their children in the streets say that their children are teased, beaten and that they only have contact with other children of SBSW.

Very few sex-workers have voter ID cards and almost all the children of the



street based sex workers don't have any birth registration certificates. And sex workers don't want their children to be a sex workers and even they don't want any influence of their profession to their children but unfortunately these children has great impact of their mother's profession into their life.

Children of street based sex workers are extremely disadvantaged group. They are stigmatized from birth, according to the literature review. Also many people in mainstream society perceive that the children of sex workers were conceived in sin and that sinfulness is inherent in a person. This view makes their acceptance into society virtually impossible, so they often start working in the brothel themselves. Popular sympathy is more common with regard to children who are brought up in villages and then trafficked or otherwise forced into brothels.

According to the different reports and review, the children of sex workers face multiple problems. Most are effectively invisible to the state, because birth registration forms require the names of both the mother and father - the latter of whom is either unknown or unwilling to become involved in the child's life. School admission forms also require the parents' names, and whilst some have used false names to gain entry, many children have been kicked out of school once authorities discovered they are the children of sex workers. Similarly, the department of social services runs 74 orphanages. They have some identity of course without father's name.

The previous reports say that the children of the Street based sex worker face unique risks, stigma and discrimination, as a result of their parents' profession. They are denied safe home, child care, health care facilities and education thus suffering numerous health problems, live a life of malnutrition, unwanted pregnancy and various mental health problems. Also, gender based violence, abuse and trafficking is very common for the children of sex workers. Children of the sex workers face serious threats of abuses and exploitation, as many face ill treatments such as getting sold when infant, forced into sex trade and drug business. Various factors directly contribute to their vulnerability and marginalization. These are the lack of education, inaccessibility of basic needs, proper safe housing etc.

Considering the facts YPSA started taking an initiative, with the support of HSBC-Future First Special Funding, which aims to bring life skills and dignity to these most deserving children those are excluded from government and non government services. The project will focus on the CSBSW who are from the most under-privileged conditions. The project will create windows for CSBSW to exercise basic human rights, increase self esteem and equal opportunities from the society & state.

But very limited studies have been under taken to bring to light the life of these children. The current study tries to depict the life of the street based sex workers' children and their needs in Banglad

The goal of the Baseline Survey is to measure the socio economic condition of the children of street base sex worker of selected area which will help the project management to measure the project achievement after completing the project period.

This research functions as basic information about the real situation of the children of floating sex workers in the Chittagong and Comilla City areas. The research made it clear that the SBSW found solutions for the upbringing of their children, but many of these solutions are not satisfactory. In many cases the SBSW were forced to give their children away to family members and many of them are not able to visit them as often as they wish. If the children live together with their mother it is sometimes difficult for the SBSW to find someone to care for the children while they are working. Even though the children have basic education, most of them left school too early and are not able to find a good job. Most of the SBSW can afford medical treatment for their children, but it is not easy for them to pay it. Often they can only visit a pharmacist instead of a doctor. In addition to these problems they are discriminated by the society, therefore many mothers try to keep their and their children's real identity secret. They are also the common victims of all sort of violence against the children like -sexual abuse and exploitation, trafficking, physical assault, involving in criminal offences like -drug and arms delivery etc.

In other places in Bangladesh and in Asia there are already some facilities specifically for the children of sex workers. These facilities are schools or daycare centers and their goal is to give the children a safe environment, shelter and a good education, in order to prevent them from following in the footsteps of their mothers.

In fact the research results did not bring many surprises. They showed what was predictable; namely that it is difficult for the women to look after their children, that the women really give their best, but that facilities such as daycare centers or schools would make the sex workers' lives easier on an economic and emotional level and most importantly, that these institutions may provide better future prospects for the children.

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## **Whither The Youth of Bangladesh and Global Perspectives**

Md. Arifur Rahman\*

Youth are the powerhouse of any nation. Any idea of national development is just myth without the active and meaningful participation of youth. Around one third of the population of Bangladesh, namely 47.6 million people, is youth. Bangladesh is one of the most densely populated countries in the world; the population density according to 2012 figures stood at 1188 per sq km. This figure is the highest in the world excluding city-states like Singapore and Hong Kong. The population of Bangladesh in 2012 was estimated 166 million. The alarming demographic pressure crippled all other efforts at sustained economic growth and development. The rate of growth of population is still very high at present the rate is 1.6 percent per annum, there will be 210 million of population by the year 2020. The population growth rate has not reached the replacement level yet and even if the population reaches replacement level fertility soon, the impact of demographic pressure will continue to be a major problem for Bangladesh for at least the next 50 years. This alarming increase is obviously having a major impact on the youth population and issues such as unemployment are likely to become more critical in the future.

### ***Demographic Profile of Youths in Bangladesh***

The concept of "Youth" can be defined as all the people within a specific age group, or as a state of being or even a state of mind or defined as the transition period of an individual from child to adulthood. In this brief, we define youth as the people between ages 10 and 24. This covers a wide range of experiences and transitions that includes an early phase (between ages 10 and 14), a middle phase (between 15 and 20), and a later phase (between 21 and 24). Young people in all three age groups face major events that affect their future well-being. As per National Youth Policy of Bangladesh, those in

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the age group of 18-35 years are considered to be youth. The United Nations has declared the section of the population aged between 15 and 24 years as youth. However different countries have defined youth by different age limits. The variations in some Asian countries are as follows:

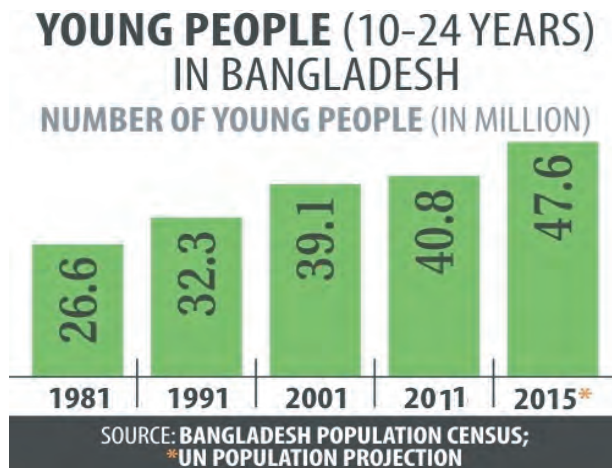
**Table-1: Age limits defining youth in some Asian countries**

Country	Age limit
Bangladesh	18-35
India	15-24
Pakistan	15-29
Sri Lanka	15-29
Malaysia	15-40
Nepal	16-40
Singapore	15-35
Philippines	15-30
Hong Kong	15-29
Brunei	15-40

**Source: Website**

The demographic structure of Bangladesh population designated as youth is expanding as the total population grows at an increasing rate. In 2020 demographic youth transition will be peak number of total population of Bangladesh (Xenos and Kabamalan 1998). Youths are now thought to make up 35% of the population, estimated in excess of 47 million. Of this number 73% are living in rural areas.

**Table-2: Youth population of Bangladesh**



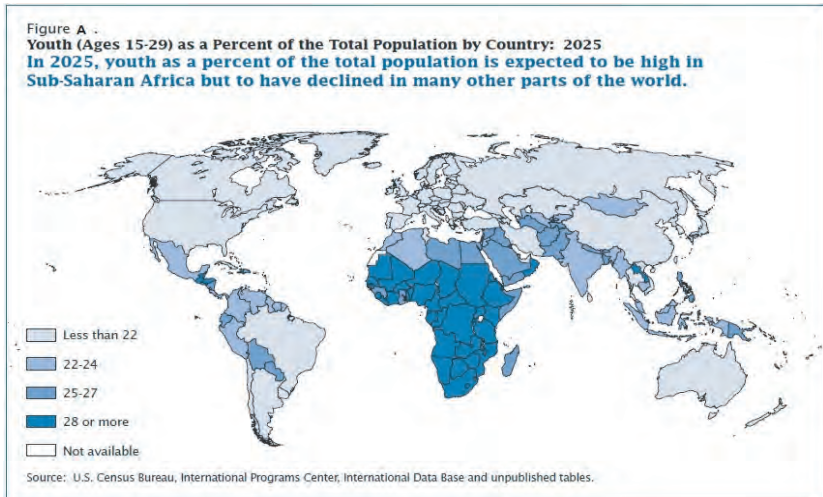
This young population is a blessing in the sense that it implies strength, energy, vigor, pool of work force and a full potential for future leadership. For Bangladesh, this is a demographic bonus. This demographic bonus could bring a huge dividend, if this raw capital is converted into circulatory capital. This window of opportunity opens for a population only once.

If we fail to grab this opportunity immediately, this young population could create a disastrous hazard for the nation.

### **Youth at Globe**

The young population across the globe has reached a remarkable 1.8 billion out of 7.3 billion, and most of them live in developing countries like Bangladesh (UNFPA-2014). This was approximately 26 percent of the total population. South Asia is the most youthful subregion; it is home to 26% of the entire world's youth, with youth representing up to 30% of its population. Over the coming five decades, the total number of youth on the globe is projected to increase slightly. Still, their percentage of the total global population is expected to fall to approximately 23 percent by 2020 and to 20 percent by 2050. As with the trends in the child population, this is primarily due to past declines in fertility across the globe and the attendant aging of the population.

Over the next two decades, the population ages 15-29 is expected to grow in some parts of the world and to decline. In others 2012, youth as a percentage of the total population ranged from a high of 35 percent in Grenada to a low of 14 percent in Monaco (Figure A). The percentage of youth was predominantly higher in Africa and much of Asia, but generally low in the countries of the Developed World and in Eastern Europe and the new independent states of the former Soviet Union. Over the 2012-2025 period, the change in the population ages 15-29 is expected to vary by region, growing faster than the total population in Sub-Saharan Africa while declining in China, Eastern Europe, and the developed world. As a result, youth as a percentage of the total population are likely to decline everywhere across the globe except in Sub-Saharan Africa (Figure A).



### ***Government of Bangladesh and Youth Policy***

Youth are the confident and creative force in a society. They have passion and vision. Proper guidance and direction can bring them in the forefront of national development. Though one third of the total population are youth in Bangladesh, to provide this huge manpower with proper guidance and institutional support, the created in 1978 Ministry of Youth Development (subsequently renamed Ministry of Youth and Sports) and Department of Youth Development (DYD) in 1981. Since its inception, the Department has been extending multifarious training, guidance and support to the youth. DYD operates huge programmes through 64 districts, 493 upazilas including 10 metropolitan unit thana offices and 111 Youth Training Centers all over the country (Department of Youth Development-2013).

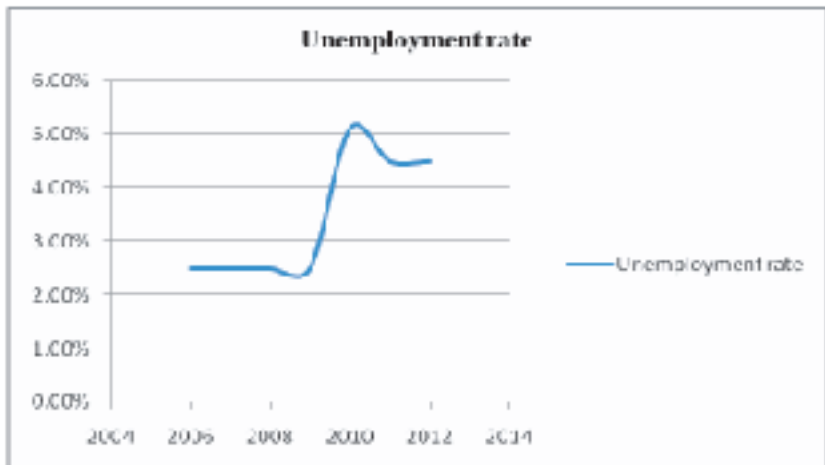
Although youth suffered many problems in Bangladesh a national youth policy has been finalized at 2003. This policy estimates that 50% of the youth populations are unemployed and 45% are illiterate. Young people make up 37.7% of the workforce so the importance of including them in education and training is evident. In their paper the Government state the importance of including young people in national development and of their aim to increase the proportion of young people in the national population who are active. The key principals of the policy include pride and understanding of national culture and values, human rights for all, gender

equity, sustainability of change, environmental development and promotion of peace. In youth policy encouraging the youth for self employment and wage employment through motivation, training, micro credit assistance. In youth policy promoting the formation of youth organization at grass root levels and ensuring their participation in national development. The national youth policy is highly important as a guideline and for the government and private sector providing it is passed by national parliament.

### ***Involvement of Youth in the Economy of Bangladesh***

Bangladesh is currently facing a paradoxical economic situation (Biswas, 2014, "Youth Unemployment in Bangladesh"). A report on Bangladesh Bureau of Statistics (BBS) stated that about 50.41 million productive manpower are in Bangladesh at 2010, their age group is above fifteen (BBS-2010). At present, almost 45% of total productive manpower of Bangladesh is unemployed and they are youth. Youth unemployment is an acute problem in Bangladesh economy.

According to a study of the International Labor Organization (ILO), every year some 2.7 million young persons are becoming eligible for jobs whereas only about 0.7 million of them are getting employment. The rate of growth of unemployment in Bangladesh was 1.9 per cent in the decade of the nineties. But the growth in unemployment currently is 4.5 per cent.



**Source:** Bangladesh labor survey



The ILO figures also show Bangladesh in the twelfth position among the top twenty countries in the world where unemployment is rising. The number of the unemployed in Bangladesh now is estimated at 45 million. The way the rate of unemployment is increasing, it is feared that at this rate unemployment would soar to some 60 million by 2015.

In spite of these alarming indicators youths are playing a vital role in our national economy. Young people from Bangladesh are earning a huge foreign remittance that makes a significant contribution to foreign exchange reserves.

The ready-made garments (RMG) industry that was responsible for 76% of our total export earnings in 2011-12 employed 4.2 million people, and most of them are young men and women, about 50 percent of them are women from rural areas. The agriculture sector's contribution to the GDP declined from 50 per cent in 1973 to 13.09 per cent in 2012-13, whilst the service sector's contribution increased from 17 per cent to 17.38 per cent during the same period (Economic Review, 2012). About 4.1 million youth were received training from Department of Youth Development and 2 million of youths are now self-employed in the areas of poultry live stock rearing, small trading, and other informal sectors with or without support services like, credit and marketing from starting period of DYD (Department of Youth Development-2013).

With the vision to establish Bangladesh as a middle-income country by 2021, the present government has targeted to achieve 8 percent GDP growth rate by Fiscal Year (FY) 2014-15 as stipulated in the Medium Term Macroeconomic Framework of 2011-2015. It urged governments to ensure equal opportunities for health services, education, jobs and wider participation of the young people in the policy-making and civic activities.

Over the last 10 years Bangladesh has made impressive gains in key human development indicators. In the 2014 UNDP Human Development Report, Bangladesh ranked 142 among 187 countries. The 2014 HDI report said Bangladesh had scored 0.558 on the index with 70.7 years of life expectancy at birth, average per capita education of 5.1 years and \$2,713 per capita gross

national income (GNI), which places it among countries considered to have achieved medium human development (Wikipedia). This is the result of macroeconomic stability, low population growth, increase in women's empowerment, reduction in aid dependence, food self-sufficiency, youth employment, income generation, effective disaster management capacity, promoting non-governmental organizations (NGOs), free and fair parliamentary elections, a vibrant, pluralist, democratic civil society marked by cultural activism and developmental debates, and an active and free press.

### ***Social and Political Constraints***

Youths are potentially most powerful force in a society for the development of a country. But most young people in Bangladesh suffer from frustration, violence, poverty and unemployment. Unemployed youths may suffer from frustration and may easily become addicted to drug. Most of the anti social activities are committed by the unemployed youths. Unemployment destroys the moral values and leads to undesirable activities from a feeling of despair and anger.

A portion of youth is involved in violence activity. Youth violence can take different forms. Examples include fights, bullying, threats with weapons, and gang-related violence. Youth violence typically involves young people hurting other youth. Youth can face violence from their peers in their neighborhoods, on the streets, online, and at their educational institutions. Regardless of where youth violence happens, the consequences are felt by everyone-young victims, their friends, families, neighbors, schools, communities, and local organizations. Worldwide some 250,000 homicides occur among youth 10-29 years of age each year, which is 41% of the total number of homicides globally each year (WHO-2008).

Development of this densely populated country cannot be thought of without properly engaging the youth forces in the development process. Under the traditional, patriarchal structures of Bangladesh adults dominated society and there is little room for young people to be heard. Within this context girls have still less scope for being listened to. Dominated and overruled in and outside the home young people are timid and obedient. A lack of outlets for

self-expression and independence leads to disappointment. Unfulfilled dreams and rejected desires become a source of frustration, which is reinforced by a lack of information and awareness.

The current climate of political unrest affects mainly the young people, they fall prey to drugs, and abuse by political parties involving them in violence and sabotage. At once time student politics was leaded for the welfare of country. Most brilliant and socially committed students leaded at that time. In those days there was no quarrel among the student politicians for money & power as of today. It's our bad luck that a big portion of student politics has been mislead and spoiled at present.

Superstitions surrounding reproductive health are a danger to young people because there is a lack of awareness about such issues, and it is difficult to talk openly about them. There are very few recreational facilities available to young people, in rural and urban areas. The existing facilities do not always provide safe and friendly environment for young people and do not represent positive role models to the young people. There are very few opportunities for young people to express their creativity, especially in rural areas.

### ***Inclusion of Youth in Development***

Bangladesh, since its emergence as an independent state has undergone a tumultuous record of political history. The young people of Bangladesh have impressive history activists for change. The Language Movement of 1952 was headed by students, and they played a leading role in the independence war of 1971. In both of these struggles the largest casualties were suffered by young people. Now they are still recognized as a political force. They have many challenges facing them in this century and they must be encouraged to be at the centre of development.

In order for young people to fulfill their potential as a socio -economic development force for their country they must be supported, and enabled to grow freely. It is critical to make their parents and communities aware of young people's basic rights and needs so as to open up new possibilities for their independence, creativity and broader education. As well as awareness

pragmatic approaches for including them in activities can be introduced to facilitate their social, economic, intellectual and psychological development.

The group best equipped to reach the young people and their communities, to facilitate their personal development and their usefulness as a development resource, are NGOs. Government initiatives are few and are mainly urban, thus missing the majority of the target group. Partnerships between youth organizations, NGOs and the Government will be most effective in address in the needs of the youths. Additionally International networking for the sharing of ideas and support will be extremely beneficial for the youth of Bangladesh.

Any single strategy for reaching the youth population will not be successful; they must be assisted at all levels, through education, technical training, human resource development and recreational and moral support. The finalization of a national policy should go hand in hand with grassroots activities to establish youth groups and promote community participation. In this way the country's youth will have the best chance of being ready to meet the demands of the new century and a global economy.

### ***The future of Youth in Global Perspective***

A young person today has many reasons to be grateful: greater contact with the rest of the world, more educational opportunities, and a longer life than her mother and grandmother. This typifies the experience of a young person growing up in a developed country, and is increasingly the experience of many young people growing up in developing countries as well. But these experiences are not universal.

Young people also face some daunting risks. HIV/AIDS will lead many young people and/or their parents to an early death. Youth who live in poor countries, or poor youth in wealthier countries, still cannot count on living lives better off than their parents, and there is a substantial wealth gap within and across regions of the world.

Young women are more challenged than young men in achieving a long and healthy life. They are vulnerable to sexual violence or coercion, they suffer

from high levels of reproductive or pregnancy-related disorders, they stay in school for shorter periods than boys, and they face fewer economic opportunities. For example, the likelihood of a young woman bearing a child before 18 has declined in many developing countries, but the likelihood of sexual initiation prior to marriage has increased.

Both young women and young men today may benefit from a global effort to improve the well-being of the world's poor through the Millennium Development Goals, a framework for poverty reduction forged by world leaders in 2000. Six of the eight Millennium goals address issues raised here: reducing poverty, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, and combating HIV/AIDS and other diseases. While not all the goals are likely to be reached by the year 2015, and although the goals are not aimed only at youth, they do promise better lives for today's youth if and when they are attained.

### ***The future of Sustainable Development with Youth***

In 2000, world leaders committed to the Millennium Development Goals (MDGs) to address eight of the great development challenges of the day. With great progress across all goals, and with some already having been met, the MDGs have been the most successful global anti-poverty push in history. The MDGs included several targets and indicators of direct relevance to young people.

For example, MDG 1, to eradicate extreme hunger and poverty, included a target for achieving full and productive employment and decent work for all, including women and young people. The 2015 target for achieving the MDGs will over this year. Governments, international organizations, civil society and ordinary people from around the world are already engaged in crafting a transformative post-2015 development agenda and a new set of global sustainable development goals to succeed the MDGs.

Young people matter and are our future according to the latest 2014 State of World Population published by UNFPA (United Nations Population Fund) .

# SUSTAINABLE DEVELOPMENT GOALS

- GOAL 1 End poverty in all its forms everywhere
- GOAL 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- GOAL 3 Ensure healthy lives and promote well-being for all at all ages
- GOAL 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- GOAL 5 Achieve gender equality and empower all women and girls
- GOAL 6 Ensure availability and sustainable management of water and sanitation for all
- GOAL 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- GOAL 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- GOAL 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- GOAL 10 Reduce inequality within and among countries
- GOAL 11 Make cities and human settlements inclusive, safe, resilient and sustainable
- GOAL 12 Ensure sustainable consumption and production patterns
- GOAL 13 Take urgent action to combat climate change and its impacts\*
- GOAL 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- GOAL 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- GOAL 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- GOAL 17 Strengthen the means of implementation and revitalize the global partnership for sustainable development

The Report said that a youth of 10 in 2015 will be an adult of 25 in 2030, the target year for achieving the next generation of sustainable development goals. Governments aiming high today will make young person's future a bright one, with rights upheld, promises fulfilled and potential realized. The journey towards a post 2015 development agenda began in 2012 at a meeting of world leaders and top-level stakeholders in Rio de Janeiro on the twentieth anniversary of the Earth Summit.

The 2012 event concluded with a declaration, "The Future We Want," which provided a foundation and guide for development of a strategy for achieving an economically, socially and environmentally sustainable future for the planet for present and future generations. As part of this process, the General Assembly in January 2013 established a 30 - member intergovernmental Open Working Group to lead the debate about new post-2015 sustainable development goals. As of August 2014, the Open Working Group had proposed 17 goals and 169 targets to guide the international community over the coming 15 years (United Nations, 2014).

With sustainable development at the nexus, the goals cover economic, social and environmental dimensions aimed at improving people's lives and protecting the planet for future generations. The new goals and targets would also aim to fully realize the MDG agenda. The formulation of a post-2015 sustainable development framework presents an opportunity to more deeply integrate the needs, aspirations and potential of young people into the global strategy for the coming 15 years.

The aspiration of the post-2015 sustainable development agenda is to create a just, prosperous and responsive world where all people, regardless of their age, realize their rights and live with dignity and hope. Eradicating poverty in all its forms, tackling exclusion and inequality, and Empowering the world's 1.8 billion young people will be instrumental in bringing this vision to life.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Implicit in this definition is the idea that in order to meet the social

and economic needs of people today and in the future, there must be continued efforts towards poverty eradication, human rights, and equity, as well as sustainable consumption and protection of our natural resources.

The largest cohort of young people in human history is about to enter the workforce, and their success will define development trajectories not only for Bangladesh also sub-Saharan Africa and Central Asia countries, where they represent a high proportion of the population, but for the entire world, given our increasingly interconnected and globalized economies.

But young people are important to our sustainable future not just because of their unprecedented numbers. Globally, fertility rates are falling. That means that the current generation of young people will have smaller cohorts of young people to support them as they themselves age. And this means they must be able to support themselves and thrive as they age. Today's youth will also shoulder the responsibility for supporting the existing and growing population of elderly persons.

Today's youth are also important to the future because the majority of them are growing up in developing nations where they are facing challenges of education, away from decent life s tyle and health systems that are weak, limited access to sexual and reproductive health and a dearth of jobs or income-earning opportunities.

The declining fertility rates are providing low and middle-income countries with a window of opportunity because the proportion of the population that is of young working age is historically high, and these cohorts can, if they are in good health and assured learning and work opportunities, jump-start economic growth and development.

Therefore, the well-being and the positive social participation of this cohort of adolescents and youth hinges on the commitments of governments to protect their human rights, develop their capabilities, secure their sexual and reproductive health and reproductive rights, prepare them for productive and creative activities and reward them for their labours.

Finally, Young people can drive economic growth forward. Investing in the



health, education, leadership and safety of young people improves future productivity and economic returns. Furthermore, because human development is cumulative, it would be extremely costly for young people and society to reverse missed opportunities for investing in and preparing this generation for the future. At the heart of the post-2015 quest for sustainable and inclusive development is the individual whose potential must be realized. The key to the agenda's success will lie in developing the resilience of individuals, particularly young people.

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## **Socio-Economic Condition on the Children of Street Based Sex Workers (CSBSW in Chittagong and Comilla City Corporation Area**

Muhammed Ali (Shahin)\*

### **Introduction**

The children of the sex workers spend a considerable time living and working here and there as maverick. They feel they do not have any identification. So they suffer from identity crisis. The community looks at with hatred and negligence. In fact sex workers' children are illegitimate children. The abuse like bastard means the children of the prositor whore.

The daughters of the streets are mostly from the clandestine association of the sex workers surviving in a grave situation. They cannot claim any rights. So they suffer violation of human rights. Living on the margins of the society relying entirely on their own efforts with no one caring for them the sex workers' children remain as the most vulnerable children (MVC).

As a matter of fact sex workers' children are a special group of children far apart from urban poor children. They are out of reckoning in the definition of the children most vulnerable, exploited facing the highest risks. They suffer torture and harassment in the red light zone where they live and move with their mothers who are sex workers. As a counterpoint to the contemporary realities and the future prospects public policy on child development will have to be reformulated putting the last first including the MVC Today's children are the future of to-morrow. Since they create the world of to-morrow, they are at the heart of social development. The future depends on how children prepare themselves to enter into the world of work. Children who are healthy, well-fed and educated grow up to be productive, innovative workers and responsible adults. But to-day more than one billion children (First Call for Children, A UNICEF Quarterly, 1995 /No1) are condemned to poverty, without jobs, without basic necessities, without hope.

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According to IPEC, 1994, about 200-300 million children work through out the world, work long hours in poor and dangerous conditions; the hazard that working children face are many and varied. This estimation may include the children of the sex-workers but very little attention been concentrated on the rights of these children. Sex-workers in contemporary Bangladesh continue to suffer manifold harassments. Their basic rights are denied.

They cannot dare claim right to be buried after death. Some communities require them to carry identity mark like burqas (black apron covering head to feet). They can move barefooted. It's found and mentioned in so many reports that the people verbally assault sex workers, threaten them with blades and acid, and spit at them. Police, mastans (hoodlums), and customers physically and sexually abuse street-based sex workers-and extort money from them or deny them payment-with impunity. Sometimes shopkeepers charge them discriminatory, extortionate prices.

Many street base female sex workers in Bangladesh get pregnant willingly or even unknowingly but face dire situation raising the child. Many girls involved in child labour, such as working in factories and as domestic workers are raped or sexually exploited, these girls are highly stigmatized and many of them flee to escape such abuse, but often they find that prostitution is the only option open to them for survival - once in prostitution they become even more marginalized.

Most of these girls enter the profession before the age of 12. It is reported that most CSBSW are engaged in street-based prostitution. At present commercial sex market is expanding at an unprecedented pace touching even every strata of the society to meet ever growing and diverse sex demand more and more children of the Sex workers have entered into this booming market as young sex workers.

Marriage is termed as being an escape from all sorts of insecurities and vulnerabilities of young sex workers. The society arranges marriages of girls in their early teens. The children of the sex workers in particular are exposed to sexual abuse and harassment everywhere, they are found mostly in the red-light zones, some moving around the street near shopping centre, bus terminals and cinema halls.

While the sex workers have such a social condition to live with, the children

of these female sex workers in Bangladesh are at high risk of many significant threats to their health and wellbeing. While some of these problems are shared with other children of similar social and economic circumstances in Bangladesh, children of sex workers experience a range of problems due to the social stigma and threats associated with their mother's sex work and the resulting discrimination. Even if a mother decides to raise her child, they are frequently kidnapped and abused by pimps and thugs. Furthermore, prostitutes and their children live a precarious existence, with many being evicted from brothels and suffering physical and emotional harassment from police and goons.

If we see the legal obligation regarding the sex-workers we found that the Bangladeshi High Court has ruled, in early 2000, that prostitution as a livelihood is not illegal. Lawyers argue the judgment is highly unusual because it makes Bangladesh one of the few Islamic countries which do not ban prostitution. This judgment means that prostitutes in Bangladesh now have the legal authority to practice their trade. Although the constitution of Bangladesh declares that the state should discourage prostitution, it is one of the few Muslim nations in the world that doesn't make it illegal. However campaign groups were disappointed in August when the Electoral Commission overturned its earlier decision to recognize prostitution as a profession. Many believed that it would reduce the levels of harassment faced by sex workers, and that it would make it easier for their children to become enrolled in schools. Prostitution was legalized in Bangladesh in 2000 even though the Bangladesh constitution provides that the "State shall endeavor to prevent gambling and prostitution."

The overall context for children's rights, for all children, has legal, political, social, cultural, economic, demographic, and environmental dimensions. Bangladesh, which is now home to about 63 million children, enacted the Child Act in 1974 while ratified the Convention on the Rights of the Child (CRC) in 1990. The CRC sets forth the rights of all children to health, education, participation, and protection.

The Government is developing laws and policies with a view toward consistency with the UNCRC and Bangladesh's other human rights commitments. Still, however, many of the rights guaranteed in international conventions are not yet supported with legislation, and some laws and

policies contradict them. When appropriate laws and policies are in place, they are often poorly implemented and enforced.

In such a situation, the children of the street based sex workers are the most vulnerable, deprived and marginalized part of the society where their mother are treated as garbage and not even treated as human being. Such sordid lifestyles may have a profoundly negative effect on the child's development and well being-and the damage is further compounded if the mother decides to sell her own daughter into the sex trade, which happens frequently due to poverty and a lack of opportunities for education.

According to the different reports and review, the children of sex workers face multiple problems. Most are effectively invisible to the state, because birth registration forms require the names of both the mother and father - the latter of who is either unknown or unwilling to become involved in the child's life. School admission forms also require the parents' names, and whilst some have used false names to gain entry, many children have been kicked out of school once authorities discovered they are the children of sex workers. Similarly, the department of social services runs 74 orphanages.

Considering the facts YPSA started taking an initiative, with the support of HSBC-Future First Special Funding, which aims to bring life skills and dignity to these most deserving children those are excluded from government and non government services. The project will focus on the CSBSW who are from the most under-privileged conditions. The project will create windows for CSBSW to exercise basic human rights, increase self esteem and equal opportunities from the society & state. But very limited studies have been under taken to bring to light the life of these children. The current study tries to depict the life of the street based sex workers' children and their needs in Bangladesh.

The goal of the Baseline Survey is to measure the socio economic condition of the children of street base sex worker of selected area which will help the project management to measure the project achievement after completing the project period.

The study contains the following objectives :

1. To know the real socio-economic condition of the children of the sex

- workers including their personal information, living condition, social stigma, problems and suggestions there to,
2. To assess the need of children of street base sex workers considering their expectation and interest.
  3. To consider baseline data in order to track down changes in condition of the children of the sex workers through mid- term and final evaluation.
  4. To review activities and strategies of the project in the light of baseline survey findings.

## Methodology

### Survey:

The survey was conducted by the YPSA team on one hundred five (105) children including Children of Street based sex workers (CSBSW) of different ages like Group One is including the children who are aged less than 15 years and Group Two who are aged between 15-24 years. There are 70 children interviewed from Chittagong city and 35 other children are interviewed from Comilla.

**Table 1: Number of Children surveyed in 2 districts**

Group	Girls : Boys:	Total Number	Age (less than 15 years / between 15 - 24 years / both)
Group 1	Girls:26 Boys:28	54	less than 15 years
Group 2	Girls: 34 Boys:17	51	between 15-24 years
<b>Total</b> - 105 ( From Chittagong City 70 and from Comilla city 35 other children are interviewed)			

### Method of Data Collection:

At first, the team identified the location of different spots where the children of the street based sex workers are available. Observation on the activities of the sex workers and their children was done for some days to know the behavior, leisure time and daily life style. To bring out the life stories and provide numerical support the study was conducted using mixed methodology. In consonance with the conceptual framework, a questionnaire



including both open and close ended questions for in-depth interview constructed to collect data from the primary sources or the children of the sex workers. 'One to one interview' was done to get the answer of the questions. Most of the interviews were taken near the areas they live, play and work. Some interviews were also taken at night as they become available and relax at that time.

Data were also collected from a field study using other instruments i.e. Key Informant Interview (KII) and Focus Group Discussions (FGD). The KIIs are conducted with the experts on socio-economic condition of street based sex workers like as government high and concerned officials, researchers, senior development activists and senior media personals. Some FGDs are also arranged with the street based sex workers or parents of the targeted children of the study, concerned civil society representatives and also with the Children of the SBSWs.

### **Method of Data Analysis:**

Some reports on the children of the sex workers aided us though those were insufficient. The preparation of the report and analysis of data was done by the office management system (MS Word, MS Excel, MS Access, MS Power point) in computer.

### **Survey Working Area:**

The study is conducted in two districts of Chittagong division: Chittagong district and Comilla district. Chittagong, the second largest city of Bangladesh and a busy international seaport, is an ideal vacation spot. Chittagong is the country's chief port and is the main site for the establishment of heavy, medium and light industries. Besides, the longest sea-beach, Cox's Bazar and its adjoin areas have a lot of things to see and places deserve visit by the tourists. For this, people from different part of the country are traveling and living in Chittagong and most of the time they are living without families.

On the other hand, the city Comilla is positioning in between the Chittagong and Dhaka, the capital city of the country. The city Comilla considered as one of the busiest transit point for commercial and economic purpose. Because of these reasons the sex trade became a very common in Chittagong

and Comilla which trigger number of sex workers in these cities. It is hypothetically considered that these two cities will have the worst condition of the CSBSW. Children, in general, belong to a very vulnerable group of people, and therefore need special protection. Children of poor families especially face many problems in their daily lives. According to Woman and Children - The Forgotten Faces in the Coast by Khursid Alam Ph.D. and Sultan Mohammed Giasuddin, many children of the coastal area of Bangladesh have no access to public school. Some could only attend for a short period of time due to various reasons, such as:

- √ Economic hardship, e.g. a child needs to work to support the family with some money, or the oldest child has to care for his or her younger siblings while the parents are working.
- √ Distance, when the school is too far away and therefore not accessible for the child.
- √ Clothing: "Sometimes a child is subjected to teasing by other kids because their worn out clothes do not match those of other kids. Daily humiliation of such bantering takes a toll on kids and they lose interest in pursuing education"<sup>1</sup>.

As a consequence many children are forced to do child labor in order to sustain their own lives. Girls are particularly vulnerable. Besides being under paid they often become victims of trafficking, sexual assault and prostitution.

1. Even worse than child labor is child-trafficking. Greedy traffickers abuse the desperate situation of poor families by promising lucrative jobs to their daughters and subsequently selling them into prostitution.
2. An important issue is that the children's health is often poor. Some of the main problems here are malnutrition, poor sanitation and a lack of immunization against common childhood maladies.
3. Considering the facts the Survey is considered to be conducted in the above mentioned cities to explore the socio-economic condition of the Children of the Street Based sex workers.

## **Result Analysis:**

The survey was conducted over 105 Children of the Street based sex workers

(CSBSW) and these are sampled from some specific target areas of Chittagong and Comilla city and its estimated that there are around 1000 CSBSW in these target areas of these two cities. The survey also includes findings from FGDs (Focus Group Discussions) and KIIs (Key Informant Interview). It is difficult to determine the number of children of SBSW living in Chittagong and Comilla, since the number of SBSW living there is also not exact. According to the KII and different content analysis of newspaper reports, there are an estimated 200,000 sex workers in Bangladesh, and whilst it's more difficult to estimate how many sex workers have children, conservative estimates in Chittagong and Comilla place the figure at around 10,000 as it's a port and commercial cities of the country. Most of the Sex workers are not aware about the reproductive issues and that is why they became pregnant often and many SBSW give their children away to relatives.

### **A) Housing and Living Condition:**

69 percent of the Children surveyed, in Group 1, live together with their mother, and 20 percent live alone and rest of the children live separately from their mother. 69 Percentage of the children are sleeping at a small hut with their mother and 30 percent of the children below 15 years are living at the station and street. Most of these children live together with a relative, with their grandmother or an aunt or uncle. Some of them live in another village or another city, and some in another place in Chittagong. Most of the SBSW give away their children due to economic hardship, because they are unable to care for them or believe that their child will have a better life with their relatives.

32 Percent of the surveyed Children of Group 2 (age 15-24) are living alone in the different public places like train station and bus stations etc and also on streets. 21 percent of the children of the Group 2 are living with the mothers. 47 percent of the children are living with other friends and other relatives. 79 percent of the children of Group 2 are the sleeping at temporary places like streets or road-side sheds. 80 percent of the older children of the sex workers say, they were brought up with their grand-mothers and aunts as the mother were always busy. 100 percent of the female children are working as sex workers and they are sleeping in different places depending on the situation. 80 percent of the children said that they never lived in their father's

house and always lived with mother's places.

According to the FGD conversation with the sex -workers, Some SBSW visit their children two to three times per month and others, depending on the distance and the transport costs, only once or twice per year, but all have contact with their children. Most of the women would prefer to live together with their children rather than give them to a relative. But the women give away their children because, due to their work, they are not able to care for them. Furthermore, some of the women are afraid that their children will suffer discrimination if they live together. Sometimes they are forced by a family member to give their children away.

## **B) Care for the Children**

69% of the surveyed CSBSW of Group 1, live with their mother in the care of the mother. The remaining 22% of the young CSBSW live alone and few of them living with other relatives. Surprisingly no child says that their father supports them, even though 75% of the children have father. Some children say that their father cannot care for them because he is working all day or because, due to work, he is living closer to work.

**Table 2 : Children Taken care by whom**

<b>Children taken care of ;</b>	<b>Group 1</b>	<b>Group 2</b>
Mothers	69%	22 %
Alone	22%	63 %
Other Relatives	8%	0 %
Husband/friends		15

However, many claim that the father shows no interest in the children at all. The reason being is that often the husband of their mother is not the father of the child; the child is Children taken either of a former husband or of a client. This is the scenario of the children age less than 15 years. But for the Group 2 the scenario is different as they live alone and with their friends and share living spaces. And they have no one to take care of them and no one to share their suffering and provide support. They eat from the road-side

restaurants or food van or tea stalls. They rarely go to the doctors for any sickness and take medicine consulting with the pharmacy. 63% Percentage of the children of, Group 2, of Sex workers living alone and remaining surveyed CSBSW are living with the female friends or husbands/wives.

All of the mothers are agreed that they have access to medical assistance in case their child is ill, although not all of them can afford to see a doctor and visit a pharmacist instead, who is evidently not as competent. Furthermore visiting a doctor is associated with high costs. Children of the sex-workers mentioned they are far away to have regular pure drinking water and hygiene sanitation.

**C) Education Status:**

The children of sex workers are commonly denied access to schools. If the Occupations of sexually exploited children become known in their places of origin, their families are often also scorned, and many families reject their children as a result. All the children recognize the importance of a good education and want to go to school. 35 percent of the surveyed children of Group 1 go to schools and 50% of the children never went to schools. Besides, 15% children dropped out from the schools and could only finish grade-2.

Group	Study		Drop Out
Group 1	Yes: 35% study and go to schools	No: 50% percent never went to schools	15% drop out from
Group 2	Yes: N/A	No: 100 % don't study	20 percent studied till grade 3 and dropped-out

100 percent of the surveyed children of Group -2 don't study and don't go to schools. Among them 20 percent of children dropped out from the schools from Class-3. Most of the children or surveyed persons could not go to schools and quit from the school as their parents could not afford to send them to school because of financial crisis, family crisis, and identity crisis. Another fact is creating barrier for these children to go school as the school needs the names of the father which these don't have mostly. They stated that they could have done some decent jobs or involve in some fare profession if

they would go to school regularly.

The conversation with the SBSW in the FGD (Focus Group Discussion) reveled that the mothers (sex worker) of the children are willing to send their children when they are old enough despite the fact that these women do not have the means to send their children to school or would have to work extra hard in order to provide their children with an education.

One mother (sex worker) of a Child said that she spends 800 to 900tk per month on her child's education, which includes tutoring. Another mother said that she is afraid to send her son to school because he was once involved in a car accident while crossing a dangerous street on his way to school. Another mother said that she actually wants her son to go to school but he prefers working in a shop. Another mother told me that her son is just lazy. The women want to send their children to school, regardless of whether or not it is a boy or a girl.

#### **D) Sports and other Entertainment:**

As a general picture, most of the surveyed children don't have enough scope to go for any sports or games. Most of the children only hang around on the near by streets and different public places like-bus stations, train stations, public park etc. As they don't have enough scope to play so they become involved with unsocial and minor criminal activities like -helping hijackers, drug dwellers, minor violence, begging , harassing common public etc.

But most of these children watch television in nearby tea stalls and like to see bangle and hindi movies and drama serial. And the children like the negative contents like of violence, sexual violence etc. Some time, these contents of these TV entertainments are not appropriate to be a decent personality for a child. These penetrate the children to be more arrogant to the society. The grown up children of Group 2 are also not to able find any places and interest for sports; sometimes they pass time by gossiping and playing indoor games. They also go cinema sometimes and visit some tourist spots with friends and colleagues. As mentioned , these age-group of children also get involve with some extreme criminal activities directly like -hijacking, snatching, drug trades, sex-work and different violence. They don't get any opportunities and scopes to develop moral values and norms which is necessary for an individuals to be decent to the society. They have

no religious values and rituals to maintain as they are always kept aside by the society because of the parental background for which they are not responsible. Addiction is a common phenomenon for these children; it's revealed that they considered consuming drugs as the way for entertainments.

### **8.5. Income Source:**

In general most of the children started their income when they are 10-12 year old. The common jobs for these children are sexwork, waste picking, rail oriented jobs, and begging. The female children mostly involve with sex work which they are forced to start at the age of 12 to 13 year. 12% of the children are already started and involved with sex work which is 40% of the surveyed female kids. And the male children are involve with waste picking and begging even though the female children also are involved with the begging when they were very young. 37% of the children of Group-1 are involved with waste picking and 50% are involved with bagging.

53% of the surveyed children of, Group -2, are involved and started their income by Sextrade which is 89% of the female children are involved with this profession. The income of them depends on their physical appearance, particularly how beautiful and youthful she is. Some of these girls are already having kids but they don't have any husband. They say they are not aware about the re-productive health issue and don't know about the family planning issues. 10% of the children here also doing waste and bottle picking. Interesting fact is that, 24% of the surveyed grown up children did not mentioned about their jobs. Its revealed that most of these children forced and derailed to support several unsocial and criminal activities directly or indirectly like as - hijacking, snatching, drug trades, sex-work and different violence.

The income of the children involve with sex work have high income (200-500 taka daily and monthly 5000 to 6000 taka as they don't do the work everyday) than the other children and their income is in-between 1000 tk to 2000tk per month. Mothers often give relatives money to take care of their children when they are unable to provide shelter for them. The economic situation is often a reason for the SBSW to give away their children. All the women say that it is difficult for them to provide their children with the bare

necessities.

### **Social Stigma :**

It can be said that the children of SBSW face discrimination in society as soon as their background is revealed. Therefore their mothers try to keep their profession a secret, and if this is not possible the children's friendships are limited to children with the same background. Almost all the surveyed children say that the people behave very badly with them both in the work place and at the living place. The Birth and Death Registration Act, which came into effect in 2006, marks a turning point for children's rights in Bangladesh. The new law has created demand for birth registration by requiring it for many public services, including marriage registration and school enrollment. But the children of sex workers don't have this registration as their mother often fears that their children will face severe discrimination if her identity is revealed.

The Election Commission in Bangladesh says prostitution will be recognized as a job title on new voter ID cards. "Sex workers can mention prostitution as a profession in the voter identity cards," One of the former Election Commissioner Shakhawat Hossain told the BBC. With the new identity cards the sex workers would not hesitate to mention their profession in offices and public places. But the real truth is that the sex workers don't bother with the voter ID cards, most of them don't have the voter ID card as it exposes their identity. According to the FGD with the sex workers, the voter id cards can reveal their identity for which they and their children may face severe discrimination in the society.

Many children of sex workers are drawn into commercial sexual exploitation, sometimes when they are well below the age of puberty. Some of these children are based in large registered brothels, which are scattered throughout the country. Some work on the streets, in parks, or at bus or train stations. Within brothels, girls who are bonded sex workers are the most deprived of their rights. Their acceptance into society is virtually impossible, so they often start working in the brothel themselves. Street-based sexworkers have greater independence and agency, but they are more vulnerable to physical and verbal abuse and to arrest and maltreatment in the criminal justice system. Abuse, exploitation, and the lowest quality of care arrangements are the major problems of these children which are often



linked to one another, and they have multiple causes that are also interlinked.

The local people who are involved with different crime try to utilize them in different criminal activities and if they refuse to do so then they are often beaten. The children say, when the people reveal that they are children of a sex worker, they treat them like animals. Even some time they are sacked from their jobs. They have friends who are also children of sex workers and they dare to make friends with others as and the grown up children don't have close friends and they became alienated gradually because of the social stigma towards them. The shocking factor the Sex-workers that they don't get space for the death bodies in the grave yards and Since 69% of the children live with relatives rather than their mothers, their friends do not know their mothers' profession and therefore these children do not face any kind of discrimination. In addition, the women who can afford a house for themselves and their children, do not tell their neighbors and friends about their profession, and therefore their children do not have any problems when it comes to discrimination.

However there have been rare occasions in which the women have moved houses due to community members finding out about their profession. In contrast to acceptance experienced by the children living in houses, the women who live with their children in the streets say that their children are teased, beaten and that they only have contact with other children of SBSW.

### **Future Plan :**

Almost 100 percent of the children said that they want to change their present job especially the girls who are involved with the sex work. They say that they don't enjoy it and they are doing it because it's easy to earn money as they are not received cordially and able to find decent jobs. They want to work in garment factories learning different skills, Beauty Parlor etc and the boys (70 percent) want to learn electrical work and 20 percent want to learn driving. Besides, 10 other percent of the children want to be selfemployed by opening grocery shop.

Mothers wishes for the future of their children illustrate for the first time since this research has been conducted, that there exists a clear difference between the sexes in this society. For their sons most of the women wish for a good education and a job. Some of the women are satisfied if their son gets

majority of mothers would be happy if their children were able to find any opportunity to be trained on technical jobs that would enable them to make a living on their own. This illustrates that education leads to capacity development enabling the children to have an entry into the workforce.

It is evident that above all else, if education didn't require extra costs such as uniforms, supplies and tutoring, the mothers' financial burdens would be alleviated. After education, most women stated that they need daycare facilities for their young children. It is particularly the women who have to care of their children by themselves who stress this point. I then asked the women whose children live with their relatives if a daycare center would be a better alternative than their relatives' houses. They all appreciate the fact that a daycare center would allow them to live with their children but they also say that it will depend very much on the quality of the daycare center. They would have to compare the two options, and then decide which would be better for their children. A daycare center would allow them to see their children more often and if it was free, it would help them financially.

The women also mentioned the need for healthcare facilities for their children. Although some of the women mention "economic support", if the other services are provided to them, it will already improve their financial situation.

## **Conclusion and Recommendations**

This research functions as basic information about the real situation of the children of floating sex workers in the Chittagong and Comilla City areas. The research made it clear that the SBSW found solutions for the upbringing of their children, but many of these solutions are not satisfactory. In many cases the SBSW were forced to give their children away to family members and many of them are not able to visit them as often as they wish. If the children live together with their mother it is sometimes difficult for the SBSW to find someone to care for the children while they are working. Even though the children have basic education, most of them left school too early and are not able to find a good job. Most of the SBSW can afford medical treatment for their children, but it is not easy for them to pay it. Often they can only visit a pharmacist instead of a doctor. In addition to these problems they are discriminated by the society, therefore many mothers try to keep

majority of mothers would be happy if their children were able to find any opportunity to be trained on technical jobs that would enable them to make a living on their own. This illustrates that education leads to capacity development enabling the children to have an entry into the workforce.

It is evident that above all else, if education didn't require extra costs such as uniforms, supplies and tutoring, the mothers' financial burdens would be alleviated. After education, most women stated that they need daycare facilities for their young children. It is particularly the women who have to care of their children by themselves who stress this point. I then asked the women whose children live with their relatives if a daycare center would be a better alternative than their relatives' houses. They all appreciate the fact that a daycare center would allow them to live with their children but they also say that it will depend very much on the quality of the daycare center. They would have to compare the two options, and then decide which would be better for their children. A daycare center would allow them to see their children more often and if it was free, it would help them financially.

The women also mentioned the need for healthcare facilities for their children. Although some of the women mention "economic support", if the other services are provided to them, it will already improve their financial situation.

## **Conclusion and Recommendations**

This research functions as basic information about the real situation of the children of floating sex workers in the Chittagong and Comilla City areas. The research made it clear that the SBSW found solutions for the upbringing of their children, but many of these solutions are not satisfactory. In many cases the SBSW were forced to give their children away to family members and many of them are not able to visit them as often as they wish. If the children live together with their mother it is sometimes difficult for the SBSW to find someone to care for the children while they are working. Even though the children have basic education, most of them left school too early and are not able to find a good job. Most of the SBSW can afford medical treatment for their children, but it is not easy for them to pay it. Often they can only visit a pharmacist instead of a doctor. In addition to these problems they are discriminated by the society, therefore many mothers try to keep

their and their children's real identity secret. They are also the common victims of all sort of violence against the children like -sexual abuse and exploitation, trafficking, physical assault, involving in criminal offences like -drug and arms delivery etc.

In other places in Bangladesh and in Asia there are already some facilities specifically for the children of sex workers. These facilities are schools or daycare centers and their goal is to give the children a safe environment, shelter and a good education, in order to prevent them from following in the footsteps of their mothers. Sex workers are also human beings. They need square deal. They also need esurience the rights of safe birth and the survival of the newly-born babies through the provision of family planning services, prenatal and post-natal health care.

They also need to ensure proper food and nutrition of the children of the sex workers. Ensure their access to integrated health care system .They need educational facilities with any fictive relatives like aunts taking care of their education. The whole community should look at the sex workers and their children rather sympathetically. The project personnel may well try to organize community stakeholders to address the grievances of sex workers' children. In fact they need proper care and rehabilitation. They may be tormented by trauma of forced prostitution. They should be brought under the programme like counseling and motivation.

As sex workers are abandoned and ex-communicated so are their children. They must be bruoght under policy fold with direct services like shelter, mobile schooling, recreation, legal aid and supports for their relatives who take care of them Another consideration is sex-related health. As there the problem of STD- HI attempt must be taken to minimize sex trade sex trade. The sex workers and their children must be given health education. This must be treated an adjunct health care system putting the sex workers first. We recommend conduct of census on sex workers and their children. It is a difficult task. As there is an open sex market with the availability of commercial sex workers. This is institutionalized in developed countries with all health services. All the same clandestine prostitution or brothels are difficult to identify. Many urban imposters control it with their god fathers in mafia circles giving back up services. They are trafficking drugs with many sex workers transiting drugs as peddlers.

Finally, we suggest construction of drop-in centers for the children of sex workers training them to shift to other occupation so that they get rid of stigma. They may be prodding into positive action. They should be involved in income generating activities. In fact this research results did not bring many surprises. They showed what was predictable; namely that it is difficult for the women to look after their children, that the women really give their best, but that facilities such as daycare centers or schools would make the sex workers' lives easier on an economic and emotional level and most importantly, that these institutions may provide better future prospects for the children.

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*through planned economic growth, a constant increase of productive forces and a steady improvement in the material and cultural standard of living of the people, with a view to securing to its citizens (a) the provision of the basic necessities of life, including food, clothing, shelter, education and medical care; (b) the right to work, that is the right to guaranteed employment at a reasonable wage having regard to the quantity and quality of work"*

**Article 18A** *"The State shall endeavor to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens"*

**Article 19(2)** *"The State shall adopt effective measures to remove social and economic inequality...and to ensure the equitable distribution of wealth among citizens, and of opportunities in order to attain a uniform level of economic development throughout the Republic".*

**Article 25** *"The State shall base its international relations on the principles of respect for national sovereignty and equality...and respect for international law and the principles enunciated in the United Nations Charter".*

Besides, Bangladesh has signed and is bound to respect many key international human rights treaties that provide important human rights protections to climate displaced persons, including:

- ✓ The International Covenant on Economic, Social and Cultural Rights (Bangladesh acceded on 5 October 1998);
- ✓ The International Covenant on Civil and Political Rights (Bangladesh acceded on 6 September 2000);
- ✓ The Convention on Elimination of All Forms of Discrimination against Women (Bangladesh acceded on 6 November 1984); and
- ✓ The Convention on Rights of the Child (Bangladesh ratified on 3 August 1990).

Further, although non-binding, Bangladesh is bound to respect the UN Guiding Principles on Internal Displacement as they reflect and are consistent with international human rights and humanitarian law.



The UN Guiding Principles on Internal Displacement define an "internally displaced person" as "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of....natural or human-made disasters, and who have not crossed an internationally recognized state border."

Thus, the majority of persons displaced by the effects of climate change will be internally displaced persons for the purposes of the Guiding Principles.

To strengthen the advocacy campaign on climate displacement in Bangladesh YPSA, consultation with different stakeholders, recently developed the five key actions including reference to relevant domestic and international legal standards so that the Government of Bangladesh could undertake those actions to protect the rights of climate displaced persons. The proposed five key actions for ensuring rights of climate displaced peoples are as follows:

**Action-One: Climate displacement monitoring mechanism should be implemented across Bangladesh:**

The Bangladesh Climate Change Strategy and Action Plan (2009) recommends that the Government of Bangladesh: "develops a monitoring mechanism of migration of climate-change-affected people and monitoring of internal as well as external migration". However, despite this recommendation, there still exists no mechanism for monitoring or recording climate displacement across Bangladesh. The Government of Bangladesh should develop and implement a nationwide climate displacement monitoring mechanism to monitor and record all displacement as a result of the effects of climate change. This mechanism could include the ability to register all climate displaced persons, as well as document any support or assistance they are receiving from the Government or other stakeholders.

This comprehensive information can then be utilized nationally, to plan for and implement effective and durable rights-based solutions for all climate displaced persons in Bangladesh. Accurate information on the true scale of climate displacement in Bangladesh is an essential step towards providing effective, rights-based, responses to climate displaced persons. This information could also be shared with other countries, similarly affected by

climate displacement, in order to develop global best practice on monitoring and recording climate displacement.

The design of this climate displacement monitoring mechanism can draw on international practice, including the recent joint Government of Samoa and UNDP project entitled 'Human Rights Monitoring of Persons internally displaced by the 2009 Tsunami in Samoa'. The purpose of that study was to monitor and advise on responses to human rights challenges, as well as to bring attention to Internally Displaced Persons (IDPs) as a category of disaster affected persons with a right to protection, appropriate assistance, and active involvement in finding solutions to displacement through return, local integration or relocation.

**Action-Two: The rights of climate displaced persons should be incorporated into existing climate change law and policy**

The Government of Bangladesh has developed a large number of laws and policies relating to climate change vulnerability and adaptation, including: The National Environment Policy (1992); The Coastal Zone Policy (2005); The National Adaptation Program of Action (2005); The Bangladesh Climate Change Strategy and Action Plan (2009); The National Plan for Disaster Management (2010-2015); The National Land Use Policy (2001); and The Disaster Management Act (2012). However, none of these laws or policies clearly addresses the challenge of climate displacement. It is clear from recent experience that there are considerable gaps and weaknesses in the existing institutional arrangements and existing policies for ensuring the rights of climate displaced persons - including their housing, land and property rights.

An essential step in creating effective responses to climate displacement will be the design and implementation of rights-based laws and policies. Many laws and policies on climate change already exist and it is essential that the rights of climate displaced persons are incorporated into these existing laws and policies. The UN Guiding Principles on Internal Displacement explain the responsibilities of the Government both prior to displacement, during displacement and after displacement. It is essential that all of these responsibilities are incorporated into existing laws and policies. It is equally essential that these laws and policies are drafted in a manner which

emphasize respect for the human rights of all climate displaced persons.

It will only be through a concerted effort by the Government as well as from civil society, with the support of the regional and international communities, that effective and durable solutions can be found for the many current and future climate displaced persons in Bangladesh.

**Action-Three: Distribution of Government Khas land should be effective, transparent and just and take into account the needs of climate displaced persons**

Since independence the Government of Bangladesh has enacted a number of laws and policies regarding the distribution of Government Khas land. Currently, Article 53 of the Land Management Manual (1991) provides that any landless family is eligible for Khas land distribution. Khas land is officially State-owned land and is often located in marginal areas along the coast and rivers. The majority of these laws and policies have targeted "landless" persons and families for the grant of Khas land. However, these program have met with mixed success due to vested interests illegally occupying Khas land, a lack of political will, the inefficiencies in the way local and national administration is organized and the absence of an updated, systematic and universally accepted source of information on land resource availability and land rights.

There is, however, a large amount of agricultural and non-agricultural Khas land under the control of the Government and it is clear that this land could play an important part in creating durable solutions for climate displaced persons. It is estimated that State has 3.5 million acres of Khas land - of which 25% is agricultural, 50% is non-agricultural and 25% is covered by water bodies. It is essential that the Government take steps to implement an effective, transparent and just program for the distribution of Khas land to landless persons - including climate displaced persons. These programs should be rights-based, they should involve the participation of affected communities in their design and the ability to review adverse decisions should be clear and accessible. It is important that decisions about the distribution of Khas land are made on the basis of genuine need, rather than political or personal considerations. Civil Society representatives should also be part of the decision-making panels for Khas land distribution.

Furthermore, training should be provided to decision makers on climate displacement in Bangladesh and the need to ensure rights-based durable solutions for climate displaced persons.

Article 54 and 56 of the Land Management Manual (1991) provides that persons who are landless as a result of river erosion should be given first priority for the allocation of Khas land. It is important that this Manual is updated to reflect the current reality that the vast majority of people are and will become landless as a result of a range of adverse effects of climate change, rather than simply prioritizing those people affected by river erosion. The law should treat all people affected by the adverse consequences of climate change and natural disasters equally - including victims of tropical cyclones, storm surges, flooding, droughts and landslides.

#### **Action-Four: Non-agricultural Khas land should be allocated for climate displaced persons**

At present it is only possible for the Government to grant legal title to agricultural land for landless persons (including climate displaced persons). The Government is restricted - under Articles 102 and 103 of the Land Management Manual 1991 - to granting simple leases over non-agricultural land to landless persons. It is clear that domestic land solutions will play an important role in promoting durable solutions for the current and future millions of climate displaced persons in Bangladesh. However, it is equally clear that there is a severe shortage of land in Bangladesh, coupled with dramatic overcrowding in the major cities and slums. For this reason, it is essential that the Government of Bangladesh is able to utilize all land - both agricultural and non-agricultural - in providing solutions to climate displaced persons.

Further, the effects of climate change-including flooding, storm surges, droughts and river erosion-are decreasing the amount of available agricultural land, further emphasizing the need for a policy and legislative change to allow the grant of non-agricultural land to climate displaced persons. It is currently estimated that the State has 1.75 million acres of non-agricultural khas Land (50 percent of the total 3.5 million of acres of Khas Land). With a change of existing law and policy, the vast majority of this land could be made available to climate displaced persons-with enhanced

tenure security-representing an important step towards truly durable solutions to this crisis.

**Action-Five: Effective return, relocation and rehabilitation programs should be implemented for all climate displaced persons**

In line with the Government of Bangladesh's responsibilities under domestic and international law, effective return, relocation and rehabilitation programs should be promptly implemented for all climate displaced persons in Bangladesh. The UN Guiding Principles on Internal Displacement state, in accordance with international human rights and humanitarian law, that the competent authorities (in this case the Government of Bangladesh) have the primary duty and responsibility to facilitate the conditions as well as provide the means for internally displaced persons (including climate displaced persons) to return to their homes or places of habitual residence, or to facilitate and provide the means for their relocation to other parts of the country.

The Guiding Principles also emphasize that special efforts should be made to ensure the full participation of internally displaced persons in the planning and management of their return, or relocation. Currently, there are no comprehensive program in Bangladesh to ensure the effective return of climate displaced persons to their homes or places of habitual residence, nor to facilitate their relocation to other parts of Bangladesh. There are also no comprehensive programs to ensure the effective rehabilitation of climate displaced persons upon return or relocation. Experience has shown that there are many critical livelihood and other challenges to the effective rehabilitation of many climate displaced persons in Bangladesh.

It is essential that such return, relocation and rehabilitation program are designed in a rights-based manner and implemented immediately. The Guiding Principles also note the importance of cooperation by international humanitarian organizations and other actors in assisting with the return or relocation and rehabilitation of climate displaced persons.

Conclusion can be drawn with two quotes recently voiced by the leading personnel in climate change issue of Bangladesh. Dr. Qazi Kholiquzzaman, Coordinator of Bangladesh Climate Change Negotiation Team, said in a

seminar by while speaking as the chief guest that "at present, no reliable data is available about the climate-displaced people in the country. In absence of data about the climate refugees/displaced people, we can't place the issue in global negotiations." And Dr. Hasan Mahmud, MP said that "a comprehensive Climate Change Policy is now demand of time, which can cover all climate changes issues including the rights of climate displaced peoples of Bangladesh. I, myself, will take necessary initiative of this requirement as a chairman of Parliamentary standing Committee for Ministry of Environment and Forest" while he was speaking as chief guest in a Round Table Discussion on Climate Displacement issue and Launching of Mapping Study report organized by Young Power in Social Action (YPSA) at Dhaka.



## Urban Local Government Election: A Focus on The Role of Youth

Dr. Md. Shairul Mashreque \* and M. Abul Kashem Mozumder\*\*

### Introduction

At the national and local levels Institutionalization of democracy is the reveling aspect of political development. It is inseparable from electoral participation in an enabling political environment. Nothing, there, is likely to maintain the process of institutionalizing democracy as electoral participation. Election must be meaningful to uphold the spirit of democracy and free exercise of 'public choice'<sup>1</sup>

What ensures free exercise of rights to vote is free and fair election. It is expressive of the well-functioning of democratic form of governance. Democracy derives its meaning and substance from free and fair election.<sup>2</sup> For democracy to work successfully it is necessary to create conditions conducive to free exercise of franchise.

We have witnessed a number of elections both local and urban. In the election parliamentary of 2008 there were a large number of young voters as there was a bulge in youth population.. Their vote bank was a derisive factor in the election outcome that signaled a change. in the political landscape.

Institutionalizing democratic decentralization has already received intellectual concern. So national government sets the programme of local level election as an important agenda of political development. Local government elections in Bangladesh normally take place at five levels: grassroots level, sub-district level, district-level, and semi-urban-level and metropolitan level. The election under study is at the metropolitan urban level. The paper while stressing the role of the youth is a focus on Chittagong city poll 2010.

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## **Chittagong City Corporation (CCC)**

Extending over an area of 155.4 sq. kilometer, Chittagong city corporation has a population of 15, 66,070. The city is divided into 41 wards<sup>3</sup>. It is a port city with sea port as the hub of commercial operations. Traditional businessmen are a distinct social class and dynamic commercial group established industries and commercial centers around the river Karnafuli. The southern part of the city is a border of land near Bay of Bengal. This seashore area is known as Patenga<sup>4</sup>.

Chittagong city corporation area was once full of hill and hillocks densely covered with trees. Development activities by some private agencies somewhat in an illegal manner have impaired ecological balance as natural infrastructures like hills and forest were grossly misused and destroyed. The deluge of natural devastation like landslide in residential areas located near hills or hill tops during rainy season already caused innumerable loss of lives and properties. Among many others problems water logging continues to trouble the city dwellers.

The original city residents, called Chittagonians are conservative notwithstanding the fact that the city is marked out in history as a place of armed rebellion. Some among them are presumed to be a mixture of different stocks. The language of the original settlers is a dialect of Bengali in which many Arabic elements are found. They have overtime developed a distinct sub-culture within the broad Bengali culture. It has evolved over many years in the wake of the influx of Arabians, Europeans and Arakanese. The peculiar Chittagonian culture embodies various streams of external influences that came here through sea route. People from different parts of Bangladesh live here along with original settlers; many among them are rendering service in government offices, autonomous bodies, multinational companies and private farms within the city corporation area. Some among city dwellers are from Hill tracks tribal areas.<sup>5</sup>

## **CC Polls 2010**

The Chittagong city corporation election (2010) is a significant antigen to the institutionalization of democracy at urban-local level. It has been truly meaningful as it was carried on within democratic political system. The newly elected democratic government may boast of having successfully held



the city election within 166 days of its tenure albeit with strict measures of electoral fairness. It marks a transition from perennial rule of a three-time elected Mayor displaying the image of attributed leadership with authoritarian predisposition to the new Mayor elected to the position to start afresh for city development.

This experience provides a fascinating case study of the most impressive effort to ensure election friendly environment all the way all to the satisfaction of the contestants. This was to reinforce democratic institution at the city point accountable to the city dwellers and responsive to their needs. This was also an effort to gratify the political goal of implementing mandated scheme of social change through participatory urban governance with new leadership style. As a matter of fact the City corporation election stands out to be a land mark signaling the prospect of revamping urban management.

The competition for the prized post like city Mayor as well as for the positions of councillorships directed the attention of the national political figures that could speak on the issue of development and make pledges with reference to the better management of urban affairs in the metropolitan city. The study may add an important qualification to the interpretation of the new trends towards establishing corruption free society-- a social movement that was propped up by the military back care taker government that took over after one eleven political change over in January, 2007.

The account of national politics in the metropolitan area was converged on urban local body election which echoed the exact nature of power play. Although a local government election the election was in the nature of national election. It was a litmus test for the performance of the government. The main opposition party took election battle with due seriousness. It thought city election as a great opportunity to gain stronghold in a major urban area and to overcome the stigma of its election debacle in 2008 parliamentary polls. The challenge facing the ruling grand alliance was insurmountable in the midst of escalating political tension.

## **Candidates**

There were speculations about probable candidates for the posts of city Mayor and councilors. When exchanging views with the city voters open-

endedly most thought that persons holding clean image would be nominated for Mayoral position and councillorship. Urban politicians stigmatized with previous misdemeanor would be automatically flushed out in the changed political situation. Some predicted that there would be no change in the consideration for nomination. The old political players even corrupt one would be nominated for the race. However the nomination finally decided was a mix of old faces and new ones.

There were internal squabbles in the rank and file of local Awami League and Bangladesh Nationalist party (BNP) over the question of nomination. Mentionably the problem of factionalism within city BNP was acute during 1994 and 2005 city elections. Most prominent city BNP leaders involved in factional conflicts were charged with corruption. BNP' s failure to find its own candidate due to its inner part squabble backed one time close associate and friend of Mohiuddin Chowdhury, Manjurul Alam, who until recently had a very strong Awami League label tagged to his personal dossier. Backing Manjur for this coveted post was master stroke in BNP's election strategy, which paid off in the end. Manjur was elected ward commissioner for three consecutive terms.

He acted as Mayor in the absence of Mohiuddin Chowdhury who was arrested by the military-back care taker government. He held the position until Mohiuddin was released. BNP did not seem to face difficulties in settling the issue of nomination even though it kept its own city leaders out of reckoning so far as the post Mayor was concerned. The central party decision was gladly accepted by the city leaders belonging to various factions. Awami league (AL) by this time was divided into two rival groups- Mohiuddin and anti-Mohiuddin groups. Despite AL city leaders did not seem to brawl over nomination issue and Mohiuddin managed to get nomination fourth time for the position of city mayor. BNP-led traditional 4-party alliance, now the opposition forces comprising anti-AL rightists parties, unitedly campaigned for its nominee Majurul Alam.

The Awami League Mayoral candidate ABM Mohiuddin Chowdhury wanted to dash through with the support of grand alliance formed mostly of progressive and pro-liberation youth forces. The strong point of his candidacy was that he was supported by a youth platform.

## **Election campaign**

Campaign remained a dull affair for a first few days. There was not so much interest and enthusiasm among the voters and active supporters. The fear of violating electoral codes of conduct was a stumbling block to campaigning with much fanfare to attract the youth and children. A Rickshaw puller expressed disappointment over lull in campaign activities with no sign of enthusiasm. The participants were not in festive mood, no dancing in the street beating drums, no tea stall gossip. The shop keepers with betel and cigarette could not be happy this time as they would not be able to profit much as they usually expected one month before the election.

One of the marked features of electoral governance in 2010 city election was observance of strict discipline. For this reason the city was calm and quiet during campaign period compared to all previous city elections. This indicated a conspicuous change in campaign behavior. A Prominent citizen associated with a civil society thus commented that the city dwellers have been tired of election frenzy that polluted city environment. Now the city dwellers have had rest from all public nuisances, like milking, shouting and procession. Due to smart implementation of election rules by the administration the contenders could not spend much. Strict monitoring of the campaign activities prevented the candidates from spending beyond limitations set by the election Commission (EC).

As a fascinating spectacle election campaign picked up steam a few days before the votes were collected. Techniques used by activists and supporters were more or less same as 'visibility' observability' 'reading-hearing', 'personal informal approaches including meeting, rally and procession. Most materials used for 'visibility-observability' methods were not used in the campaign. Only hanging posters with photos were found available. Use of microphone was common. Leaflets containing important information about the candidates were distributed by the election workers. The personal informal approach was marked by door-to-door canvassing.

Once momentum was gained campaign attracted a great deal of attention involving a large number of party workers, local leaders, tycoons and even national stalwarts. The wave of enthusiasm was high especially among active supporters and workers of the contenders for councillorship.

Campaign strategy of the opposition became a matter of great attention. They criticized government for failing to fulfill expectations of the masses. They pointed finger at misgovernance and anti-democratic activities of the ruling party. There was opposition skepticism about election engineering. The opposition warned the ruling party with dire consequence in the event of election rigging and manipulation of administration. Apart from national issues the opposition touched upon local; issues.

### **Election issues and pledges**

The Major concern of the study of electoral politics has been the way the election issues affect voting patterns. One of the potent reasons for this concern is to call attention to the relative importance of the issue attitude.

Both the major contenders approached the voters with a list of electoral pledges. Nagarik Committee backing ABM Mohiuddin Chowdhury presented an election manifesto with a long list of priorities and Chittagong Unnayan Andalan supporting Manjurul Alam placed 15-point development agenda. New component added to Nagarik Committee agenda was IT village and digital Chittagong and city government. Chittagong Unnayan Andalan emphasized among others: combating water logging, traffic jam and a host of welfare measure putting the poor first.

It may be argued that the city mayor can hardly redeem the promises of change. We cannot expect much from the elected mayor. This is because this city body is not sufficiently empowered to fulfill mass expectations for a change. Its financial strength is limited with a poor taxation base. The image of city government is not reflected in position of City Corporation. So, the promise of doing the things with a long list of priorities is mere political gimmick to conjure up votes. From common feelings and general mass reactions against fuzzy urban governance it seems that they consider pledges, harangue, tall talks about change as catch phrases and common tactics employed in political game. A well informed voter commented 'voting forced upon the silent masses helps the dominant groups to acquire legitimacy for wrong doing and wanton corruption. The post election scenario is one of frustration, increasing apathy and disenchantment'.

Among the issues highlighted included price hike, terrorism, negligence of the port city holding tax, licensed rate for cycle rickshaw, water logging, landslide and environmental degradation.

## **Election Commission (EC) to Ensure Free and Fair Election**

EC's unequivocal commitment to free and fair city election tallied well with the sincerity of the grand alliance government to create election friendly urban environment. The EC took extensive measures to ensure level playing field in city election that was to be held in Chittagong on 17th June, 2010. The Commission employed its own observers in different areas of the city to monitor election activities and deployed army for five days, three days before the election and two days after in anticipation of untoward incidence to ensure peace and transparency. The executive and judicial magistrates were active in different city points during the campaign and on Election Day. Law enforcing agencies were there to see to it that contenders for the posts of Mayor and councillorship could not get any scope for the violation of electoral codes of conducts. Participation of the Ministers and state /deputy ministers in electioneering was not allowed. Arrangement was made by the EC to facilitate participation of the national and international observers on election Day. The city Mayor who contested for the post once again relinquished the position to acting Mayor showing full respect to the call of the CEC. Acting Mayor would be allowed to take part in electioneering without using any official facilities.

## **Results**

Looking at the results of 1991, 2001 and 2010 competitive parliamentary elections compiled from constituencies--8, 9 and 10--all within the CCC area and the results of 1994, 2005 and 2010 mayoral elections (see tables 1, 2 and 3)-- we see that popularity of the party that won parliamentary election in all of these constituencies sharply declined. Same is the case with ward commissioner/councilor election. All the time the party winning the race for mayoral position has got highest number of councilor post. It has also been observed that opposition party that won CCC election subsequently registered a victory in parliamentary election including seats of the three constituencies. So CCC polls represent electorate view on government performance. It is proven that the opposition performed well in city elections (the metropolitan urban areas) capturing most parliamentary seats within the corporation area. The CCC election result is not a good sign for the government.

According to the latest voter roll, CCC has 1688676 voters of which 873165 are male and 815511, female. Ballots were cast in 4748 polling booths in 673

centers under 41 wards. Votes were collected through conventional system in 40 wards with only one ward (ward 21) being an exception where the country's first ever electronic voting system was launched.

According to reports the opposition backed Chittagong Unnoyan Andolon candidate M. Manjur Alam won the election battle defeating AL backed Nagarik Committee's candidate ABM Mohiuddin Chowdhury by a convincing margin of 95,528 votes. M. Manjurul Alam in fact humiliated his mentor and three times elected Mayor ABM Mohiuddin Chowdhury by recording a comprehensive victory. He termed the victory as 'the victory of the Chittagong people'. The Prime Minister SK Hasina immediately congratulated M. Manjurul Alam and thanked EC, law enforcing agencies, local administration and Chittagong city dwellers for working together to hold a free and fair election.

Despite political situation going beyond the control of the ruling party political environment enabling the EC to stage the most fair and impartial city election without intervention is of course a remarkable sign of change. The ruling party did not show any sign of influencing the consequence in its favor despite the fact that it was an acid test for its popularity or policy failure. It ensured election friendly environment all the way all to the satisfaction of the contestants. Defeat for the grand alliance was rather a moral victory for the ruling party though some may comment that four-part alliance upset AL-led grand Alliance cart. From election results (see results at a glance) one may argue that popularity of the AL-ledgrand alliance government is at a discount. Mentionably the opposition front termed the results as popular discontent about malgovernance. The ruling grand alliance dismissed the murmur that 'the elections results indicate a fall in popularity of the government.

**Table1: Votes received by AL and BNP candidates in three parliamentary elections**

Year	AL (No. of valid votes received)	BNP (No. of valid votes received)
1991	1, 37,890(three constituencies)	16, 65480(three constituencies)
2001	304326(three constituencies)	393109(three constituencies)
2010	405002(three constituencies)	351420(three constituencies)

Sources: compiled by author from Bangladesh Observer, Ajker Kagoj, Prathom Alo, Ittefaq, June 6-15, 1996, Bangladesh Observer, Ganokhanto, agker Kagoj, Oct. 7, 2001, Daily Star, Prathom Alo, 30-31st December, 2008

\*Three constituencies indicate constituencies 8, 9, 10

**Table 2: Votes received by AL-backed candidates and BNP-backed candidates in three Mayoral elections**

Year	AL-backed candidate	BNP-backed candidates
1994	1, 80,684	1, 63,445
1999	AL-backed candidate elected uncontested	
2005	3, 5089	259416
2010	3, 83,617	4, 79,145

**Sources:** compiled by author Prathom Alo, Dainik Purbakon,, May5-7, 2005 and June 17-19, 2010

**Table 3: Councilors polls (no of wards 41)**

Year	AL-backed candidates	BNP-backed candidates	Others
1994	30	10	1
2005	29	11	1
2010	12	28	1

Sources compiled by Purbakon, Ittefaq, Sangbad, Aazadi, Peoples view, Independent, 5-10 May, 2005 and 17-19 June, 2010

**Table 4: CCC Elections at a Glance**

Mayoral polls

No of polling centers	1673
Results announced	673
No. of voters	16, 88,677
Votes cast	8, 85, 064
Voters' turn out (per cent)	54.5
Manjurul Alam's total votes	4, 79,145
Mohiuddin Chowdhury's total votes	3, 83,617

Councilors' polls (including reserved seats)	
No. of wards	41
Four-party alliance-backed candidates win	28
Grand alliance-backed candidates win	12
Others	1

(Source: The Independent, 19<sup>th</sup> June, 2010)

More than half of the registered voters cast their votes (54.5 per cent turn out). M. Manjurul Alam was elected for the first time as Mayor of the port city like Chittagong defeating his once political mentor ABM Mohiuddin Chowdhury. Chittagonians with about five lakhs young voters have chosen 4-party alliance backed Chittagong Unnayan Andalan candidate Manjurul as city Mayor for the next five years through exercising their franchise (People's view, Independent, 19th June, 2010). M. Manjurul Alam in fact humiliated his mentor and three times elected Mayor ABM Mohiuddin Chowdhury by recording a comprehensive victory. He termed the victory as 'the victory of the Chittagong people. The Prime Minister SK Hasina immediately congratulated M. Manjurul Alam and thanked EC, law enforcing agencies, local administration and Chittagong city dwellers for working together to hold a free and fair election.

### **Youth Chittagonians Voted for a Change**

Many political analysts and experts commented that youth Chittagonians wanted to vote for a change. The city would be corruption and terrorism free urban society. Chittagong should be developed in a desired direction according to a master plan. The youth forces needed a Mayer with a vision who would dream for a modern and peaceful city. The voters were critical of any rhetoric and grandiose project like making the city as the 'queen of the East' or a city like Singapore or Hong Kong.

What was wrong with the ruling party was that it did not make any attempt to look for person of a relatively clean image for nomination to the post of city Mayor. Think tanks associated with the ruling party perhaps underestimated opposition- backed candidate and became thunder struck to see things tuned upside down. They could not ever think that a strong candidate who was elected three times would be defeated so ignominiously. Perhaps they could not count the new voters and thus the outcome contrary to their expectation was inevitable.



## **Youth as new voters**

The youth forces as new voters played a vital role in electing new mayor as 'city father'. Given demographic transition bulge in youth population has become a matter of utmost concern. Children upto 18 years old are among the youth as the next generation. They have become a part of public participation so far as electoral roll is concerned. The new youth forces would like to vote for a person who could fulfill their expectations for a change. In 2008 parliamentary election they mandated the scheme of social change that appealed much to them. Unlike the elder generations the new generation does not have a liking for stereotypes, authoritarianism and old trappings that have crept into political leadership. With a sense of justice the youth elements exercise franchise judiciously. They want to make a decisive break with past as it is full of sinister days of lopsided domination and nightmarish experiences accounting much for malgovernnance. It is not difficult it understand their voting behaviour. They always welcome new and fresh political leadership rejecting old leadership style with conservative outlook. In two recent elections-2008 parliamentary election and 2010 CCC elections-their voting participation in large number has caused ballot revolution.

Chittagonians with about five lakhs young voters have chosen 4-party alliance backed Chittagong Unnayan Andalan candidate Manjurul as city father for the next five years through exercising their. They want to make a decisive break with past as it is full of sinister days of lopsided domination and nightmarish experiences accounting much for malgovernnance. It is not difficult it understand their voting behaviour It was not that opposition's nominee impressed the youth with his projected programs of goals. He held the office of Mayer for some time during immediate care taker regime. The young voters perhaps were not satisfied with the performance of ex-Mayor as scores of city's problems and predicaments were not properly addressed. They wanted to put an end to erring and insensitive urban governance.

We cannot help accepting the fact that CCC election is not a national election. It is not the parameter to gauge the popularity of the ruling part/alliance. Even then the ruling AL felt the need for facts findings about election debacle including the skepticism about the role of local AL leaders. The issue has been discussed in the party forum. However the results of the

city polls tilted supports to opposition's favor as a reminder to ruling party. The government should not be complacent only for proving its sincerity to hold fair polls falsifying all the allegations made by the opposition. True the ruling party is trying its level best to consolidate democracy with EC holding the helm of election affairs freely without intervention. Even then the ruling party needs to be circumspect as Dhaka City Corporation (DCC) is drawing near. Based on county's electoral history there is every reason to think that from the outcomes of local government elections in two mega cities it is not difficult to predict the results of the general elections.

Objectively speaking performance of the grand alliance government in a brief period of sixteen month is a mixed bag of success stories and failure. Electoral pledges for changes are difficult to be implemented so soon. In fact nothing is fully achieved to make the government complacent. Good governance in terms of poverty reduction, elimination of corruption and terrorism, improving law and order situation and establishing rule of law still remains a distant dream. As for reducing corruption the government is committed. This is reflected in its stance against all irregularities and anomalies and politicization in the public bodies and institutions. But anti corruption drive of seemingly weak commission has dwindled into anti climax. Its independent status to project the image of neutrality has been decapitated thus blurring electoral commitment of the grand alliance government. The donors hit out at the design of the government to weaken the power of the anti-corruption commission making it a cipher.

From now on the government should be serious about fulfilling mass expectations for a change according to electoral pledges. Much of what the ruling party committed is much less than redeeming. Distressingly upazila parishad is now in a state of emasculation. This runs counter to electoral pledge about strengthening local government with upazila parishad 'being a pivotal factor in' democratic local self-government. This is only one case of non-implementation of the promise of change. There are too many other cases like this.

Last, far from least, the city people voted for a change. They spoke out against old style of preoccupation with power politics with little interest in social and humanitarian services. The politicians should learn to respect public sentiment nourishing democratic values. And the rising young voters

have become a determining criterion directing the wind of change.

## **Conclusion**

The city people have spoken choosing who they feel can best work for the furtherance of their interests. Though urban local body polls in theory they continue to have a national significance. CCC is no exception. Election debacles at the urban-local level are a remainder to the government. That 'history repeats itself' has been proven once again. Based on the records of the two CCC and national elections it may be observed that local government election in a major urban area is a parameter to gauge the popularity of the ruling party. Defeat of the ruling party in city election resulted in its cutting a sorry figure in all the constituencies that make up the city corporation boundary. The just finished CCC election is a premonition for the ruling party as it may suffer the same consequence for failing to provide basic human needs. This marks a sharp decline in the popularity of the government.

Normally, the voters show tremendous enthusiasm at the local level election including urban polls. This time enthusiasm is much less as is clear from voter turnout. This time the known voter turnout was above 54% whereas the figures for 2008 parliamentary election the figure was as high as more than 90% so far as the City corporation constituencies were concerned.

Most observers feel that conduct of the city polls is a clear indication of fairness in electoral governance. The role of the EC was far beyond any controversy. It projected the image of neutrality.

Election outcome was a moral booster for the anti- liberation force especially the beleaguered religious political front that has been facing consequence for collaborating with Pakistan occupation army during war of liberation, 1971.

Public frustration with the ruling party is now clear. The failure to redeem electoral pledges influencing the voters to vote for change in 2008 parliamentary has added to public resentment with this government. It must try to grasp the underlying message the result has conveyed. It is certainly a wake up call and the ruling party need to do some soul searching. There is need to see whether it was the performance of the ex --mayor that had a bearing on the outcome or whether it is also the ruling party's showing that had anything to do with his defeat.

It is obvious that youth played a great role in any political programme for a change. SHAHBAG gathering with extremely enthusiastic participation of the youngsters highly moved me emotionally. In other expression I am seized by utter emotion as I cherish a quixotic orientation to the intrinsic values of liberation war like secularism, socialism, Bengali nationalism, democracy. Imbued with the spirit of Bengali nationalism we fought liberation war against Pakistan occupation forces and their local quislings raising the slogan Joy Bangla. In fact Shabag gathering took me back to the eventful days of liberation war especially when the young participants at shahbag thunder 'Joy Bangla' and 'Joy Bangabandhu'. Alongside with male teenagers enthusiasm of young girls was high.

The youth rose to the occasion at the right moment when an extremely rightist political party disturbed normal peace attacking police all on a sudden. It called hartal a day before the announcement of verdict of Quader Molla charged with war crime. This is an act of treason with threat and liquidation through pelting stone to security force and vandalism. This party continued violence to panic the city dwellers when Quader Molla was given life time imprisonment. Even it tried to let loose a reign of horror for a while on 12th February, 2013, the day of agitation the party announced earlier. But their agitation programme could not hold water and in some city points its act of vandalism faced mass resistance. The agitators were adopted violent means all with their terrifying dance in the street. They were far away from youth gathering as the young participants were determined to foil their diabolical mischievousness.

This gathering is a social movement as youth renaissance for realizing the dream of Jahan Ara Imam who kindled the light of conscientization for cleansing all war criminals. Led by Jahanara Imam Ghatak-Dalal Nirmul committee strongly lobbied for the trial of war criminal. It staged symbolic trial of war criminals. There was a growing demand for trying the war criminals with the sector commanders continuing to play role second fiddles to none

Opinions in favour of the death sentence of war criminals were mobilized through the use of social media tools like face book, twitter and You Tube, and blogg. Media's-both paper and electronic--coverage on Shahabag mammoth gathering went from local villages and to the world of over one hundred million viewers.

News media continued to bring quality coverage on youth show down eventful with a host of golden moments. News about the movement spreading far and wide received favorable response from news media. People from all walks of life express solidarity with this non-political movement.

Hats off to bloggers--their pro-active role in organizing youngsters. Their movement for the execution of the war criminals gained momentum--thanks to on-line activists specially bloggers. Cyber pace became 'a crucial site of mobilization and knowledge tools built by the simple efforts of individuals, bloggers and associations.' It helped 'communicate with the world to keep up-to-date on what was happening across the country effectively eliminating misleading and false propagation. . The authorities rather encouraged the flow of videos.' Face book has become the most video sharing sites moulding public opinion against war criminals and projecting the values of liberation war.

Beginning with staging a protest rally at Shahbag a small number of youth violently reacted immediately after the announcement of tribunal's verdict awarding life term punishment to Quader Molla. This was the beginning of youth movement with revolutionary mooring that kept anti-liberation forces at bay. Soon Shahabag wore a festive look turning into a massive gathering like a sea. It was termed as Projanmo Moncho (generation circle).

For the enthusiastic youth with new blood this seems to be revolution of rising popular expectations for a change. With such upheaval indicating a great topsy-turvy the prospect good governance is beckoning. They voiced some ideas in the Mancho that militate against beaten tracks in our politics that has been badly affected by equations and coterie. Now we are hopeful that all the evils and the ghosts of Pakistan occupation army will be removed root and branch.

Everybody could not but admit that youth movement lends itself much to IT operating with web activities. IT as a means of social communication contributes to the conscientization of the youth about highhandedness of anti-liberation media generating misleading news and about ridding roughshod over human rights by the militants. So IT revolution smoothed the way to the crystallization of movement towards finishing an unfinished revolution flushing out all Razakars and AL Badars. "Through out the

movement demonstrators relied on face book to communicate with each other. Non-internet users kept abreast via satellite news channels including ATN news, Independent and Ekattor.'

The extremely agitated and angry young masses played up a revolutionary image through a violent demonstration and thunderous voice with the hope of establishing Razakar-free society.

It seems that the regime at its fifth year of tenure was managing the helm of affairs at the time when the country was embroiled in deep political crisis. The New Year (2013) has become a year of change and transformation indicated by the challenges difficult to meet. The immediate picture was one of utter confusion rendering it difficult for the rulers to set things in a right gear. The challenges ahead are disbanding Jamat-Sibir eliminating all their supportive and financial institutions and media.

The country going through century of wear and tear became again set on the horn of dilemma as the verdict of the second case given by the tribunals for trying war criminals triggered mass agitation. Violent protest erupted. Public opinion was extremely agitated. The demonstrators thronged at Shahbag in the capital and Projanmo Mancho in peripheries.

Responding to protest the cabinet of the Mahajot government approved on 11th February, 2013 the draft proposal for amendment of international crimes tribunals act keeping equal rights of both the plaintiff and the defendant.

The heroic youth really staged a popular progressive movement against politics going through degeneration in the presence of anti-liberation forces. The message conveyed by the youth revolution is straight forward. Any violent show of the supporters of war criminals with horrifying state of terrorism must one day meet a dead end. In the long run youth power will overpower seemingly powerful pro-Pakistani elements in politics.

This as if Ekattor were reincarnated signaling liberation war once again. The youth gave a clarion call to fight once again to achieve ultimate victory from Shahabag close to to the venue where Bangabandhu thundered: Ekarer Ssangram muktir sangram, ebarer sangran sadhinater sangram on 7th March, 1971 amidst a vast ocean of people. The young generation is coming to the full awareness about history of liberation war and the image of Bangabandhu

as the vanguard of Bangladesh movement

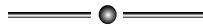
It needs to be mentioned that political Islamists contributing to misunderstanding and misinterpreting the meaning of Jihad Islam use cyber pace for the articulation of their views. They go for global expansion using face book. The persons harboring sympathetic feelings for their articulation use face book to share views with their face book friends.

It is really heartening to note that our young bloggers now try to occupy cyber pace as global advocacy for the dissemination of progressive movement upholding the spirit of liberation. The movement centrally spearheaded by the young leaders at Shahbag stirs the whole society at its depth stretching far to remote world. Shahbag set the stage with tumultuous youth expression and the city dwellers in Chittagong, Sylhet, Comilla, Khulna, Rajshahi and others towns followed suit. I and my son visited Chittagong gatherings several times. We observed 3-minute silence at our respective positions on 13th February (pahela falgun) as a mark of respect to the movement.

All our thoughts for ever are ready to pour into all the sorrows and joys of the youth struggle. All our emotions with national symbols now ride out anew to the new era of politics. We are out on the freeway of nurturing our liberation values and spirit in a political environment friendly to progressive ideas. There are no bounds to the expectations for a dreamland free from the sinister political elements using religious values to their own political advantage.

## **Notes and references**

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# **Challenges of Coordination at Urban Government in Bangladesh: A Focus on Chittagong City Corporation**

Amina Sabrin and Rifat Darina Kamal \*

## **Introduction:**

Rapid urbanization is a contemporary effect of modernization. In the third world, as a rising country Bangladesh is also on the way to proceed forward to urbanization. But the question lies how far discipline it is? Urbanizations should be conducted in a more plan way in the underdeveloped country like Bangladesh due to the shortage of resource and wealth. But in this regard we get a very dismal picture. Lack of collaboration and coordination between urban local bodies create a severe mismanagement which desecrate time and money and no doubt the ultimate sufferers are public. So the purpose of this paper is to give an account of the present scenario of urban bodies as well as to address the problem embedded in these bodies properly by highlighting Chittagong City Corporation and to provide some remedies to overcome this problems.

**Methodology:** The article is based on both secondary materials and primary data. The problems of urban bodies has been noted from internet websites, relevant published research articles, books, newspapers etc.

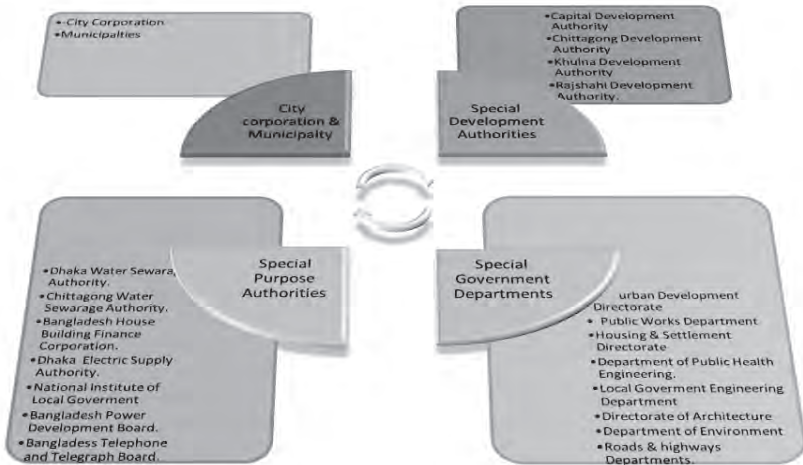
Beside this, primary data collection process had been continued for a period of three months from the field level study. In this regard we interviewed general public, social scholars and high officials of Chittagong City Corporation. Interviews were assisted by open structured questionnaire and informal discussion with them.

## **Present State of Urban Local Government of Bangladesh:**

Before going to the in-depth analysis now we shall discuss the institutional framework of Bangladesh urban governance in brief. The municipal governments include corporations and pourashavas or municipalities. All the municipal corporations include a certain number of official commissioners

designated by the government who are the top functionaries of special development agencies, special purpose authority and special government bodies (Panday & Panday 2008).

### *At a glance Urban Local Bodies of Bangladesh*



*Souce: Urban Governance in Bangladesh. Chapter 7*

**City Corporation and Municipality:** City corporation and pourashavas are obligated to extend municipal services ranging from construction of roads, bridges and culverts, the removal and disposal of refuse and waste, the provision of water supply, the provision and maintenance of street lighting; the registration of births, marriages and deaths, the provision and maintenance of graveyards and cremation grounds, eradication of mosquitoes, the issuing of different kind of certificates and the provision and maintenance of park and gardens (Siddique, 1994: 146-147).

**Special Development Authorities:** Four Special development authorities for four City Corporation have been created for the purpose of providing urban planning service relating to infrastructure and site development for housing, commercial and industrial use (Pandey & Pandey 2008).

**Special Purpose Authorities:** Dhaka Water and Sewerage Authority (DWASA) and the Chittagong Water and Sewerage Authority (CWASA) - have been created by the government in order to provide construction, improvement, expansion and maintenance of water and sewerage services.

The Power and Water Development Board (PWDB) works under the Ministry of Energy and is responsible for the generation and distribution of electricity throughout the country. Bangladesh Telephone and Telegraph (T&T) board is provided Telephone and telegraph services. Dhaka electricity supply authority is responsible for electricity supply in Dhaka city (Islam & Khan 1997: 14).

**Special Government Department:** The Urban Development Directorate (UDD) is the main government agency concerned with urban planning in the country. It is also responsible for preparing and coordinating regional plans and master plans for cities and towns, except for the six metropolitan cities, and for advising the government on policies related to land use and development. The Department of Public Health Engineering (DPHE) and Local Government Engineering are responsible for the development of public health, water supply and sanitation and maintenance of roads, storm drains in rural and urban areas, excepting in cities like Dhaka and Chittagong. Public Works Department is responsible for constructing government offices and public building. Housing and settlement Directorate is involved in the development and distribution of serviced residential plots and construction of medium sized-stored flats in cities and towns. Roads and highways department is responsible for national highways and important feeder roads (Ghulam Chapter 7).

The need for coordination among these above mention urban local bodies is unquestionable. But unfortunately the situation is quite different. Actually there are no specific rules for collaboration among these organizations. Usually they maintain very traditional procedure such as correspondence by official letter , use telephone or make face to face contact for coordination.

### **Coordination: A Conceptual Overview.**

According to Mooney and Riley, 'Coordination unites group efforts in a concentrated manner to achieve a common goal' (cited in Islam, 1994:2). The Shorter Oxford English Dictionary defines 'coordination' as 'the action of coordinating; harmonious combination of agents and functions towards the production of a result' (cited in Islam, 1994:2). Thus coordination can be an important mechanism through which disparate agencies come together with the intention of making their efforts more compatible (in the interest of

equity, effectiveness and efficiency). However, the obvious end of coordination is to have a harmonious relationship among actors by synchronizing their actions to avoid conflicts inevitably arising in their activities, and wastage of resources including time and energies.

But it is worthwhile to note that a serious shortfall of coordination persists at urban government bodies in Bangladesh. Very often city corporation authorities fail to provide efficient service delivery to the citizenry due to problems in intra-organizational coordination. This limitation leads to discord, friction, chaos and confusion, ultimately causing inefficiency and ineffectiveness in the activities of organizations involved in urban government bodies (Khan, 1997: 29).

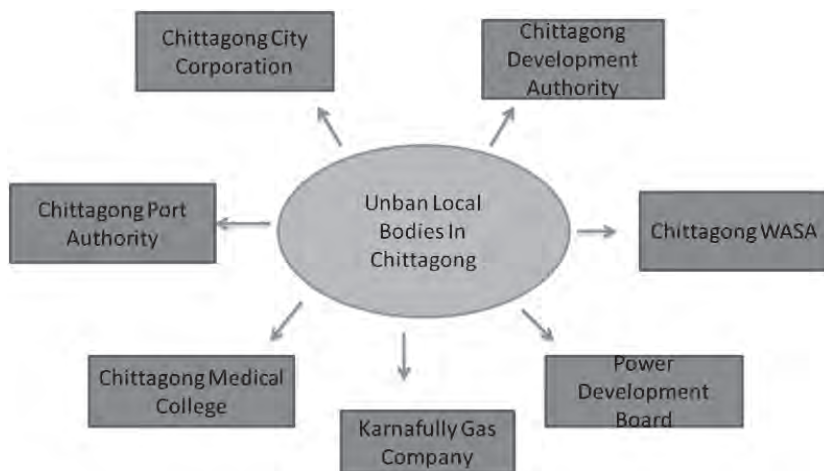
For instance the Chittagong Development Authority is an autonomous body to plan and systematic growth of the city. If Chittagong City Corporation wants to build any infrastructure in the jurisdiction of CDA it must take approval from CDA. But we see that in many times Chittagong City Corporation construct infrastructures without any approval from CDA. Shopping centre is being built by City Corporation over drains violating law and avoiding stay order issued by the High Court. This kind of infrastructure creates water logging problem during the rainy season which enhances the hassle of city dwellers. Local businessmen think that if those non approved infrastructure is built, fire extinguishing system for existing shopping centers will fall in threat. It is mentionable that, they also built a University complex in another place over drain which is not according to the systematic plan. This type of project cannot be continued without the approval of Chittagong Development Authority. (05-02-2014, The Daily Prothom alo).

### **Coordination in Urban Local Government Bodies in Bangladesh: A Focus of Chittagong City Corporation**

Chittagong is the second largest city and principle seaport of Bangladesh with an estimated population of over 6.5 million people. It serves as the administrative capital of Chittagong Division. A number of autonomous and semi-autonomous departments and agencies under different ministries are responsible for providing services at local level in Chittagong. Key organizations serving at City level are the Chittagong City Corporation, Chittagong Development Authority and Chittagong Water Supply and

Sewerage Authority (CWASA). Other departments and agencies are the Power Development Board (PDB) and Karnafully Gas Company under the Ministry of Energy and Mineral Resources (electricity supply), Chittagong Medical College and 8 Department of Health, under the Ministry of Health (health services), and Chittagong Port Authority under the Ministry of Shipping (operates the port and port development).

### *At a glance Urban Local Bodies of Chittagong City*



Like other city corporation areas Chittagong City Corporation is not out of the array of coordination problem between different urban local government bodies. There is a striving need of coordination among these departments for nation building purposes. But we get a depressing picture in this regard. At present there are hardly any formal or informal arrangements for coordination/ among urban local government bodies working at the same level. In fact, it is only during training programs or conventions arranged by the national government that functionaries of local government come together and get to know one another's problems to some extent. However, such get-togethers are few and far between (Siddique, 1994: 304-305).

### **Discussion:**

Lack of coordination between different urban bodies create many hassles which are narrated below

**Water Logging Problem:** The people of Chittagong city and its adjoining areas are suffering from water logging for decades but there is apparently no

project to mitigate the problem either by any local government agency including Chittagong City Corporation (CCC) or by the government. It is a common scenario that Chittagong city is flooded by rainfall in the rainy season. Streets, shopping centers usually go under knee-deep water, and houses are flooded, causing untold sufferings to the city dwellers. This problem is getting bad to worse day by day due to lack of coordination among Chittagong Water Supply and Sewerage Authority, Chittagong Development Authority and Chittagong City Corporation (The Daily Star, 17 th August 2009). For example people suffered immensely for torrential rain in June, July and August this year which submerged the low-lying areas (Bakalia, Nasirabad, Patenga, Dewanbazar, Chawkbazar, Agrabad, Halishahar, Kapasgola, Chandgaon, Shulakbahar, Enayet Bazar, Boropol, Muradpur, Sholoshahar, Bahaddarhat and Probartak intersection) in the city. Commuters had to suffer quite a lot through filthy water from overflowing roadside drains. Offices and different educational institutions-bound people faced water logging problem mostly.

In this regard Bijoy Kumar Chowdhury, co-chairman of CCC standing committee clearly stated that no significant project was taken up by CCC to excavate the city's canals this year except Dom Khal, on which Tk 8 crore was spent. CCC cannot keep up the regular cleaning and excavation of canals due to shortage of manpower and funds. He further commented that the issue of water-logging cannot be mitigated without coordinated efforts between Chittagong Water Supply and Sewerage Authority, Chittagong Development Authority, and CCC (Chakraborty 2014).

**Absence of proper carpeting after road digging:** It is a common scene in most of the important roads and highways that different organization such as PDP, WABDA, WASA, Karnafully Gas Company dig the road for their own purpose in Chittagong city. But this becomes a matter of suffering and pain for the citizen because the carpeting of the roads remains incomplete due to the negligence of concern authority. For example the road starting from Almas to Gol pahar turn which is known as Mehdi bag road is in a terrible condition. Its length may be 1 km long having at least 7 places dug of ten to twelve feet. This was done for residential gas connection by Karnafully Gas Company. There are education centre, private hospital, residential and non residential buildings and business centre on both side of the road. To avoid

jerking and accident in this type of shabby road the vehicle moves on very slowly which creates serious traffic jam. A pedestrian Mamunul Islam shared his woes that he was going to a nearby private hospital situated at Mehediabag where they experienced severe jerking which made the condition of his sick brother bad to worse. It is a matter of great regret that the condition of the most roads in Chittagong city are same and the matter becomes more apathetic when the city corporation shows indifference to public sufferings and pay no heed to the reconstruction of the roads. Moreover not all the roads and footbridges within the city are owned and constructed by the CCC. The other players are the Roads and Highways Department, CDA and sometimes even the LGED. As there is no coordination mechanism, huge mismanagement is created in this regard. Sometimes it is seen that CDA constructs roads and hand over it to CCC for carpeting. But City Corporation does not start their job in time. It not only damages those roads but also creates immense suffering to the city dwellers.

**Lack of proper drainage and sewerage system:** Sometime the urban bodies blame each other for any kind of unprofessional conduct, such as the responsibility, cleaning of surface drains belongs to CCC and the sewerage system to WASA. But due to the lack of collaboration, the two organizations constantly blame each other for the poor waste disposal from the drains. Though the main responsibilities of city corporation is to keep the drainage clear for proper water flow but we see that they avoid their duties by not clearing the drain regularly which creates serious water logging problem in time of monsoon due to heavy downpour.

**Frequent accident occurred by bettery run rickshaw :** It is noticeable that the urban bodies sometimes try to avoid their responsibilities or failure to tackle some kind of misconduct. For instance the city dwellers face a common problem regarding motor rickshaws. About 35 thousand motor rickshaws are plying on the roads in this city without taking license from the city corporation or from Bangladesh Road and Transport Authority (BRTA). Though paddle based rickshaws are converted into motor vehicle by only attaching rechargeable battery but without structural change. Moreover the driver of this speedy vehicle has no professional training. For which traffic congestion and a number of accidents often takes place. These rickshaws are operated by rechargeable batteries which consume a huge amount of electricity. An official of BRTA said that there is no rule for giving validity

of any kind of non mechanical vehicle and BRTA issues no license to these vehicles. On the contrary City Corporation has no control over these illegal rickshaws. Mr. Ali Ahmed, the chief executive officer of Chittagong City Corporation says in this regard, 'battery rickshaws are not in our jurisdiction and we have no control over the same. The avoiding tendency of urban local bodies has increased the problem to high range and made it beyond control (23-03-14 The Daily Prothom alo).

**Illicit activities of City corporation directly hit environment protection rule:**

Sometime Illicit activities of City corporation was directly hit environment protection rule for instance Chittagong city corporation is cutting the hill and collecting mud to fill up a hollow place of an residential area naming Lake city residential area. Consequently the hill is becoming narrow losing structure which stands erect in a dangerous position for the locality. In this case the city corporation itself is breaking the rule of safety environment. According to the opinion of Chief property officer of City Corporation,

"City Corporation is only doing this for creating proper drainage system which is not harmful for the environment."

Later on Chittagong Development authority and environment ministry find out that city corporation is doing their work without taking permission from environment ministry. This type of illicit work increases the possibility of landslide accident which we have seen earlier in monsoon season. For instance in 2007 a serious accident had occurred which took away many life. Illegal grabbing of footpath: Despite repeated eviction drives, hawkers and vendors continue to run businesses occupying footpaths and large portions of roads in different parts of Chittagong. Illegal parking of bicycles and motorbikes is also taking place unabated on the walkways and pedestrians are being forced to risk their lives by walking in the roads. One of the main duties of city corporation and CDA is to keep the footpath free for city pedestrians but ironically we see that lack of collative action between them create golden opportunity for the illegal grabber to occupy most of footpath illegally. The pedestrians have no option but to walk on road as the footpath are blocked by the illicit grabbers which sometime causes fatal accident. Seeking anonymity, a high official of CCC, said: "When journalists write about the issue, drives are conducted to evict them. But, the illegal occupiers get back to business on the same spot after some time due to a lack of



monitoring. (Mahmood 2013)

**Illegal structure:** City corporation is constructing a shopping centre by disobeying the rule of high court. For example in Bohotdarhat area a shopping mall is under constructing on the slab of drain which will definitely create huge havoc of water logging in rainy season .in this case city corporation is playing a duff and dump role with the citizen. Not only that they already have a university campus on the slab of drain and another one is over a CNG gas station which is really risky for the students. Perhaps this type of ridiculous activities of City Corporation will give birth to another Rana plaza devastation which took more than 1100 life. So immediate precaution should be taken to stop these harmful constructions.

**Traffic congestion:** The city people are yet to get rid of perennial traffic congestion in the port city due to lack of proper traffic management by the authorities concerned. Stakeholders hold the lack of coordination among Traffic Division of Chittagong Metropolitan Police (CMP), Chittagong Development Authority (CDA) and Chittagong City Corporation responsible for the tailbacks while the authorities blame each other for the problem. An intense traffic jam, especially during morning and evening peak hours, kills time and put a negative impact on the commuters' work, the city people allege.

The gridlock intensifies at almost every intersection of the city especially at the CDA Avenue, Agrabad, Bahaddarhat, Mehedibagh, Saltgola, Jubilee Road, Jamal Khan, Muradpur and Oxygen.

Traffic Division thinks that the roads cannot accommodate the increased number of vehicles plying across the streets, and that is the main reason for the tailbacks. But CCC and CDA do not take proper action in this regard.

**Coordination problem between central and local government:** Sometimes the coordination problem between central and local government bodies creates complexity in the way of development .For some projects City Corporation needs help from central government. But we know about the procrastination of our bureaucracy.

The construction work of Chittagong Chaktai Meriners by-pass road has not been started yet though seventy percent of the total allocated money of the

project has already been spent. The duration of the project will be expired after three months. The required money for land acquisition regarding road construction has already been deposited to LA section of Chittagong District administration. But the road construction work has not been started till now because of non transfer of land. On the other hand, Chittagong District Administration says the land acquisition program is under processing. For this reason, wastage removal (sewerage system) of Chaktai canal and soil lifting works are being hampered (04-04-14, The Daily Prothom Alo).

From discussions above, it is not hard to understand that a city cannot develop in such a unplanned way, where lack of coordination is a great obstacle in the way of development.

### ***Empirical Finding***

In order to collect primary data the authors of this article interviewed some high official of Chittagong City Corporation.

#### **Chief Executive Engineer, Mokter Hossain said**

*"Once working jurisdiction of City Corporation was large. But now a days, as the population is increasing rapidly there are many other service providing agencies beside City Corporation. They are all working for the development of the city. But these organizations belong to different ministry. Such as we work under the ministry of LGRD and CDA works under the ministry of Housing and Public works. Development works of these organizations depend on the collection of fund from different ministries. For this reason we cannot coordinate with other organization. We start our development project when we collect fund. So very often it is notable that when we finish our work, other organizations start their work in the same place for their purpose. That is why serious mismanagement is visible during development works."*

#### **He also stated that,**

*"In developed countries service providing agency in city area arrange their works in a coordinated way. But in our country we try to solve the problem only when it takes an acute position."*

**When we asked about the conflict between City Corporation and CDA**

**about unauthorized infrastructure in Chittagong city, he said**

*"We have 10 Acre area of our own in the city. We constructed those infrastructures in our area. So CDA has no right to say that we are violating the Master Plan. The claim of CDA is totally self contradictory."*

**Chief Education Officer, Professor Muhammod Shahidullah.He said**

*"We need to knock City Corporation for their mismanagement in some case but do not get quick response from them often. For example waste removal responsibility lies on city corporation. But often we find their reluctance in this case. Few days back, Oporna Choron School informed us that an unclean dust bean which was near to their class room was hampering their educational activities. We instantly informed it to our chief conservancy officer but to no heed in time as usual."*

**In this regard Chief Conservancy officer Shafiqul Mannan Siddiqui said that**

*"It is not like that we are neglecting our duties . Everyday 16 hundred ton wastage is produced in the Chittagong city. We have 1950 labor to remove wastage though we need 5000. Several initiatives were taken by City Corporation to manage waste. But the main problem is lack of labor and vehicle."*

He also blamed the sensation and common sense of citizen. Although City Corporation set a time from 6 pm to 10 pm for dumping waste but most of the citizen don't pay heed to their suggestion. They throw waste all the time which creates a grubby condition. Consequently the cleaning procedure is in a hazardous position.

In a informal discussion Dr. Shairul Mashreque, professor of Chittagong University, Department of Public Administration stated his own opinion regarding the issue of coordination problem. He said,

*"It is a serious problem. At present there are many service providing agencies working in the city. But we see poor coordination among them which divert to play conflicting role. During the development work s CDA and City Corporation involve in conflict several times. Both the organizations blame each other. When an agency builds a new road and people get relieved then another urban body starts digging it. It is always*

*seen that they work in peak hour which creates traffic jam. We never expect such types of development work which creates conflict with human rights. To solve this problem we need an active coordination committee in urban level."*

We have talked with 100 city dwellers from different areas .Most of them think that they are the victim of the coordination problem of different agencies. 38 respondents said that frequent road digging is the main result of coordination problem among different agencies. They are facing traffic jam because of continuous road digging process. Another severe problem they are facing in the city is the road accident because of Motor Rickshaw. 5 of our respondents were victims and they want that government should ban this kind of vehicles as soon as possible.60 City dwellers pointed out the water logging problem in rainy season which hampers their daily work due to poor drainage system and for this they blamed weak coordination of urban bodies which sometime increases fatal cases. Most of the respondents think that the service providers of the city are not only accountable for these kinds of mismanagement but also wasting public fund.

So it is quite apparent that lack of effective linkage and meaningful integration among these city service providing bodies is a major cause of public woes.

### **Recommendation and Conclusion:**

So to mitigate or reduce the above stated problems, we recommend the followings steps:

w Urban local bodies should be accountable through regular audit, supervision, inspection.

w Coordination is must in decision-making, planning, implementation and maintenance of services provided by different agencies.

w The government should constitute a permanent independent named urban local government commission which will act as a controlling authority to resolve the dispute of inter urban local government bodies and also publish an annual report on the activities of the bodies.

w A central coordination committee should be established including the representatives of urban bodies and general people. This committee will

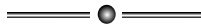


services only for the mismanagement of urban local administration. So to promote good urban governance, the urban local government bodies should maintain the effective linkage and meaningful integration among them.

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## **Spontaneous Urban Growth and Transportation Accessibility: A Study on Eastern Fringe Area of Dhaka City From Citizens' Perspective**

**Riazuddin Kawsar \* and Md. Abdus Sabur \*\***

### **Introduction**

Accessibility is an important characteristic of urban areas and a crucial link between transportation and land use. As urban transportation planning is increasingly being considered as an integral element of overall urban land-use planning, accessibility is becoming a key element in analyzing the efficiency of transportation systems (Gutierrez et al, 1998 Handy and Niemeier, 1997 O'Sullivan et al, 2000 Polzin, 1999 Tolley and Turton, 1995). Accessibility is frequently included as a goal in transportation planning, land use planning, and urban planning. The reason for this is that most would argue that accessibility is something to value and improve in an urban setting. Beyond acknowledging the importance of accessibility as a goal in planning, it has seldom been translated into performance measures by which policies are evaluated (Handy and Niemeier, 1997 in Richard L. Church and James R. Marston, 2003). The measurement of accessibility has a rich, substantive history in the urban and regional sciences. But planners and policymakers have not regularly and continuously evaluated urban facilities systems on the basis of accessibility.

The fringe area is known as unplanned growth area. The unplanned growth means the growth without plan - the growth of land use or development of land in an area without following or partially following the land use plan of the Master Plan and also without or partially following the construction rules, and without the approval of the concern authority. All of these are common phenomena of the urban fringe area. The development process and expansion of urban fringe area is occurred naturally.

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The accessibility of a fringe area is a measure of how well transportation networks interact with land use attributes to satisfy household, business, or others' preferences. Transportation and communication system are crucial to an areas development and Accessibility that is the ease of spatial interaction, the potential of contacts with activities of supplies. Accessibility provides an aggregate measure of how accessible a location is to other locations.

Dhaka City and its surroundings areas are growing so rapidly with a significant growth rate. Dhaka is expanding horizontally towards the northwest and in eastern direction. Urban fringes of Dhaka city are experiencing some impacts of unplanned development. Due to rapid growth of Dhaka City, the land use pattern of the fringe area are changing, as a result unplanned residential growth are taking place. To full fill the present demand of infrastructure development, road encroachment and spontaneous development taking place. It has adverse impact on the accessibility and it is hinder for the community living at the fringe of the city. For the future development it is essential to ensure better accessibility of transport.

Most of the cities of the Third World countries like Bangladesh are inevitably facing the spontaneous growth, suffering severe lacking of utility facilities and degrading urban setting. Considering the expansion trend of Dhaka city, eastern fringe area of Dhaka city is developing so rapidly and spontaneously. So aim of this analysis is about to identify the impact of spontaneous urban growth on the transport accessibility of urban fringe area.

## **Objectives**

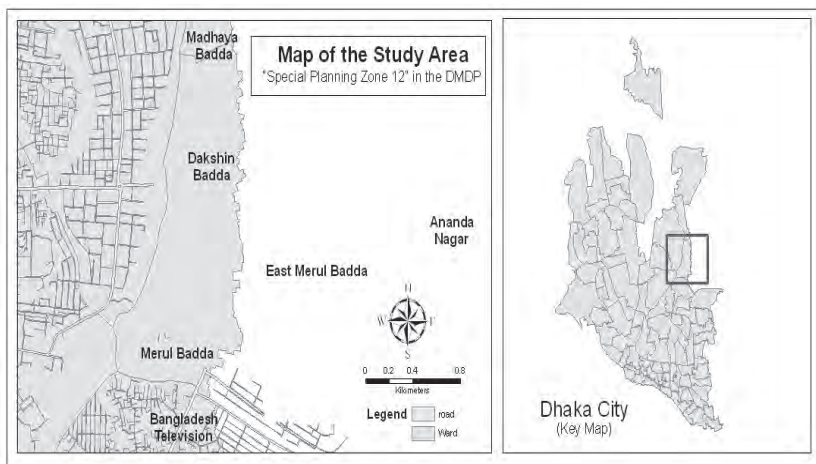
" To explore the urbanization status of the study area for assessing growth pattern.

" To portray the major challenges lead by unplanned development which are threatening for transport accessibility of the urban fringe area.

## **Study Area**

"Merul Badda" is declared as eastern fringe area in the Dhaka Metropolitan Development Plan (1995-2015); the area is denoted as "SPZ-12, the Eastern Fringe" is mostly undeveloped with some rural villages and fisheries settlements alongside Balu River. East side of the area is Pragati Sarani is experiencing rapid development by poor and by comparatively lower

income people. The zone is partly covered by private developers. In the established areas around Pragati Sarani considerable development of one to four storied walk up houses has taken place on lands freed from flooding by landfill. The area is poised to develop quicker than presently thought as the proposed Eastern Bypass road may be realized earlier than expected. In spite of all the apprehended constraints, the zone will see densification at a high intensity especially in the lake within the next 10 years.



## Methodology

'Merul Buddha', a fringe area near Dhaka city is selected as the study area for this work. The justification of selecting 'Merul Buddha' as the study area lies in the fact that the area is denoted as an urban fringe area in the Dhaka Metropolitan Area Plan. The study has been conducted on three major phases- Phase one is for identifying the present urbanization scenario and Level of urbanization as well. Phase two is for Identifying and analyzing the changes in land use over time occur due to interactions of various factors; the factors being human motives and capacities together with the characteristics of the available resources. Final phase is for assessing the transportation accessibility from citizen's perspective using Analytical Hierarchy Process (AHP) model.

This study has been conducted based on both primary and secondary information. Primary data has been collected through questionnaire survey and secondary data has been collected from the RAJUK, KCC, different Journals, Articles, internet etc. The planning strategies and design guide line under this

research is completely done by users' opinion survey and factors analysis.

The sample size is determined by the following formula (Johnson Richard A et all, Statistics Principle and methods, second Edition, p - 346):

$n^0 = p (1 - p) [z a / 2 / d]^2$ ; Where

$n^0$  = the sample size,

$z$  = the value of the corresponding to an area  $(1-a)/2$  from the center of standardized normal distribution,

$d$  = margin of error

$p$ =proportion of one of two characteristics in the population

When  $p$  was unknown, the maximum possible proportion value  $p = 0.5$ . If there is no logical estimate of  $p$ , the sample size can be estimated by letting  $p = 0.5$ . It was assumed that the error margin 5 % ( $d = 0.05$ ),  $z = 1.96$  (95% confidence interval)

The initial sample size therefore

$$n^0 = 0.5 \times 0.5 [1.96 / 0.05]^2 = 384.16$$

The sample size is adjusted by using the following equation

$n = n^0 / (1 + n^0 / N)$ ; Here

$n$  = total sample size

$n^0$  = 384.16 the initial sample size

$N$  = 15962 household

$$\text{Therefore } n = 384.16 / (1 + 384.16 / 15962) = 375.13 = 375$$

With the 95% percent, confidence level 375 of the total households is surveyed from the study area.

This paper has focused on the relationship among the development, development control and transportation accessibility. Development without development control can hamper the transpiration accessibility. In the study area, the impedances behind the accessibility have been identified and finally keep the light on the lack of development control strategies

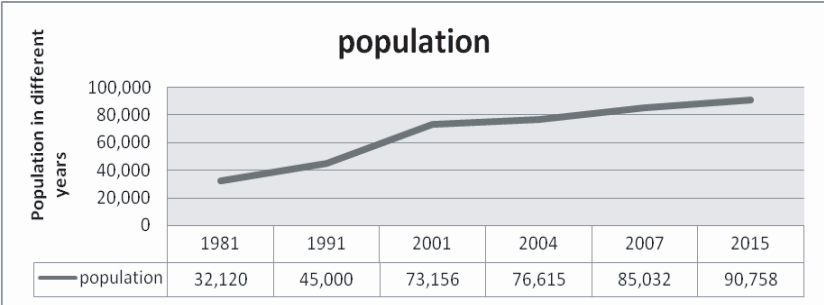
## Analysis

### Urbanization

Day by day population in the study area is increasing gradually. In the year 1981 population was 32,120, in 2007 population was 85,032 and in 2015 population of the study area would be 90,758. Increasing rate of population

is a major cause of increasing level of urbanization.

**Figure 1:** population in different year



**Source:** Estimated by JICA study team, the Study on Solid Waste Management in Dhaka city, 2007.

**Level of urbanization**

Urbanization refers to the proportion of a nation's population living in the urban areas. Its Demographic Meaning emphasizes largely on only two variables, population and location. The demographic approach focuses on location but it largely ignores individual behavior and the structure of occupations, in its most concise form it postulates that urbanization is a process of population concentration.

The degree or level of Urbanization may be denoted as,

$$Un = (Up / Tp) * 100;$$

Where Un : level of urbanization  
Up : Total urban population  
Tp : Total population

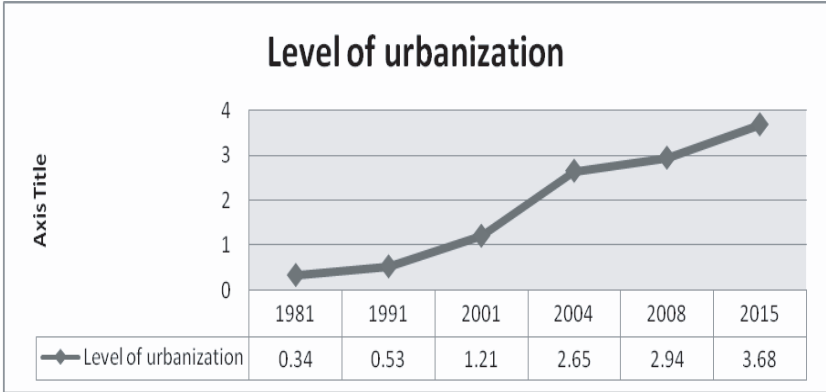
Urbanization is indicated by an increase in urbanization over a period of time. For example, in 1981 the total population of Merul Badda was 32,120 and the urban population 110 million. Hence  $Un_{81} = 110 / 32,120 * 100 = 0.34\%$ .

**Table 1:** Level of urbanization of Merul Badda

Year	Total population	Growth rate	Total Urban population	Level of urbanization
1981	32,120	0.34	110	0.34
1991	45,000	0.83	240	0.53
2001	73,156	1.86	890	1.21
2004	76,615	2.45	1880	2.65
2008	85,032	2.74	2500	2.94
2015	90,758	3.43	3340	3.68

**Source:** BBS, 2004 and Field survey, 2008.

**Figure 2:** level of urbanization



**Source:** BBS, 2004 and Field survey, 2008.

Figure 2 explains an upward trend line of changing pattern of the level of urbanization. The level of urbanization of the study area is increasing gradually. Urbanization is the end result of high rate of population growth and rapid change of land use as agricultural to non agricultural. Changes in land use are the end result of a variety of forces that drive the millions of separate choices made by individuals and governments. The fringe area of Dhaka city is fast becoming a zone of intense land use conversion in which various participants are playing their respective role. The participants in land use change process are the land owner, land sub divider, land speculator, land broker, the owner or possessor occupier, the tenant occupier, RAJUK and other public agencies, and the financiers.

Population growth and household formation is the ultimate driver of land use change, which, when combined with growth in income and wealth, spurs new housing development and consumption of land for housing. The study also found that, to solve the enormous housing problem violation of rules and deviation from the plan are taking place. In the study area there is dynamic land use changing pattern. There is increase rate of settlement and its associated land use.

## **Land Use Change**

In the study area changes in land use over time occur due to interactions of various factors; the factors being human motives and capacities together with the characteristics of the available resources. The pattern of land utilization depends upon the natural relationship between man and environment. Land use pattern reflects not only the present requirements but also the stage and development activities of any country. By comparing the present land use information with those of the previous one of a selected area, it is possible to determine how effectively the potential land in that area is being used.

Merul badda is situated at the eastern side of the Dhaka and experiencing high impact of urbanization. Merul badda got importance for its better communication facilities with Dhaka. It is also very important for industries and for the huge demand of land near Dhaka city. In the study area changes in land use over time occur due to interactions of various factors.

The study area comprised of 425 acres of land located at eastern part of Dhaka city. As stated earlier people in the study area are mostly middle and low-income groups of people. The land use is rapidly changing in the study area due to the growth of Dhaka city as because the study area is adjacent to Dhaka city. It is going to be an urbanized area with the reduction of agricultural land use and increment of non-agricultural land use.

**Table 2** reveal the overall upwards and downwards of area of different types of land use in different years in study area. Reduction of agricultural land and increment of non-agricultural land is the general findings from this table. Within 1991 to 2008 total 115.39 acres or 29.53% of agricultural land is changed from its purpose and at the same time another types of land uses are going to be increased. Other types of land use increased by demolished agricultural land. Among the different land use settlements and its associated land shared the highest rate of change then commercial and industrial land shared the highest amount of land. Road network and settlement related land use also increased where vegetation and vacant land decreases.

**Table 2:** Total Land use pattern in different years (in acres)

Category of Land use	1991		1998		2008	
	Amount	% of total land	Amount	% of total land	Amount	% of total land
Settlement and its associated land	71.48	16.81	123.66	29.09	232.52	<b>54.71</b>
Agricultural land	146.36	34.43	125.79	29.59	45.11	10.61
Institutional land	14.01	3.29	20.98	4.93	35.09	8.25
Commercial & Industrial land	10.80	2.54	32.40	7.68	51.31	12.17
Water body	70.35	16.55	49.16	9.01	11.88	2.79
Road	11.21	2.63	18.02	3.18	26.70	6.22
Forest or green space	52.61	12.37	25.45	4.09	16.02	3.76
Vacant	48.66	11.44	30.01	7.03	6.37	1.49
Total	425	100	425	100	425	100

**Source:** BBS 2004 & Field survey, 2008

### Urban sprawl

There is increase rate of population growth and population density per km<sup>2</sup> that is 85,032 and 48,918 in the year 2008. Growth rate of the area is also high that is 2.74 in the year 2008. In the study area there is increase level of urbanization and that is 2.94 in the year 2008. Because of all those factors development pattern of the fringe area is changing day by day. Development trend is high in the study and in the study area development control strategy is weak; the regulation management is weaker as well. End result is that unplanned and haphazard development is taking place in the study area. And there is a strong relationship between urbanization and urban sprawl and between urban sprawl and transportation accessibility as well.

Dhaka metropolitan development plan, voll-ii, urban area plan (1995-2015) Illustrates, the road hierarchy is poorly established in eastern fringe area, new development is taking place without any coherent road system and haphazard manner and there is a poor Institutional and regulatory framework and a reluctance to enforce existing legislation. As a consequence, the capacity of existing roads is reducing by Lack of enforcement and accessibility is deteriorating.

The strategic transport plan (STP) final report (December 2005) says that, growth would occur in accelerated contiguous growth in the eastern fringe area. The study determined that development of the land in eastern fringe area is reaching its fully capacity and noted as the largest most important and least accessible area.

This study identify that, accessibility of the study area is reducing day by day and is in threat. So that major impedance of accessibility has to be determined and take some mitigate measure. In this study AHP model is used to determine those major impedance of accessibility.

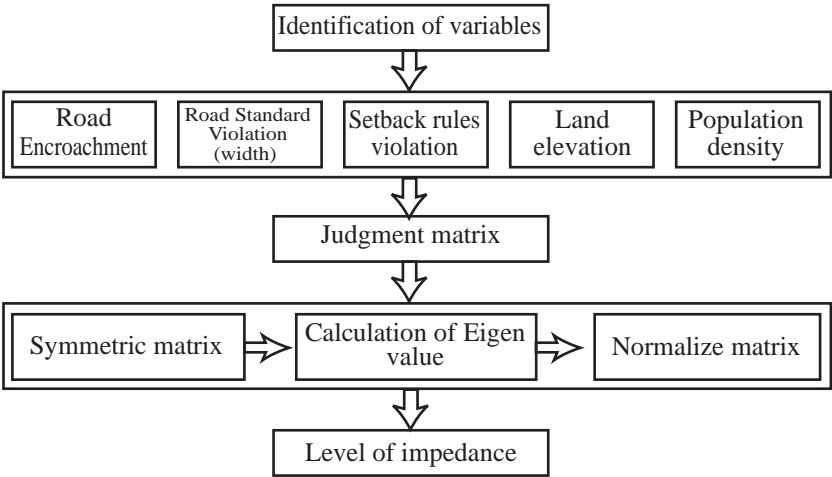
### **Transportation Accessibility**

In this study transportation accessibility is measured from citizens' perspective. According to the citizens' opinion accessibility of Merul Badda is hindered by different reasons and is in threat. Dhaka metropolitan development plan (DMDP), 1995-2015 and strategic transport plan (STP), 2005 also recommended that, accessibility of Merul Badda is reducing day by day. Causes of reducing accessibility are determined by AHP analysis according to people's perspective.

The Analytical Hierarchy Process (AHP) is a theory of measurement for dealing with quantifiable and intangible criteria that has been applied to numerous areas, such as decision theory and conflict resolution (Vargas, 1990). AHP is a problem-solving framework and a systematic procedure for representing the elements of any problem (Saaty, 1983). AHP is based on the following three principles: decomposition, comparative judgments, and the synthesis of priorities.



**Figure 2:** AHP Methodology in Brief



**Source:** Adapted from Saaty L. Thomas. 1980

For evaluation of the five criteria selected, the respondents are interviewed individually and they had to rank each of the criteria with the ranking being 5 to 1 in descending order. That is if the respondent decides on criteria 1 for example "road encroachment" being the most influencing one, he will rank it by giving "5" as a rank resembling his personal opinion. In this way, the respondent ranks each of the criteria. For ranking the criteria, the questionnaire contains a table which is provided as follows-

**Table 3:** Process of Ranking of Criteria

Road encroachment	Road standard (width)	Set back rules violation	Land elevation	Population density
5	4	3	2	1

AHP analysis is used in the present study of 100 samples to reveal the fact how accessibility of urban fringe are reducing, for this study, the study area is Merul Badda, identified as the eastern fringe in the DMDP. From field surveying, five identifiable causes were identified which are summarized from the questionnaire data in a judgment matrix of 5 by 5 arrays. Then the judgment matrix has been transformed into the transpose matrix and then to a symmetric matrix. Afterwards, we calculated the value of Theta (f) which

has can be achieved through the multiplication of the identity and symmetric matrix. Finally we got the value of the determinants from the equation: Determinant(S - q \*I) = 0. Here, the value of ? depends on the determinants. From the completion of these mathematical procedures we get the respondents choice from the five criteria in a normalized equation.

In this research, "hierarchical analysis with three degree" approach is used to provide every variable or category with weights. The following part is about how to calculate the weights. A Comparison Matrix is given by comparison between variables pair-wise according to the following formula. K ij is the criterion in Comparison Matrix, and "i" is encoding of row and "j" is encoding of volume.

- K ij=
- 0(criterion i is less important than criterion j)

1(criterion i is the same important to criterion j)

2(criterion i is more important than criterion j)

Table 4: Comparison Matrix

	K <sub>1</sub>	K <sub>2</sub>	K <sub>3</sub>	K <sub>4</sub>	K <sub>5</sub>	S <sub>i=5ki</sub>	
Road encroachment	1	2	2	2	2	9	<b>K<sub>1</sub></b>
Road standard(width)	0	1	2	2	2	7	<b>K<sub>2</sub></b>
Set back rules violation	0	2	1	2	0	5	<b>K<sub>3</sub></b>
Land elevation	0	0	2	1	0	3	<b>K<sub>4</sub></b>
Population density	0	0	2	2	1	5	<b>K<sub>5</sub></b>

**Source:** Field survey, 2008

Then the Judgment Matrix is generated from comparison matrix with related mathematical formula. The procedure is explained with a 5-variables (Road encroachment, Road standard, Setback rules violation, Land elevation, Population density) evaluation.

**Format for Judgment Matrix:**

$$r_{ij} = [(K_i - K_j) / (K_{max} - K_{min})] \times (b_m - 1) + 1$$

(i) when,  $K_i \geq K_j$

$$r_{ij} = 1 / \{[(K_i - K_j) / (K_{max} - K_{min})] \times (b_m - 1) + 1\}$$

(ii) when  $K_i < K_j$

Here,  $b_m = K_{max} + K_{min}$

n "i" and "j" of "rij" are the correspondent to the "i" and "j" from Ki and Kj.

- n "i" and "j" respectively represent the coding of row & volume in the judgment matrix.
- n  $K_i$  and  $K_j$  mean the cumulative value of every row ( $S_i = 5K_i$ ).
- n  $K_{max}$  and  $K_{min}$  respectively mean the maximum and minimum of  $K$  value (from  $K_{i1}$  to  $K_5$ ).
- n The value of  $r_{ij}$  means the values of the judgment matrix.

$K$  value (from  $K_i$  to  $K_5$ ), In this case,  $K_{max}$  is 9 and  $K_{min}$  is 3.

The value of  $r_{ij}$  means the elements of Judgment Matrix. For example, in the judgment Matrix,  $r_{11}$  refers to the row1 and volume 1, because  $K_1 = k_1$ , which accord with the precondition ( $K_i \geq K_j$ ) of formula, so it's needed to use formula to calculate the value of  $r_{11}$ , which is 1 in the following matrix. The  $r_{21}$  is  $3/25$ , which is from formula (1) because  $K_j$  less than  $K_i$  and accord with the precondition of formula ( $K_i < K_j$ ).

**Table 5:** Judgment matrix

	Road encroachment	Road standard Violation (width)	Set back rules violation	Land elevation	Population density
Road encroachment	1	25/3	12	12	25/3
Road standard(width)	3/25	1	14/3	14/3	1
Set back rules violation	12	3/14	1	1	1
Land elevation	1/12	3/12	1	1	1
Population density	3/25	3/14	1	1	1

**Source:** Field survey 2008

This table shows the relation in between two pair of criteria. For example, the relation in between Road encroachment and Road encroachment is simply 1 as their values are equal. However, the relation in between Road encroachment and road standard (width) violation is  $25/3$ . In the same way, the relation could be found in between other criteria. After plotting the judgment matrix to be examined, an Eigen vector or Eigen Value ( $\lambda$ ) have to be calculated. In this case, a transpose matrix is prepared from the present judgment matrix and then converted into a symmetric matrix. Now the symmetric matrix is multiplied with the identity matrix (a five by five matrix that only has cell values 0 and 1). First we assume a hypothetical value of  $\lambda$ . After operating the goal seek program in AHP with the

hypothetical value, we got the value of the determinant (D). Then, we use this determinant again to get the real value of ?.

**Determinant(S - q \*I) = 0 ----- (iii)**

Here, (S - q \*I) is the value that influences the determinant. Symmetric matrix has been subtracted from the multiplication of Eigen value and Identity matrix in this case. So, we call the determinant at a certain value dependent on q to make it 0. However, after calculating the total equation, q = 0.617847756, This value is named as the Eigen value or Eigen vector in this present study. When we get the Eigen value, we can easily calculate the choices of the pedestrians in a normalized scale so that it can be easily understandable. Finally a normalized table is prepared.

**Table 6:** Normalize value of different impedance.

Impedance of accessibility	Value
Road encroachment	0.4416611363
Road standard(width)	0.4924141110
Set back rules violation	0.3006227990
Land elevation	0.2251212420
Population density	0.2025524539

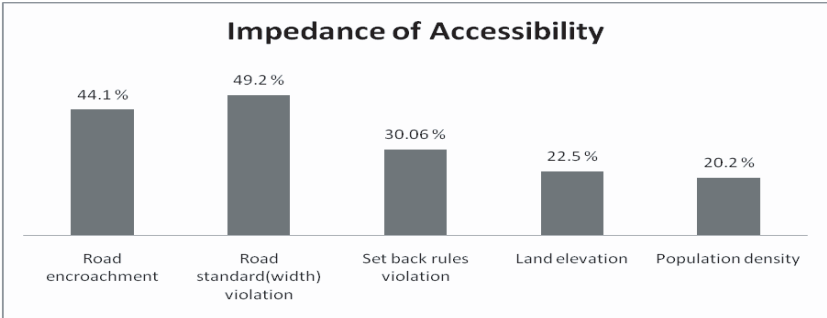
If we multiply the total value of each criterion, then we will get the total weight of impedance which is equal to 1. So, we can draw the equation from this normalized value as:

*Impedance of accessibility in Merul Badda = (0.4416611363 Road encroachment + 0.4924141110 road standard (width) + 0.3006227990 Set back rules violation + 0.2251212420 land elevation + 0.2025524539 population density) ----- (IV)*

**FINDINGS / DISCUSSION**

In AHP, the total value of the dependent variable is assumed "1". The dependent variables as shown in the preceding equation, contributes in the composition of the total value of the dependent variable "Impedance of accessibility in Merul Badda". Therefore multiplying both sides of the equation with "100" can derive a percentage distribution which makes the equation more illustrative as the following chart shows-

**Figure 5:** Impedance of accessibility of Merul Badda



According to the graph, narrow road width is the major causes of reducing accessibility of the study area. Road encroachment is the major reason of reducing adjacent road width and which is partially being one of the major impedance of the accessibility of the study area.

**Dhaka Metropolitan Development Plan, vol -2, Urban Area Plan (1995-2015)** recommended road standards are derived from consideration of traffic volumes, but were not undertaken in conjunction with the DITS. The study on road and its standards that specified in DMDP have reviewed by the experts. The recommended Land Study standards are summarized in the table below:

**Table 7:** Recommended Road Standards

Road Standards	Width (in Meter)	Width (in ft)	Remark
Major/Main Road	24.00	78.00	ROW
Arterial Road	14.50	47.50	ROW
Collector Road	13.00	42.60	ROW
Access Road-I	9.00	29.50	ROW
Access Road-II	6.00	19.70	ROW
Non Motorized Road	4.00	13.00	ROW (Pedestrian links between two access roads)
Footpath	2.50	8.20	ROW

**Source: DMDP (1995-2015)**

In the study area there is a violation and deviation form recommended road standard. According to the field survey there is clear scenario is that recommended road standard is not maintained. In the study area traffic conditions are characterized by a conflict in the use of available road space.

There is a poor Institutional and regulatory framework and a reluctance to enforce existing legislation. As a consequence, the capacity of existing roads is reduced by Lack of enforcement.

Further, the road hierarchy is poorly established, and most new development is taking place without any coherent road system and haphazard manner. As population growth in these predominantly urban fringe areas and as car ownership and traffic density increase, accessibility will deteriorate. With every new phase of peripheral urban growth, especially in the east, the ability of such urban fringe areas to function at levels of even minimal efficiency is increasingly compromised. Planning and safeguarding access to new and rapidly growing fringe urban areas (and securing and protecting right-of-way (ROW) for other infrastructure services) should be a major priority. According to the field survey road width condition of the study area as follows:

**Table 8:** Adjacent road width

Road width(ft)	Frequency	Percent (%)
<b>5 to 8</b>	160	42.7%
<b>8 to 12</b>	115	30.7%
<b>12 to 16</b>	72	19.2%
<b>16 to 20</b>	28	7.5%
<b>Total</b>	375	100.0

**Source:** field survey, 2008

Road encroachment, setback rules violation, building height rules violation is the common phenomena in the study area. According to the field survey of transparency international Bangladesh, 2006, the scenario of violation of building construction rules in the study area. There is 98% of road encroachment violation and 100% of setback rules violation are taking place in the study area. Road encroachment and narrow road width is the end result of building construction rules violation and its effect direct goes to the accessibility of the study area. Along with this the field survey also justified that.

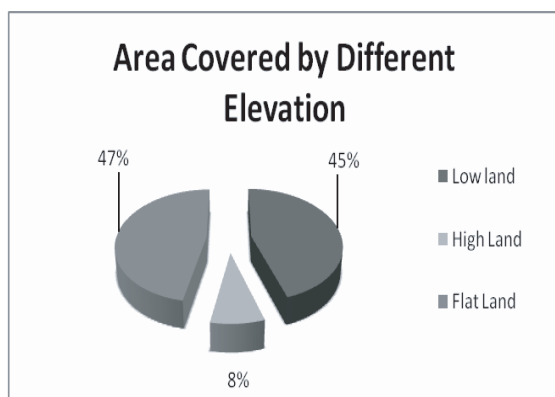
Land elevation is another component of controlling accessibility of the study area. According to the **Dhaka Metropolitan Development Plan, voll -2,**

**Urban Area Plan (1995-2015),****Table 9:** Elevation of the study area

Elevation (in meter)	Covered Area (in acre)
<b>Less than 1</b>	<b>17.88</b>
<b>1.0– 1.9</b>	<b>148.83</b>
<b>2.0– 2.9</b>	<b>128.51</b>
<b>3.0– 3.9</b>	<b>44.76</b>
<b>4.0– 4.9</b>	<b>32.70</b>
<b>5.0– 5.9</b>	<b>38.35</b>
<b>6.0– 6.9</b>	<b>12.93</b>
<b>Total</b>	<b>425</b>

**Source:** DMDP (1995-2015)

Table 3.9.4.2.4 shows the elevation of the study area. According to the survey data, most of the study area has an elevation of four to six meter. The highest elevation is seen in the northern part of the study area and it covers very small areas. At that point, elevation reaches nearly 7 meter. The lowest elevation is seen in the western part of the study area. Lowest elevation is seen in the side of the Balu River and at that point elevation reaches less than 1 meter.

**Figure 6:** Area covered by different elevation

Low land (Elevation is less than 2 meter)

Flat land (Elevation is 2 to 4.9 meter)

High land (Elevation is 5 to 6.9 meter)

**Source:** DMDP (1995-2015)

From the figure 3.9.4.2.2, it is seen that most of the areas are flat which represents 47 percent of total area. There are many low lands in the study

area which covers 45 percent of the total area. Only minor portion of the lands (8 percent) are high. Flood and water logging are occurred on the undulation of the land. When the lands are more undulated, there is a great chance of water logging and flood. In the study area there is undulation of low and flat land, so that there is chance of reducing accessibility.

## **Conclusion:**

Uncontrolled and spontaneous development is a typical characteristic of metropolitan cities of Bangladesh. Being a poor and underdeveloped country this process create sprawl especially at the fringe area of existing city arena. Development in the rural-urban fringe cannot be hindered, but can be controlled. The rapid land use changes in this transitional and semi-urban system often create serious planning problems. Despite acute limitations, this study tries to provide an insight into the development process of urban fringe to control its transformation into an urban sprawl. It should be noted that the study has made a comprehensive analysis of land use changes pattern and its impact on the urban fringe area of Dhaka city, largest metropolitan area of Bangladesh and has added to general understanding of the impact of the urbanization in the fringe area which leads unplanned development and for these fringe area being less accessible. This study, particularly aims to provide the planner with a basic view of the trend of growth and process of development in the rural-urban fringe. This study find out that, unplanned development have a direct impact on the transport accessibility of urban fringe. It also points out the problems of unmanaged growth which can be managed if noticed at an earlier stage.



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## **NGO's Development Management: A Focus on Governance and Its Challenges**

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### **Introduction**

Non-governmental organization (NGO) are a global phenomenon. The size and are of coverage and spending capacity of NGOs have registered a significant increase. Successful models of some NGOs in Bangladesh in the areas of micro credit, non-formal education and primary health care are being replicated in other developing countries. NGOs play dominant role in the polity also. NGOs policy advocacy role established pioneer innovative programs in Bangladesh on underprivileged children's education sector. NGO focuses 'earn and learn' strategy trying to build on the strengths that the underprivileged children already possess. That is to say, there are a lot of things children can learn through working that are not taught within the confines of a classroom. To disregard the knowledge that a child gains from work and assume that she knows nothing for not being in school is to further undermine that Child self esteem and self-confidence. It aims to ensure access equity and quality education to these underprivileged children. Quality non-formal education can help prepare underprivileged children for broader options available to them so that they can make their choices regarding their future - to access further education, to gain access to appropriate skill training and work or to negotiate for better conditions in their present work. It is also trying to provide a child friendly environment where interactive leaning takes place. By coming to these learning centers. Children get an opportunity to mix with their peers and get peer support, and meet teachers who are not punitive in their ways. These interactions help children to gain self-confidence.

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Policy advocacy role of NGO has its impacts on government economy and society. This is linked to the concept of governance and the process of operationalizing the key precepts of good governance to help the underprivileged children and their poor guardian to fight for their rights. Non Government Organization (NGO) generally means any organization not established by government. However, in the context of NGO work over the last three decades, the term now refers to social organizations, mostly of voluntary and non-profit character, that are engaged in development work (Banglapedia). During the past two decades, non-governmental organizations (NGOs) working in development have increased their profiles at local, national and international levels. NGOs have come to be recognized as important actors on the landscape of development, from the reconstruction efforts in Indonesia, India, Thailand and Sri Lanka after the 2004 tsunami disaster, to international campaigns for aid and trade reform such as 'Make Poverty History'. NGOs tend to be best known for undertaking one or other of these two main forms of activity: the delivery of basic services to people in need, and organizing policy advocacy and public campaigns for change. At the same time, NGOs have also become active in a wide range of other more specialized roles such as emergency response, democracy building, conflict resolution, human rights work, cultural preservation, environmental activism, policy analysis, research and information provision.

It is probably impossible to say how many NGOs there are in the world, since there are no comprehensive or reliable statistics. Some estimates put the figure at one million, if both formal and informal organizations are included, while the number of registered NGOs receiving international aid is probably closer to 'a few hundred thousand'. The United Nations currently estimates that there are about 35,000 large established NGOs. Nor are there accurate figures available for the amount of aid overall that NGOs receive, but there is agreement that the increase has been dramatic since the 1980s, when almost all foreign aid tended to be provided to governments. The growth of NGOs in Bangladesh began in the aftermath of the WAR OF LIBERATION in 1971 when such organizations stepped in to participate in the massive task of rehabilitating a war-ravaged country. Till now there are about more than 20,000 NGOs are in Bangladesh.

"Private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development"-----World Bank NGOs are 'privately constituted organizations-be they companies, professional, trade

and voluntary organizations, or charities - that may or may not make a profit'-----**Sunkin et al. 1993**

NGOs are groups of individuals organized for the myriad of reasons that engage human imagination and aspiration'.----- **Charnovitz, 1997**

A more common-sense definition focuses instead on the idea that NGOs are organizations concerned with the promotion of social, political or economic change-an agenda that is usually associated with the concept of 'development'.

In a wider usage, the term NGO can be applied to any non-profit organization which is independent from government. NGOs are typically value-based organizations which depend, in whole or in part, on charitable donations and voluntary service. Although the NGO sector has become increasingly professionalized over the last two decades, principles of altruism and voluntarism remain key defining characteristics.

**Table 1:** The diversity of NGO acronyms

AGNs: Advocacy groups and networks	Dotcause: Civil society networks mobilizing support through the internet
BINGOs: Big international NGOs	ENGOS: Environmental NGOs
BONGOs: Business-organized NGOs	GDOs: Grassroots development organizations
CBOs : Community-based organizations	GONGOs: Government-organized NGOs
COME'n'GOs: The idea of temporary NGOs following funds!	GRINGOs: Government - run (or - inspired) NGOs
DONGOs: Donor-oriented/organized NGOs	NGIs: Non-governmental interests
GROs: Grassroots organizations	NGIs: Non-governmental individuals
GRSOs: Grassroots support organizations	NNGOs: Northern NGOs
GSCO: Global social change organizations	NPOs: Non- profit or not-for-profit organizations
GSOs: Grassroots support organizations	PDA: Popular development associations
IAs: Interest associations	POs: People's organizations
IDCIs: International development cooperation institutions	PSCs: Public service contractors
IOs: Intermediate organizations	PSNPOs: Paid staff NPOs
IPOs: International/indigenous people's organizations	PVDOs: Private voluntary development organizations
LDAs: Local development associations	PVOs: Private voluntary organizations
LINGOs: Little international NGOs	QUANGOs: Quasi-non-governmental organizations
LOs: Local organizations	RONGOs: Royal non-governmental organizations
MOs: Membership organizations	RWAs: Relief and welfare associations
MSOs: Membership support organizations	SNGOs: Southern NGOs
NGDOs: Non -governmental development organizations	SHOs: Self-help organizations
TIOs: Technical innovation organizations	VNPOs: Volunteer non-profit organizations
TNGOs: Trans-national NGOs	VOs: Village organizations
VDAs: Village development associations	VOs: Volunteer organizations
Vis: Village institutions	

**Source:** adapted from Najam (1996); Lewis (2007)

### **Categories of NGOs**

The World Bank tends to interact with the following two main categories of NGOs:

- 1) Operational NGOs - whose primary purpose is the design and implementation of development-related projects.
- 2) Advocacy NGOs - whose primary purpose is to defend or promote a specific cause and who seek to influence the policies and practices of the Bank.

### **Framework for NGOs**

Worldwide, there has been growing participation of civil society in public life, particularly in the last 30 years. We can identify four basic reasons for this phenomenon.

*Firstly*, the disenchantment with and mistrust officialdom.

*Secondly*, a greater awareness of certain problems that have both a local and a global dimension principally the increase in poverty and environmental degradation.

*Thirdly*, the rapid globalization of the world economy in the last two decades, as a consequence of deregulation and privatization policies.

*And lastly*, largely due to the spread of neo-liberalism; declining living standards among large sectors of the North a situation that lends itself to unsupportive or even racist attitudes towards the South, and a denial of the shared causes linking their poverty with ours.

Within the NGDO sector, we shall refer especially to those organizations that are tied to social movements, and which:

1. Influence private and public decision-making that affects them directly, or affects third parties whose interests they defend (by delegation);
2. Rely on a wide social base;
3. Claim to hold alternative ideologies or values;
4. Do advocacy and lobbying on behalf of people or communities whose human rights are infringed by the despotic exercise of economic and political power, both locally and internationally

For instance, various ecological, pacifist, human rights, ethnic minority, feminist, and international solidarity organizations belong to this kind of 'anti-system movement' (Wallerstein, 1984). In some cases, they can be defined as New Social Movements (NSMs), sharing many obvious similarities with the trade union movement of the nineteenth century industrial revolution.

However, for organizations that are involved in the social field, the welfare and rights based campaigning aspects of their work often go on simultaneously, and there are frequently ideological and institutional tensions in trying to harmonize these. This tension is particularly prevalent amongst NGOs, an unfortunately imprecise term (perhaps 'International Solidarity Organizations' ISO as used in Francophone areas, would be a better alternative?)

Therefore, mostly concerned with the term 'non-governmental organization' in this narrower sense. Even so, we still need to recognize a high level of diversity among different types of NGO. One basic distinction common in the literature is that between 'Northern NGO' (NNGO), which refers to organizations whose origins lie in the industrialized countries, and 'Southern NGO' (SNGO), which refers to organizations from the less developed areas of the world. NGOs in the post-Soviet or 'transition' countries, and more recently in China, also need to be fitted into what increasingly seems like an outmoded North-South geographical frame of reference. Our definition of NGO includes membership forms such as community based organizations or people's organizations, as well as intermediary NGOs working with communities from outside, sometimes termed grassroots support organizations (GSOs), as Najam (1996) sets out.

### **NGO Strength**

Because the nature and quality of individual NGOs varies greatly, it is extremely difficult to make generalizations about the sector as a whole. Despite the diversity, some specific strengths generally associated with the NGO sector include the following:

- Strong grassroots links
- Field-based experience
- The ability to innovate and adapt

- Process-oriented approach
- Participatory methodologies and tools
- Long-term commitment and emphasis on sustainability
- Cost-effectiveness

### **Some Key Issues of NGOs**

#### **Funding Issues**

NGOs are generally cost-effective. They should not be, however, be viewed as a "low-cost alternative" to other types of implementing agencies.

#### **Importance of Clearly Defined Roles and Responsibilities**

Establishing and maintaining an effective trilateral working relationship can be a complex task. A number of projects have experienced difficulties due to lack of communication among government, NGO and the Bank and a lack of clarity concerning specific roles, responsibilities and lines of authority.

#### **Access to Documents**

It is important to ensure that participating NGOs have access to project documents which relate to their collaboration. Wherever possible, credit agreements and procurement documents should be shared with NGOs. Projects with substantial NGO involvement have usually appointed an official liaison person and established institutional mechanisms to ensure on-going communication

#### **Governance**

Governance of course with the addition of prefix 'good' is sinequanon for efficient development management. NGO's development intervention is now a favorite of intellectual discussion as it very much concerns about institutional governance with the participation of the stakeholders to fulfill its desired objectives. Beneficiaries of public policy look to NGOs for better service for ameliorating their socio-economic conditions. The NGOs with voluntarism are expected to fulfill expectations of various groups of stakeholders through its well and systematic intervention. Its governance-led distributional profile is based on the parameters of participation, empowerment and accountability.

NGOs have long been handling their projects by structured flexibility

approach, self-assessment mechanism, regular monitoring and intermittent change of techniques, if situation demands. This is really efficient and apt management of implementation. They are found working in an enabling working environment that they themselves created with participatory component, decentralization and motivation. In health care sector, for illustration, there has emerged some positive changes in health behaviour. Based on the index of health development there has been astounding improvement in health awareness, especially awareness about STD/HIV/AIDS, immunization, balanced diet and maternity services.

We may have much to take lessons from NGO's health management projects. This is of course result-oriented. The paramedics are well trained health workers doing their utmost to the satisfaction of the people. The resource persons at the apex of project management treat things well in a professional manner.

NGOs like BRAC, CRITAS, ASA, Proshika, YPSA UNICEF etc have come forward to enlighten our society with a scheme of non-formal education. They happen to address the issues of drop-outs. Thing is that Formal education is not inclusive and participatory. The poor child is left out. He/she cannot benefit from formal schooling finding it hard to cope with a rigid institutional situation and the demands of close system and thus drop out. All the same NGOs non-formal education has proved to be good alternative motivating the poor children. In fact non-formal institutions like open air school, distant education and mobile schooling are most likely to cater to the needs of street children, maverick and vagrant.

The NGOs are complementing the government in the implementation of Child development policies. The major areas/sectors or policy goals are 'basic education', 'health and nutrition', 'water and environmental sanitation', 'children in need of special protection', 'social integration, participation and cultural affairs', and 'information and communication'. The other goals were gender equity, elimination of child labor and children requiring special protection.

In pursuance of the fundamental principles of the Constitution and the UN CRC, the Government of Bangladesh decided to formulate and implement a National Policy on Children (NPC) in December 1994, to ensure the



security, welfare and development of children. The policy highlights the importance of providing adequate services to children, including health, nutrition and education. It also stipulates that a "proper family environment" is one of the main preconditions for the proper development of a child. The NPC identified the need for assistance to children in difficult circumstances, and ensures the protection of the legal rights of children within the national, social and family context. The policy clearly states that the Government has adopted the principle of 'Best Interest of the Children' - that is, in all national, social, family or personal situations, the best interest of the child will be held paramount.

Most experts on child rights opine that child related policies concern about children development, their participation and their rights. Obviously we have a cluster of good laws and programmes in connection with child rights and development. Notwithstanding legislative measures and programmatic intervention the most vulnerable children continue to suffer manifold harassments and negligence. They are growing up on the margins of society in a state of neglect and deprivation, without educations, affection, care and guidance. Once a child takes to the street there is a strong possibility that the child, both girls and boys may end up sexually abused and exploited. This is because survival becomes the sole priority - in the absence of alternatives, street children are forced to do anything, which keep them alive.

When the community makes plans, it does not take into consideration the poor children's plight. They tend to be excluded from participating in most of the activities and facilities of other children. This is one reason why they often do not have access to medical, educational, recreational and vocational resources. They face problems such as lack of vaccinations; poor health, illiteracy and they cannot acquire skills needed for finding jobs.

Society perceives the vulnerable children as children in difficult circumstances. Their vulnerability is at peak. This is due to the state of gap in existing laws and policies to protect their rights. There is no protection against child labour that may be termed as torture. ILO and Unicef advocate for measures to curb child labour. The UN Convention on Rights of the Child (UNCRC) has been universally ratified. The present government is actively considering formulation of a national child labour policy. It is, of course, a good move. We have a child policy. But we do not have child

labour policy. We may contend that if there is child labour there must be a control mechanism to erase its evils through legislation and public policy. One may wonder whether all such policy and legislative measures will be mere paper tigers. We have laws to protect child workers from the deluge of exploitation. The problem lies with implementation. If antiquated legal procedures and codes framed during the colonial period come into conflict with a future child labour policy the implementation process will be in the dock.

### **Challenges and Opportunities Facing NGO's Development Manage**

**Lack of Funds:** NGOs are expressing difficulty in finding sufficient, appropriate and continuous funding for their work. They find accessing donors as challenging as dealing with their funding conditions. They perceive there to be certain cartels of individuals and NGOs that control access to donor funds. They have limited resource mobilization skills and are often not looking for funds that are available locally, preferring to wait for international donors to approach them. There is a high dependency of donors and a tendency to shift interventions to match donor priorities. There is a lack of financial, project and organizational sustainability.

**Poor Governance:** This is recognized within the sector as a whole, within the NGO Council and within individual NGOs. Knowledge of good governance varied widely, with some regions indicating very little understanding of why NGOs are required to have Boards or what their roles and functions should be. Many other participants explained that it is difficult to achieve good governance with founders who wished to own their NGOs for their own purposes. Participants with better understanding of good governance appreciated that this is fundamental to NGO accountability and transparency. Many NGOs mismanage their resources, quite often with the involvement and encouragement of their Boards that eat their NGOs resources. Finding Board members can be difficult if you are not willing to pay them or provide allowances.

**Absence of Strategic Planning:** Few NGOs have strategic plans which would enable them to have ownership over their mission, values and activities. This leaves them vulnerable to the whims of donors and makes it difficult to measure their impact over time.

**Poor Networking:** This is identified as a major challenge. It is the cause of duplication of efforts, conflicting strategies at community level, a lack of learning from experience and an inability of NGOs to address local structural causes of poverty, deprivation and under-development. Negative competition for resources also undermines the reputation of the sector and the effectiveness of NGO activities at community level. As a result there is a great deal of suspicion among NGOs, secrecy and lack of transparency. Many NGOs, large and small, intervene at community level without any community mapping and implement projects without due regard to ongoing community initiatives. NGO politics: one fighting another, one with resources but no community presence, another with community presence but no resources.

**Poor Communications:** NGOs also recognize that there is very poor communication within the sector. The majority of NGOs have little or no access to reliable email and internet connections, they receive almost no literature on development issues and are generally out of touch with issues of global, regional and national importance. There lack of understanding of the difference between the Board and Council is just one example of the knowledge gaps that exist.

**Limited Capacity:** NGOs recognize that many of them have limited technical and organizational capacity. Few NGOs are able or willing to pay for such capacity building. Weak capacity was identified in fundraising, governance, technical areas of development, and leadership and management. Some NGOs felt that the existence of quality standards would assist them to develop the required capacities. The speed of technology changes is also a challenge particularly in areas of IT capacity.

**Development Approaches:** Many NGOs are still focusing upon what some refer to the 'hardware' approach to development, i.e. the building of infrastructure and the provision of services; rather than what some refer to as the 'software' approach of empowering people and local institutions to manage their own affairs. Other NGOs seem unaware of changes in the role of government, the changing Aid paradigm, and the effectiveness of a "right's based" rather than "welfare" approach. While it is becoming harder to fund and sustain service delivery interventions, most local NGOs persist with them. Community poverty and illiteracy rates remain significant.

NGOs are acutely aware of the increasing and enormous needs of poor people and feel at a loss as to how they can respond to all these needs. There is a lack of sustainability and ownership of development interventions by communities. Some communities have been spoilt by dependency creating interventions and are not inclined to do things for themselves. It is difficult to keep our programmes relevant to changing situations and the culture of handouts is hard to counter. There is no accepted code of ethics and conflicting approaches.

**Relationships with INGOs:** There is considerable concern among local NGOs that the giants, mainly INGOs, occupy so much space that it is very difficult to find room for themselves. INGOs often intervene without any concern for the building of sustainable local CSOs. They pay government and community members to participate in their projects while local NGOs have no facility for doing so. INGOs are also perceived to be driven by short-term project approaches that are not locally sustainable. They pay high salaries and attract local NGO personnel. They are also responsible for creating the high cost image that undermines the credibility of the sector. It is difficult and inappropriate for local NGOs to compete with the international and national giants. Many external organizations are not working with local CSOs, they simply provide unfair competition and hold back the development of our sector and cost effective development interventions. International NGOs should not be allowed to work on the ground, they pay allowances and manipulate the people; cannot run this nation on the whims of international NGOs; they suppress local NGOs.

**Political Interference:** In some regions, in particular South Rift and North Eastern, NGO leaders identified the interference of local politicians and civic leaders as a major hindrance to their work. Where NGOs are involved in sensitive issues, such as land disputes, local leaders can threaten NGOs with de-registration. NGOs are not aware that the Board - and potentially the Council - are there to protect them from such intimidation.

**NGO Board and NGO Council:** Many participants were poorly informed of the difference between these two institutions, NGO Coordination Board and the National Council of NGOs; and unaware of their roles and responsibilities in relation to them. Most participants expressed the opinion that the NGO Code of Conduct is outdated and needed updating soon. This

group of participants also complained that the NGO Council is poorly governed and doesn't provide any services to the NGOs. They were aware that the NGO Board does not respect the Council and that there is mistrust between the Government and NGOs. Participants are well aware that the NGO sector has a very poor public profile which they see as mainly due to the leadership wrangles, politics and infighting at the Council and among NGOs. While most participants appreciated the positive role of the NGO Board in creating an enabling environment for NGOs, a few participants felt there was a lack of political good will towards NGOs in some parts of government. Some branches of government are thought to deliberately frustrate NGOs. A few participants felt that government bureaucracy holds back the NGO sector and its members.

## **Opportunities**

**Local Resource Mobilization** provides potential for NGOs to raise funds from local businesses, individuals, government and locally generated income. To do this NGOs must have strong governance and accountability mechanisms, clear strategies and local credibility

**Local Networking** provides opportunities for mutual learning, identifying appropriate development initiatives, generating learning resources, improving coordination and cooperation with local government, harmonizing approaches to development, and pursuing effective local advocacy. Form consortia to source funding from the donor community (larger projects to access larger donors).

**Regional NGO Networks:** Regional and thematic networks present opportunities to NGOs to share research, approaches, resources, capacity and work with both GoK and the corporate sector. Strong regional networks also provide the basis for supporting district level networks and ensuring the NGO Council remains strong by keeping its membership strong.

**Effective support from the NGO Board and NGO Council:** Maintaining NGO records with the NGO Coordination Board will enable NGOs to received regular information and gain access to basket funding. The NGO Coordination Board is also working hard to improve the public image of NGOs through the promotion and support of annual NGO Week. A more effective NGO Council supported by its members and responding to NGO

expressed needs, will provide appropriate and affordable capacity building support and an enabling environment for the sector. Good Governance of the NGO Council would provide a positive example for all NGOs to emulate. Good Governance can be achieved if the serious, active and engaged NGOs exercise their rights and responsibilities in a professional manner. An effective NGO Council will become a voice of the sector when interacting with GoK and Regional Governments.

**Enabling Environment:** The new governmental dispensation has provided Kenyans with more political space to undertake their own development initiatives. People at all levels of society are more prepared to pursue their own development activities rather than wait for government and external actors to provide services, relief and welfare support. Improved infrastructure (roads, electricity, IT, communications, water, market access) provides more development opportunities to poor people and their communities. Tax incentives are now encouraging donations to registered charities. GoK is also enhancing the performance of its line Ministries, who are now all on performance contracts. GoK technical personnel are now willing to partner with NGOs who need not duplicate skills that are already locally available.

**New NGO Act:** The proposed new NGO Bill and Act, provides both opportunities and threats to the NGO community. If the NGO Council effectively lobbies for the NGOs in an informed and professional manner, a more enabling environment for this sector may result. Alternatively it is possible for the Sector to lose its self regulating mechanism and be controlled by a single government-appointed body.

**Government devolved funds and new funding mechanisms:** The CDF, Constituency Aids Funds, Youth, Women, Water, LATF and other locally available development funding is available to local NGOs and CBOs, which should also be more involved in the management of these funds. New basket funding from central government, through the NGO Board, is also a possibility.

**Corporate Social Responsibility:** The concept and practice of CSR is taking hold in Kenya and many companies are now establishing foundations and development funds for use by CSOs.

**Use Volunteers:** Kenya has a huge supply of idealistic, young, energetic and well educated graduates who are unemployed or underemployed. Many of them are searching for opportunities to serve their country and get work experience. There are also many older experienced professionals willing to give their time to NGOs. Many companies will loan experienced personnel to NGOs. Finally, there are opportunities to appoint international volunteers to fill vacancies that would otherwise require unavailable funds to fill. Student exchange programmes also offer NGOs low cost human resources that can support research, documentation and staff capacity building initiatives.

**Development Approaches:** Communities have assets, wisdom, labour, time, and skills to be applied to their own development programmes. Communities are now willing to work for their own development. Invest in community institution building, train local people; enable them to plan, implement and evaluate their own development programmes, and to access available local resources. Innovative local solutions to local problems always attract support.

**NGO Income Generation:** NGOs with excess assets can use them to generate income which may be used as the NGO determines. Consider renting buildings, providing consultancy, offering training, trading on your name or with locally made products.

**Information, Communication and Technology (ICT):** The world has moved into the technological age. Get connected! Internet and email are fundamental to serious organizations. Set up a simple website and start building your networks and your profile. Share with others your work, approaches and impact.

**Selected INGOs provide potential partnerships:** Progressive INGOs are looking to partner with local institutions and have the ability to provide financial, technical and institution building support. Some also support thematic and issue-based advocacy initiatives that enhance local networking and address the structural causes of poverty, inequity and injustice.

### **NGOs: Diversity, Expansion, North- South Co-operation**

NGOs are like a kaleidoscope of national, regional and international institutions of development co-operation (we use the term 'development'

with all its conceptual ambiguity, assuming that readers will sense what we mean). The OECD calculated in 1988 that there were between two and three times as many NGOs and similar organizations in the South as in the North (8,000-12,000 and 4,000, respectively). A major expansion occurred in the 1960s in the North, while in the South it took place in the 1970s, especially in countries like Peru and Mexico, India and Bangladesh, Senegal and Burkina Faso. These Southern NGOs collaborate in turn with local groups.

By 1994, the number of local NGOs in the South had grown to 50,000. Unlike the earlier OECD calculation, this figure includes small NGOs, but gives hardly an idea of the actual number of grassroots organizations. For instance, UNDP claims that there are 18,000 NGOs registered in the Philippines, while in the single Indian state of Tamil Nadu there are 25,000, two-thirds of which could be described as grassroots organizations (UNDP, 1993).

two-thirds of which could be described as grassroots organizations (UNDP, 1993).

An interesting phenomenon is the proliferation of different kinds of networks: national and regional for example, the NGO coordinating Committee in Spain, the 'Conseil des ONGd' Appui au DeÂveloppement' (CONGAD) in Senegal, or the Asian NGO Coalition (ANGOC); North-North umbrella groups, such as CIDSE, EURODAD, or EUROSTEP; North-South umbrella groups, like IRED or ICVA; and South-South umbrella groups such as the Latin American Forum for Debt and Development, or Third World Network, which has offices in Malaysia, Uruguay, and Ghana.

As to what constitutes a desirable relationship between Northern and Southern NGOs in terms of co-operation an issue not covered here we believe that: the principal objective [of voluntary agencies] 'continues to be that of removing themselves from the scene, leaving the field entirely to the indigenous ones' (Gill, 1988: 172). The most important role of Northern NGOs is in their own countries. This withdrawal from the scene implies a process of decentralization both in financial matters as well as in decision-making on the part of the Northern NGO, but without losing direct contact with the situation on the ground, or with the analysis and campaigning



activities of Southern people, their organizations and grassroots movements.

A point worth emphasizing is that many NGOs worldwide are companions in a continual learning and evolutionary process, whose two chief goals are, on the one hand, to give power and voice to those who are socially, economically, and culturally oppressed; and, on the other, to create a new model of relationships between the peoples of the North and the South.

### **Historical Context of NGO**

Non-governmental organizations (NGOs) as we know them today are generally thought to have come into existence around the mid-nineteenth century. It was only about a century later that the importance of NGOs was officially recognized by the United Nations. At the UN Congress in San Francisco in 1968, a provision was made in Article 71 of the Charter of the United Nations framework that qualified NGOs in the field of economic and social development to receive consultative status with the Economic and Social Council.

#### ***The UN Charter Article 71 states:***

*"The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations and, where appropriate, with national organizations after consultation with the Member of the United Nations concerned."*

The development of modern NGOs has largely mirrored that of general world history, particularly after the Industrial Revolution. NGOs have existed in some form or another as far back as 25,000 years ago. Since 1850, more than 100,000 private, not-for-profit organizations with an international focus have been founded. The growth of NGOs really took off after the Second World War, with about 90 international NGOs founded each year, compared with about 10 each year in the 1890s. Only about 30 percent of early international NGOs have survived, although those organizations founded after the wars have had a better survival rate. Many more NGOs with a local, national or regional focus have been created, though like their international counterparts, not all have survived or have been successful.

NGOs became strongly associated with the world of international aid during the last decades of the twentieth century, but if we take a longer-term

perspective it becomes clear that NGOs are a far from recent phenomenon. Ideas about NGOs can be seen to have emerged from longer-term traditions of both philanthropy and self-help common to all societies.

**Table 2:** The seven historical stages of Western international NGOs

Stage	Example
Emergence (1775-1918)	Anti-Corn Law League founded in 1838 in Britain to campaign against unfair tariffs
Engagement (1918-1935)	International associations given representation in the newly established League of Nations
Disengagement (1935-1945)	The League of Nations falls into decline as Europe falls into authoritarianism and war
Formalization (1945-1950)	Article 71 codifies selected NGO observer status at the new United Nations under ECOSOC
Nuisance value (1950-1972)	NGOs generally marginalized as UN processes dominated by governments and Cold War tensions
Intensification (1972-1992)	NGOs play ever higher profile roles in a succession of UN conferences from Stockholm 1972 onwards
Empowerment (1992-?)	The Rio Environment Conference marks the new ascendancy of NGOs in development and international affairs

**Source:** Constructed from Charnovitz (1997)

### **History of NGO Activity in Sub-Continent:**

Sub-continent has a long history of civil society based on the concepts of daana (giving) and seva (service). Voluntary organizations that are voluntary in spirit and without profit-making objectives were active in cultural promotion, education, health, and natural disaster relief as early as the medieval era. They proliferated during British rule, working to improve social welfare and literacy and pursuing relief projects.

During the second half of the 19th century, nationalist consciousness spread across India and self-help emerged as the primary focus of sociopolitical movements. Numerous organizations were established during this period, including the Friend-in-Need Society (1858), Prathana Samaj (1864), Satya

Shodhan Samaj (1873), Arya Samaj (1875), the National Council for Women in India (1875), and the Indian National Conference (1887). Servants of India, a secular NGO, was established in 1905. In 1958, the Association for Voluntary Agencies for Rural Development (AVARD), Association of Sarva Seva Farms (ASSEFA), Nepal's dhikiri rotating credit groups etc

NGOs in Bangladesh began in the aftermath of the WAR OF LIBERATION in 1971 when such organizations stepped in to participate in the massive task of rehabilitating a war-ravaged country. In all spheres of development, NGOs are reported to have created a landmark in the history of Bangladesh. Doubtlessly to say, the NGOs with their constructive efforts have been promoting development strategies by creating unique changes in the field of socioeconomic progress in Bangladesh since her independence. Most of the endeavors made by the NGOs mainly targeted to achieve overall development of the country by meeting pragmatically or practically.

NGOs in Bangladesh are now an integral part of the institutional framework addressing issues such as poverty alleviation, rural development, gender equality, environment protection, disaster management and human rights. The phenomenal growth of NGOs in Bangladesh is also attributed to the limitation of the government to meet the enormous challenges of poverty.

Bangladeshi NGOs are known worldwide for their innovative approaches. Many successful models in microfinance, NON-FORMAL EDUCATION and primary healthcare developed by the GRAMEEN BANK, the Bangladesh Rural Advancement Committee (BRAC) and the Association for Social Advancement (ASA) are being replicated in other developing countries.

A recent phenomenon in the evolution of NGOs is their role in lobbying and advocacy and in activities designed to influence public policies, plans, and projects, which are friendly to the interests of the poor or to the environment.

NGOs have become such a global phenomenon partly because they represent a flexible form of organization under an increasingly ubiquitous neoliberal global governance system that places a strong emphasis on such flexibility.

### **Generations of NGOs :**

Most NGOs emerge from relatively small-scale origins and grow over time

into larger and more complex organizations. An individual takes action, or a group of people with similar ideas come together in order to do something about a problem. Korten (1990) argued that it was useful to conceptualize this evolutionary process in generational terms (Table). In the first 'generation', an NGO's most urgent priority is to address immediate needs, mainly through undertaking relief and welfare work. In the second, NGOs shift towards the objectives of building small-scale, self-reliant local development initiatives, as they acquire more experience and build better knowledge, and may become more influenced by other agencies, such as donors. A stronger focus on sustainability emerges with the third generation, and a stronger interest in influencing the wider institutional and policy context through advocacy. In the fourth generation, NGOs become more closely linked to wider social movements and combine local action with activities at a national or global level, aimed at long-term structural change.

This schema is helpful in illustrating the basic organizational history of many development NGOs. They may combine several roles or activities at any one time, and will need to be understood in terms of their relationships with other development actors, such as states and donors, and their particular historical and cultural contexts. Korten's (1990) generation model is useful because it explores the way that some NGOs change, influenced by both external pressures and internal processes. For example, while many NGOs owe their origins to relief and welfare work, they often attempt to shift over time into more developmental roles. Korten's schema is context-specific, reflecting his work in the 1980s with NGOs in Bangladesh and the Philippines. The framework is useful because it provides a window of understanding on the changing ways in which development NGOs have approached their work over time.

**Table-3** : Generations of NGOs

Orientation in South (S) and North (N)	First	Second	Third	Fourth
	Welfares (S) Fundraising (N)	Local development (S) awareness- raising (N)	Partnership (S) and Critique (N)	Empowerment (S) Political pressure (N)
	Relief and Welfare	Community Development	Sustainable systems development	People's Movements
Year of Reference	1945	1960	1973	1982

Dominant midset	Emergency assistance, e.g. Catholic Relief Services (CRS), Save the Children (UK), BRAC (Bangladesh).	Development (North as development model; belief in 'trickle-down' effect).	Development as self reliant political process (New international economic order seen to be possible)	Development must be socially equitable and ecologically sustainable at local and global level. Gender analysis and empowerment of excluded groups.
Definition of the problem	Lack of goods and services	Lack of economic and technological resources. Basic needs not met. Under development and neocolonialism	Institutional limitations, as well as local, national and international policies. Role of local elites and transitional economic groups.	Local, national and international limitations. Non development is South, mal development in North. Poverty as denial of basic human rights.
Time frame for action	Immediate	As long as the project continues	Indefinite, long term	Indefinite future
Scope	Individual or household	Community or people	Regional or national	National or Global
Main actor	NGO donor	NGDOs in North South, base/grassroots groups and beneficiary communities	All public and private institutions comprising the relevant system	Formal and informal networks of people and organization at local and international level.
Relations with NGDOs in North and South		Transfer of economic and other resources	Northern NGDOs: from funding to partnership	Concerted action and mutual support, decentralization.
Development education	Starving babies	Community self-help initiatives	Politics and institutions that impede local self reliant	Planetary community, Social economic, political and ecological

Political strategy		Awareness raising among general public about living conditions in the South, Emerging conflict between this and fund raising capacity	Protest phase, directed at the interests and organizations that prevent the alleviation of poverty in the South. Denunciation of hunger and unequal terms of trade; lobbying for 0.7% of GNP for development aid.	Protest plus proposal phase. Denunciation and action: political pressure, public mobilization, strategic alliances, growing use of social and telecommunication; encouragement for research.
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**First Generation:** welfares and characterized by emergency activities that began around 1945, the year in which the Nuclear Era began (with the bombing of Hiroshima and Nagasaki), the Second World War ended, and the United Nations was created; one year before the signing of the Bretton Woods Agreements from which the International Bank for Reconstruction and Development was born, and whose most important institutions are the World Bank, the International Monetary Fund (IMF) , and the General Agreement on Tariffs and Trade (GATT).

The first generations of NGOs in Bangladesh were engaged largely in relief and post World War II rehabilitation and other charitable acts. This was soon followed by reconstruction work around the theme of community development

**Second Generation:** The second generation emphasized the formation of credit unions, co-operatives, and other community-based development projects, giving more emphasis to micro-interventions in development.

**Third Generation:** This is based on partnership with the South and protest in the North, and for which 1973 can be taken as their starting point , the year in which the non-aligned countries proclaimed a New International Economic Order (NIEO) and which, paradoxically, thanks to higher petrol prices that gave rise to the abundance of petro-dollars, began the period of Southern indebtedness that resulted in the so-called debt crisis of 1982 when Mexico claimed that it could no longer service its foreign debt.

The third generation of NGOs in fact, the bulk of NGOs involved in agrarian reform and/or rural development programs.

**Fourth Generation:** This is based on empowerment in the South and lobbying in the North, and emerging from 1982. Obviously, this overlaps with the previous generations and shares many of their characteristics. It is formed by those NGDOs who, without abandoning their close co-operation with their Southern counterparts, prioritize the lobbying of opinion-makers and powerful groups as well as research and public awareness-raising in their own countries.

**Need for a fifth generation strategy:**

The question of development strategy was never put to rest with the emergence of the fifth generation strategy. While the strategy, as Korten puts it, is a key to people-centered development, the farthest it can go is to correct the dysfunctional aspects of one or other system in the interdependent systems. ~~Still, the basic framework~~ is comparative advantage, that is to say, the NGOs must stick to where they are good at (direct and efficient assistance to beneficiaries at a much cheaper costs), and, in addition to this, policy advocacy around broader, youth development and climate change issues.

The development landscape continues to be dominated by the persistence of debilitating and dehumanizing poverty and the declining availability of resources. This condition persists at intolerable levels in most countries and regions of the South, except in the "miracle economies" of Taiwan, Korea, and Singapore.

As they evolve, Northern NGDOs must become more sensitive and critical of their role in mediating between poor communities in the South and their own fellow citizens and governments. And they must also abandon their old function as mere financial intermediaries by trying to incorporate the maximum added value that would justify playing this role. At present some NGDOs, albeit a minority, are simply a *modus vivendi* for their staff, in an ever more precarious job market. The challenge is for Northern NGDOs to transform themselves into reliable 'transmission belts' for the perceptions, concerns, and struggles of the South, while also assuming their role as funders of 'added value' via development education, awareness-raising, and

lobbying all with the objective of democratizing and transforming the structures of their own societies and, as equal partners with Southern NGOs, global society itself.

Among the foreseeable changes and risks that are entailed in steering a course between pragmatism (the best possible option) and utopia (the most desirable option), Northern NGOs should bear in mind the 10 following courses of action directions that also apply to some extent to Southern

**NGOs, as to those of Eastern Europe as these become stronger :**

1. The decrease in private funding in absolute terms, and certainly relative to public funding (especially assistance which is destined for humanitarian and emergency aid), will make it imperative that NGOs should be doubly aware of the risk of co-optation or manipulation by the public authorities.
2. Those NGOs that depend largely on public finance run the risk of becoming mere government subsidiaries by implementing activities formerly carried out by their own governments or multilateral institutions (substitution).
3. Fund- raising campaigns will have to be scrupulous in their image codes, resisting the temptation to be sensationalist, even more so when some NGOs still have no qualms about using what has been described as 'the artery that connects the heart with the wallet' (Clark, 1991). Equally, we must not forget that NGOs, in contrast to portable companies, do not work to gain a bigger slice of the 'market', but to help others to grow. At the end of the day, our commitment as an NGO is to withdraw ourselves from the businesses. (Dichter, 1989)
4. There will be a restructuring of the non-governmental co-operation sector with a drop in the number of generalist NGOs, an increase in the number of those specializing in emergency activities, and an increase in mergers between small and medium-sized NGOs.
5. There will be a major increase in the number of civil action and lobbying campaigns, as well as in the number of organizations and networks involved in them. Likewise, spontaneous movements for change and social protest must be monitored, and on occasion supported; movements that will



probably be on the increase in the years to come.

6. NGDOs will become more involved in poverty eradication activities in their own societies (a step already taken by the Comité contre la Faim et pour le Développement (CCFD) in France, and Oxfam in the United Kingdom, among others), and in Eastern Europe (as some Austrian, German, and Swiss NGDOs are already doing) .

7. NGDOs should not fear growth (Schumacher would have agreed that even if 'small is beautiful', large is not necessarily ugly), but must maintain the balance between such growth and their capacity to adapt to a highly changeable economic and social environment.

8. NGDOs should push, both individually and with other organizations and academic institutions, for research and analysis into all the issues related to their practical work in the context of North-South-East relations. This research is essential if their campaigns are to achieve maximum impact.

9. NGDOs should face the challenge presented by modern telecommunications and the need to be more efficient in sharing information, ideas, meetings, as well as other forms of exchange.

10. Northern NGDOs should share their private fund-raising experience with those from the South so that the latter may reduce their dependence on external finance, including bilateral and multilateral aid (direct financing).

Finally, we should ask if it is possible, or indeed desirable, that NGO networks should become political parties; or that political parties should evolve from them, as has happened with environmental NGOs in countries like Germany. Unlike the Greens, the parties we envisage would set themselves up in different countries, both Northern and Southern, eventually allowing for the emergence of transnational organizations that supersede present models (such as those of the International Socialist or Christian Democracy). Given that there will always be a need for some NGOs that are distanced and critical of institutional power. and assuming that parliamentary representation will survive as a political model, will some governments even regard such a conversion of the NGO sector as necessary given their own declining decision-making power, and the fact that they are increasingly beholden to the interests of minorities who cling to national and transnational economic power.

Governance of course with the addition of prefix 'good' is sinequanon for efficient development management. NGO's development intervention is now a favorite of intellectual discussion as it very much concerns about institutional governance with the participation of the stakeholders to fulfill its desired objectives. Beneficiaries of public policy look to NGOs for better service for ameliorating their socio-economic conditions. The NGOs with voluntarism are expected to fulfill expectations of various groups of stakeholders through its well and systematic intervention. Its governance-led distributional profile is based on the parameters of participation, empowerment and accountability.

NGOs have long been handling their projects by structured flexibility approach, self-assessment mechanism, regular monitoring and intermittent change of techniques, if situation demands. This is really efficient and apt management of implementation. They are found working in an enabling working environment that they themselves created with participatory component, decentralization and motivation. In health care sector, for illustration, there has emerged some positive changes in health behaviour. Based on the index of health development there has been astounding improvement in health awareness, especially awareness about STD/HIV/AIDS, immunization, balanced diet and maternity services.

We may have much to take lessons from NGO's health management projects. This is of course result-oriented. The paramedics are well trained health workers doing their utmost to the satisfaction of the people. The resource persons at the apex of project management treat things well in a professional manner.

NGOs like BRAC, CRITAS, ASA, Proshika, UNICEF, YPSA etc have come forward to enlighten our society with a scheme of non-formal education. The happen to address the issues of drop-outs. Thing is that Formal education is not inclusive and participatory. The poor child is left out. He/she cannot benefit from formal schooling finding it hard to cope with a rigid institutional situation and the demands of close system and thus drop out. All the same NGOs non-formal education has proved to be good alternative motivating the poor children. In fact non-formal institutions like open air school, distant education and mobile schooling are most likely to cater to the

needs of street children, maverick and vagrant.

The NGOs are complementing the government in the implementation of Child development policies. The major areas/sectors or policy goals are 'basic education', 'health and nutrition', water and environmental sanitation', 'children in need of special protection', 'social integration, participation and cultural affairs', and 'information and communication'. The other goals were gender equity, elimination of child labor and children requiring special protection.

In pursuance of the fundamental principles of the Constitution and the UN CRC, the Government of Bangladesh decided to formulate and implement a National Policy on Children (NPC) in December 1994, to ensure the security, welfare and development of children. The policy highlights the importance of providing adequate services to children, including health, nutrition and education. It also stipulates that a "proper family environment" is one of the main preconditions for the proper development of a child. The NPC identified the need for assistance to children in difficult circumstances, and ensures the protection of the legal rights of children within the national, social and family context. The policy clearly states that the Government has adopted the principle of 'Best Interest of the Children' - that is, in all national, social, family or personal situations, the best interest of the child will be held paramount.

Most experts on child rights opine that child related policies concern about children development, their participation and their rights. Obviously we have a cluster of good laws and programmes in connection with child rights and development. Notwithstanding legislative measures and programmatic intervention the most vulnerable children continue to suffer manifold harassments and negligence. They are growing up on the margins of society in a state of neglect and deprivation, without educations, affection, care and guidance. Once a child takes to the street there is a strong possibility that the child, both girls and boys may end up sexually abused and exploited. This is because survival becomes the sole priority - in the absence of alternatives, street children are forced to do anything, which keep them alive.

When the community makes plans, it does not take into consideration the poor children's plight. They tend to be excluded from participating in most of

the activities and facilities of other children. This is one reason why they often do not have access to medical, educational, recreational and vocational resources. They face problems such as lack of vaccinations; poor health, illiteracy and they cannot acquire skills needed for finding jobs.

Society perceives the vulnerable children as children in difficult circumstances. Their vulnerability is at peak. This is due to the state of gap in existing laws and policies to protect their rights. There is no protection against child labour that may be termed as torture. ILO and Unicef advocate for measures to curb child labour. The UN Convention on Rights of the Child (UNCRC) has been universally ratified. The present government is actively considering formulation of a national child labour policy. It is, of course, a good move. We have a child policy. But we do not have child labour policy. We may contend that if there is child labour there must be must be a control mechanism to erase its evils through legislation and public policy. One may wonder whether all such policy and legislative measures will be mere paper tigers. We have laws to protect child workers from the deluge of exploitation. The problem lies with implementation. If antiquated legal procedures and codes framed during the colonial period come into conflict with a future child labour policy the implementation process will be in the dock.

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[www.un.org/ecosoc/](http://www.un.org/ecosoc/) The UN Economic and Social Council (ECOSOC) site provides information about NGOs and the.

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# Perception of Climate Change and Adaptation on Agriculture in Chittagong Coastal Area of Bangladesh

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## Introduction

Bangladesh is widely recognized to be one of the most climate vulnerable countries in the world. It experiences frequent natural disasters, which cause loss of life, damage to infrastructure and economic assets, and adversely impact lives and livelihoods, especially of poor people living in remote or ecologically fragile parts of the country, such as river islands and cyclone-prone coastal belts (MoEF, 2008). The geographical location and geomorphological conditions of Bangladesh have made the country one of the most vulnerable ones to climate change, particularly to sea level rise (SLR) (Ali, 1999). The Intergovernmental Panel on Climate Change (IPCC) forecasts that global warming will result in sea level rises of between 0.18 and 0.79 metres by the last decade of the 21st century, which could increase coastal flooding and saline intrusion into aquifers and rivers across a wide belt in the south of the country, although most of the area is protected by polders (IPCC, 2007a). The south western part, also known as the Ganges tidal plain, comprises the semi-active delta and is crisscrossed by numerous channels and creeks are more vulnerable as its topography is very low and flat.

Climate change and variability (CC & V) is considered to be one of the most serious threats to sustainable development with adverse impact on environment, human health, food security, economic activities, natural resources and physical infrastructure (IPCC, 2007b; Huq et al., 2006). The impacts of climate variability are manifested by floods, droughts, erratic rains and extreme events. Given the over-dependence on rain-fed agriculture by the majority of people living in rural areas, CC & V has been one of the major limiting factors in agriculture production, resulting in food insecurity and low-income generation. The studies conducted by Rosenzweig et al.

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(2002) revealed that changes in rainfall patterns and amounts have led to loss of crops and reduced livestock production.

Increasing impacts of CC & V on agriculture have been associated with various adaptation and coping mechanisms (Gwambene, 2007). These are based mainly on indigenous knowledge which embodies a wide variety of skills developed outside the formal education system (UNFCCC, 2003). Indigenous knowledge arises out of continuous experimentation, innovation and adaptation, blending many knowledge systems to solve local problems (UNFCCC, 2003). Such farmers' adaptive innovations, techniques, methods and processes based on their own knowledge, and skills to decrease or prevent devastating climate change impacts are location specific and community specific. Climate change is a global phenomenon while adaptation is largely site-specific. A common disadvantage for local coping strategies is that they are often not documented, but rather handed down through oral history and local expertise (McGregor, 2004). As site-specific issues require site-specific knowledge, experience has shown that identified adaptation measures do not necessarily translate into cultural, psychological and physiological barriers to adaptation (IPCC, 2007b). These innovations should be documented and disseminated so that other communities from distant locations can benefit from these adaptive initiatives. Moreover, future adaptation options proposed by researchers should be discussed with the farmers for their opinion before evaluation or validation. This would help in meeting the specific demands of community. Again, perception and experiences of both male and females and their participation in selecting future adaptation options are also important. Therefore, a study was conducted to understand and document the perception of the community on climate change and variability in respect to gender, and on their strategies to cope with or adapt to the changing situation in the context of agriculture. The study also sought to understand and document the farmers' responses on some adaptation option offered by researchers.

## **Methodology**

**Study area :**The study was conducted in two villages, namely, Khankhanabad and Abu Torab under Banskhal and Mirsarai upazila in Chittagong district in 2011. The maximum annual mean temperature of the district is 35.50C and the minimum is 12.50C. Mean annual rainfall is 1710



mm. This area is mainly characterized by 2,559,910 of which 52% is male and 48% are female. The distribution of the farm families showed that on average more than 49% farms are in the landless and marginal category. This number accounts again about 79% including small farmers. Only 4% farmers belong to large farms. The study area was selected to specifically represent communities affected by climate uncertainty, tropical cyclones and storm surges to different degrees. The communities were selected for the following reasons: firstly, they fall within the coastal saline area of Bangladesh where there are frequent shortage of food due to uncertainty of rainfall and lack of fresh irrigation water. Secondly, the area provides an opportunity to study impacts associated with climate change and vulnerability on crop and livestock; and thirdly they are already associated with existing climate change research projects.

**Data collection and processing:** Participatory tools and methods were used to capture the perception of the community on climate change, climate variability, and associated strategies to cope and adapt in the context of agriculture. Primary information was captured using focus group discussions (FGDs) with farmers, members of water users group. Each meeting was attended by about 30 participants, including one third females. All shared their views and experiences in an informal environment. General information was captured ensuring the participation of both male and female participants. The male and female participants were then divided into separate groups and data were captured using a checklist by the lead male researchers in the male group and female researchers in the female group. During FGD, participatory tools were used for documenting local knowledge, technology and practices related to coping and adaptation strategies. Gender, age, social position and income of respondents were considered during the process. Captured data were validated through key informant interviews. Some probable simple adaptation options were presented by the researchers to the community for their opinion in the light of their knowledge and experiences. The captured data were organized and presented according to desegregated of gender.

## **Results and Discussion**

### **General information:**

**Composition of the farmers:** Ninety five percent of the inhabitants of the village Khankhanabad is locals and the rest are temporary migrant. Among

the migrants, 2-3% voluntary and rest of them are due to climate change. While in Abu Torab, it was notable that this migration had not occurred.

**Farmers' category:** In both of the study villages, most of the participants are small to medium farmers. Only 5 to 10% belong to the large farmer category (Table 1). In Khankhanabad, out of 10 % of large farmers, 5% are landlords of whom 3% are absentee. The large and medium farmers are landowners. Among the small and landless farmers, 16 and 25 % are owner cum tenant farmer and 5 and 10% tenant farmers were reported in Khankhanabad and Abu Torab villages, respectively. A few farmers of both the villages have off-farm income.

**Table 1: Farmers' category and their distribution at the study villages, 2011**

Farmer's category	Khankhanabad, Banskhali	Abu Torab, Mirsarai
Large farmer (> 2 ha land)	10	5
Medium farmer (1-2 ha land)	50	25
Small (0.2-1.0 ha land)	35	60
Landless (homestead only)	5	10

**Land type and their uses:** All the lands in the study area are inside the polder of 30 (Khankhanabad) and 31 (Abu Torab). Farmers classified their land into three categories depending on inundation during wet season. The land types are highland, medium highland and lowland and their corresponding inundation depths reported as 15-25 cm, 25-75 cm and more than 75 cm. Medium highland is the most dominant in the area followed by lowland (Table 2).

**Table 2: Land type and their distribution at the study sites, 2011**

Farmer's category	Katianangla, Batiaghata	Laxmikhola, Dacope
Highland	10	10
Medium highland	50	70
Low land	40	20

HL=15-25 cm inundation, MHL=25-75 cm inundation, LL= > 75 cm inundation

**Crop cultivation:** The villagers of Khankhanabad considered their village as a medium saline area. They cultivate mostly two crops per year in a

sequence. The most dominant cropping pattern is Sesame-T.Aman rice practiced in medium highland followed by Mungbean-T. Aman rice practiced in highland. On the other hand, single T. Aman is practiced in Abu Torab village. In the rabi season, land remains fallow due to lack of fresh irrigation water and higher soil salinity. Lands remaining fallow after T. Aman rice are used for open grazing. Farmers use the high yielding variety of rice in the high and medium highland and local varieties in the lowland. The most dominant rice variety reported as BR23 with some recent adoption of BRRIdhan49 and BRRI dhan41. Farmers use the local varieties of sesame and mungbean (Tilemug).

**Homestead:** Each farm has on an average 80 m<sup>2</sup> area around the household. About 90% households have fruit trees and also cultivate vegetables in different niche of homestead.

**Fish cultivation:** About 60-80% farmers have pond of 100 to 200 m<sup>2</sup> size where poly culture of fish is practiced. Again, 15 % and 50% farmers have rice-fish, in Abu Torab and Khankhanabad, respectively. Poor people earn additional income from river fishing. The people of Abu Torab have moved from brackish water aquaculture to fresh water aquaculture i.e. from shrimp to prawn and carp. About 30% farmers are engaged both in crop production and fish culture.

**Livestock:** The majority of the farm has cattle and chicken. They fed their cattle with straw in the wet season and open grazing in the dry season.

### **Farmers' perception on climate change:**

Perception on different events of climate change in regards to gender is presented in Tables 4 and 5. From the results it is found that the overall changes occurred in rainfall patterns, temperatures, salinity of river water and cyclonic storms. Rainfall patterns changed over the time both in wet and dry seasons. Onset of the monsoon has become delayed and with decreased total rainfall per annum. The winter period has decreased and dry periods are hotter. River water salinity appears in January instead of March. The peak storm periods have shifted later compared to the past. Men and women responded in similar fashion which indicates the concern of women also for climate change. Male respondents of Khankhanabad reported that stormy weather at the vegetative stage of T. Aman (September - October) was earlier

which was a positive change as it reduced the insect population. But the peak storm period has shifted later to the flowering stage of the crop causing sterility and is therefore negative. Again due to hotter temperature the insect infestation is higher now. They also linked the variability of some component of weather to others. They mentioned that heavy rain is linked to extreme cold and heat, cold rabi season results in less rain in Kharif I and Kharif II and heavy rain in Kharif I and Kharif II results in a warm rabi season. In addition to that farmers of Abu Torab added that there is no positive outlook or aspect about climate change rather all bad changes. Brackish water shrimp farming made the canals silted and has resulted in no drainage.

**Table 3: Perception on climate change and their results, Khankhanabad, Banskhal**

Climatic variability	Observations on changes		Results of climate change	
	Women	Men	Women	Men
Rainfall pattern and wet regime	Onset of monsoon delayed	Same as women	Delayed transplant Aman rice & decreased yield	Forced to cultivate photo sensitive variety
	Changes in rabi rainfall pattern	Same as women	Affect sesame harvest.	Drought causes yield reduction of sesame by 40%.
Temperature (hot and cold regime)	i) Extreme cold spell, fog increased during rabi season.	i) Winter delayed. ii) Dry regime lengthened	i) Damage of flower of fruits like mango.	Decreased sesame yield by 12 % and
Salinity of river water (duration & salt period)	ii) Dry periods are hotter.	and summer temperature hotter.	ii) Declined crop (sesame, mungbean) yield.	mungbean failed due to poor emergence.
	River water salinity 2 months more	River water salinity appears January now which was March 40 years back.	Availability of irrigation water for rabi crops decreased	Rabi crops affected and decreased yield
Cyclone & storm	-	The peaks storm period has shifted later to the flowering stage of the T. Aman crop	-	Delayed storm causes high sterility and lodging in T. Aman and thus affected yield.

**Table 4: Perception on climate change and their results, Abu Torab, Mirsarai**

<b>Climatic variability</b>	<b>Observations on changes</b>		<b>Results of climate change</b>	
	<b>Women</b>	<b>Men</b>	<b>Women</b>	<b>Men</b>
Rainfall pattern and wet regime	Onset of monsoon delayed	i) Delayed onset of monsoon and unpredictable. ii) Reduced amount of rainfall both in wet and dry season.	Delayed transplanting of T. Aman rice, harvesting delayed and decreased yield	Forced to transplant late planted rice variety (photosensitive)
Temperature (hot and cold regime)	i) Increased fog during rabi season. ii) Dry periods are hotter.	i) Increasing the temperature throughout the year and hot period is longer. ii) Humidity less.	Create problem for drying rice after harvest.	i) Insect infestation increased. ii) Growth period is shortened and thus yield is decreased.
Salinity of river water (duration & salt period)	Increasing soil salinity through intrusion of river water with higher salinity by tidal surge.	River water salinity 2 months longer now. Previously it was up to May and now even up to July.	Intrusion of salt water reduced the grain yield of rice from 5.00 $\text{tha}^{-1}$ (pre-shrimp period) 1.00 $\text{tha}^{-1}$ (shrimp period).	Drastic yield reduction in Aman rice. Rabi crops are not possible due to salt intrusion.
Cyclone & storm	Intensity and frequency increased.	Higher frequency and intensity of storms and cyclones. Tidal height is 30-120 cm higher now.	Losses of crop and livestock increased.	Delayed storm cause sterility in T. Aman rice due to lodging of rice

**Perception on future climatic changes**

Men farmers of Khankhanabad expected that the climatic variability may be further increased. Rainfall decreases. The river height level is increasing due to siltation which if continued may increase the intrusion of salt water more to the crop land. The soil fertility is expected to be further decreased. On the other hand, the male farmers of high vulnerable area (Abu Torab) reported that the weather is unpredictable with probable increased temperatures.

Insect infestation in crops and rat damage may increase. New diseases and insect problems are coming and sterility due to high temperature in Boro rice is expected to increase. River salinity may further increase due to less upstream flow resulting from low rainfall. The female farmers were not able to predict future changes in climate.

### **Adaptation/coping mechanism: farmer experiences**

Farmers experienced that climate change and variability directly affected the agriculture sector especially crop, fish and livestock production. That situation led the people for adaptation strategies to mitigate the risk. Based on their experiences, knowledge and resources, they looked for adaptation strategies to cope with the changing climatic situation. Male participants noted a 40% yield reduction of sesame over the past 40 years. A notable yield reduction was also reported in mungbean. The changes in rainfall pattern and temperature rise resulted in changes to emergence, germination and insect pests of crops. Adaptation options followed by the men and women in the area mentioned in Table 5.

**Table 5: Desegregated experiences in changing crop cultivation and fish production to adapt in the changing climate, Khankhanabad, Banskhal and Abu Torab, Mirsarai, 2013**

Village/Farmer category	Crop season/ polder management	Experiences		
		Past	5 years	Present
Khankhanabad				
Women	Kharif II	Long duration local T. Aman	High yielding BR23	BR23 with declining yield, BRRI dhan49
	Rabi	Fallow then included jute, sesame	Included local mungbean	Included T. Aus
Men		40-50 years back	10 years back	Present
	Kharif II	Long duration local T. Aman	BR23	BR23, BRRI dhan49
	Rabi/Kharif I	Fallow, then included sesame after T. Aman	Sesame, Local mungbean (Tilemug)	T. Aus

<b>Abu Torab</b>				
Women		Pre-shrimp (>25 years back)	Shrimp (3-25 years)	Post-shrimp (last 2 years)
	Kharif II	Long duration local T. Aman	Local Aman with declining yield.	BR23 and local rice with improving yield.
	Rabi	Pulse, ridged gourd, water melon, musk melon	-	-
Men		<b>25-40 years ago</b>	<b>3-25 years ago</b>	<b>Present</b>
	Polder and sluice gate management	There was no polder protection 40 years ago.	Polder with sluice gate management for shrimp culture.	Polder with faulty sluice gate management for crop cultivation.
	Kharif II	Long duration local T. Aman	Integrated local Aman rice and shrimp.	i) Integrated T. Aman rice (BR23/local) with prawn, tilapia and carps
	Rabi	Fallow/pulses, water melon etc.	Shrimp only	Grazing cattle and trying salt tolerant crops.

Besides the options mentioned above, the farmers overcome the worse situation by increasing river fishing, pulling rickshaws and vans, working as day labourers, taking loans from NGO/bank, small scale business with poultry and livestock, and engaging in handicrafts.

### **Future adaptation plan/restriction and concerns:**

The male participants of Khankhanabad village reported that the concept of pre-emptive adaptation is foreign. They don't plan ahead - they will wait till it happens, and then they will adapt. They will look at regions further south and think about how they are farming. In contrast, the participants of southern part interested for more tree plantations (quick-growing timber) as an adaptation option. The reason for the interest is that they hope the trees will modify the micro-climate and cause more rain. If they could stop the salinity increase, it would allow growing (on a small scale) of pumpkin and watermelon.

Women farmers reported that they can't plant sesame in early February due to high moisture in the soil particularly for poor drainage system. They need

new sesame cultivars tolerant to sudden stagnant water. Sesame gives better yield when sown in the medium highland, and poorest yield in the medium lowland. Women are more informed and passing their knowledge to their children (future generations) for adapting to changing situations. Both male and female are concerned for local control over drainage of tidal waters. Canals are blocked by bigger farmers for fish farming (reduction of drainage pathways). Polders may collapse at any time.

### **Sources of information on climate change and seasonal variability:**

The women's group responded that they are getting advice on seasonal variability and climate change from DAE (Directorate of Agricultural Extension) personnel at block and upazila level. They have positive response to DAE working in the village commenting: "They give help to all farmers, not just the bigger landholders". They are aware that there is an Agricultural news and discussion in Bangladesh Television (BTV) at 7-8 am. This is one of the sources for that information. They also know that mobile phone service offering agricultural advice but they do not use this at present. They have received advice in training or trial site demonstrations by some projects. Men mentioned the sources in the same fashion including some more like WBD (Water Development Board), mass media (radio), NGOs, and relatives in other parts of the country.

### **Response on some proposed adaptation options**

Some probable adaptation options were proposed by the team of researchers to the respondents for their responses. The captured responses are presented in Table 7 and 8.

**Table 6: Responses of men and women against some proposed adaptation options, Khankhanabad, Banskhali, Chittagong**

Proposed adaptation option	Response of women	Response of men
Replacing long duration T. Aman rice variety (BR23, 150 day) with short duration variety (125-130 day) for further intensification or reducing risk	i) Good for early harvest that may enable the risk of heavy rainfall for stormy weather during maturity of BR23 and may reduce the risk of damaging sesame for water logging with rain water.	Men responded as women but they emphasized on community approach for rat damage, proper drainage of rain or tidal water and easy harvest.



Proposed adaptation option	Response of women	Response of men
	ii) Needs optimum rainfall to transplant short duration Aman rice by August 20.	
Relay cropping of cowpea and grass pea with T. Aman rice under single T. Aman cropping area	May be possible in medium highland.	The idea is good for medium highland but needs to be a community-based operation for protecting open grazing.
Cultivation of direct dry seeded/dibbled or transplanted rice in Aus season	No response.	i) Can be tried in the medium highland after sesame or mungbean but needs short duration cultivars. iii) Aus rice depends on early Kharif 1 showers.
Deepening of inner side existing canal of rice-fish culture under gher for storing more surface water for irrigation	No response.	i) May be 30-60 cm deeper is possible in existing canal of 120-150 cm width and about 60 cm deep. ii) If more, then need to increase the width of the canal but they expressed concern about taking up too much land.
Specially built ponds for irrigating the dry season crop	No response.	i) Ponds with an area of 80-100 m <sup>2</sup> at 180-210 cm depth may be possible to store fresh surface water for irrigating rabi crops. ii) Cost and area expansion is a concern to them.

**Table 7: Responses of men and women against some proposed potential adaptation options, Abu Torab, Mirsarai, Chittagong**

Proposed adaptation option	Response of women	Response of men
Crops and cropping sequence		
Relay cropping of cowpea and grass pea with T. Aman	No response.	The idea may be good for high land with medium salinity.
Cultivation of direct dry seeded/dibbled or transplanted rice in Aus season	No response.	i) In highland to medium highland may be possible but need short duration cultivars. ii) Aus crop depends on early Kharif 1 showers.
Deepening and broadening of inner side of existing canal of rice-fish culture under gher for storing more surface water for irrigation	No response.	i) May be broaden further 30 cm of existing canal of 120-150 cm width and about 90 cm deep. Water normally stored in the canal for 2 months may further extended one month by broadening of the existing canal. ii) They expressed concern about taking up too much land.
Specially built ponds in the crop field for irrigating rabi crops	Possible only for large farmer.	Ponds with an area of about 200 m <sup>2</sup> at 180- 210 cm depth may be possible to store surface water for irrigation rabi crops but needs initiative for demonstration.
Rabi cropping of watermelon, mask melon, okra and other vegetables	Only possible in the high land, plots with medium salinity.	i) Sesame and cowpea tried to grow with some assistance from some projects but not successful due to salinity. ii) May be tried in medium soil salinity.

## Conclusion

Communities at local level have been facing the adverse impacts of climate changes over the time and adapting with strategies as per their own

traditional knowledge, skills and information. Considering the results discussed above, a few points are noted below for consideration.

- u Men and women are mostly similar in how they perceive climate change and take part in local level adaptation process. Both groups should be considered for local level adaptation planning.
- u The medium vulnerable area depends on the learning and adaptation processes of extreme vulnerable area (further south). Therefore, adaptation options need to be demonstrated in more climate vulnerable area for wider dissemination.
- u New crops, fish and agronomic practices suited for the changing climatic situation require demonstration with community involvement to ensure the best possible community adoption.

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# **Clean Development Mechanism (CDM): Global Effort to Reduce Greenhouse Gas Emission Lead to a New Notion of Participation**

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## **Introduction**

Common responsibility of all countries is the core concern in mitigating global reduction of greenhouse gas. The Clean Development Mechanism was established under the Kyoto Protocol that permits Annex 1 countries to subsidize non-Annex 1 countries to generate greenhouse gas emission credits (CERs) by dint of investment in emission reduction projects. With the introduction of CDM, the developed world expects carbon di oxide emission reductions with much lower cost. However, there are divergent of views for or against the effectiveness of this mechanism. One side argues that it concentrates on the large scale projects and thus failed to produce its dual objective of emission reduction and sustainable development (SD) in the long term. It is also described as a mechanism which is 'unrewarding and cumbersome' and 'tangled in red tape.'<sup>1</sup> Others defend by saying that it has made effective contribution in transferring technology, capacity building by generating employment and thus accomplished the basic ingredient of SD.

Therefore, comparing both the sides, this paper would argue though there are concern about environmental sustainability for host state action and procedural complexities, it has received overwhelming support from the developing countries which shows that it has played a key role in line with its objectives.

Against this background the essay will briefly discuss the basic goal and methodology developed by the Kyoto Protocol and Marrakech Accord. After that it will be dedicated to figure out negative and positive sides of CDM followed by conclusion.

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<sup>1</sup> Comments made respectively by the Secretary of the Indian Ministry for Non-conventional Energy Sources and the Chief Executive of BP, Lord Browne cited in Ben Pearson, Market Failure: Why the Clean Development Mechanism will not Promote Clean Development? 2007 (15) Journal of Cleaner Production, 247

## **Objective and Rule of CDM Projects in Terms of Kyoto Protocol and Marrakech Accord**

The principle goal of the CDM is to act within the purview of common responsibility of emission reduction by global projects.<sup>2</sup> Specifically, it is to be used by Annex I parties to generate projects by providing financial support to the developing countries (non-Annex 1 parties) who are not under any obligation to mitigate emission. These projects would eventually lead to sustainable development in developing countries along with assisting Annex 1 parties to comply with their commitments under Article 3 of the United Nations Framework Convention on Climate Change (UNFCCC) by generating Certified Emission Reductions (CERs).<sup>3</sup>

The rules for governing the activities of CDM was finalized in 2001 by which the most important organ, the CDM executive board was created.<sup>4</sup> According to the rule, private/public entities can participate in CDM by acquisition of certificate of emission reduction by fulfilling the obligation of Protocol.<sup>5</sup> But the participation of the developing countries along with public and private entities must be voluntary which is to be evident by a written approval from a Designated National Authority (DNA) in the host country for confirming that the project activity would result in achieving sustainable development. Moreover, to be registered in the host country,<sup>6</sup> project documentation (PDD) is an important part that needs to be approved after verification by an independent verifier and the executive board. At this time, the PDD has to make it transparent that the project is an additional mechanism to host countries Business as Usual projects for reducing emission. This clarification is called the principle of additionality.<sup>7</sup>

<sup>2</sup> Michael Wara, 'Measuring the Clean Development Mechanism's Performance and Potential' (Working Paper No 56, Program on Energy and Sustainable Development, At the Center for Environmental Science and Policy, Stanford University, July 2006) 5.

<sup>3</sup> Kyoto Protocol to the United Nations Framework Convention on Climate Change, opened for signature 11 December 1997, 37 ILM 22 (entered into force on 16 February 2005) art 12(2). (Kyoto Protocol)

<sup>4</sup> Paul Curnow & Glenn Hodes (eds), 'Implementing CDM Projects: Guidebook to Host Country Legal Issues' (UNEP, Denmark, August 2009) 8.

<sup>5</sup> Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP), Decision 3/ CMP.1: 'Modalities and Procedures for a clean development mechanism' as defined in Article 12 of the Kyoto Protocol. Annex: Modalities and Procedures for a clean development mechanism (FCCC/KP/CMP/2005/8/Add.1, 30 November 2005) Annex para 33. [Marrakech Accord]

<sup>6</sup> Ibid para 28.

<sup>7</sup> Kyoto Protocol, art 12(5) (c ).

Finally after registration, a monitoring report has to be submitted for independent verification about the number of CERs. The certification report has to provide a written assurance from the verifier to the executive board which will then send to the UNFCCC secretariat for issuing the instrument through the registry.<sup>8</sup>

## **Reasons for Not Claiming CDM Become Successful**

### **A. Dependency on Host country and cost to sustainability**

The role of executive board is commonly debated for not ensuring sustainable development coupled with reduction commitment.<sup>9</sup> Projects like industrial gas involving HCFC-23 destruction having low abatement cost with huge production of CERs become a common choice in developing countries with minimum contribution to sustainable development.<sup>10</sup> One of the reason is host countries have the option to define sustainable development within their national level.<sup>11</sup> States generally want to use procedural parts of sustainable development like transparency, community participation and access to justice associated with cost of transaction. If these components are not accomplished, the expectation of having sustainable development becomes a far-fetched idea. The rule of state dependency has other adverse consequences for instance, while effectuating hydro projects, the lax policy favors corruption in giving compensation in addition to forced displacement and impoverishment.<sup>12</sup> The rationale behind host country depended definition of SD is to attract more investment meaning to have little incentives to require strong criteria for sustainability. Therefore it lacks specificity, transparency and stringency along with the process of assessment used by host country DNA which is usually careless.

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<sup>8</sup> Marrakech Accord, Annex [65].

<sup>9</sup> Olsen K, 'The Clean Development Mechanism's Contribution to Sustainable Development: A Review of the Literature' (2007) 84 Climate Change, 59.

<sup>10</sup> Nicola Durrant (ed.), Legal Responses to Climate Change, (the federation Press, New South Wales, 2010) 55.

<sup>11</sup> S thorne and S Raubenheimer, Sustainable Development (SD) Approval of Clean Development Mechanism (CDM) Projects- experiences from the South South North(SSN) projects (South South North) 12 <[http:// www.southsouthnorth.org](http://www.southsouthnorth.org)>

<sup>12</sup> Katy Yan, 'Illegal Construction of CDM Project Barro Blanco Continues, International Rivers' [2011] <http://internationalrivers.org/blogs/246/illegal-construction-of-cdm-project-barro-blanco-continues>

## **B. Transaction Cost and Lack of Technology Transfer**

According to Kyoto protocol, the setting up of DNA is crucial as it has been given the authority to seal on the project proposal associated with countries' ratification. Most of the least developed countries have lack of financial and institutional resources to build any organ like this to oversee CDM activities with no incentive for potential resources to initiate projects.<sup>13</sup> While some countries charge high levy on Certified Emission Reductions (CERs) for which the projects get delayed and eventually cost of transaction increases, others like India and China are concerned about the low price of carbon, plan to fix minimum price on CERs approval. As shown by Alex Michaelson and Frank Jolzo that "the transaction cost for CERs accounts for 20% of the permit price for the marginal (most expensive) projects in standard scenario. Moreover taxation also add to the cost which includes CER taxation by host country by 10% as an illustration with 1% of DNA fee and 2% of adaptation and levy (as per Marrakesh Accords) is modeled as creating a wall between the market price for permits and the amount unit that the project implementers receive."<sup>14</sup> This transaction cost has been the major player for not favoring technology transfer into developing nations.<sup>15</sup> As noted above the DOE has a key role of cycling the project consisting of auditing firms, law firms and consulting companies, having no office is a major barrier for CDM to work in LDCs. With procedural complexities, this gives a competitive advantage to the other countries which eventually increase the cost for them.

## **C. Adverse Effect on Environment with Suffering to Marginalized People**

Virtually, the UN cannot claim to be successful in regulating the huge private market that is evident in the area of environment pollution, suffering to marginalized people and even with the example of violation of human rights.

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<sup>13</sup> McIntosh Thanakvaro De Lopez, Ponlok Tin, Keisuke Iyadomi, Sergio Santos and Bridget, The Clean Development Mechanism and Least Developed Countries, Changing the Rules for a Greater Participation, September (2009) 18 (4) The Journal of Environment & Development (Sage Publication, 2009) 444 available online <http://jed.sagepub.com/content/18/4/436>.

<sup>14</sup> Alex Michaelson and Frank Jolzo, 'Transaction cost, Institutional Rigidities and the size of the CDM,' 2005 (33) Energy Policy 518.

<sup>15</sup> Durrant above n 10,54.



While in most cases, the CDM projects infringe their commitment under sustainable development some of them have direct livelihood threatening impacts. Renewable energy projects such as electric generators are accused of environmental impacts associated with health hazard from burning of landfill gases producing more carbon mono oxide and nitrogen.<sup>16</sup> The environmental concern from waste management sector is also a concern against sustainability. Alarming is to note that project like hydropower has experienced direct negative impact on the environment on aquatic life and by leakage from the reservoir, negative social impact by displacement of communities, loss of agricultural land and decline in biodiversity.<sup>17</sup> In this issue of biodiversity, projects like plantation of Eucalyptas is criticized to be incompatible with local biodiversity and ecology. Negatively, CDM Watch<sup>18</sup> voices against these projects by pointing towards the issue of inequity between vulnerable groups like poor rural population, indigenous communities and ethnic minorities and urban dwellers who are the commercial farmers and industries.

Amongst many other reasons, why CDM cannot be said to fulfill its expectation is the instances of violation of human rights in accomplishing project. The glaring examples of this nature are the case of Panama and Honduras, instead of having specific allegations, the executive board registered two projects<sup>19</sup> because of conflict of reclaiming land rights which shows the unfairness of DOEs in validation of projects.

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<sup>16</sup> Tiwari and P. Souza N, Money for Nothing: A People's perspectives on CDM for Sustainable Development, Laya Resources Center\_/20101101\_klima\_emissionshandel\_cdm\_tour\_LAYA Money for Nothing.pdf

<sup>17</sup> The Energy and Research Institute, 'Assessing the Impact of the Clean Development Mechanism on Sustainable Development and Technology Transfer' ( Report No GW o5, New Delhi, 2012) Prepared for United Nations Framework Convention for Climate change, 102-103.

<sup>18</sup> CDM Watch. 2012, HydroPower Projects in the CDM. Policy Brief [http:// internationalrivers.org/files/attached\\_files120228\\_hydropower-brief%20web.pdf](http://internationalrivers.org/files/attached_files120228_hydropower-brief%20web.pdf) last accessed on 12 June 17, 2013.

<sup>19</sup> 'Anguan Biogas Project linked to serious Human Rights Violation' CDM News for Civil Society and Policy Makers in the context of the 59th meeting of the CDM Executive Boards. CDM Watch Newsletter No 12, February 2011,

### **D. Problems Surrounding Additionality**

Although, the executive board established tool to measure additionality principle, it is not an easy concept to define,<sup>20</sup> Nevertheless, there are two different interpretation for additionality criteria; they are, environment additionality and project additionality.<sup>21</sup> The aim of additionality test is to ensure that the projects are given credit only if they would not have happened under a Business as Usual (BAU) scenario.<sup>22</sup> In this context, while the investors claim that the environment additionality is easy way to define, others, specifically the civil society demands that it may destroy the whole purpose of CDM by lifting the veil between business as usual project and CDM<sup>23</sup> as it does not satisfy what an additional test is desired to do because the CDM projects must be alternative to domestic reduction commitment.

The most alarming point is to ignore the consent by flagging the idea of environment additionality resulting to create spurious credit.<sup>24</sup> In fact by providing spurious credit, the Annex 1 parties avoid making real reduction, such registration leads to increase in emission globally. However, it was presumed in the beginning that if these type of projects in the name of additionality are registered anyway then the ultimate effect is an increase of global emission<sup>25</sup> as the extra credit will be utilized to allow higher domestic emissions apart from reducing.<sup>26</sup>

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<sup>20</sup>. Durrant, above n 10, 52.

<sup>21</sup>. Harsh Chopra e Sahil Garg, Clean Development Mechanism, Bacconi School of Law Student Edited Papers, (Paper No 2010-14/EN) 7-8 <http://www.bacconilegalpapers.com> last accessed on 12 June 17, 2013.

<sup>22</sup> Ibid

<sup>23</sup> Third World Network, 'The CDM: Reducing GHG Emission or Relabeling Business as Usual?' <<http://www.twinside.org.sg>> last accessed on 12 June 17, 2013.

<sup>24</sup>. Garg, above n 21.

<sup>25</sup>. Ibid

<sup>26</sup>. Anne Olhoff, Anil Markandya, Kirsten Halsnaes and Tim Taylor, CDM Sustainable Development Impacts (Project No CD4CDM, UNEP, Netherlands Ministry of Foreign Affairs, Denmark, 2012).

### **E. Problems with Monitoring Methodology**

The methodology used for calculating gap between baseline emission and CDM project emission is regulated by executive board. It depends on statistics from the inventories. In most cases it is not done in a systematic way, particularly in least developed countries, due to lack of basic requirements such as national energy balance, land cover and land use and data are from aggregate level without taking consideration of village, household situation.<sup>27</sup>

Another concern is the renewal of projects which depends on the DOE to determine and inform CDM executive board considering after revision of the PDD, formal application by project proponent and public review resulting a huge cost and uncertainty of the renewal process. The primary role though of DNA is to certify that the propose of CDM has an insight about sustainable development which is unconditional and purely relied on PDD followed by production and issuance of CERs complying the CDM rules which is accused of being biased towards buyers and purchasers of emission reduction and less concentration on the protection of host countries' sustainable development benefits where the production of quality CERs has taken preference over tangible sustainable development.

### **Why CDM Cannot Be Claimed To Be Unsuccessful**

Despite the criticisms mentioned above, the CDM cannot be straightforward said as a failure which is evident from the recent data of projects that says that until 31 May 2013, 6886 projects have been registered with CDM executive board whereas 15 more of them are waiting for registration.<sup>28</sup> It is the only climate change mechanism that offers an inventive solution by illuminating the concept of sustainable development with emission reduction commitment of developed countries. There is fairly equal distribution of sustainable development benefit in most of the projects.

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<sup>27</sup>. Lopez, Tin, Lyadomi and Santos, above n 13, 447.

<sup>28</sup>. Unitedn Nations Framework Convention on Climate Change. CDM Website <<http://cdm.unfccc.int/projects/>>

From the side of benefits, economic growth, improved air quality, capacity of the local population lead the list with priority in employment generation.<sup>29</sup> However for better understanding the positive attributes of CDM are outlined below:

### **A. Sustainable Development/Renewable Energy**

In rural areas people get benefitted by using local resources for generating renewable energy that solves the problem of power. This process is economical, practical and functional to a large extent or to some extent it is sustainable. In some cases improved energy can bring positive result in the delivery of good health and educational services like with the introduction of modern power services like lighting and refrigeration that adds information and communication technology. In addition to that this project of renewable energy lead to economic development of small businesses helping to reduce poverty alleviation. These consequences help remote areas to decrease reliance on central government.<sup>30</sup> The general presumption is that small scale projects are more beneficial to sustainable development than large projects<sup>31</sup> however there are evidence of failure of small scale projects.

### **B. CDM's Role in Technology Transfer**

It is estimated that there will be a major shift in GHG emission from developed countries to developing countries like India and China within 2030. For this, international offset program supplies technology to this country with incentives for the purpose of mitigation though there is no express provision in CDM to do this.<sup>32</sup>

29. K.H. Olsen and J. Fenhann, 'Sustainable Development Benefits of Clean Development Mechanism Projects: A New Methodology for Sustainability Assessment Based on Text Analysis of The Project Design Submitted for Validation,' (2008) 36 (8) Energy Policy 2822-2826.

30. Michael Gillenwater and Steephen Seres, 'The Clean Development Mechanism: A Review of the First International Offset Program,' (2011) 1 (3-4) Greenhouse Gas Measurement and Management 197 <http://dx.doi.org/10.1080/20430779.2011.647014> last accessed on 10 June 17, 2013.

31. Ibid 197-199.

32. Ibid.

As both UNFCCC and Kyoto protocol require transfer of technology, the project developers add information in the PDD about whether the technology that need to be transferred are environment friendly and new to the developing countries. The major players in this are Germany, Japan, USA, France and Great Britain who are generally the parties in larger projects and contribute 36% of transfer which helped to reduce 59% of annual emission reduction.<sup>33</sup>

### **C. CDM's role in capacity building**

The institutional capacity and human resources of developing countries are definitely on the rise with the inclusion of private parties with public sectors in the Marrakech accord. This partnership accelerates the experience of developing countries in financing project, environment assessment, monitoring emission and trading. With this growth of experience these countries' institutional capacity would definitely improve in mitigating GHG emission goals with more technical experts to finalize that the CERs are adjustable to their quality.<sup>34</sup>

### **D. Bargaining Tool**

The large buyer of CERs are the developed countries who would use the tool in international negotiation with developing countries by building capacity for bringing them under stronger commitment with the use of CDM as a funding source. Eventually, in any future negotiation, CDM could play a central role.

### **Conclusion**

Certainly, CDM projects could not claim that they have been successful to satisfy their dual objectives of emission reduction and sustainable development. Alongside, it has a long and costly procedure. Moreover, the rising popularity of CDM shows that the UN system has lack of potential in regulating this growing private market.<sup>35</sup>

33. Seres and Haites, Analysis of Technology Transfer in CDM Projects, Report to the UNFCCC Registration & Issuance Unit CDM/SDM cited in Ibid.

34. Gillenwater and Seres, above n 30, 197.

35. David Freestone, 'The International Climate Change Legal and Institutional Framework: An Overview' in David Freestone and Charlotte Streck (eds), Legal Aspects of Carbon Trading: Kyoto and Copenhagen and Beyond (Oxford University Press, USA, 2009) 14-15.

In spite of these gaps, with continuous effort to modify, both developed and under developed countries has well accepted this innovative approach of the Kyoto protocol which is evident from the fact that financial support around US\$ 100 billion/year to the developing countries has been provided. Moreover, the transfer of technology has been in use in 30-40% projects.<sup>36</sup> Alongside, in terms of investment renewable energy is in the first position which rose to US\$ 70 billion/year in 2011. These data definitely indicates that CDM has introduced a global market based attitude, new to the arcade of exceptional share, by dint of partnership between number of entities joined to provide fund to emission and emission reduction projects.<sup>37</sup> It has also developed testing method of emission calculation, monitoring protocol and needful infrastructure of emission registry.<sup>38</sup> Therefore, the achievements should not be considered by its' past only as there are scopes to rectify those negative issues. To do this, most importantly, domestic legal and regulatory framework need to be proportionated with CDM project having clear intention from the host country government to avoid disputes regarding ERs and CERs.<sup>39</sup> Secondly, UNFCCC secretariat could establish an internal DOE to support cost effective registration of projects to the LDCs.<sup>40</sup> Thirdly, by considering the concern of local community, there should be a community consensus building program to help them raise their voice jointly.<sup>41</sup> Hopefully, these steps could effectuate the capability of CDM. To make it more effective, administrative actions have been taken in the area of reporting of emission, review, data collection and enforcement.<sup>42</sup>

<sup>36</sup> Bert Mertz, *The Legacy of the Kyoto Protocol: a View from the Policy World*, (2013) 4 (3) *Wiley Interdisciplinary Reviews: Climate Change*, 1, online library <http://www.onlinelibrary.wiley.com/doi/10.1002/wcc.216/abstract>

<sup>37</sup> Freestone, above n 35.

<sup>38</sup> Ibid.

<sup>39</sup> Curnow above n 5, 8.

<sup>40</sup> Thanakvaro De Lopez, Ponlok Tin, Keisuke Lyadomi and Sergio Santos, Above n 31, 448.

<sup>41</sup> Makino Yamanda Yamanoshita, Masahino Amano, 'Capacity Development of Local Communities for Project Sustainability in Afforestation and Reforestation on CDM,' (2012) 17 *Mitigating Adaptive Strategy and Global Change*, 425.

<sup>42</sup> It is recommended to take administrative steps and to make correction against professional negligence and fraud of designated operational entity (DOE) and by the executive board in the 8th session held at Doha between 26 November to 7 December 2012 in Conference of the Parties to Kyoto Protocol. United Nations Doc No. FCCC/KP/CMP/2012/11 Dist General 25 October 2012.

In particular, raising awareness by addressing the adverse effects and solution to climate change has improved recently that shows that international community is heading towards the right direction.<sup>43</sup> With CDM, the global effort to reduce emission would lead to a new notion of participation.

<sup>43</sup> Ibid

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# **Climate Change Impacts & Adaptation in Bangladesh**

Raihanul Fardaus Shahreen\* and Muhammad Abdur Rahaman Rana\*\*

## **Introduction**

An increasing number of evidences in recent years have clearly established the fact that anthropogenic climate change is a reality. According to latest findings of the International Panel on Climate Change (IPCC) and other concerned organizations/agencies, developing countries are expected to suffer the most from the negative impacts of climate change. Bangladesh is known as one of the most vulnerable countries under climate change. The frequent occurrence of extreme weather events such as the floods and tropical cyclones in Bangladesh can set back development in the country for decades. In general, warming would increase both the summer as well as winter mean temperatures, while there would be an increase in monsoon rainfall with a likelihood of withdrawal of dry season rainfall over the country. The water resources sector of the country would most likely be affected significantly due to anticipated changes. Most of the adverse affects of climate change will be in the form of extreme weather events, while water-related hazards such as flood, drought, salinity ingress, bank erosion, and tidal bore are likely to exacerbated, leading to large scale damages to crop, employment, livelihoods, and national economy. Vulnerability and adaptation to the adverse impacts of climate change are the most crucial concerns for Bangladesh. The imminent multi-faceted dangers associated with climate change have been perhaps the most talked about issues across the world during the post-UNCED era. Due to anthropogenic activities the atmosphere has been loaded with various greenhouse gases which eventually are collectively causing a net increase in global surface temperature (Houghton et al.; 1996).

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There have been increasing number of evidences in recent years that earth's climate is changing, which is attributed to fossil fuel burning, land use & land use change, livestock and waste management, and agriculture (IPCC, 2001).

Global discourse on avoiding dangerous climate change revolves around two modalities: (a) Mitigation, through which emission of greenhouse gases can be reduced and the root cause of global warming can be checked to a great extent (Schnellhuber et al., 2006; O'Neill and Oppenheimer, 2002; Moss, 1995); and (b) Adaptation, by means of which anticipated adverse impacts of climate variability and change can be reduced (Smit et al., 2000; Smithers and Smit, 1997).

### **Socio-Economic Effect of Climate Change**

A change in climate will affect natural resources, such as water, forests, and grasslands. Changes in natural resources will have social and economic effects; some beneficial, some detrimental. For example, increased rainfall might increase the amount of water available for irrigation (a beneficial effect on agriculture), but increase the rate of soil erosion and leaching (a detrimental effect on agriculture). These impacts on agricultural resources (plant and soil) would in turn affect the social and economic circumstances of farmers and other socioeconomic sectors dependent upon their production. The socio-economic effects of climate change therefore arise from interactions between climate and society and how these in turn affect both natural and managed environments. Traditionally, in Bangladesh, climatic variations have provided opportunities (resources) and imposed costs (hazards), depending on how society adapted to the environment. Thus, a bountiful floodplain rice-growing system, finely tuned to seasonal climate variations, is often disrupted by floods, droughts, and cyclones. In the future, the extent to which Bangladesh will be affected (whether adversely or beneficially) will depend on the future technological, demographic, and socio-economic trends and how they influence Bangladesh's ability to adapt in order to strike a new balance between resources and hazards.

### **Climatic Hazards in Bangladesh**

Floods, droughts and cyclones have occurred in Bangladesh over the centuries. Increased exposure due to growing population and development in hazardous areas has made recent disasters seem larger and more frequent.

Bangladesh experiences different types of Natural Disasters almost every year because of the Global Warming as well as Climate Change impacts:

**Floods:** Most of Bangladesh lies in the delta of three of the largest rivers in the world - the Brahmaputra, the Ganges and the Meghna. These rivers have a combined peak discharge in the flood season of 180,000 m<sup>3</sup>/sec. (the second highest in the world, after the Amazon) and carry about two billion tons of sediment each year. The topography of the country is mostly low and flat. Twothirds of the country is less than 5 metres above sea level and is susceptible to river and rainwater flooding and, in lower lying coastal areas, to tidal flooding during storms. Once in every 4 to 5 years, however, there is a severe flood that may cover over 60% of the country and cause loss of life and substantial damage to infrastructure, housing, agriculture and livelihoods. During severe floods, it is the poorest and the most vulnerable ones who suffer most because their houses are often in more exposed locations. In the last 25 years, Bangladesh has experienced six severe floods. In 2007, two successive and damaging floods inundated the country in the same season. During high floods, river bank erosion is common. It can result in the loss of thousands of hectares of agricultural land and scores of villages, and displace many thousands of people from their homes. Flash floods can also be a problem in the more hilly north-eastern and south-eastern regions of the country in the scale of the severe flooding in 2004 and 2007

**Tropical cyclones and storm surges:** A severe tropical cyclone hits Bangladesh, on average, every 3 years. These storms generally form in the months just before and after the monsoon and intensify as they move north over the warm waters of the Bay of Bengal. They are accompanied by high winds of over 150 kph and can result in storm surges up to seven meters high, resulting in extensive damage to houses and high loss of life to human and livestock in coastal communities. The tropical cyclones in 1970 and 1991 are estimated to have killed 500,000 and 140,000 people, respectively. The storm surges are higher in Bangladesh than in neighboring countries because the Bay of Bengal narrows towards the north, where Bangladesh is located. In recent years, general cyclonic activity in the Bay of Bengal has become more frequent, causing rougher seas that can make it difficult for fishermen and small craft to put to sea. In recent years Bangladesh has

experienced more precarious cyclones: Sidr and Aila. Cyclone Sidr has affected, to various degrees, some 33 out of 64 districts in the country and up to 70 percent of the Boro season crops, mainly rice and grass pea, were damaged in the severely affected sub-districts and between 20-40 percent in the moderately damaged. Crop damages in further 5 districts in the South have also been estimated at about 10 percent of the normal production levels. In the Sundarbans some 4-5 percent (20 -25 000 ha) of forest area has been severely damaged and nearly 15 percent (60 000 ha) partially damaged. Some alien species, which had been planted in various parts of the Sundarbans on a pilot basis, have been uprooted while in the severely affected areas a large number of trees have been broken from the stem or uprooted. In the partially damaged areas many branches have been broken but the main trunks of the trees are intact. Infrastructure in the Sundarbans and elsewhere in the affected areas has also been damaged. On May 25th 2009, Cyclone Aila hit 26 districts in the South, affecting a population of around 9 million households (around 3.7 million people). The cultivated land damaged in the area is around 96,617 ha (out of 542,006 ha cultivated in the area); the loss in the production is of around 482,144 MT that is worth of BDT 6,776 million (around 99 M US\$).

**Droughts:** Droughts are associated with the late arrival or the early recession of the monsoon rains and with intermittent dry spells coinciding with critical stages of the *T. aman rice*. Bangladesh experienced droughts in 1973, 1978, 1979, 1981, 1982, 1989, 1994, and 1995. The droughts in 1973 were in part responsible for the famine in northwest Bangladesh 1974. The 1978-79 drought was one of the most severe resulting in widespread damage to crops (rice production was reduced by about 2 million tons) and directly affected about 42 percent of the cultivated land. Rice production losses due to drought in 1982 were about 50% more than losses due to floods that same year. Losses in 1997 were about 1 million tons and valued at around US\$500 million (FAO, 1006).

**Back Water Effect:** Back Water Effect in Bangladesh arises as a result of a number of dynamic conditions/causes in the Bay of Bengal. The principal ones are (1) southwest monsoon wind during the rainy season, (2) astronomical tides, and (3) storm surges.

## **Impacts of Climate Change**

Bangladesh is the most vulnerable country to climate change impact. Being the largest delta in the world located at the downstream of the second largest river system, the country is subject to a series of climatic events. The probable impacts of global climate change (GCC), particularly sea-level rise and the associated impact on ecosystems and economic loss, adds to the already daunting array of environmental issues. Climate change will change the physiography and demography of Bangladesh. Bangladesh experiences different types of Natural Disasters almost every year because of the Global Warming as well as Climate Change impacts, these are:

**Floods / Flash Floods:** Almost 80% of the total area of the country is prone to flooding.

**Cyclones and Storm Surges:** South and South-eastern Parts of the country were hit by Tropical Cyclones during the last few years.

**Salinity Intrusion:** Almost the whole Coastal Belt along the Bay of Bengal is experiencing Salinity problem.

**Extreme Temperature and Drought:** North and Northwestern regions of the country are suffering because of the Extreme Temperature problem.

## **Sectoral Impacts**

### **Agriculture and Fisheries**

The economy of Bangladesh is based on Agriculture mainly and with two thirds of the population engaged on Agriculture directly or indirectly. So, the overall impact of Climate Change on Agricultural production in Bangladesh would be wide spread and devastating for the country's economy. Beside this, other impacts of Climate Change such as - Extreme Temperature, Drought, and Salinity Intrusion etc. are also responsible for the declining crop yields in Bangladesh. Temperature and Rainfall changes have already affected crop production in many parts of the country and the area of arable land has decreased to a great extent. The Salinity intrusion in the coastal area is creating a serious implication for the coastal land that was traditionally used for rice production. The fisheries sector has also experienced an adverse affect because of the impacts of Climate Change. The fisheries sector contributes about 3.5% of the GDP in Bangladesh and people depend on fish products in order to meet up majority of their daily protein requirements. There are around 260 species of fish in the country and almost all the

varieties are sensitive to specific salt and freshwater conditions.

### **Water Resources and Hydrology**

In a high density country like Bangladesh, the effects of Climate Change on the Surface and Ground water resources will be very severe and alarming. Changes to water resources and hydrology will have a significant impact on the country's economy, where people mostly depend on the Surface water for Irrigation, Fishery, Industrial production, Navigation and similar other activities.

### **Coastal Areas**

Almost one forth of the total population of the country live in the coastal areas of Bangladesh, where majority of the population are somehow affected (directly or indirectly) by Coastal Floods / Tidal Surges, River-bank Erosion, Salinity, Tropical Cyclones etc. With the rise of Sea-level up to one meter only, Bangladesh could lose up to 15% of its land area under the Sea water and around 30 million people living in the coastal areas of Bangladesh could become Refugees because of Climate Change impacts. Agriculture, Industry, Infrastructure (School, Hospitals, Roads, Bridges and Culverts etc.), Livelihoods, Marine Resources, Forestry, Biodiversity, Human Health and other Utility services will suffer severely because of the same. Salinity Intrusion from the Bay of Bengal already penetrates 100 kilometers inside the country during the dry season and the Climate Change in its gradual process is likely to deteriorate the existing scenario to a great extent. Since most of the country is less than 10 meters above Sea level and almost 10% of the population of the country is living below 1 meter elevation - the whole coastal area is Highly Vulnerable to High Tides and Storm Surges. Moreover, the Bay of Bengal is located at the tip of the north Indian Ocean, where severe Cyclonic storms as well as long Tidal waves are frequently generated and hit the coast line with severe impacts because of the Shallow as well as Conical shape of the Bay near Bangladesh.

### **Forestry / Biodiversity**

Bangladesh has got a wide diversity of Ecosystems including Mangrove forests at the extreme south of the country. The "Sundarbans" a World Heritage, is the largest Mangrove Forest in the world, comprising 577,00 ha



of land area along the Bay of Bengal. A total of 425 species have been identified there, the most significant is the famous Royal Bengal Tiger. Therefore, Climate Change impacts will have negative effects on the Ecosystem of the Forest resources in Bangladesh while the Sundarbans is likely to suffer the most.

### **Urban areas**

Cities and Towns situated along the Coastal belt in Bangladesh are at the Front line of Climate Change related Disaster impacts and could experience a severe damage directly because of the Sea level Rise and Storm Surges at any time. Direct impacts may occur through the increased Floods, Drainage congestion and Water logging as well as Infrastructure Damage during extreme events. The important Urban sectors that suffered severely by the previous floods in Bangladesh include Urban Infrastructure, Industry, Trade, Commerce and Utility services etc. As consequence, it hampered usual productivity during and after major floods and hence increased the vulnerability of the urban poor by many folds. It should be mentioned here that, around 40 per cent of the urban population in Bangladesh lives in the Slum and Squatter settlements of the major cities which are highly prone to Disaster risk during Flooding further.

### **Vulnerable groups**

The Urban poor are therefore directly at the risk of Natural Disasters being enhanced by the impacts of Climate Change - especially in the absence / shortage of the necessary Infrastructure as well as Employment opportunity for them in the major cities of the country. In Bangladesh, Women are especially Vulnerable because of the Gender inequalities in the Socio-economic and Political institutions. During the 1991 Cyclone and Storm surge in Bangladesh, the death rate in case of women was almost five times higher than the men. Because men were able to communicate with each other in the public spaces, but the information did not reach most of the women timely.

### **Adapting to Climate Change**

The people of Bangladesh have adapted over generations to the risks of floods, droughts and cyclones. In areas where inundation is a risk, they raise

their houses on mounds, above the normal flood level, and adjust their cropping patterns to take advantage of the flood waters. Farmers in all parts of the country adapt to local flooding and rainfall patterns by growing a range of indigenous and high-yielding varieties of rice and other crops. Rural roads, paths, tracks and other infrastructure, such as schools, are also raised above flood level, where possible. Adaptation requires assessment of vulnerability from the viewpoint of different disciplines, which then requires an integrated approach. Discussed below are some adaptation strategies for the coastal area that may be pursued in Bangladesh. We have 3 adaptive options: retreat, accommodation and protection. Considering the high population density, future population projections, and shortage of land, retreat is not possible. We should pursue the 2 other options. We should also strive to get land from the sea. The intrusion distance of surge water inside Bangladesh is heavily dependent on resistance at the land surface. One of the important sources of such resistance is the forest. (Ali. A. pp. 71) In the western coastal area of Bangladesh lies a large mangrove forest. Although that area is almost flat, damage due to storm surges there is still much less than it is in other areas that have less mangrove coverage. Thus one of the most immediate and useful adaptation strategies should be to protect the mangrove forest from denudation and implement a massive afforestation program all along the coastal belt. In fact, Bangladesh has a couple of ongoing projects aiming at that. Afforestation will also help stabilize the land, create more accretion leading to more land, and also raise the level of topography that will reduce inundation by SLR. Cropping practices may also be changed in the coastal area. New rice varieties may be developed to withstand higher salinity and higher temperatures and be grown and harvested during the non-cyclonic period. Bangladesh has undertaken a massive program of constructing cyclone shelters in the coastal area. These specially built shelters will be used as shelters for human beings, animals, and property during cyclonic periods and as community centers, schools, and so forth during normal times. The number of shelters necessary has been calculated on the basis of storm surge heights at the coast and the inland intrusion of surge water. The situation may change under the future temperature increase and SLR, and in that case the requisite number of shelters may have to be revised by considering the various scenarios and actions taken accordingly. Construction of embankments in the coastal area is another adaptation and protection measure. Embankments will obstruct the

penetration of surge water; and even if the surge overtops them, the water energy will then be greatly reduced. One of the best ways to adapt to climate change is to involve people at the grass-root level. The people of Bangladesh are very enterprising and innovative. They have been living with disasters for a long, long time. Adapting to changing situations is a familiar traditional practice in Bangladesh. What is important is to carry out detailed scientific studies, to make the people aware of the impending dangers, and to develop, along with them, methods of adaptation.

## **Conclusion**

The impacts of higher temperatures, more variable precipitation, more extreme weather events, and sea level rise are already felt in Bangladesh and will continue to intensify. The impacts result not only from gradual changes in temperature and sea level but also, in particular, from increased climate variability and extreme events, including more intense floods, droughts, and storms. Bangladesh has resourceful and resilient farmers experienced in coping with a variable climate and periodic natural disasters, and who have readily adopted modern technology to increase crop production to meet the country's growing needs. The main needs now are to strengthen existing institutions and programs in order to provide farmers with the technical, financial and price support that they need to continue increasing crop yields and production in a changing physical and economic environment.

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## **Livelihood of Fishermen Communities and resource patterns of Cora Island St. Martin**

M. Nazim Uddin \* and Nani Gopal Das \*\*

### **Background**

St. Martin's Island is a very much resource rich with the enormous biological diversity, but adequate survey work is yet to be carried out in this region (Khan 1980). A wide variety of flora and fauna have been counted in the island, but the island is now environmentally fragile due to the anthropogenic influences. Many people have engaged themselves to collect the rear species of coral and ornamental shells and sell them to the tourist, kill the marine turtle and rare species of mammals, collect their eggs, skins and cubs and destroy their nests. Furthermore diesel generators and kerosene lamps have been making the environment pollution and threaten to the ecosystem of the island and eventually destroying the biodiversity.

The island was named "St. Martin's" after a British provincial Governor but the local people called it "Narikel Jinjira", which means the 'Coconut Island' (Holiday, 2004). Coconuts are the important cash crops, however every year a significant number of tourists visits the island because of its unique landscape.

The coastal area of Bangladesh supports multi-species ecosystems providing natural environment for the growth of commercially and economically significant different organisms. The coastal zone of Bangladesh is characterized by a unique combination of multiple vulnerabilities and development opportunities that reflects the inter phase between land and sea and asks for a distinctive management from other parts of the country. The coastal zone is stressed as a consequence of intensive land use combined with episodic natural events (Khan and Karim, 1982).

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The coastal zone in Bangladesh has been delineated previously in various ways (PDO-ICZMP, 2001). The Government of Bangladesh has already identified the zone as "Agro Ecologically disadvantaged region (GED, 2004) and as one of the three neglected region" (MOP, 1998). The opportunity and potentialities of the zone, however, have not received much attention to date. By harnessing and exploiting its opportunities, the coastal zone can make a substantial contribution to achieving the national goals of poverty reduction and economic growth (PDO-ICZMP, 2004). The total area of coastal zone of Bangladesh is 47,201 sq km of which 23,935 sq km area and 23,266 sq km area are considered as exposed coast and interior coast respectively.

Many Coastal regions exhibit well developed multiple use processes, often associated with high economic value and income generation. In Bangladesh, St. Martins Island has a great importance since pre-historic times for its abundance in natural resources that displays a rich biodiversity. The natural resources in the St. Martins Island coast are Water, Land, Fisheries, Coconuts, Coral boulders and Seaweeds, which have been used for multipurpose and have strongly influenced socio-economic development. The local communities have been haphazardly utilizing these resources, resulting in complete destruction of some of them (e.g. Coral), and some being over utilized (Molluscs, Seaweeds). Due to lack of proper management system for natural conservation and utilization, land use conflicts occur and the coastal zone turned into area of major conflicts.

The objectives of this research are to identify and evaluate the floral and faunal distribution of St. Martins Island for Biodiversity conservation and to find out the existing resource use patterns and its role in community livelihood.

St. Martin's Island is a small island in the north-eastern part of the Bay of Bengal, about 9 km south of Cox's Bazar-Teknaf peninsular tip and forms the southern most tip of Bangladesh, separated from Shahporir Dwip, the last of the mainland by an approximately 8 km channel of 50 ft depth. It is about 8 km west of the northwest of Myanmar at the mouth of the river Naaf. The island lies roughly between 20° 34'N - 20° 38.8'N latitudes and 92°18'E - 92°20.8'E longitudes. It is almost flat and is 3.6 m above the mean sea level (Banglapedia). The 9.66 km wide channel between the mainland and the island is much shallower than the open sea southwest of the island. There are

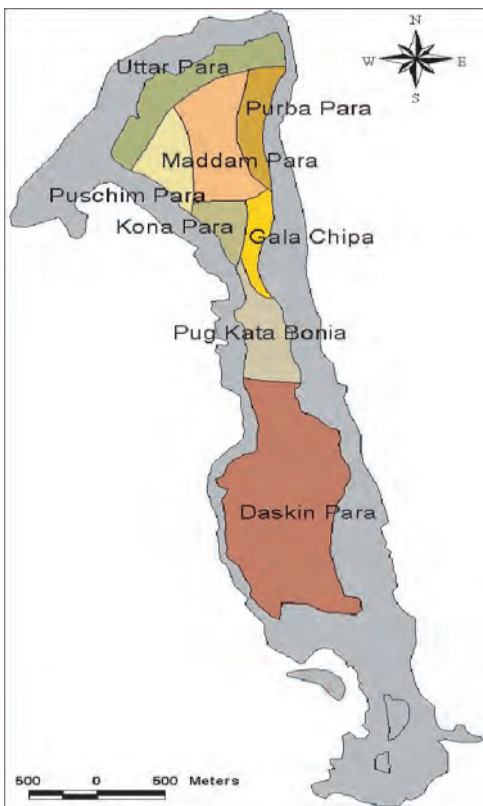
reefs from 10-15 km to the west-northwest. The island is oblong 7.315 km from south to north and is aligned NNW and SSE, covering an area of about 8sq.km. It is about 90km off from the port city of Chittagong and around 12 km off from the mainland of Bangladesh. About 60/80 miles south of Cox's Bazar, and 50 miles north-west of Akiab in Myanmar (Burma), where mangrove forests and Naaf river supply important nutrients to the sea, attribute to one of the major fish-grounds of Bangladesh. To the east the Myanmar boundary (Arakan coastal plain) lies only three miles away. To the west and southwest it faces the open sea (Islam, 1970). On the south and south- east of St. Martin's island a submerged reef is believed to be present. Which is considered in all probability the western extension of one of the Malaysian Sea coast (Hoque et al., 1979). According to Warrick et al. (1993) the island is located on the eastern flank of an anticline and probably the part of Arakan-Naga folded system and therefore the island may be regarded as a sedimentary continental island whose coastal environment supports diverse coral communities.

It's climate is heavily influenced by the subtropical monsoon that prevails over maximum average monthly air temperatures range from 27.6° C (January) to 32.7° C (May), while the minimum average monthly air temperatures range from 15.8° C (December) to 26.2° C (January). Relative humidity ranges from 67% in February to 90% in July. From October through February, the climate is mild with low rainfall (e.g., from 0 to 88 mm, rainfall in March to May 239 mm to 309 mm; June and lasts through July. The south -west monsoon is characterized by high temperatures (up to 35° C) and heavy rainfall with monthly values that may exceed 1000 mm, August and July are a transition period with declining rainfall and temperatures. A cluster of smaller islands encircled the St. Martin's Island. The island is mainly divided into six parts: 1) Uttarpara, 2) Dakhinpara, 3) Maddhyapara, 4) Purbapara, 5) Paschimpara and 6) Siradiath

## **Methodology**

Participatory appraisal evolved a series of qualitative multidisciplinary approaches to learning about local level condition and local people's perspectives. Rapid Participatory Rural Appraisal (PRA/RRA) was used applying observations and community level group meeting with different stakeholder groups (IIRR, 1998) to know the available natural resources of

the study areas as well as their importance for community livelihoods. Observations were recorded through transect across the area defined by using maps. Camera was used to collect photographs, which are very essential to prove the evidence of facts before interpretation. The transect were carried out as wide as possible to observe land use patterns, resources conditions, problems, potentials and also interviewed people. Other specific PRA tools such as resource mapping, problem tree, seasonal calendar and Venn diagram were used in the present study. To produce useable outputs, observations were required to find out the appropriate groups for collecting information and to reveal the relationship between their activities. A checklist of topics was used to aid the memory. An important way of learning about local



*Fig 1: Map of Saint Martin's Island and locating the study area*

conditions and resources is to ask local communities what they know (Pelto and Pelto, 1978). It has been experienced that the willingness and verbal capabilities of the people of St. Martin's Island differed a wide range in expressing the knowledge information. Direct observation presents rapid appraisal from being misled by myth and it provides more valid and less costly information than research method (KKU, 1987).

All the required data such as topographic maps and land use data of study area, climate condition annual reports documents of relevant agencies, tidal condition etc was collected from various administrative and Sectorial



officials namely, faculty members of Institute of Marine Science, Marine Fisheries Resource Survey Unit, Consultants of ECFC/GOB/UNDP, Upazilla Nirbahi Officer (UNO), Upazilla Fisheries Officer, LGED, Statistical Department (Teknaf), Meteorology Department (Cox's Bazar and Teknaf), Representative of Traders (Exports, Fish Drying etc.). Fishermen association along with semi-structured questionnaire and checklist. The collected data were synthesized and the useful data were extracted for this study. Arc view GIS software was also used to digitize all the classified and other necessary maps. The attribute tables were simultaneously created from the analysis.

## Research Findings

### 1) Exploited and unexploited resources

i) Major fish species exploited: There are 475 species of fish and 36 species of marine shrimp in the marine waters. Among these, 90 species of fish are commercially important. In St. Martin's Island, The most common species of fish are in table (1)

**Table 1 :** The major exploited and unexploited of Marine fishes.

Scientific Name	Local Name	English Name
<i>Lates calcarifer</i>	Vetki/Koral Machh	Giant Seaperch
<i>Cynoglossus lingua</i>	Kukkurjib	Long Tung Sole
<i>Cynoglossus bilineatus</i>	Kukkurjib	Fourlined Tongue Sole
<i>Arius sp</i>	Kata Mach	Cat Fish
<i>Mystus gulio</i>	Nuna Tengra/Guilla	Bagrid Cat fish
<i>Ephippus orbis</i>	Hatir Kaan	Spade Fish
<i>Gerres filamentosus</i>	Dom Machh	Silverbiddies
<i>Pentaprion longimanus</i>	Jagiri	Longfin Mojarra/Silverbiddies
<i>Harpadon nehereus</i>	Loittya Machh	Bombay duck
<i>Drepane longimana</i>	Pann Machh	Sicklefish
<i>Lactarius lactarius</i>	Sadha Machh	False Trevally
<i>Lutjanus johni</i>	Ranga Choukya	Red Snapper

<i>Lujanus sanguineus</i>	Ranga Choukya	Blood Snaper
<i>Lutjanus malabaricus</i>	Ranga Choukya	Malabar Red Snapper
<i>Leigonathus brevirostris</i>	Taka Chanda	Shortnose Ponyfish
<i>Mene maculate</i>	Chan Chanda	Moon Fish
<i>Upeneus sulphureus</i>	Sonali Bata	Goat Fish
<i>Liza tada</i>	Gool Bata	Tade Grey Mullet
<i>Liza subviridis</i>	Khurul Bata/Bhangna Bata	Green Back Grey Mullet
<i>Mugil cephalus</i>	Khorul Bata	Flathead Gray Mullet
<i>Valamugil speigleri</i>	Patha Bata	Speigler's Gray Mullet
<i>Nemipterus japonicas</i>	Rupban	Japanese Threadfin Bream
<i>Pomadasys hasta</i>	Sadha Datina	Lined Silver Grunter
<i>Pomadasys maculates</i>	Guti-Datina	Blotched Grunter
<i>Polynemus indicus</i>	Lakhua	Indian Salmon
<i>Polynemus paradiscus</i>	Tapsi	Paradise Threadfin
<i>Eleutheronema tetradactylum</i>	Thailla	Fourfinger Threadfin
<i>Platycephalus indicus</i>	Murabaila	Flat-head Fish
<i>Priacanthus tayenus</i>	Pari Machh	Purple-spotted Big Eye
<i>Psettodes erumei</i>	Samudra Serboti	Indian Halibut
<i>Rachycentron canadus</i>	Samudra Gajar/Raja Gajar	Cobia
<i>Saurida tumbil</i>	Achila/Tiktiki Machh	Greater Lizard Fish
<i>Sillago domina</i>	Tolar Dandi/Hondra Machh	Lady Fish
<i>Otolithiodes pama</i>	Lambu	Pama Croacker
<i>Otolithes maculates</i>	Gotipoa	Bloched Tiger Toothed Croacker
<i>Otolithes cuvieri</i>	Poa	Less Tiger-toothed Croacker

<i>Protonibea diacanthus</i>	Kala Katina/Kala Poa	Spotted Croacker
<i>Johnius argentatus</i>	Lalpoa	Silver Pennah Croacker
<i>Argyrops spinier</i>	Lal Datina	Longspine Sea Bream
<i>Sphyræna forsteri</i>	Dharkuta	Forster's Barracuda
<i>Pampus chinensis</i>	Rup Chanda	Chinese Pomfret
<i>Pampus argenteus</i>	Foli Chanda	Silver Pomfret
<i>Coilia dussumieri</i>	Olua	Pointed Tail Anchovy
<i>cualosa thoracata</i>	Hichiri Machh	White Sardine
<i>Ilisha fillgera</i>	Choukya	Big Eye Ilish
<i>EsHilsa ilisha</i>	Ilish/Hilsa	Hilsa Shad
<i>Sardinella fimbriata</i>	Takhia	Fringe-scale Sardine
<i>Chirocentrus dorab</i>	Karatia-Chela	Wolf Herring
<i>Parastromateus niger</i>	Hail Chanda	Black Pomfret
<i>Scomberoides</i>	Chapa Kori	Talang Queen Fish
<i>Selar boops</i>	Moori/Salar	Oxeye scad
<i>Alepes djeddaba</i>	Moori	Djeddaba crevalle

**Major species of shrimp exploited:** The Bangladesh offshore commercial trawl fishery has been developed on the basis of the valuable exportable Penaeid shrimp resources. The commercial shrimp species, which are available in St. Martin's Island, are in table 2

**Table 2:** Major exploited shrimp in St. Martin's Island.

Scientific Name	Local Name	English Name
<i>Penaeus monodon</i>	Bagda Chingri	Giant black tiger Shrimp
<i>Penaeus semisulcatus</i>	Bagatara Chingri	Green Tiger Shrimp
<i>Penaeus japonicus</i>	Dorakata Chingri	Tiger
<i>Penaeus indicus</i>	Chaga Chingri	Indian white Shrimp
<i>Penaeus merguensis</i>	Baga Chama Chingri	BananaShrimp
<i>Metapenaeus monoceros</i>	Horina/Loilla Chingri	Brown/Speckled Shrimp

<i>Metapenaeus brevicornis</i>	Loilla/Honney Chingri	Brown/Yellow Shrimp
<i>Metapenaeus spinulatus</i>	--	Brown
<i>Parapenaeopsis sculptilis</i>	Ruda Chingri	Pink/Rainbow Shrimp
<i>Parapenaeopsis stylifera</i>	Rida Chingri	Pink/Kiddi Shrimp

Among the shrimp exploited *Penaeus monodon* is the most valuable and hence is the targeted species. But the highest contribution in the total production, however, is made up by *Metapenaeus monoceros*, brown shrimp which is about 63%. The major penaeid shrimp and demersal fish are abundantly distributed within the 100 m depth.

**Dry Fish :** Dry fish is an important protein source of the people of Bangladesh. Fish drying is carried out in St. Martin's island in Bangladesh where modern preservation facilities and good infrastructure for transportation are absent. There are 60 independent dry fish businessmen on the island. They purchase fish from the boats on the beach in a auction. Fish drying mainly starts from September and continues till April. However this period let to varies with weather condition of the Bay of Bengal. In wet season generally fishermen do not dry their fish because of rough weather. They dry all sorts and sizes of fish during winter season whichever are available. Exact amount of total annual raw fish to be sun dried is not known because of the scarcity of catch data available. According the estimation by Coulter (1987) and Disney, the fishes to be dried consist 25 to 40 percent of the annual fish catch of Bangladesh. The important marine species that are dried are given in the table 3.

**Table 3:** list of the most dried species of finfish and shellfish of the Bay of Bengal.

Scientific name	Popular English name	Local name
<i>Harpodon nehereus</i>	Bombay duck	Loittyta
<i>(Trichiurus haumela)</i> <i>T.lepturus</i>	Ribbon fish	Chhurimachh
<i>Pampus argenteus</i>	Silver pomfret	Folichanda
<i>P. chinensis</i>	Chinese pomfret	Rup chanda
<i>Formigo niger</i>	Black pomfret	Hail chanda
<i>(Johnius argentatus)</i> <i>Pennahia argentata</i>	Croaker, Silver jew	Lal poa
<i>Protonibea diacanthus</i>	Black jew	Kala poa
<i>Otolithes bufer</i>	Silver jew	Guti poa
<i>Panna microdon</i>	Panna croaker	Leijya poa
<i>Euthynnus affinis</i>	Little tuna, Mackerel	Bom maittya
<i>Ilisha megaloptera</i>	Big-eyed jeweled shad	Choikya
<i>Setipinna taty</i>	Hairpin anchovy	Phaisya
<i>Congresox talabonoides</i>	Indian pike-conger (eel)	Kamila
<i>Colia dussumieri</i>	Pointed tail anchovy	Alua
<i>Megalaspis condyla</i>	Hardtail scad	Kauwa
<i>Raconda russelina</i>	Russel's tardoore	Fatra
<i>Polynemus indicus</i>	Indian (Salmon) Threadfin	Lakhua
<i>Arius thalssinus</i>	Cat fish	Kata, Gongra
<i>Lutjanus johnii</i>	Red snapper	Ranga choukya
<i>Scoliodon sorrakowah</i>	Dog fish	Hangor
<i>Penaeus indicus</i>	White shrimp	Chapda chingri
<i>M. monoceros</i>	Brown shrimp	Harina chingri
<i>P semisulcatus</i>	Brown tiger shrimp	Bagtara

**Crab :** Other than shrimps and oysters about 50 species of crabs have been identified in Bangladesh (Kader, 1994). Their standing stocks have not been assessed and none knows about their status of exploitation. There are a total of 11 species of marine crabs so far identified in the Bangladesh sea water of which 3 species *Scylla serrata*, commonly known as mud crab or mangrove crab, *Portunus pelagicus* and *P. sanguinolentus* are commercially commercial interest (Kader, 1994). The mud crabs *Scylla serrata* is the most suitable and reported to be abundantly available species for coastal aquaculture. The seeds of this species are also available in coastal localities covering the 480 km coastal line.

**Agriculture :** Agriculture is not much dominated in St. Martin's Island like other parts of Bangladesh. Main agricultural crops in St. Martin's Island are paddy, Coconut, and Onion. Paddy cultivation is not significant. During field visit it was found that though most of the cultivated land turned into one cropped but however, very few lands are used for 2nd crop cultivation. Most of the agricultural activities are carried on Purbapara, Maddhyapara, Paschimpara, and Dakhinpara. The upland areas, roadside of the village and homestead surrounding have been used for seasonal vegetable cultivation round the year. During winter months, some of the elevated cultivable lands also used for vegetable production. Total land in St. Martin's Island is 835.80 acre. Total agricultural land in St. Martin's Island is 495 acre. One crops land is 382 acre, two crops land is 113 acre, Paddy land is 416 acre, Coconut land is 40 acre and Onion land is 12 acre. (UNO, 2002).

### Human Settlement

The study area of St. Martin's Island the present population is 5196 and most of them are fishermen belonging to the 778 families (SRE, 2004). The Island was initially settled as back as 100-125 years. Most of the inhabitants are devout Muslims and depend on, Marine fishes for their livelihood. In the St. Martin's Island only three families are Hindu.

**Table 4 :** Total population and families of different village in St. Martin's Island

Name of the village	Population	Families
Uttarpara	1133	172
Dakhinpara	796	123
Maddhyapara	1287	185
Purbapara	948	140
Paschimpara	1032	158

**Education :** The average literacy rate in St.Martin's Island 4.40%. Poor people show higher proportion of literacy. The number of primary schools (Governmental and non-governmental) in the St. Martin's Island is 2 where the number of high school 1. Besides these, there are 2 madrasa in St. Martin's Island. Detail data on different Village in St. Martin's Island are given in Table 5:

**Table 5 :** Educational institution and literacy rate in St. Martin's Island

<b>Name of the village</b>	<b>Institutions and Number</b>	<b>Literacy Rate (%)</b>
Uttarpara	Madrasha (1)	3
Dakhinpara	Reg. Primary School (1)	2
Maddhyapara	Nil	2
Purbapara	High School (1). Madrasha (1)	5
Paschimpara	Govt. Primary School (1)	5

**Health and Health Services :** Human health is one of the important indicators for the Socio-economic condition of an area. Health is very much dependent on a number of key elements: family planning availability of health facilities, and access to safe drinking water and food. Extent of malnutrition is higher in St. Martin's Island particularly for girls. Common vaccinations like DPT, measles, and Vitamin A (for months 9-59) are taken by 65% to 95% of the coastal population. The consumption rate for Iodized salt ranges from 60% to 90% (Islam, 2004). Diarrhea, Blood dysentery, Pneumonia and Malaria are common diseases in St. Martin's Island. Health infrastructure in terms of population -hospital bed ration is relatively poor in the St. Martin's Island. There is only one Hospital of 10 beds and only 2 doctors are working their where as only 1 allopathic physicians (MBBS) in private practice. If we consider the total population of St. Martin's Island, there is one hospital 10 beds per 5196 persons. There is 1 Union health center in St. Martin's Island. Surprisingly there is no proper diagnostic center.

**Drinking Water and Sanitation:** Households having access to water source are either dependent on tube-wells/supply water or on wells/ponds water. There are only 149 tube-well in St. Martin's Island. In terms of access to sanitary facilities only 30 percent households have sanitary/ring slab latrines and another 36 percent use Katcha latrines. Around 16 percent households have no latrines ( GoB/FAO/UNDP: BGD/97/017, 2004).

**Transportation :** A good road network road has not been developed in St. Martin's Island. There are 1750 m Pucca road in St. Martin's Island. Local motorboats, tourist boat, keari of Sindbad or sea truck ply between the island and Teknaf regularly. The trips to the island are usually started during low tide while the return journey is made during high tide. In winter months

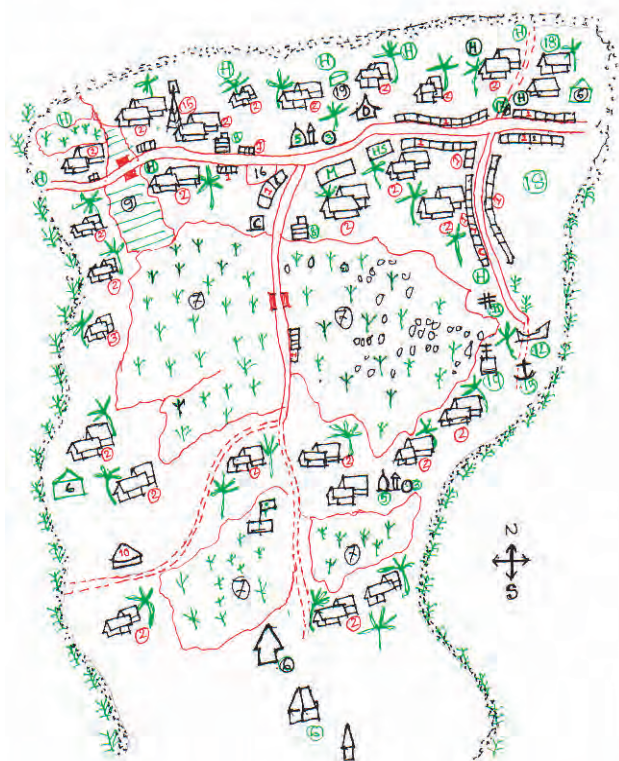
between December and January the sea usually remains calm, which ensure a relatively safe journey. The communication become risky and sometimes become collapsed for a week or more due to strong wind that blows frequently between the months of April and July. In the St. Martin's Island Roads network are not well developed.

**Social Mapping :** Social/resource map is used for collecting and plotting information on the occurrence, distribution, access and use of resources within the economic and cultural domain of a specific community. ( IIRR , 1998). The community members were participated to identify, locate and classify the resource occurrence and distribution. Several people were allowed in drawing landmarks and preparing reference points or reference lines.

Participants were advised to draw the map in the cemented yard of a household using chalk. The total land of St. Martin's island is 835.80 acre. The island has one primary school, one high school, seven mosques, two madrasha, some shops and village market (Hat). The road networks of are not well developed. The island has a lots of coconut trees. There are a one lighthouse, one sub-post office, Union parished, two-cyclone center, Scuba diving, one hospital and one union health complex, one telephone office, One Govt Dak Bungalow, some hotels and Restaurants in the island.

There is also Coast guard, Navy camp, and Police office in the island. The ministry of Forest and environment of Conservation of Biodiversity, Marine Park Establishment and Eco tourism Development at Saint Martin's Island. Most of the populations are fishermen belonging to the 778 families (SRE, 2004). The electricity line was damaged in 29April 1991 due to cyclone.





**Figure 2: Social map of a village of Saint Martin's Island**

**LEGEND:**

- |                      |                   |                    |
|----------------------|-------------------|--------------------|
| 1. Shop              | 8. Cyclone center | 15. Light house    |
| 2. House             | 9. Lagoon         | 16. Power house    |
| 3. Pond              | 10. CNRS          | 17. Union parish   |
| 4. (H) Hotel         | 11. Scuba diving  | (D). Dak Bunglow   |
| 5. Mosque            | 12. Coast guard   | HS- High School    |
| 6. Marine Park       | 13. Navy camp     | PS- Primary School |
| 7. Agricultural land | 14. T&T           |                    |

**Seasonal Activity :** Seasonal calendar is helpful for documenting regular cyclical periods (i.e., seasonal) and significant events that occur year round and influence the life of the community. (IIRR, 1998). It provides a general picture of important environment and socio-economic trends throughout the year. The community members were asked questions regarding rainy season's duration, environment condition and their activities. Group meetings

had several advantages, including access to a large body of knowledge and mutual checking. There was a tendency of self-correcting mechanism within the group because if one person put across an over favorable picture of his/her own or group's behavior, a peer would give a more realistic observation. In cross checking among different groups, a high degree of uniformity was maintained. The information was assimilated, synthesized and triangulated and finally a seasonal calendar of livelihood activities surrounding the St. Martin's Island was formulated (Table 4.)

**Table 4: Seasonal calendar showing different activities in the St. Martin's Island**

Activity	Month											
	January	February	March	April	May	June	July	August	September	October	November	December
Fishig												
Ilis –												
–other Specis												
Fish-Dryig												
Cultivation												
Paddy												
Peppr												
Water Melon												
Vegetables												
Cow /goat rearin g												
Daily Labour												

Hards hip												
Coasta l Truis m												
Rainfa ll												
Cyclo nic Strom												

Year round activities are usually fishing, poultry and livestock rearing though duckery depends depend solely on rainy season i.e., May to October. Paddy and winter vegetable are the main agricultural products. But green chili, peanuts and other special robi crops are also grown in the island. Most of the incomes generating options of the poor community are paralyzed in winter season and rainy season. Thus the poor strata of the community face miserable condition in their daily life in that period.

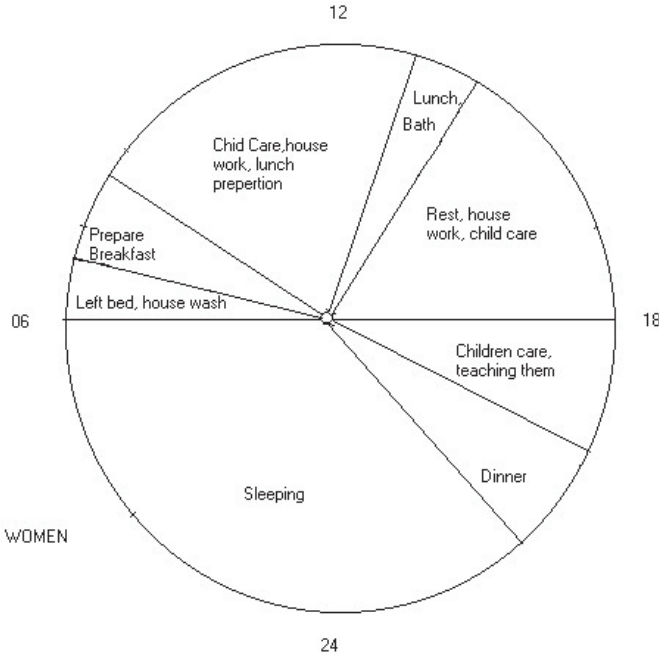
**Housing :** House construction materials may be considered one of the measuring units of the standard of living of people and an indicator of socioeconomic situation of a country. By the physical observation majority of the dwelling houses are made of materials of plants origin like chon, Golpata, bamboo, straw etc. Dwelling house made of combinations of materials like CI sheet, bamboo made wall etc. rank second highest, Golpata is the dominant roofing materials of dwelling house where there are a lower percentage of houses with walls made of durable materials like brick and cement.

**Daily Activities :** The major activities of the inhabitants are fishing, trading, and agriculture, either engaged as daily labour or as owners of such household activities. One person may be engaged in two or more different occupations i.e., one family may have agricultural land and shop in the locality. Some are engaged in fishing and fish drying. As many occupations are seasonal, so one person can take up different activities in different seasons. Among the business people, most are engaged in hotels and restaurants, selling of handicrafts and gift items for tourists and supplying fish and dried fish. Most of the men work in the agricultural fields as daily labour. Some of them are engaged in making fishing crafts and gears.

Pomeroy (1995) proposed community-based resource management as a way to involve resource users and to utilize indigenous institutional arrangements and knowledge in resource management. This can lead to form of co-management, a sharing of responsibility and authority in various degrees for resource management between the government and the local resource users/community.

Some couples were asked to identify their 24 hours activities. This type of task give an idea how they spend their time and find out if they have spare time for additional livelihood activities. The daily activities of men involve intensive labour for income generation of their family, while the women's activities are solely dependent on family affairs (Figure7). Men usually pass their time in fishing, agricultural work, and occasionally engaged in husbandry of cattle and trading in the local market. Women in rural communities do not participate directly in income generating activities. Usually they look after their families. These include the daily chore of childcare, collecting water, fuel, cooking, washing, chicken and duck rearing, sewing cloths, making handicrafts, etc. all these works go unrecognized and unpaid for. However, they have spare time for other livelihood activities. A seasonal calendar is helpful for documenting regular cyclical periods and significant events that occur during a year and influence the life of the community. It provides a general picture of important environmental and socio-economic change during the year.

The daily activities of Janab Jasim Uddin have shown as a typical example. The man catch fish in the last half of the night for own consumption and also for selling. He has trading with small shop at the village and sometimes work in the field. Most of the evening he visits village hat for selling-buying of household items, gossiping, meet with friends/relatives, etc. Mrs. Jasim Uddin is responsible for housework, childcare, cooking, etc. The night has been considered for sleeping. (Figure3)



**Figure 3:** Daily activity charts of peoples of Uttarpara , St. Martin's island.

**Mobility :** The local communities of the island are mostly fishermen and catching fish in the Bay of Bengal. Tea stall and local hat (also known as Bazar) are the part and parcel of their daily life for gossiping, meet with friends as well as relatives, selling the fish and their cultivated products, buying the house hold requirements and so on. Most of the Muslims go to mosque for prayer. Some of children go to primary school but the percentage decrease in high school. They randomly visit mobile center to talk with family members, neighbors and relatives both home and abroad. During illness they go to near by hospital. Some are engaged in trading and some are service in Teknaf. Very few people are involved with NGOs activities. They have good contact with coast guard than union office, Thana or court.

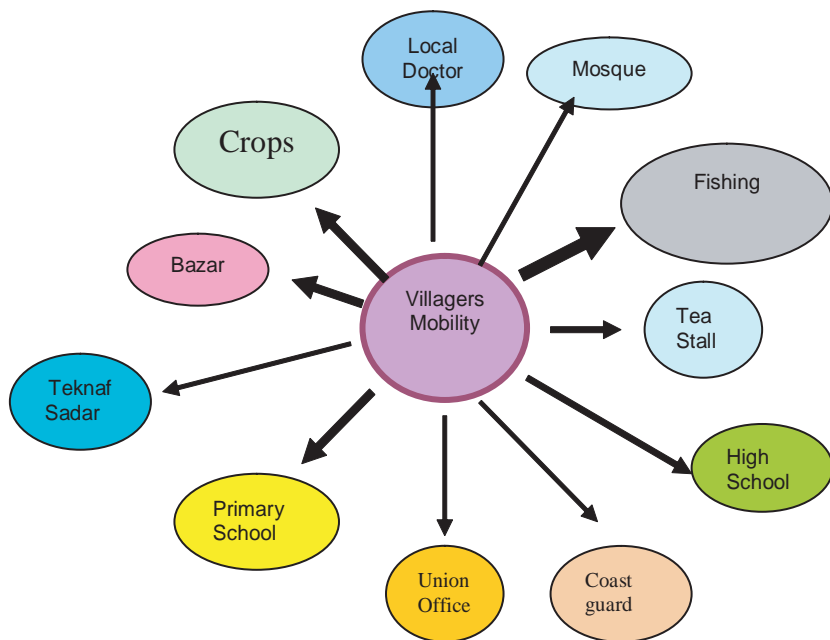


Figure 4: Villagers mobility of the St. Martin's island

**Vulnerabilities :** The Coast of Bangladesh is known as a zone of multiple vulnerabilities. In St. Martin's Island, there are lot factors are responsible to take this events such as depletion of natural resources from which the population makes its living, natural disasters, seasonal employment opportunity, seasonal incidence of disease, characteristics of the people, the general condition in which they live, the access they have to local resources and their capacity to prevent, prepare for, or respond to a given shock etc.

Land is still critical resource. In Teknaf, with increasing population and fragmentation of holdings, per capita availability of land has been declining like other parts of Bangladesh. Many households depend on a variety of local resource bases for livelihood. The fishers are a major category amongst them. Agriculture, Fish drying also play significant role. The livelihood options are not diversified in St. Martin's Island. So, more and more people are getting involved in these activities, the depletion of resources has reached serious levels. Depletion of common property resources has adversely affected livelihoods of the poor people. Also those dependent on

international common property resources are at risk: pressure on the fisheries resources in the Bay of Bengal is increased by all countries bordering the Bay and some outsider as well.

Incidence of disaster like cyclones and land erosion significantly affects lives and properties of the coastal households. The majority of storms occur in the months October and May (28% and 26% respectively). The lowest frequency of severe cyclonic storms is observed in January (Islam, 2004). The average number of severe cyclones over 200 years is about 1.48, which is 15% of the annual number of cyclonic disturbances (BBS, 1993; BBS 2002). The calamity brings in a major and sudden change in the ecosystem and it takes a long time for restoration (Mahmood et al., 1994). There are different types of cyclones form in the Bay (table 7 ). One is the Tropical Cyclone, which forms during the pre and post monsoon seasons and another one is the monsoonal depression, which develops during monsoon season. Tropical cyclone is the most destructive. Provides details on major cyclone and storm surge in coastal areas of Bangladesh.

Fruits of development are often lost due to lack of an enabling institutional environment. Present study identified the deteriorating law and order situation in St. Martin's Island as a major worry, resulting in restricted mobility (particularly of women) and increased insecurity. People generally migrate from areas of deficit and stagnancy to areas of surplus and opportunities. Local people of St. Martin's Island hardly migrate to other place. But significant numbers of illegal Rohingya from Myanmar often migrate to the St. Martin's Island. Households of St. Martin's Island adopt a wide range of strategies to cope with crisis. Choice of a certain strategy depends on its availability and access of households to such a strategy. The main coping strategy of poor households is borrowing from different sources (neighbor, local rich people, NGOs etc), sale their land and other assets, and rarely using up saving. Among this credit is critical resource, as it helps households to recover from or to cope with crises. In St. Martin's Island, access to institutional sources of credit is very limited.

**Transect analysis :** Transect analysis was clearly focused on the existing land use pattern, particularly of the St. Martin's Island (Figure 9). The transect assisted in concentrating discussions on specific zones and the activities carried out there and identified some key problems. Among the advantages of transect analysis is the simple portrayal of the resources present and the associated economic, Social and environmental issues in spatial terms.

Land Use	Sea	Beach	Agriculture	Human	Agriculture	Beach	Sea
Resources	Fish, Shrimp, Molluscs, Crab, Corals, Turtle, Seaweeds,	Dune vegetation, Keya ( <i>Pandanus odoratissimus</i> )	Seasonal Vegetables, Paddy, Pepper Cultivation, Watermelon, Onion,	Coconut and other trees, Livestock	Paddy, Seasonal vegetables	Keya, ( <i>Pandanus odoratissimus</i> ) Dune vegetation,	Fish, Shrimp, Molluscs, Crab etc.
Livelihood	Fishing,	-	Cultivation	Gardening, Poultry, Agriculture	Cultivation	Fish drying	Fishing
Problems	Declining fishery Products, Water Pollution, Sea Piracy, Fishing by	Erosion	Unfertile	Lack of drinking water, Electricity, Disaster, Preparedness, Transport, Education	Unfertile	Erosion	Declining fishery Products, Water Pollution, Sea Piracy, Fishing by outsiders



	outsider			ion, Sanity, Unemployment etc.			
Opportunities	Fishing, Renewable and nonrenewable, resource exploitation navigation	Wind energy, Shelter	More production	Construction of house and other accessories	More production and employment.	Wind energy, Shelter	Fishing, Renewable and nonrenewable, resource exploitation navigation

**Figure 5:** Transact analysis of Saint Martin's Island

**Status of Women :** Status of women in the coastal community of Teknaf is at the lowest rung of social ladder. Primarily looked at as child rearer and free labour for the family, women more often, than not, get married early at ages below 18 years. They thus face a long reproductive period to burden them with a large number of children. Also, demand for dowries continues well into their married lives. Almost no marriage takes place without transaction of dowry. Expenditure of dowries in case of women is three to four times higher than those for the men. Marriageable age for Muslim women is lower than those for the Hindu and Buddhist women. Women even when they own assets seldom can exercise their rights of transfer. Access to various work options outside home is too few for women of the rich and medium households but for women of poor hoodmolds options are many primarily for economic reasons.

**Conclusion and Recommendation**

St. Martin's Island is identified as one of the Environmentally sensitive areas in Bangladesh has suffered deforestation thrice in this century. On the other hand the extractable natural resources also depleting very quickly. Government of Bangladesh has passed a gazette notification saying that a

marine park will be developed on the island and banned many of the economic activities of the island people without arranging the alternatives. Bangladesh navy has taken 20 acre of land which is the only available farming land of the island people on requisition to develop a naval base, Local Government Engineering Department did some embankment works around the island which has caused erosion on the west side and limited sea turtles nesting area on the west. This shows that there is no coordination between the government agencies to maintain the environmentally sensitive area like St. Martin's Island.

St. Martin's Island lacks the main criteria to be considered as a potential international destination for SCUBA diving. Development of small-scale community based ecotourism, to satisfy national demand for new travel destinations, is a viable option on St. Martin's Island that needs to be promoted. Development of community based ecotourism will not only benefit local conservation efforts through community participation but will also expose tourists to new experience.

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# **Impact Analysis on Coastal Livelihood of Cox's Bazar due to Sea Beach Erosion**

Bebek Kanti Das\*

## **Introduction**

Analyzing the beach erosion through the concept from the victim of erosion, how do Beach Erode? What are the erosion points? Who are responsible for Beach Erosion in Cox's Bazar? What do the people living around the Cox's Bazar Coastal area consider their main resources, options, livelihood patterns etc.? This Research on the "Impact Analysis on Coastal Livelihood of Cox's Bazar due to Sea Beach Erosion" deals with these and related questions.

Livelihood activities may be clustered into two broad categories. These are; a) natural resources based activities such as agriculture (field crops), salt making, fishing, aquaculture, shrimp fry collection, fuel collection, crab collection, extraction of forest products, etc; and b) human resources based activities: livestock and poultry keeping, boat building (carpentry), net making, kantha making, embroidery, spice grinding, trading etc (PDO-ICZM, 2002).

Members of coastal households perform a host of activities to earn their living. Choices are conditioned by the extent of respective asset base: a more diversified asset base provides more options and is in a better position to maximize household well-being by attaining a higher level of income, consumption, comfort and security.

The coastal livelihood is diversified and always changing. On the other hand, the coastal zone is characterized by physical features (beaches, chars etc.), dynamic hydraulic conditions, rich biodiversity and dense human settlements. The worldwide average width of the coastal zone on the terrestrial side is said to be 60 km.

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The zone occupies less than 15% of the earth's land surface, yet it accommodates more than 60% of the world's population (Sharma, 2009).

The zone constitutes 32 percent of the area and 28 percent of the population of Bangladesh (Islam, 2004). Beaches are the most common shore forms in the Coastal area. Beaches are gentle slopes covered with loose sediment known as sand. The movement of sand is a normal natural occurrence, but when too much sand is moved at a time, or too little sand is produced that is a problem. One it is known as beach erosion.

When beach erosion occurs, coastal people get in trouble and fall in serious problem like loss of settlement, occupational hazard, health hazard etc. This affects the total livelihood of the inhabitants.

### **Objectives of the Research**

A livelihood analysis essentially envisages characterization of major livelihood groups with respect to their ownership of and access to resources, their respective strategic choices to use their assets in income-earning (or cost-saving) activities and their susceptibility to vulnerabilities. The aim of the research is to explore the impact of beach erosion on coastal livelihood. So following objectives of the research are taken to fulfill the destination.

- a. Explore the changes of Sea Beach area due to erosion through people perception and secondary remotely sensed data; and
- b. Determinate the impact of Sea Beach erosion on coastal livelihoods.

### **Methodology and Approach**

To complete the present study different methods and techniques have been applied. As there are two major objectives in the study, methodologies have also been applied in different ways for achieving each objective. People perceptions were taken about beach erosion through questionnaire survey to analyze and find out the impact on coastal livelihood. For a sustainable measurement of impact of beach erosion on livelihood, an interview from the expert, local representative and focus group discussion (FGD) were arranged. Secondary remote sensing data has also been used to analyze impact on coastal livelihood. And some other related documents and research work were collected and analyzed. The whole methodologies are stated below.

### **Reconnaissance Survey and site selection**

Considering the existing research topic first of all a field visit was done to select the study area. For this, a base map and GPS Machine were taken to input the existing erosion places from Samiti Para (Ward No. 01, Cox's Bazar Municipality) to Inani Beach area (Ukhia Upazila). Finally study area has taken into consideration as a research area from Samiti Para to Reju Khal Bridge (Ukhia Upazila) on the basis of existing human settlement, beach erosion and available secondary data sources.

### **Geographical Location of the Study area**

The Sea-Beach Area extends from Kolatali area in the south of the Cox's Bazar Municipality to Teknaf accompanied by a marine drive. One side of the marine drive is the sea and other side is the hill which provides an immense scenic beauty for the tourists. Golden Sands- miles after miles, over looked by genteel cliffs and awash with forming waves, colorful conch shells, ponderous pagodas, delicious seafood is the Cox's Bazar.

Location of study area is Cox's Bazar Upzaila along the coast of Cox's bazar district. Under this upazilla, the total study area covers from Samiti Para (Ward No. 01, Cox's Bazar Municipality) to Jilwanja union of Cox's Bazar upazilla along this coast (see Map 1.1.).

**Cox's Bazar Sadar Upazila:** Cox's Bazar municipality was constituted in 1869 and was turn into a town committee in 1959. The town committee was again replaced by municipality in 1972 and it was elevated to B-grade in 1989. Cox's Bazar Municipality is bounded by Chakaria Upazila on the north, Bay of Bengal on the west and on the south, Ramu upazila on the east, Moheshkhali upazila, Moheshkhali channel and Bay of Bengal on the west. It is a town, a fishing port and district headquarters in Bangladesh (Google, 2008). It is known for its wide sandy beach which believed to be the world's longest natural sandy sea beach in the world-extending for over 120 km to the south up to Teknaf peninsula and is located at 21°35'0"N and 92°01'0"E.

### **Sampling Design and Questionnaire Survey**

Perceptions of local people about beach erosion over the past 20-30 years ago, questionnaire survey was conducted using structured questionnaires to a random sample of households (80 households, mean sampling effort = 12%).



Total 80 questionnaires were surveyed where first 45 questionnaires are at Kolatali and its surrounding area. Last 35 questionnaires are at Samiti Para and its surrounding area. The sampling design of the research is as follow.

**Table 1: Sampling design for Cox's Bazar Municipality and Jilwanja Union**

Name of Upazila	Name of Municipality/Union	Households survey area/village/para	Sample Size	Total Sample size
Cox's Bazar	Cox's Bazar Municipality	Samiti Para	18	35
		Nazirertek	17	
	Jilwanja Union	Middle Kolatali	20	45
		South Kolatali	15	
		East Kolatali	10	
Total number of households				80
Mean sampling effort				12 %

In the survey every respondent was taken adult in age (above 40 years old) considering on getting valuable information of the past period.

### **Focus Group Discussion (FGD) and Interviews**

Focus Group Discussion (FGD) was adopted with local people of the study area having eight participants where maximum was adult and their age limit was between 40 and 70. Recorder system was used to record their voice during focus group discussion. People shared their opinion spontaneously about beach erosion in the view of past and present status. Total three FDGs were arranged from middle Kolatali, south Kolatali and Samiti Para respectively.

And a total of 10 interviews were taken where six was Key informant interview (KII) and remaining 4 was in-depth interview (IDI). In-depth interview was taken from adult participant who was above 60 years old in age.

### **Usage of Secondary Remotely Sensed Data**

Some remote sensing data from secondary sources on beach erosion having 38 years from the year of 1972 to 2010 is used to compare with the result of people perception. This secondary remote sensing data has been derived from the research work entitled Sea-Beach Erosion and Its Impacts on Coastal Livelihoods in Cox's Bazar (Sources: Das, B.K., Paul, A. and Hoque, A. 2011. Sea-Beach Erosion and Its Impacts on Coastal Livelihoods in Cox's Bazar, University of Chittagong, Chittagong-4331, Bangladesh). The series of four remote sensing imageries are as Landsat TM in 2010, Landsat TM in 1999, Landsat TM in 1989 and Landsat MSS in 1972.

### **Ethical Issues Consideration and Manners**

The whole work of the research was completed successfully considering the ethical matter from starting period to ending period. The main issues of the whole research such as time, language, money etc. have been taken into consideration. In the questionnaire survey, researcher & surveyor took time from respondent on the basis of availability of time. The interviewer was very careful to make sure that this research did not negatively impact on these respondents in any way. After approaching them, once the interviewer was confident that they were relaxed he asked for their patience and permission for recording. During survey, not only respondents but also researcher and surveyor have used local language to collect data where it was necessary. That time surveyor have transcribed into Bangla and noted

necessary local dialect. So the respondent gave valuable information in open-ended question too. Researcher always tried to respect his level best to the respondent, participant both interview and FGD in the field. So in every steps of the research were done considering the ethical issues and manners.

## Research Findings and Discussion

### People Perception Regarding Beach Erosion

People's Perception was taken to know the existing erosion place of beaches, changing pattern of shoreline and rate of beach erosion in the context of season of the study area.

### Existing Erosion Places

There are the following main erosion places of the study area that have been identified.

a. Nazirertek and Samiti Para, A & B hatchery point, Diabetic point and its surrounding, Girl Madrasha point, Laboni point of Cox's Bazar Municipality.

b. At kolatali area major places include- in front of Hotel sea crown and its surrounding, around the Modern hatchery and Shimozu hatchery, behind of kolatali primary school, former world vision, and Bellay hatchery of Cox's Bazar Municipality and Darya nagar of Jilwanja union, Cox's bazar sadar upazila.

c. Himchari Army Camp of Ramu upazila and Bangla Para near Reju khal of Ukhia upazila.

### Figure 1: Beach Erosion and Encroachment scenario



**Source:** Field Survey 2011

People of both kolatali and Samiti Para treated about Himchari (army camp area) and kolatali areas as an erosion points. They also said that erosion is going on at diabetic point recently. A very high degree of erosion is occurring at Kolatali moor, in front of sea crown hotel.

### **Situation of Beach Area last 20 to 030 years ago**

From the people perception it has also taken information about beach area status last 20 to 30 years ago. Most of the respondents (about 38.75%) have answered that beach area were 1.6 to 2.00 kilometers far away from present marine drive road (kolatali area).

Majority adult respondents said about the distance of beach area and also said that it was more than three kilometers far away from present marine drive road in some places. From the field survey 3.75 percent respondents have answered that beaches were 2.1 to 2.50 km and 2.6 to 3.00 km respectively before 20 years ago. A few people said that beach area was 3.10 to 3.50 km. from zirziri para (about 0.80 km east from present marine drive road). On the other hand, about 18.75 percent people said, beach was 0.6 to 1.00 km far away from the present marine drive road. It is also important information got from respondents that before 20 to 30 years ago beach areas were 1.10 to 1.50 km far away having 16.25 percent of total. So, therefore, it may say that before 20 to 30 years ago beaches were 0.60 km to 2.00 km far away in average.

### **Beach Area Scenario from Remote Sensing Data**

Das, B.K. (et.al) analyzed 38 years satellite data between 1972 & 2010 and found that erosion took place at three places highly e.g. kolatali area, himchari army camp area and nazirertek area. In his study the amount of beach area according to 1972 imagery is about 7.23 Sq.km where only 4.66 Sq.km found as a beach area from 1989 Landsat TM Imagery. After 10 years in 1999 the total beach areas have been identified about 6.28 Sq.km. Between the two Landsat TM imagery 1989 and 1999 it has showed that beach areas have been increased gradually. But again it was decreasing year to year at same places. Beaches have eroded more at himchari area (near the army camp) than other parts of the study area. About 6.17 Sq.km land have been found for beach area in the Landsat TM of 2010. If we look at the scenario of people perception on beach erosion, it has easily able to compare the similarity.

### **Impact of Beach Erosion on Coastal livelihood**

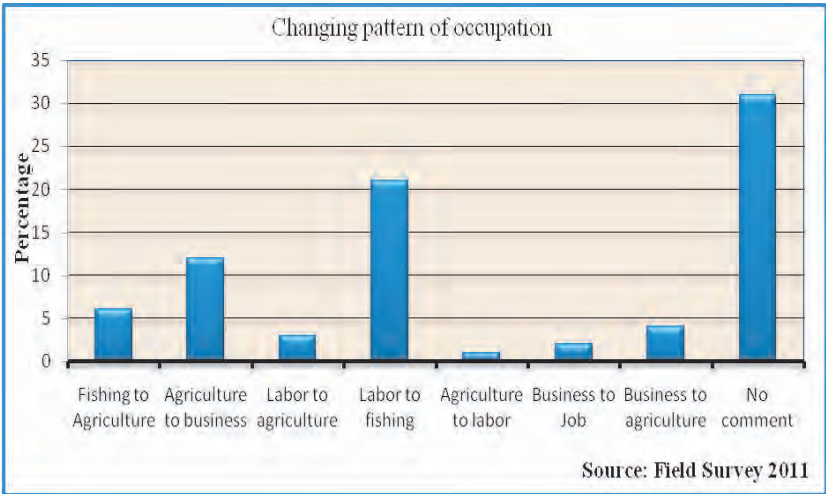
Coastal people may have to change their living pattern almost for many occurring disaster such as natural disaster; e.g. coastal erosion, storm-surge or cyclone and man-made disaster. According to respondent some interesting

findings are found that are due to impact of beach erosion on the livelihood of coastal people have discussed below.

**Agriculture and Change of occupation**

Agriculture sector supplies food, and provides employment on a large scale and also provides fuel. The sector supplies bamboos, different kinds of wood and roofing materials for housing. Many industries of the country depend on agricultural raw materials. It is still a dominant activity of most household living in the coast. Most of the people of the coastal zone in the country do agricultural activities mainly producing rice crops for earning livelihood and it is the main earning sources of the coastal people. Along the coastal belt of Cox's Bazar, the present study area people changed their occupation due to 1988 and 1991's cyclonic storm. People of the study area answered that agriculture was the most effective occupation and they made their living on producing different crops e.g. rice, vegetable, etc. around coastal area. That time most of the people had to change their occupation because of loss of agricultural land due to cyclonic storm and beach erosion. About 15 percent respondent had to change their agricultural occupation due to losing land and shifted into business and labor occupation. Some of the people who were affected in erosion shifted their occupation into labor from agriculture having 1.25 percent of the total respondent. The following figure (Figure 2) shows the changing pattern of occupation.

**Figure 2:** Changing pattern of occupation



Majority people of the study area did not stay their own occupation and many of them were engaged in wages labor. After happening the 1988 disaster in the study area people lost the resources. About 26.30 percent labor changed their occupation into fishing. It is mentioned that fishing occupation were not profitable that time as they could not want to involve ownself in fishing profession and were a risky work. But fishing occupation is profitable business today according to local perception. Overall majority respondent changed their occupation to increase their income level. Only a very few respondent didn't change their occupation, as they are govt. service holders.

### Land Resources losses

Land is the major resources of Bangladesh. It is the key element of crop production and is a scarce and limited resource in the country. For limited natural and man-made accretion of new land in the coastal areas, nearly all available arable land is presently cultivated. In many purposes land is used both agricultural purposes and non-agricultural purposes. Coastal people use land for many purposes such as agriculture, vegetation coverage, salt farming, shrimp farming and factories. The people of Cox's Bazar have experienced about the land resources losses and accretion due to different disaster. It was calculated from questionnaire survey on the study area that 25 respondents (out of 80 respondents) gave their opinion about the land resources losses. All the 25 respondents (31.25 percent respondent) have lost about 850 decimal of land resources in cyclonic storm as well as beach erosion. Almost these land resources lost at Kolatali point than the site of Samiti Para and Nazirertek area. These land could use for producing crops or agricultural purposes and dwelling purposes. As their main occupation were agriculture they used to use the coastal land in agricultural purposes but now they cannot use for losing land in erosion. So the people of Cox's bazar shifted their occupation into other. It was another significant finding of the research that they cannot produce crops like previous time.

**Table 2:** Land resource losses in erosion

Losses item	Frequency	Percentage (%)	Quantity
Agriculture land	25 respondents out of 80	31.25	850 decimal

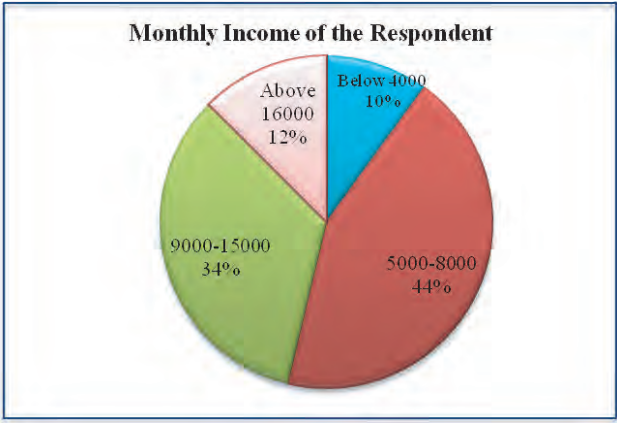
**Source:** Das, B.K., Paul, A. and Hoque, A. (2011)

Therefore, in this study it may say that losing agriculture land some people was taken labor work as an occupation.

**Loss of Homestead Resources**

Due to beach erosion people lost animal, trees, homestead etc. According to the respondent about 27 respondents (out of 80) lost their homestead in cyclonic storm as well as beach erosion in Cox's Bazar. A lot of vegetation lost during cyclonic-storm close to beach. They answered that approximately 3577 trees have been destroyed in beach erosion. As more or less respondent gave answer that they lost huge resources in erosion and were weak in mentally. These losses have affected in their income level. They said that insufficient income is a serious problem at present. So, income level of the respondent is not well. Around 44 percent people earn between 5000-8000 TK per month which do not provide sufficient scope of living of the coastal people in the area.

**Figure 3:** Monthly Income of the respondent



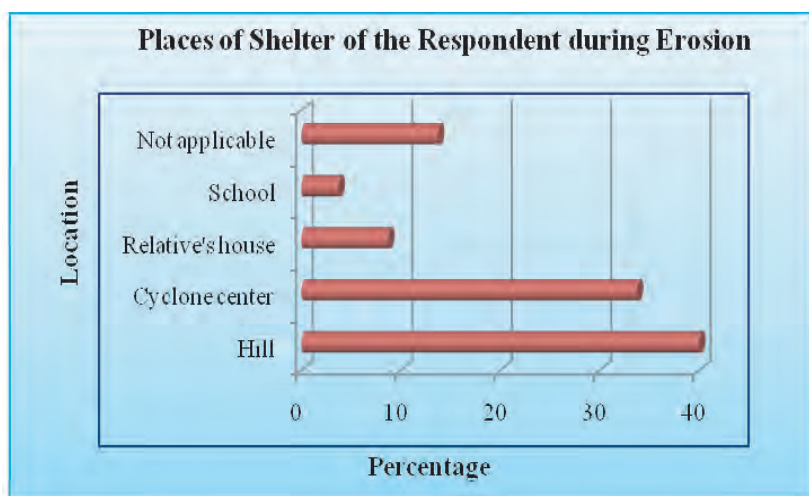
**Sources:** Field survey 2011

Most of the coastal people spent their live with a very pathetic situation. People said that they did not buy land for making house. As a result they took shelter in different places such as hilly area (maximum respondent took shelter in hill and settled their house in hilly area) or relative's house etc. It may be clear by analyzing the above figure of income of the respondent that they have been spending a very single life.

### Evicted people by beach Erosion

Every affected people in erosion took shelter in different places where they got shelter instant to save life. They became disappointed that time. As the hilly areas were close to shoreline and were safety placed, they took shelter in hill located at Zirziri para of Kolatali area. Many people (about 34 percent) went to cyclone shelter and relative's house. Who took shelter in hilly area during erosion; they permanently settled their house there. Places of shelter of the respondent during disaster are shown (Figure 4) in the following bar diagram:

**Figure 4:** Places of shelter of the respondent during erosion



**Sources:** Field Survey 2011

### Conclusion

Thirty two respondents out of eighty have been living in hilly areas since 1988 due to cyclonic disaster and beach erosion. They have to live there because of poverty. As a result hill forests are going to lose and hill cutting also being increased. Impact of beach erosion accelerates to lose the access to land, become dependent on wage labor and dependent on natural resources. So the victim of beach erosion changes their present occupation to another to sustain their livelihood and earn their living in diversified sectors.



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\* Aa`vck, bweÁvbw wefM, mgvR weÁvbw Ably, Rvrvüxi bMi wekte`üj q, mrvvi, XvKv

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Zt`i Drm t Z`cöBi Drm wntmte `öaitbi e`envi Kiv ntqtQ | cÖwgK  
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cwI Kv, Rvbj, MtelYvKgBZw` t`K Z` msMö Kiv ntqtQ |

Z`vZv msL`v t gj-Z 12 u Mp`ijxK chfeQY Ges 35 Rb Z`vZv wBKU  
ntZ MtelYv wefbaZw` msMö Kiv nq |

### **c×wZmgr t**

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b%ÁmbK c×wZi mvrth` GB Aí mgtqi gta` D³ I qvWP RbMvöxi wefbae  
Z` DcvE Zjb Avbvi cÖPov Kiv ntqtQ | Z` msMöni tjt`i AskMöbgj-K  
chfeQY, wbeo mvtjvKvi, cÖeT Rwi c, tKm ÷wW, `jxq Avtj vPbv cÖwZ  
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### **djvdj wtk- IY**

Z`vZv`i Av`mvgwRK tctjvcU chaj vPbv t  
eqm t GLvfb Mfem Z Z`vZv`i eqmmxgv 10-90 eQi | Gi gta` 21-30

eQti Z\_`vZiv mSL`vq uQj tēk/ 10-30 eQi eqtmi Z\_`vZiv Mōtgi BwZnm I `hM Mi aib-aviY mēutK AtcvKZ.Kg Rvbb/ Aciv tK 30 Daŕe wēM Mōtgi tMvorcEb t\_K iiaKti NtU hvlqv mēcōZK `hM chS/ AibK iaZcY Z\_` Rvbb/ D<sup>3</sup> Mōtgi `hM Mi aib-aviY wbtq AibK tēk Z\_` cvlqv hvq AtcvKZ.30 Daŕe wēM KivQ t\_K/ wbtgōQK AvKv i Mēw Z` i eqm mēgv I mSL`v Dti Kiv ntjv t

eqm mēgv	Z_`vZiv mSL`v	kZKiv nvi
10-20	5	14.28%
21-30	8	22.86%
31-40	5	14.28%
41-50	6	17.15%
51-60	3	8.57%
61-70	1	2.86%
71-80	3	8.58%
81-90	4	11.42%
tgw	35	100%

Z\_`vZiv i wKvMZ thvM Zv t MtelYvq Z\_`vZiv i cōq mKtj B `f wKvZ I `vji-Avbnxb, Avevi wKvYKvY wēv i tqtQ hviv D`P wKvZ Ges AibK i B cori bv Pwj tē hvlqv B`Qv i tqtQ/ Z\_`vZiv i gta` KtjR cogv ev wēkē `vj tē cogv mSL`v uQj gv 3 Rb Ges Zviv mKtj B cōq m`m`/ Avi ev` evKv nq cōwK wē `vj tē wKvY b cori bv Kti tōto w tqtQb A\_ev bPr cōbwb/ wKvY nvti GB ifc wbgMvZvi KviY RvbtZ PvBtj Zviv (Z\_`vZiv) etj b th Mōtg tKvB KtjR bvB, Zvi Dcēi ev`Priv hvi Ziv i KvR mrvh` Kti Zte wKvYvōZ UvKv tivRMvi nq/ Ab` tK hviv KtjR I mēZtKvEi chēq cōtQb Zviv gj-Z Mōtg v\_tKb bv/ D<sup>3</sup> e wēM fvel` tZi tj Lvov Pwj tē hvlqv B`Qv i tqtQ/ Dti - L` Mōtg tēqt` i wKvY nvi cōq i Zēbvq AibK Kg/ Z\_`vZiv i gta` 4 Rb bvix m`m` cōwK wē `vj tē cōtQb/ 2 Rb gv`mēvq cōtQb (Gi gta` GKRb 6ō tkYx Ges Ab`Rb 8g tkYx chS) Ges ev` evKx 5 Rb KLbI `ēj ev gv`mēvq hvbwb/ Ab` tK cōq m`m` i gta` 5 Rb cōwK chēq chS (Gi gta` 1 Rb Z\_`vZiv 5g tkYxZ cōtQb, 4 Rb gv`wK chS 2 Rb D`P gv`wK chēq cōtQb, 1

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 KLbI qj hvbvb| cjaZ Z\_vZvt'i KvqQ ukqvi G Ae\_vri KvY RvbZ  
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 coqj Lvi cOZ Amb"Qvi K\_v Dtl Ktib| brix m'm't'i KvqQ Zvt'i ukqvi  
 Ae\_vri tcmqZ RvbZ PvBj Zvt'i GKRb etjb OAviv gvB cgv, tenk cb\_v  
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<i>c0`igK</i>	9	25.71%
<i>gra`igK</i>	6	17.14%
<i>D"P gra`igK</i>	2	5.70%
<i>`mZK</i>	2	5.70%
<i>Aᐱᕈᑦᓴᓂ (c0`igK mē`ij q )</i>	16	45.70%
<i>ᓗᑲᓴ</i>	35	100%

Z\_`vZv`i tckvi neeiYt Z\_`vZv`i cġq mKtj wbgueE Ges ga`neE hv`i cġvb tckv ntjv wPsw/jeb kġgK| 35 Rb Z\_`vZv`i gta` 11 Rb gwnjv Z\_`vZv`i cġq mKtj B Mynbx, iaswġ 1Rb gwnjv GKw temikvix GbwRI cġZv`b gw Kgf Kvr Kti \_vKb| Aciw`K 19 Rb cġ`I Z\_`vZv`i gta` 11 Rb mivmwi fivte jeb/wPsw kġgK, 1 Rb gv`mwq wK`KZv Ktib, 4 Rb covtjLv KtQb Ges ev`evKxiv cte`wPsw/jeb PtiLi miv`maw<sup>3</sup> \_vKtjI eZv`b tKvb Kvr Ktib bv| Zte Zv`i Mp`vjxi Avq jeb/wPsw wbfP| tckv wPivqtb i`tġtġ Zv`i`K jeb/wPsw PtiLi miv`h<sup>3</sup> Kiv ntqtQ| Dġ - L` mKj gwnjv Z\_`vZv`i Mp`vjxi Avq jeb/wPsw Drcv`b kġ wbfP| wKŠ`G tġtġ Zv`i Mp`vjxi cġvb tckvK wPti t`Lv`bv nqwb| Zv`i cġq mKtj i tckvK Mynbx wmwte Dġ - L Kiv ntqtQ Ges ev`evKx 1 Rb`K GbwRI Kg`wmwte t`Lv`bv ntqtQ| DctivŠ`Qvġ wmwte thme Z\_`vZv`i Mp`vjxi Avq wPsw/jeb Drcv`b kġ wbfP tmtġtġI Zv`i Mp`vjxi tckv t`Lv`bv nqwb|

<i>čckvi aib</i>	<i>Z_vZvi msL_v</i>	<i>kZKiv nvi</i>
<i>jeb,iiPsoo kqK</i>	19	54.28%
<i>ikqKZv</i>	1	2.86%
<i>Gb,iiR,I KgiP</i>	1	2.86%
<i>Mynbx</i>	10	28.57%
<i>QvT</i>	4	11.43%
<i>tqvU</i>	35	100%

hivb tnvK Z\_`vZv`i gwmK Avq wePbv Zv`i tK wKQytkYxZ/K'vUvMni tZ  
tdjv hvq| Z\_`vZv`i gta` UvKvi GKtK 2,000 Gi wbtP Avq Ktib 3 Rb,  
Zvi gta` mKtjB Mynbx| 2000-3000 UvKv chS- Avq mxgvq itqtQb 1 Rb  
Z\_`vZv| 3000-5000 UvKv chS- Avq mxgvq itqtQb 11 Rb Z\_`vZv, Zviv  
mKtjB wPsw/jeb Pvl Ktib| Avl Dtl` wPswi tgSmg GB Mtelbri KvR  
tkl nq weavq Zv`i Avtqi wP wPswi klGK nmvte cOb gRjxi mvtc`jB  
wePbv Ktiw| Z`gwi jeb Pvl i tgSmg A\_ A+vei gvtmi gvSvgnS t\_ tK  
Gicj gvtmi gvSvgnS chS| Zv`i gwmK Avq Mto 6,000-6,500 UvKv chS-  
nq| 5000 UvKv t\_ tK 10000 UvKv chS- gwmK Avq mxgvi gta` itqtQ 1 Rb  
DEi vZv Ges wZub GKRB gv`tmv wKjK| 4 Rb QvI I 7 Rb Mynbx Ges  
Acivci eq` 8 Rb cjad m`m`i e`wK Avq kb`| QvI I Ab`vb` Mynbx  
Ges eq` hivb tkvb Drci`b (UvKvi gj`) KvRi mvt\_ RwoZ bb Zv`i tK kb`  
Avq mxgvi Aaxtb QtK t`Lvtrv ntqtQ|

mbtgeZ\_`vZv`i Avtqi mqv QK AvKvti †Lvbr ntjv Ges Gi cirkvncw  
Mv`vjxi tqvU qwmK Avq I mqv cieZQZ Dti † Kiv †mji |



Avq (UvKvq)	Z_“vZvi msL“v	kZKiv nvi
0	19	54.28%
2,000 Gi wþP	3	8.50%
2,000-3,000	1	2.86%
3,000-5,000	11	31.43%
5,000 Gi DtaŸ©	1	2.86%
tgU	35	100%

Z\_“vZv“i Mp“vj xi tgU gwmK Avq t MtelYvq Mp“vj xi gwmK Avtqi tŸŸtÎ t“Lv hvq th, 4000-5000 UvKv chŠ/Avq mxgvq iŸqŸQ 7uU Mp“vj x| 5000-6000 UvKv chŠ/Avq mxgvq iŸqŸQ 3uU Mp“vj x| 6000-7000 UvKv chŠ/Avq mxgvq iŸqŸQ 1uU Mp“vj x Ges 7000 UvKvi Dci Avq iŸqŸQ 1uU Mp“vj x| Zte eQtii me mgq th Mp“vj xi gwmK tgU Avq Ggb \_vŸK welquU wK bq| Drcv`b A\_ŸP Psw/jeb BZ“w` PvŸI i tgšmg I gRjx Ges Ab“vb“ evomZ Avq; thgb- CŸ“i mgq Awak tcvlvK `Zix (MwvbxŸ“i tŸŸtÎ), gvQ Pvl BZ“w` i mvŸcŸŸ Mp“vj xi tgU gwmK Avq wfbwvq| wŸgŸj eY Pvl Kvj xb mgŸq Mp“vj xi tgU gwmK Avq QK AvKvŸi t“LvŸbv ntj v t

gwmK Avq	Mp“vj xi msL“v	kZKiv nvi
4,000-5,000	7	58.34%
5,000-6,000	3	25.00%
6,000-7,000	1	8.33%
7,000Gi DtaŸ©	1	8.33%
tgU	12	100%

Mp“vj xi Avtqi QK chŸj vPbv Kitj t“Lv hvq th, Awakvsk Mp“vj xi gwmK Avq 4000-5000 UvKvi gŸa“| thLvŸb Mp“vj xi m`m“ msL“v MŸo 7 Rb; tmLvŸb Dctiv<sup>3</sup> Avq mxgv wetePbvq wbgwE ejv hvq| Aci w`ŸK 5000-6000 Avq mxgvq 3uU Mp“vj x iŸqŸQ hvŸ“i l wbgwE ejv PŸj, Zte ZvŸ“i Ae“v AŸcŸŸwKZ. GKUzFij| 6000 DtaŸ©Avtqi Mp“vj x mgwŸK ga“wE wmwŸte wPwŸZ Kiv hvq| Zte GfŸte ga“wE, wbgwE wPwŸZ Kiv mgm“vRbK| KvY wetei aib-aviY iagvŸ A\_ŸwZK mPŸK wbfP Kiv nq, RxeŸbi “ŸQ` I



Mp~vjxi aib I m m' mSL'v t Mteul Z Z~vZv' i Av\_@mvgnRK tclvUw  
 wefePbvi t¶t¶ Zv' i Mp~vjxi aib Ges m'm' mSL'v cvV Kiv\_iaZp<sup>ø</sup>  
 Z~vZv' i t¶t¶ mvariYZ `B aiþbi Mp~vjx tPvtL cto| GKU ntjv GKK  
 Ges AciuW th\$\_| GKK Mp~vjx th avibv Zv'Z gv ever tQtj tqtq Giv  
 GKmv' \_vtK Ges GKmv' Lvl qv `vl qv Kti| Ab' w' tK th\$ Mp~vjxi t¶t¶  
 GKwaK GKK Mp~vjxi Dcw'wZ j ¶¶ Kiv hvq| wKŠ' Avgvi Mteul Z GjvKvq  
 GB `B aiþbi (GKK I th\$\_) Avjv'v'vte tPvtL cti bv| KviY cQq Mp~vjxi  
 t¶t¶ t'Lv hvq ex gv, ever A\_ev fivB tevB GKmv' emevm KiþQ Ges GKB  
 cmZtj Zv' i ivbæ evbæ nt'Q| Mteul Z Mp~vjx,tjvi gta' GKK Mp~vjxi  
 mSL'v 5uU| Gi gta' GKU Mp~vjxtZ `vgr-`x, mš-ibiv emevm Ktib| Avi  
 evnK 4uU Mp~vjxtZ D<sup>3</sup> m'm't' i cikvcwnk eq' gv A\_ev ever ev AweewnZ  
 fivB A\_ev AweewnZ tevB emevm Kti| Ab'w' tK evKx 7uU Mp~vjx th\$ \_wbgæQK  
 AvKv' i Mp~vjxi aib I nvi t'Lvfbv ntjv t

$Mp^{-1}jxi aib$	$Mp^{-1}jxi msL'v$	$kZKiv nvi$
GKK	5	41.67%
th\$	7	58.33%
tgwU	12	100%

OK t\_K t`Lv hıq th Mtem Z Gj vKıq Zıbrıgj-Kfıte th\_ Mp`ıj xi msL`v  
tekr/

Mp<sup>-</sup>vj xi m<sup>-</sup>m t M<sup>-</sup>ewl Z Mp<sup>-</sup>vj x<sub>2</sub> t j vi m<sup>-</sup>m msL<sup>-</sup>v 5-10 R<sup>-</sup>bi g<sup>-</sup>ta / Gi  
g<sup>-</sup>ta 5 Rb m<sup>-</sup>m<sup>-</sup>weikó Mp<sup>-</sup>vj xi msL<sup>-</sup>v 3 wU, 8 Rb m<sup>-</sup>m<sup>-</sup>weikó Mp<sup>-</sup>vj xi msL<sup>-</sup>v  
5wU Ges 10 Rb m<sup>-</sup>m<sup>-</sup>weikó Mp<sup>-</sup>vj xi msL<sup>-</sup>v n<sup>-</sup>t<sup>-</sup>Q 2 wU / Mp<sup>-</sup>vj xi m<sup>-</sup>m<sup>-</sup>msL<sup>-</sup>v  
cvVceR t<sup>-</sup>Lv h<sup>-</sup>vq th M<sup>-</sup>ewl Z Mp<sup>-</sup>vj xi g<sup>-</sup>ta 8 Rb m<sup>-</sup>m<sup>-</sup>weikó Mp<sup>-</sup>vj xi msL<sup>-</sup>v  
me<sup>-</sup>tP<sup>-</sup>tq tenk /

məuʔi weeiYt MəwZ GjvKvi Z...vZviv məuʔ ejʔZ Zvʔi wFuv-gwUʔKB  
wPyZ KʔiʔQb/ 1991 mvʔji NwYStoi ci Zvʔi AwKvsk Rwg, emZwFuv  
mwMʔi wejxb nʔq tMʔQ/ AʔbʔKiB wʔRi Rwg tʔB/ Zviv tɛwɔɛʔai Dci Ni  
wɔqʔY Kʔi emɛvm KiʔQb/ Avevi AʔbʔK Aʔbʔi RwgʔZ emɛvm KiʔQb/

məuʔi weeiY tʰlqvi tʰlʔtʰ MpʰijxKw`K məuʔi weeiY tʰlqv cʰmʷK  
gʰb KiŋQ/ KviY Mpʰijxi GKwaK m`mʰK Z\_`vZiv mʰtʰmte ʷbeʰb Kiv nʰtʰQ  
weaʰq Zvʔi eʷK məuʔ weʰPbv mʰmʰvcʰYnʰtʰq hvq/ hvBʰivK, Mʰeʷ Z  
Mpʰijxi gʰa` gʰl 5 ʷ Mpʰijxi ʷBR`^evʰʷʰv I ʰf cʰwʰvY PʰlʰvMʰ Rʰq  
iʰtʰQ/ tʰtʰnZyGB Aʰtʰj ʰPʰw I jʰtʰbi Pʰl nq tʰmB tʰcʰʰZ weʰPbvq  
PʰlʰvMʰ Rʰq ejv nq/ AbʰʷʰK evʰevKx 3 ʷ Mpʰijx Aʰbʰi RʰqʰZ emeʷ  
KiʰQ Ges evʰevKx 4 ʷ Mpʰijx tʰeʷeʰʰai Dci Ni ʷbgʰY Kʰi emeʷ KiʰQ/  
Dʰj - L` tʰeʷeʰʰai Rʰqi Askʰtʰjvi gʰwʰj Kʰvʰv Abʰ eʷK Aaxʰ/ ʷbʰʰQʰKi  
mʰvʰtʰ Mpʰijxi evʰʷʰʷmʰn Rʰqi cʰwʰvY tʰLʰvʰ nj -

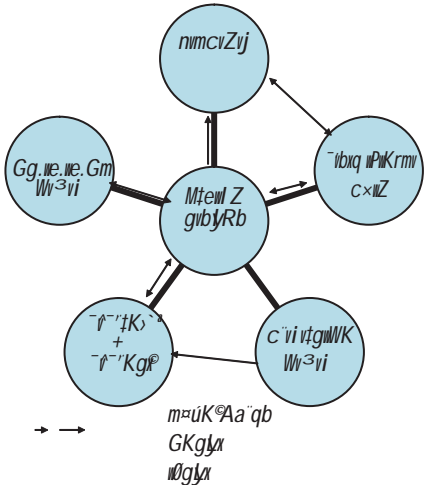
məuʔi weeiY	Mpʰijxi msLʰv	nvi (%)
0	1	58.34
1-101	7	33.33
10+	4	8.33
ʰgvʷ	12	100%

emʰtʰbi aiY t Mʰeʷ Z Mʰtʰgi emʰNʰii aiʰYi gʰa` GK aiʰYi mʰjʰcZv  
tʰLʰv hvq/ Zʰe tʰkʰʰtʰ` GB iʰc aiʰYi cʰwʰeZʰ NʰtʰU/ Z\_`vZiv Rʰvʰv tʰ  
cʰeʰZiv gʰwʰi tʰqʰj Ges Qb ʰtʰq Ni ʷbgʰY KiZ/ tʰmB Rʰqʰmʰq eZʰgʰtʰb Av  
gʰwʰi tʰqʰtʰj Ni tʰPʰtʰL cʰto bv/ AʰwKʰsk emʰi tʰqʰj teʷvi Ges Pʰtʰj i  
tʰlʔtʰ ʷʷb A\_`ev Qʰbi AʰwK` tʰLʰv hvq/ Z\_`vZvʰi emʰtʰbi aiY cʰvʰ Kʰi  
tʰLʰv hvq, emʰʰZ teʷvi tʰqʰj I Pʰtʰj i ʰtʰj Qb AvʰQ Gʰb Mpʰijxi msLʰv  
nʰʰQ 7ʷʷ, emʰʰZ teʷvi tʰqʰj I ʷtʰbi Pʰj mʰʰj Z emʰvʰb iʰtʰQ Gʰb  
Mpʰijxi msLʰv 4 ʷ Ges evʰevKx GKʰʷ Mpʰijxi tʰgʰS I tʰqʰj Kʰbʰʰtʰi  
ʰZix Ges ʷtʰbi Pʰj mʰgʰ/ gʰwʰi tʰqʰtʰj emʰ ʷbgʰY bv Kivi cʰtʰʰ  
Z\_`vZiv eʰtʰb tʰ, cʰwʰtʰZ ʰfRʰtʰjB gʰwʰi tʰqʰj tʰfʰ0 hvq, Zvʰ tʰKD Av  
GLb gʰwʰi tʰqʰtʰj emʰ ʷbgʰY KiʰZ AvMʰx bb/ Zʰe cʰjʰv Mʰgʰʷ Nʰj KʰtʰKʰʷ  
Avʰv-cʰvKʰv emʰ tʰLʰZ cʰvʰ qʰ hvq/ G cʰtʰʰ Z\_`vZiv eʰtʰb tʰ, Av\_`R Aeʰv  
fʰtʰjv nʰj GB GʰjʰvKʰv gʰvʰy emʰi cʰvKʰv tʰqʰj ʰtʰZ AvMʰx nq/ Gʰtʰtʰ Ziv  
Sʰoi K\_`v gʰvq tʰtʰL cʰvKʰv emʰ ʷbgʰY Kʰiʰb/

AʰwKʰsk Mpʰijxi ʷBR`^tʰKʰv Rʰq tʰb weaʰq Zvʔi emZemʰ Qʰvʰ Abʰʷʰ  
tʰgb: Dʰvʰ, cʰjʰz, cʰwZ Z Rʰq) AʰbK ʷKʰʰtʰPʰtʰL cʰto bv/ emʰi gaʰKʰv ʰiZ;  
gʰl nʰZLʰtʰbK/ meʰtʰvB cʰtʰj vʰtʰmʰq emʰ Ges AʰbKʰeʷK NʰemʰZ cʰY  
AbʰʷʰK 4 ʷ Mpʰijxi tʰlʔtʰ emZemʰ Qʰvʰ ʷKʰʰcʰwZ Z Rʰq tʰPʰtʰL cʰto, tʰLʰtʰb  
Ziv ʰf cʰwʰmʰi tʰgʰmʰx kʰv-mʰeʰRi Pʰl Kʰi/ GB Dʰcʰvʰb cʰʰqʰ gʰj-Z Zvʔi  
MpʰijxK tʰfʰtʰMi mʰtʰ\_ RʰwZ/ Avʰvi Mʰeʷ Z Gʰme Mpʰijxi Z\_`vZiv Rʰvʰv  
tʰ Ziv eʰemʰqK Dʰtʰtʰk` bq, iʰagʰl ʷbʰtʰRi tʰfʰtʰMi Rb` ʷKʰʰmʰeʰR Dʰcʰvʰb

Ktib| Aciw`tk 1 u Mp`vjxi t`q`f`l uKQzcuZZ Rig, 1 u cKz, emoi  
Avtkcvtk djR MvQ thgb: bvi`tkj, tLRj) tPrtL cto| 10 u Mp`vjxi  
m`m`iv 4 u Mfxi bj Ke t`tk Zv`i c`qurBxq Lvevi cmb msMh Kti|  
Ab`w`tk 2u Mp`vjxZ wR`^bj Ke itqtQ| m`mbtUkb/ cqtub`vkb e`e`v  
itqtQ hvi gta` 5 u cvKv, 4 u AvavcvKv I 1u Kuv| tKvbn Mp`vjxi  
m`m`f`i wR`^cqtub`vkb e`e`v tbB|

uPukrmv e`e`v: Z`vZv`i KvQ Zv`i uPukrmv e`e`vi aiY m`u`K`RvbtZ  
PvBtj Zviv etjb th Mtg Z`v mgMaj NuGj vKvq tKvb nvmcvZvj A`ev tKvb  
Gg.ue.ue.Gm. uMvix Wv`vi tbB| iagv`l m`zi qv evRvti (6 bs I qvW`GK u  
`f`tk`^`itqtQ| Z`vZviv c`u`gK uPukrmv t`q`f`l D`^`f`tk`^`hvb Ges  
A`bK t`q`f`l Zviv P`kmiqv, g`nkLvix, K`evRvi m`ti uPukrmv Rb` Mtq  
\_vtKb| Z`vZv`i m`tkl Kti g`njv`i KvQ t`tk Mf`Zx brix `f`, uki i  
uKv, tiM BZ`w` m`u`<sup>3</sup> uPukrmv tbqvi aiY RvbtZ PvBtj Zviv etjb th,  
`vbxq `f`tk`^`Zviv `f` Kg` KvQ t`tk Gme w`lq, tjvZ uPukrmv m`vav  
wbq \_vtKb| Z`vZv`i Z`v`v`v`i Mtgi gvbv gj-Z uR`ji KvQ t`tk cmb  
cov tbb| cvkvcnk `f`Kg`i KvQ t`tk cingk` tbb| c`y-i`mvqubK  
(biomedicine) Jla MhY Kti Ges kvi i`K Ae`v Dciv`<sup>3</sup> uPukrmv e`e`v ev  
aitYi evBti tMtj Zviv K`evRvi, P`kmiqv, g`nkLvix BZ`w` Gj vKvq Mtq  
Gg.ue.ue.Gm Wv`vii kibvcb`nb Ges A`bK t`q`f`l nvmcvZvj hvb| uMvix  
Wv`vii udm tekx w`avq A`bK t`q`f`l Zviv `vbxq `f`tk`^`i Dci A`vK  
w`f`Kxj| Zte Ri`ix Ae`v w`tePbvi mvtct`q` Zviv uKvK/nvmcvZvj ev  
Wv`vii KvQ hvq| uPukrmv e`e`v Ges m`uk` gvbvRb I c`Zv`vbi mvt`  
Zv`i m`u`K`K wbtg`<sup>3</sup> fite uPw` Z Kiv hvq|



*ckvmbK Kw/tgv I wPvi e'e-v:*

Drcw Z / Pvl thvM ctb i tgsmgx w bcw t Z vZv Av mvgmRK tclvU  
Rvbri tql Zvt i Drcw Z / Pvl thvM ctb i tgsmgx w bcw vV Rlax GB  
w bcw Zvt i RmeKvi aib eStZ mrvh Kti Mteu Z Mtg gj-Z eQti  
ctb i Pvl nq| h\_v : jeY I Psw| evsjv gvtmi AMhvqb t\_k ekvL gvm  
chS-je tbi Pvl Kiv nq| AMhvqb gvtm mvtii cwb AvUk ti tL i Ktq jeY  
msMh Kiv nq| Z vZv Rvbib th 1 Kwb (80 kZisk) Rng je tYi gvV  
wtmte mtZ 800010.000 UvKv jvM| tKvb tKvb mgq GB DBwbq tbi UvKvi

পরিমাণ ১৫০০০ টাকা পর্যন্ত হয়। তথ্যদাতারা জানান যে প্রতি কানি লবনের মানে ৪-৫ জন লবন শ্রমিক কাজ করে। অন্যদিকে মাঠে পলিথিন ব্যবহার করলে ৬ জন লবন শ্রমিক লাগে। শ্রমিকদের বেতন ৪০০০-৫০০০ টাকা পর্যন্ত অন্যদিকে জ্যৈষ্ঠ-কার্তিক মাস হচ্ছে চিংড়ি চাষের সময়। চৈত্র মাসের শেষের দিকে পোনা ছাড়া হয়। লবনের পরপরই এসব পোনা ঘেরে ছাড়া হয়। ১০০ পোনার দাম পড়ে ৩৩.৫ টাকা করে। প্রতি কানিতে চাষ করে ৩০ জন চিংড়ি পাওয়া যায়। প্রতি কানি চিংড়ি চাষ করতে ১০-২০ জন চিংড়ি চাষী প্রয়োজন। লবন ও চিংড়ি চাষের মৌসুমী দিনপঞ্জি নিম্নে দেখানো হল :

#### লবন:

মাস	উৎপাদনের পরিমাণ
পৌষ	২০ মণ
মাঘ	৫০ মণ
ফাল্গুন	৪০-৫০ মণ
চৈত্র	১০০মণ
বৈশাখ	৫০ মণ

#### চিংড়ি চাষ:

পোনা ছাড়ার সময় = চৈত্র মাস
মাছ শিকার = জ্যৈষ্ঠ মাস
উৎপাদন (কে.জি) = ১০-২০ মণ

উপরোক্ত চিত্র থেকে দেখা যায় যে ইজারা সূত্রে মালিক স্থানীয় ব্যক্তিটি চতুর্মুখী সম্পর্ক জালে আবদ্ধ। এক্ষেত্রে উৎপাদনের কেন্দ্রে অবস্থান করে ইজারা সূত্রে মালিক ব্যক্তিটি। উক্ত মালিক/ অধিকর্তা একই সাথে লবন শ্রমিক/চাষী, ইজারাদার, লবন ব্যবসায়ী এবং মধ্যসত্ত্বভোগী প্রভৃতি লোকজনের সাথে চতুর্মুখী সম্পর্কে আবদ্ধ থাকে। অপর দিকে চিংড়ি চাষের ক্ষেত্রে চিংড়ি ঘেরের মালিক নিম্নোক্ত সম্পর্ক জালে আবদ্ধ থাকে।



চিংড়ি ঘেরের মালিক একই সাথে ইজারাদার, স্থানীয় বাজার, পোনা বিক্রেতা, চিংড়ি শ্রমিক, পাইকারী বিক্রেতা ও অনেকক্ষেত্রে রপ্তানীকারক এবং কখনো কখনো ট্রলার মালিক ট্রলারে পাইকারী দরে চিংড়ি কিনে দূরবর্তী বাজারে বিক্রি করা হয় বা মধ্যসত্ত্বভোগী সাথে ব্যবসায়িক সম্পর্কে যুক্ত থাকেন।



## দূর্যোগ ও উপকূলীয় মানুষজন

### সাইক্লোন সেন্টার-দূর্যোগকালীন সময়ে আশ্রয় পর্যালোচনা :

উপকূলীয় মানুষ জনের জীবনে সাইক্লোন সেন্টার গুরুত্বপূর্ণ ভূমিকা পালন করে। দূর্যোগকালীন এবং পরবর্তী সময় (মানুষ তার যাপিত জীবনের স্বাভাবিকতায় ফিরে না যাওয়া পর্যন্ত) পর্যন্ত সাইক্লোন সেন্টার দূর্গতদের প্রধান আশ্রয়স্থল হিসেবে কাজ করে। শুধুমাত্র দূর্যোগকালীন সময়েই নয় দূর্যোগের সংকেত পাওয়ার সাথে সাথে মানুষজন তাদের মূল্যবান জিনিসপত্র, যেমনঃ- অলংকার, টাকা পয়সা, ট্রানজিস্টার, রেডিও, গবাদিপশু ও খাবার (যেমন- চিড়া, মুড়ি, চাল, ডাল) ইত্যাদি নিয়ে সাইক্লোন সেন্টারে আশ্রয় নেয়। দূর্যোগকালীন সময় সাইক্লোন সেন্টারে বিভিন্ন শ্রেনী, পেশা, বয়স, লিঙ্গের মানুষ আশ্রয় নেয়। উক্ত সময়ে সমাজে বিদ্যমান সামাজিক দ্বন্দ্বগুলো অপেক্ষাকৃত কম পরিলক্ষিত হয়, এতদসত্ত্বেও সামাজিক টানাপোড়নের বিষয়গুলো যে একবারে অস্পষ্ট হয়ে যায় তা নয়। তথ্যদাতারা জানান যে তারা বিভিন্ন সময়ে আশ্রয়কেন্দ্রে অবস্থান নিয়েছেন। দূর্যোগের সংবাদ পাওয়া মাত্র তারা তাদের মূল্যবান জিনিসপত্র, খাবার ইত্যাদি গুছিয়ে রাখেন এবং সাইক্লোন সেন্টারে আশ্রয় নিতে যান। তথ্যদাতাদের মতে গত ৩০ বছরে উক্ত অঞ্চল (ধলঘাট ইউনিয়নে) সবচেয়ে বড় ও ভয়াবহ দূর্যোগটি সংগঠিত হয় ১৯৯১ সালের ২৯ শে এপ্রিল। ওই দিন তারা দূর্যোগের সংকেত ও এর ভয়াবহতা সম্পর্কে (যারা অবগত ছিলেন) অবগত হওয়ার পরে তারা সাইক্লোন

tm>Urti i w tK tQrtUb Ges tmLvrb Avkq tbb| Z<sup>---</sup>vZviv Avtivr Rvrbv th c0q  
`hM tjtZ Zvt i GKgt Fimv nj mvtKvb tm>Uvi |

Mteul Z M0guUz ebvi c0KvcZv teuk, GLvrb tFweK tRvqiti cmbi Zvt i  
Rb ugiKi KviY tE| BDibqtb Abvb l qrtWP tPtq AtcTlvKZ.mPZAÄj  
nlq q Ges mvmi tNtI Gi Ae vb nlqvi iab D<sup>3</sup> M0guU gvbYRb eZgvtb  
`hMKvjxb mgta AvkqtK> tK Avkqi Rb tetQ tbq| Z<sup>---</sup>vZviv Rvrbv th  
GB mgta Zviv mg ltf vtf fjt hvb| GKmvt abx-Mi e mevB mgtj GKB  
Qt i mtp Ae vb Ktib| GtTt e<sup>3</sup>K 00, m0uEMZ SMov BZw melq  
KvR Ktibv| c0q mKtj i gta GK aitbi HK KvR Kti; thtnZymeVB  
`hMcMOZ|

`hM mvov t l qvi wfbZv t `hMKvjxb mgta e<sup>3</sup>K mvov t qvi aib wfbæ  
ntq vtK| GtTt wj ½, eqm, tckv, tkbxtf mvov t l qvi aitbi wfbZvi  
`wi nq| cjal Z<sup>---</sup>vZviv Rvrbv th `hMi mgq brix, iki, ex Gt i mta  
mgm v nq| `hMi mgq Zviv AtbK teuk Amnvq ntq cto| AvkqtK> a bv  
hvl qvi iab Zvt i Rieb AtbK tekx ugiKi gtl cto| GtTt iagvt  
AvkqtK> bq `hMi Z<sup>---</sup> cvl qvi melquU iZcy cjal Z<sup>---</sup>vZviv Rvrbv  
th Zviv Zvt i Mptj xi gunjvt i `hM mstKZ, Gi c0KvcZv BZw m0uT<sup>©</sup>  
Rmbta vtKb| GKRb Z<sup>---</sup>vZv kudK Avj x (58) etjb th, gunjviv tmftZ  
mZvivZ cfti bv| Zviv Nt i gta vtK weavq `hMi (vbxq fvlvq So  
evZvm) wKgZ Lei cvq bv| wZb 91 mvtj i NvStoi D0w wta etjb th Zvi  
Mtq tiwvi wQj wQzmsL'K| `hMi (So) Lei hLb c0vi Kiv nq ZLb  
Avgiv hviv Lei itbQ emotZ wta t-tgtq i RmbtqU| AtbKB AvtQ  
hvt i t0x A<sup>-</sup>ev cjal m miv emoi evBti wQj, dtj Zviv Lei wtZ cvtibv|  
Ggb Kti AtbK gunjv, iki `hMi Ketj cto Ges c0b nvivq| Aciw tK  
gunjv Z<sup>---</sup>vZviv Rvrbv th Stoi mgq Zviv Zvt i t0x A<sup>-</sup>ev Mptj xi cjal  
m mti i wKU t tK Lei cvb| Kwgtb (44) 910Gi NvStoi D0w wta  
etjb th Zvi t0x gtnkLvix wmtqQj AvZw emotZ| mUvq emo tdivi ci  
Zvi KvQ t tK `hMi Lei cvb Ges ZvTlvKfite c0qvRbxq e w wQta  
ivZ 8 Uvq tQtj, kt i-kvi oxmn mvtKvb tm>Urti hvb| Aci AvtKRb gunjv  
Z<sup>---</sup>vZv Avtqkv teMg (40) etjb th gunjviv ZvovZmo wivc Avkta thtZ  
cfti bv| Avi So ebvq Zviv teuk TlvM0'nb Kvib Zvt i kw<sup>3</sup> Kg, evPt i  
evvbtvi Rb GKUv tP0v Zvt i vtK, Avevi Zvt i kixt i Kvco tPvcol  
AtbK teuk vtK hvi Rb Zviv wKgZ mZvivZ cfti bbr |

`hM mvov t l qvi c0qv wetePbv Ktj Avil wfbæw l q t l qv hvq|



Ab'ir tK eq' e'w<sup>3</sup>iv Zit'i evaK'RibZ KvitY Lg' Z<sup>3</sup>Zvi mvt\_ Aitkq tKt'<sup>a</sup>  
hvl qv, eb'vq m<sup>3</sup>Zit'bv BZ'w' KvRKg@KiZ ctit'bv| wkit'i t'q'it' t' L'v hvq  
th kw<sup>3</sup>, AwfÁZv BZ'w' i Afite Zit'i qta' GK ait'bi AmnvqZj'Zwi nq|

ṽhṽm A\_ṽ 910Gi NṽSṽto kivBZjv Z\_v mgM0aj NvU BDṽbqṽb Pig Lv ṽrve  
ṽLv ṽq| 2/3 w b aṽi ṽfRv Pij, cṽR Kgov, bviṽKj BZ'w ṽLtq w b  
KṽUṽqṽQṽj b eṽj Z\_ṽvZviv Rvrbv| Zviv AvI Rvrbv AṽṽKi AvZṽṽqi emṽ  
ṽṽK Avmv Lrevi fṽMvfvM Kṽi ṽLtqṽQṽj b Zviv| Priṽ b cṽi cṽKv (GbṽRI)  
I mi Kṽi mṽvṽh D<sup>3</sup> AĀṽj ṽcṽQvq| cṽKv Mg I mi Kṽi fṽṽe Pij wZib Kiv  
nq|

NWSto KgmS~tbi Dci weifc cŕve cto| jeb tgsmy\_vKvq jeb Pvl Kiv  
nrQj| WKŠ~NWSto jeb tNti cmb XjK hvq, dj Z jeb Prtli e'vck TqTtZ  
nq| jeb gwyj K (BRviv mĤ), BRviv vi t\_tK i i " Kti jeb klgK, Prlx mevB  
TtZM0'nb| jeb tNti Drcv' b weNWZ nl qvi dtj AĥK klgK KvR nrivb I  
teKvi ntq cto| Zviv teKvi Ae'vq 6 gvm KvUrb| D<sup>3</sup> mqtq Zviv Aek"



kwɔK Avj x (58) etj b th Sto (1991) Ni emw, gmuR<sup>h</sup>, BDiqbq cwi l<sup>h</sup>  
 Awdm, t<sup>h</sup>vkvb cvU, gr<sup>h</sup>tmv, <sup>h</sup>ǰ, jeb gvU me wKQB tft<sup>h</sup> cto| c<sup>h</sup>iv GjvKv  
 gZ<sup>h</sup>z<sup>h</sup>xi gZ gtb ntqUj etj wZub gS<sup>h</sup>-e<sup>h</sup> Ktib| Avej<sup>h</sup> tnvmb (54) etj b,  
 0Ni, Mi<sup>h</sup>, Qj, RvqMv-Rvq teg<sup>h</sup> b wMtg MB, FvBti dBi Ag tMB| GLb

temoera i Divi \_wM| Avj - vn Avixi tKvb kvw'w'j 0| Z\_''vZv' i DEi t\_tK Rvrv hvq, Mōgi AnaKvsk tj vKRbB Zv' i Niewo, tMv-māū, gj-erb gjv vgvj nvivb| cieZxPZ wefbaetbi mnvnh" mnthwMZvi (miKvix, temiKvix ms-v) ga" w' t q aj NvU GjvKvi tj vKRb clyvq Zv' i Rxeb clyvVb Ktib|

`hM cieZxmnvnh" mnthwMZv t`hM cieZxmgq wefbaemiKvix temiKvix msMVb `MZ DcKj-xq AĀtj mnvnh" mnthwMZv cōvb Kti \_vKb, hvZ Kti DcKj-xq gvbyRb Zv' i Rxebi `rfweKZvq wdti thtZ cti| `hM cieZx<sup>o</sup> mnvnh" mnthwMZv Kvhpjgi t q t f wefbaetbi `vZv ms-vI gly' figKv cij b Kti \_vK| 910Gi NwSto aj NvU i t q t f miKvix cōZōvb Qvovl temiKvix cōZōvb thgb- cōKv, Kwi Zvm, Rvgb-ersj v' k m-cōZ, tiW wptmU BZ'w' ms-v mnvnh" Kti \_vKb| MtelK' i Gd, wR, wV t\_tK Rvrv hvq th GB mKj ms-v cōq 6 gym aṭi Zv' i Tvb Kvhpjg Pwj t q hvq| MteW Ziv Rvrvb th Stoi 2 w' b ci miKvi tnij Kpvi t\_tK e-vq wefbae' ē'w' fti `MZ AĀtj tdtj b| e-li gta' Pij, Wj, JIa BZ'w' `ē'w' wQj| cwevi cōZ gvtm 10 tKwR Kti Mg t l qv nq| 910 cieZxmgq cōKv Mg weZib cōt½ Z\_''vZv tgv Avej gwR' (82) etj b, ōwvR, cōKv AwQj ewj gvby tnt' ē'w' AwQj w'| wvZiv cBt'Z'K Niti Mg w' wqj | el Ziv b Q-gvni WBK'v mVh' MBw'4j | Aviv, gvBbtm LvB cwo evBw'Qj | Ab'w' tK Rvgb-ersj v' k m-cōZ aj NvU GjvKvq mnvnh" mnthwMZv cōvb Kti| Zviv wVb Ges evk w' t q `MZ' i Rb' cōq 1000 wU Ni wbgP' Kti t' q| wefbaechP'q Zviv Gme Ni wbgP' Kti t' q| GB KvRi Ask wntmte kivBZjv Mōg Z\_v aj NvU i gvby Zv' i mw' GKthvM KvR Ktib etj MteW Z' i Gd, wR, wV t\_tK Rvrv hvq| ZrKvjxb ersj v' k miKvii `hM e'e-vcbr gšpj t q i Dt' v' tMI tek wQzNi ewo wbgZ' nq etj Z\_''vZiv AwfgZ cōKv Ktib| Z\_''vZiv Avil Rvrvb th ersj v' k tmbvwnbx m'm' i mnvqZvq miKvi Gme Ni wbgvP' Kti t' b| D<sup>3</sup> gšpj t q i Aaxtb wbgZ' Nti i msL'v cōq 200 etj Z\_''vZiv Rvrvb|

cōKv Zv' i mnvnh" mnthwMZvi Ask wntmte mgMōaj NvU AĀtj Mfxi bj Ke `vcb Ktib| MteW Ziv etj b th, cfe'kivBZjv Mōg Z\_v mgMōaj NvU gvby clyzi i cwv cvb KiZ| 910 cieZxmgq wefbaechP'q cōKv bj Ke `vctbi tPōv Kti| wKš' m'c q cwbi `li AṭbK wbtP \_vKvi dtj Zv' i ct' q bj Ke emv'bv m'ē nqwb| cieZxP' AṭbK Mfxi Lbṭi ci 450-480 dē wbtP m'c q cwbi `ti i mōvb cvl qv hvq| Zviv mgMōaj NvU AĀtj 20-30wU Mfxi bj Ke `vcb Kti etj Z\_''vZiv Rvrvb| Ab'w' tK Kwi Zvm bvtg AvtiKw GbwRI mgMōaj NvU BDwbqṭb cōq 100 wU i gZ Mfxi bj Ke `vcb Kti etj MteW Z\_''vZiv AwfgZ cōKv Ktib|

91 mvtj `#MceR, `#MKvj xb mgq Ges cieZ<sup>9</sup>mgq weifbæitbi mrvh<sup>9</sup> mnthwMzv c0vb Ktib| NibSo `M<sup>9</sup> aj NvU Zviv Pij, Kvco, JIa BZ<sup>9</sup>w<sup>9</sup> c0vb Kti| Ab<sup>9</sup>w<sup>9</sup> K I qvc<sup>9</sup> v tæoerau clytbgfYi KvR nvZ t<sup>9</sup>b| Gt<sup>9</sup>ŋt<sup>9</sup> Zviv gvu I enij i e<sup>9</sup>-v BZ<sup>9</sup>w<sup>9</sup> w<sup>9</sup> t<sup>9</sup>q 15 wK.wg. we<sup>9</sup>-Z. tæoerau clytbgf Kti t<sup>9</sup>q| 91 mvtj i tg gvtm i iæn lqv tæoera wbgfYi KvR 92 mvtj i gvSvms M<sup>9</sup>tq tkl nq|

Z<sup>9</sup>-vZv<sup>9</sup>i KvQ t<sup>9</sup>-K Rvrv hvq GduRw<sup>9</sup> t<sup>9</sup>-K Rvrv hvq 91 mvtj cieZ<sup>9</sup>mgq t<sup>9</sup>-K mrv<sup>9</sup>c0ZK mgq chS<sup>9</sup> weifbætemi Kvix mSMvb thgb- eiK, wiK, Bcmv, Mqxb e<sup>9</sup>vsK BZ<sup>9</sup>w<sup>9</sup> mSMvb weifbæch<sup>9</sup>q aj NvUi Av<sup>9</sup>-fvvRK w<sup>9</sup>elqej x<sup>9</sup> t<sup>9</sup>jvi Dbw<sup>9</sup>Z Kti KvR Kti Ptj tQ|

Rb<sup>9</sup>Mvöxi `#M mspvš<sup>9</sup> aviYqvb : `#M Mi aviYv tKvb fiteB<sup>9</sup> vbxq gvb<sup>9</sup> i veklm, agf<sup>9</sup> Ab<sup>9</sup>ŋZ c0ZövbK Avb I Avb Kvvtgv-we<sup>9</sup>Qbæ<sup>9</sup>tKvb w<sup>9</sup>elq bq| M<sup>9</sup>ewl Z<sup>9</sup>i eY<sup>9</sup>ŋv `#M Mi BvZnm, `#M Mi Aw<sup>9</sup>FÁZv, vbxq veklm, agf<sup>9</sup> AvPri, M<sup>9</sup>ewl Z GjvKvq `#M tgvKvtejvi c0vb nmZqvi nmrvæ tæoera<sup>9</sup> AvtjvPbv, e<sup>9</sup>-v<sup>9</sup> I c0Zövb<sup>9</sup> gta<sup>9</sup>Kvi weZ<sup>9</sup>R Ges vbxq Avb Kvvtgvi mvt<sup>9</sup>-c0ZövbK w<sup>9</sup>gt<sup>9</sup>-vRw<sup>9</sup>eZvi w<sup>9</sup>elq<sup>9</sup> t<sup>9</sup>jv AvtjvPbv mvt<sup>9</sup>c<sup>9</sup>t<sup>9</sup>ŋ G Aa<sup>9</sup>v<sup>9</sup>tq M<sup>9</sup>ewl Z Rb<sup>9</sup>Mvöxi `#M mspvš<sup>9</sup> aviY<sup>9</sup>tK Z<sup>9</sup>ŋ aiv nte|

`#M mspvš<sup>9</sup>- aviYqvb<sup>9</sup> i t<sup>9</sup>ŋt<sup>9</sup> M<sup>9</sup>ewl Z<sup>9</sup>i eY<sup>9</sup>ŋv `#M Mi BvZnm Aa<sup>9</sup>vq<sup>9</sup> AZ<sup>9</sup>vek<sup>9</sup>Kvq GKw<sup>9</sup> w<sup>9</sup>elq| `#M Mi c0KvcZv, gv<sup>9</sup>v<sup>9</sup> ŋqŋw<sup>9</sup> BZ<sup>9</sup>w<sup>9</sup> w<sup>9</sup>elqej x<sup>9</sup> D<sup>9</sup>tV Av<sup>9</sup>ŋm Z<sup>9</sup>-vZv<sup>9</sup>i AvtjvPbv ntZ| A<sup>9</sup>cŋvKZ. eq<sup>9</sup>-v t<sup>9</sup>jvKRB<sup>9</sup>i w<sup>9</sup>btq cwiPv<sup>9</sup> Z Gd<sup>9</sup>.w<sup>9</sup> w<sup>9</sup> t<sup>9</sup>-K Dc<sup>9</sup>t<sup>9</sup>v<sup>9</sup> w<sup>9</sup>elq<sup>9</sup> t<sup>9</sup>jv D<sup>9</sup>tV Av<sup>9</sup>ŋm| Z<sup>9</sup>-vZv<sup>9</sup>i t<sup>9</sup>ŋt<sup>9</sup> t<sup>9</sup>-Lv hvq th Zviv ŋqŋw<sup>9</sup> Z<sup>9</sup> gv<sup>9</sup>v<sup>9</sup> BZ<sup>9</sup>w<sup>9</sup> i Dci w<sup>9</sup>f<sup>9</sup>ŋE Kti `#M Mi mgq eY<sup>9</sup>ŋv Kti| Z<sup>9</sup>-vZv<sup>9</sup>i Gd<sup>9</sup>.w<sup>9</sup> w<sup>9</sup> t<sup>9</sup>-K `#M mspvš<sup>9</sup> weifbæw<sup>9</sup>elq D<sup>9</sup>tV Av<sup>9</sup>ŋm| w<sup>9</sup>bt<sup>9</sup>æ QK Av<sup>9</sup>Kv<sup>9</sup>i `#M Mi mvj, D<sup>9</sup>tj<sup>9</sup> LthvM<sup>9</sup> I M<sup>9</sup>ewl Z<sup>9</sup>i fvl<sup>9</sup> gt<sup>9</sup>Z c0mw<sup>9</sup>æK w<sup>9</sup>elqej x<sup>9</sup>

v <sup>9</sup> Pv <sup>9</sup> tj nj t	D <sup>9</sup> tj <sup>9</sup> LthvM <sup>9</sup> NUBvej x
1960	ekv <sup>9</sup> gvtm Zg <sup>9</sup> vb nq  mvm <sup>9</sup> t <sup>9</sup> i cwb Dc <sup>9</sup> t <sup>9</sup> mg <sup>9</sup> l GjvKv cmeZ Kti  wKQy <sup>9</sup> KQy <sup>9</sup> ex <sup>9</sup> N <sup>9</sup> t <sup>9</sup> i Pij D <sup>9</sup> to hvq  10-20 Rb t <sup>9</sup> jvK gv <sup>9</sup> v hvq
1961	w <sup>9</sup> eM <sup>9</sup> eQ <sup>9</sup> t <sup>9</sup> i `#M Mi Aw <sup>9</sup> FÁZvq mi Kvix mrvqZvq tæoera wbgfYi Kv nq  I qvc <sup>9</sup> v, KweLv (Kv <sup>9</sup> Ri w <sup>9</sup> ebgtq Lv <sup>9</sup> ) cK <sup>9</sup> t <sup>9</sup> i Aaxb 6 d <sup>9</sup> D <sup>9</sup> æra wbgfYi Kti  GB era wbgfYi Kv <sup>9</sup> R GjvKvi mvari Y gvb <sup>9</sup> ŋK Aš <sup>9</sup> f <sup>9</sup> Kiv nq
1962-69	G mgq aj NvU tKvb gv <sup>9</sup> vZ <sup>9</sup> K ev eo ai <sup>9</sup> t <sup>9</sup> Yi So R <sup>9</sup> tjv <sup>9</sup> Qm BZ <sup>9</sup> w <sup>9</sup> `#M Av <sup>9</sup> NvZ n <sup>9</sup> t <sup>9</sup> b  Zte eQ <sup>9</sup> t <sup>9</sup> i gvSgms mgq Kij w <sup>9</sup> ekvLxi c0Kvc j <sup>9</sup> Kiv hvq
1970	G mgq N <sup>9</sup> ŋSo nq  aj NvU 10 br <sup>9</sup> vi m <sup>9</sup> Mb <sup>9</sup> vj I c <sup>9</sup> to  Zte cieZ <sup>9</sup> N <sup>9</sup> ŋStoi M <sup>9</sup> uzg <sup>9</sup> c <sup>9</sup> t <sup>9</sup> è hvq Ges Zv m <sup>9</sup> æxc, nmZqv A <sup>9</sup> ŋt <sup>9</sup> Av <sup>9</sup> NvZ n <sup>9</sup> t <sup>9</sup> b



Kudj Dwi b etj b th wekjm Ki tZ cwiub GZ teuk ¶wZ nte| iay(úw b gym)  
tgšm tZ KZUK zew Avi ¶wZ nte| eotRvi Ni emoi Pvj, teov BZ w Dto  
hve| ¶vriUv MvQ wQUtK Gtm cotel mKŠ ivZ 12Uvi ci t tK cwi b D PZv  
evovi mvt\_ mvt\_ ¶DŠlq cto hvB| tKvb iKtg Rvb ewhvB| AvtiKRb Ab vZv  
Avej Kvtkg etj b, tiwWI i K\_v wekjm b Mwi fž MBw¼, ZBij AvnRtq Avi  
GUUv NiwUtq gvby gvib b hvBtZv| Avnvti gtb MBw¼j vg úw b gvtm| Avi mK  
ABeš GLvrb GKw K\_v Dtj t th vbxq wekjm KLtbrB w i tKvb cčA bq|

#h#Mi aglq e'vL v I Avrit A#Bk gZv'k; Ávb KvVtgv, aglq gj'teva  
 BZ'w' RvqMv t\_#K GKRB gvbly `#h#M#K aviYmqZ Kti| GB tclq'tZ Zvi  
 ('vbxq gvbly i) aglq `#h#M mslv'sle'vL v Ges AvPri cÜv `#h#M Aa'q'tbi Rb"  
 ,iaZcY'ntq cto| Z\_''vZv kwdKDj m (88) etjb th `#h#M nj Avj m#  
 MRe, cÜ'ex hLb AbvPri# fti hvq ZLb Avj m# Avim tKtc l#v| wZvb  
 gvbly#K kw'f t'qvi Rb" MRe bwrj Ktib, Av#K Z\_''vZv Avej tnvmb  
 etjb th, Avj m# gvbly#K cix#v Kivi Rb" `#h#M, thgbt eb'v Ny'So BZ'w'  
 w'tq \_#Kb| Cgvb'vi ew'v#K cix#v Kivi Rb" Ges cvcx tjk't i kv'tq'v  
 Kivi Rb" Avj m G me bwrj Ktib| GKw melh ,iaZcY'GB mg'f mekym  
 aglq gZv'k#l tkY#f't' GKB A\_#cvLY Kti br| A#c#vKZ.eq' e'w'iv  
 `#h#M#K Ajv -vni MRe mntmte wPyZ Kitj l A#c#vKZ.Aí eqmx e'w'iv  
 i'agvî G ai#Yi mekym bq, Gi cvkvcmk `#h#Mi terSvcovi t#t'f e'ÁvbK  
 DcvE e'envi Kti \_#Kb| Zte `#h#MKjxb mg'tq bvix, cja# mkj eq'mi  
 mkj tkYxi gvbly Avj m# Kv#Q w#v v cÜ'v Kti hv'tZ fqven iKtgi `#h#M bv  
 nq A\_ev `#h#M Rvb gvtj i #vZ bv nq|

Kudj Dwi b 910Gi NySsto D×Z. w`tq etj b th, Zviv`thMi w b gvmi tēi  
mgq t`tK gmiRt` wētkl gbyhvZ Ki tZ`\_v tKb| gunjviv ewotZ etm Avj - vnd  
Kv tQ KvbKwU Ktib etj Z`\_vZviv Rvrb, hZB ivZ ewotZ`\_v tK Ges  
evZtmi c0KvcZv ew× tctZ`\_v tK, ZZB gbyb Avkvnxb I`\_yōšlMōintq cto  
Ges Avj - vnd Kv tQ Rieb w f q v Pvb tZ`\_v tK| 29tk Gucj hviv mib tKb  
tmUrti Avkq wbtqUj Zvivl ivZ ewovi mvt\_ mvt\_ ZRue tMvrb i i` Kti  
(wētkl Kti Atc q vKZ. eq`\_ gunjv I`\_cjad) tgbv hvZ Ki tZ`\_v tK etj  
Z`\_vZv iugRv LvZb (30) Rvrb| Z`\_vZviv Avl Rvrb th hLbB umMb`ij  
8 Gi Dci I Vv i iæ Kti ZLbB gmiRt` wētkl c0\_ bvi Rb` Avn`vrb Kiv nq|  
AtbtK ewotZ Avrvb t`b etj Z`\_vZviv AwfgZ c0uk Ktib| kudKDj un&  
Rvrb th, gZz AvmbæAe`vq`\_vKvKjxb gbyb Dcqršl bv tctq Avj un& Kv tQ  
q qv c0\_ bvi Kti| Awgl Kwi| GBt fte th h w` gti hvB Zte Avj un&thb



**ᐃᐅᐱᐅ ᐱᐅ ᐱ ᐅᐱᐅᐱᐅ ᐱᐅ ᐱᐅᐱᐅᐱ ᐱᐅᐱᐅᐱ ᐱᐅᐱᐅᐱ :**

Mteul K Rb#Mmôi `h#M mspuvš'aribvq#bi RvqMvq c#ZômbK Áv#bi/ melquU  
 ,iaZçY#tq cto/ kiBZjv M#gi Z\_`vZviv `h#Mi Nubv I Ab`vb` c#m#ZK  
 melqvejxi t#t# Ggb #KQycZ`q e`envi Kti \_v#Kb th,tjv A#bK tekx  
 c#ZômbK I me`vqZubK RMtZ ,iaZçY`A`c#Kvk fvgKv titL \_v#K/  
 Z\_`vZviv etjb th mv=c#ZK mgtq Zviv `h#Mi c#ve m#ú#K`msev` cÎ,  
 #Uvj #dvb, ti#WI, tgeivBj BZ`w`i m#v#` m#th#MZv #btq \_v#Kb/ Zviv AvI  
 etjb th 91 Gi ce`chS`G A#tj cÎ c#Kv GZ Pj/c#j b #Qj bv/ #KŠ`  
 GLb mgq e`tj#Q/ (aj NvU) A#tj GLb cÎ c#Kv Av#m/ g#b#y c#Kv cto  
 A#bK #KQyRv#tZ c#i/ AvenvI qvi Lei, t`k-#e#t#ki Lei g#b#y c#q/ ZLb  
 Z\_` c#bi #K t\_#K Zviv (Mteul Ziv) A#bK teuk Av#bK etj Z\_`vZviv  
 Avf#GZ c#Kv Ktib/

`h#M t\_#K iia Kti R#t#bi #e#f#e#t#t# GLb Zviv `#Z thv#th#M m#ú#e  
 c#y# e`envi Ktib etj Z\_`vZviv Rv#b/ Avej Kv#mg etjb th, AvR t\_#K  
 #ek c#K eQi Av#MI Ly KvPr tUvj #f#b t#U t`Lv thZ/ ti#WI #Qj nv#Z#Mv#  
 KtqKk e`#i Kv#Q/ #KŠ` GLb c#i#`#Z c#t#t#Q/ Z\_`vZv#i A#b#Ki  
 em#tZ tUvj #f#b t#U, ti#WI, tgeivBj BZ`w`i tP#tL cto/ D#j - L` th mgM#  
 aj NvU A#tj tKv#f#e me`y m#e#v t#B/ Z`g#v Zviv t#S#k# e`envi Kti  
 Zv#i c#q#Rb tgU#b/ `v#xq g#b#yR#bi Ávb Kv#t#gt#K GLb AvI tKv# #b#ó  
 t#d#l q#t#K`AvU#K ivLv m#e# bq/ Zviv GKB m#t\_ ag#q Ab#y#Z#K ,iaZ;t`q  
 Ges Aciv#K c#ZômbK Ávbmg# Z\_` I Zviv K#v#eva Ktib bv/ c#v#  
 Z\_`vZv#i GKRb K#dj D#xb etjb tK, #k eQi Av#MI #m#b#y #tj AÎ  
 ,iaZ# Zvg bv/ Avj #t#K `š#Y Ki Zvg/ AvI f#e#Zvg hv nI qvi n#e/ #KŠ` 91  
 Gi ci #m#b#y tK #ek#m Kvi/ mi Kv#t#K A#ek#m Kti f#y Ki#Q/

mv=c#ZK mgtq `v#xq Ávb c#v#Z #btq #eZ# i#t#t#Q/ thLv#b #e#f#e#Zv#E#K#b  
 Zv#i Kv#R `v#xq Áv#bi m#t\_ c#ZômbK Áv#bi #gt\_vR#e#Zvi K\_v D#j#  
 Ktib/ D` Zv#E#K#b c#k#e#Zv#j b th, Av#Š` #K Kv#t#K `v#xq ejv hvq #Kbv,  
 A\_ev `v#xq Ávb tKv# #e#v#b#e`Zt #m# tKv# #elq #Kbv/ Avgvi Mteul K  
 GjvKvi g#b#yR#bi R#e#v#Ib c#v m#t#t#t# Zv#i#K `v#xq A\_ev `v#xq Áv#bi  
 av#K I ev#K ejv hvq #Kbv t#U#v GKU#v c#k#e#t#t# #elq, DciŠ` Z\_`vZv#i  
 f#l`gtZ, Zv#i ce`c#j#d iv c#q 300-400 eQi (Kv#iv Kv#iv gtZ 600 eQi)  
 Av#M g#n#L#j#x, KZ#w`q#, nv#Zqv Gme A#j/ #x# t\_#K G A#tj em#Z M#o  
 Z#j#Q#j b/ G#t#t# c#k#e#t#K hvq Zviv #K Av#Š` `v#xq/ Z#e t#v#ic#v#i  
 m#e#v#t\_`Rb#MZ f#t#e Zv#i `v#xq a#i #btj I, Zv#i Ávb Kv#v#gt#K `v#xq  
 c#t#q #e#e#P#v Kiv GKU#mgm#v#R#K n#q cto, thLv#b Av#I lqv# (1978)  
 `v#xq Ávb Kv#v#gt#K c#R#t#t#K c#R#t#t# c#v#v#Z GKU#v #elq #t#t#e D#j#





e0t̃ii ci eQi aṭi Rj evqycw̃ieZḂbi KṽiṭY evsj vṭ k ʔṡMZMöf̃t̃ k̃ t̃jv kxṭl ©  
 ̃vb ṭctqtQ| ZvB Nṭji ̃wṭfZ nṭe evsj vṭ kṭK| Rj evqycw̃ieZḂbi mṭ½ Lvc  
 LvBṭq ṡbṭZ Ges ṡbirc ̃fiel ̃Z ṡbṡÖZKiṭY cōwZ ṡbṭZ nṭe Gṭṭki  
 RbMYṭK| Avkvi K\_v, evsj vṭ ṭki ̃ḡḡM ẽe ̃vcbv ṭKSkj AvšRw̃iZK A½ṭb  
 cḷsmv KṡotqtQ| ̃ḡḡM ẽe ̃vcbvq evsj vṭ ṭki mvdj ̃w̃ekḷvcx ̃ṭKZ/  
 ̃ḡḡMi mgql cṭi AvnZṭi D×vi Kṭi ṡbirc ̃Avkṭ ṭblqv Riāi ṡPṡKrmv  
 tmev ṭlqv, ṡbirc ̃cwb mieivn Ges Riāi Lv ̃l eṭ-ḡ ẽe ̃v Kivmn  
 mdj fiṭe ̃ḡḡM ṭgvKṭejvq evsj vṭ k D̃vniY mṡṡ KṭiṭQ| GQov cṡ\_xgq  
 ̃ḡḡM cēY w̃ewf̃baf̃ kmgnṭK mṡ\_ ṡbṭq evsj vṭ kṭK Rj evqycw̃ieZḂ tivr̃a w̃ek/  
 ṭdvivṭq RbqZ Mṭo ṭZvj v DṡPZ|

*MöcÄx*

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ch f j v P b v, b % e Á v b c w i K v, m s L`v-3, b " e Á v b e f v M, R v n v ½ x i b M i  
e k t e ` i j q, X v K v |
- u t g v ` b v, K v g v j (2001) c w i t e k m g m ` v I e v s j v t ` k, K v K j x c k v k b x, X v K v |
- u n v j ` v i, i t g j Ges e j e j, M q v m D i x b (2000) t k Y x t f t ` A v f e v m b t  
t c i j Z b ` x f v ½ b 0, b % e Á v b c w i K v, m s L`v-3, b % e Á v b e f v M, R v n v ½ x i b M i  
e k t e ` i j q, X v K v |

## *PÆMāgi ew-ēvmx̄` i Av-ḡmguRK Rxeb e'e-ṽ I b%ÅwBk wētkāY*

*Lvtj `v Lrbg\* Ges klēYx eoḡv\*\**

### *fvgKv*

*mvariYZ m̄thvM m̄x̄av ew-ĀZ Rb̄Mvōx kn̄ti i cwīteḡk Gtj vtgtjv fite `ḡf  
f̄h̄j Acwi "Qbæ I Ach̄ß Av̄qvr̄b hLb tKvb NiemiZ cY©Avev̄m-j M̄to  
tZvtj ZLb ZvtK ew-īw̄tm̄te w̄P̄yZ Kiv nq| ew-ḡK Avevi tKD Acivax̄` i  
Av-ībv I m̄vgnRK fite Ach̄ß m̄x̄av t̄f̄w̄m̄x̄` i em̄w̄ZK` a D̄tj L̄ K̄ti tQb|  
ZvQvor w̄ech̄l̄ RbRxeb, w̄b̄ḡv̄tbi Rxebhv̄l̄v, `w̄i `a, `ḡ-` I Avev̄mK m̄x̄avi  
Abḡw̄-ūZ, m̄gvR̄tmevi Ac̄ūB̄ BZ`w̄ ew-īRxeb̄ j ḡ` Kiv hvq|*

*ew-ī D̄tj L̄thvM̄ `enkō` t `w̄i `Zv, w̄b̄ḡv̄tbi Niemo, Rbev̄j, w̄b̄tk̄Yxi  
tj vtKi evm̄feb, w̄b̄ḡv̄tbi w̄k̄ḡv I `ḡZv, m̄v̄-ūZK m̄x̄gēx̄Zv, m̄x̄gZ `ḡ-`  
m̄x̄av, Ach̄ß m̄gvR̄tmev, Acwi "Qb̄Zv, Aciva c̄ēYZv I Av̄m̄vgnRK Kiv̄R̄j v̄c  
BZ`w̄ | m̄Z̄iv̄s ew-īej̄ tZ b̄Mi Ḡj v̄Kvi Rb̄em̄w̄ZK̄ t̄ev̄Sq, thL̄v̄b `f̄ R̄vq̄M̄vq  
t̄K̄v̄i Kg Kiv, ev̄k, PU w̄ t̄q `Zwi R̄x̄Y©K̄ūl̄m̄ḡn̄ GKūZḡv\_ v̄t̄M̄R̄vi V̄vB K̄ti  
M̄v̄v̄w̄w̄ fite A-ḡ-`Ki cwīteḡk Āt̄bK̄ tj v̄K GK̄t̄l̄ ḡv̄b̄teZi Rxeb hv̄cb  
K̄ti |*

*c̄ōK̄ūZK w̄K̄sev m̄vgnRK K̄vīY M̄āg t\_ t̄K Av̄mv `w̄i `a ḡv̄b̄y hv̄iv ew-ī̄ tj vtZ  
w̄b̄t̄R̄t̄ i em̄v̄t̄mi Rb̄ Ae-ṽb ḡt̄b K̄ti ev̄ em̄v̄m K̄ti, Z̄v̄t̄ i Av̄ḡiv m̄variYZ  
ew-ēvm̄x̄ et̄j \_w̄K| ḡj-Z, Giv hv̄h̄vei t̄k̄Yxi| w̄ew̄f̄b̄æAe-ṽi t̄c̄ōḡt̄Z hv̄iv  
K̄v̄th̄P̄ Rb̄ kn̄ti Av̄tm̄ Ges m̄sN̄ex̄ n̄t̄q GKB ṽt̄b w̄K̄S̄ Gtj vtgtjv fite,  
k̄L̄j v̄v̄b̄fite t̄b̄v̄siv m̄v̄ū̄t̄m̄t̄Z Ges A%ā R̄vq̄M̄vq ev̄m K̄ti| ḡj-Z Z̄vivB  
ew-ēvm̄x̄| M̄t̄el̄Yq t̄ L̄v hv̄q, Z̄t̄ i R̄xebhv̄l̄v Āt̄bK̄Ūv t̄L̄q̄j x̄ Ges w̄b̄ḡv̄tbi |  
t̄Q̄v̄ t̄Q̄v̄ ev̄m̄M̄t̄n̄ GK̄t̄l̄ Āt̄bK̄ ḡv̄b̄ȳ i em̄v̄m̄ m̄t̄ē̄l̄ w̄b̄t̄R̄t̄ i R̄xebḡv̄t̄bi  
D̄b̄ḡt̄bi c̄ōP̄óv̄ Kg| w̄b̄æR̄xebhv̄l̄vi GB ḡv̄b̄ȳ , t̄jv D̄vi w̄et̄k̄| m̄sK̄x̄Ȳfite  
em̄v̄m̄ K̄ti w̄b̄t̄R̄t̄ i m̄vgnRK̄fite ew-ēvm̄x̄ et̄j cwīP̄q w̄ t̄Q̄| Av̄ḡv̄t̄ i t̄ t̄ki  
ew-ī̄ t̄jv t̄ L̄t̄j Z̄vi c̄ḡȲ cv̄l̄q̄ hv̄q| PÆM̄āg kn̄ti i ew-ī̄ t̄j vtZ M̄v̄B̄ev̄Üv,  
w̄iv̄RM̄Ä, w̄K̄t̄k̄viM̄Ä, ḡḡḡb̄m̄sn̄, ew̄ī k̄ij̄ i sc̄j̄ Ges ṽb̄x̄q w̄b̄æAv̄t̄qi ḡv̄b̄ȳ i  
Av̄w̄æK̄` t̄ek̄x̄|*

\* Aa'ick, mgyR weÁvb wefM, PÆMög Ktj R, PÆMög|

\*\* MtelYv mnthvMx, mgyR weÁvb wefM, PÆMög Ktj R, PÆMög|

mvaviYZ Av\_ŠmvgwRK Ae~v ejtZ Avgiv A\_ŠowZK I mvgwRK Ae~vK  
eŋStq\_vnK| wKŠ'nek`fite ejtZ tMtj terSv hvq th, gvbJ i mgyR emevm  
Kiv t\_tK i'ie Kti Zvi A\_ŠowZK, mvgwRK, ivRŠowZK, weťbr`b, wKŋlv,  
ms~wZ, fvlv, evm~vb, wPwKrmv, Lv~, e~iBZ'w`tK mwešj Zfite Avgiv Av\_Š  
mvgwRK Ae~v ejtZ cwi| ew~lvmt`i Av\_ŠmvgwRK Ae~v ejtZ Avgiv  
ew~tZ emevmKvix RbMtYi A\_ŠowZK, mvgwRK, ivRŠowZK, fvlv Lv~ ms~wZ,  
weťbr`b, wKŋlv, tckv, wPwKrmv, evm~vb BZ'w`tK eŋStq\_vnK|

PÆMög kniKt ejsvt`tki embtR'i cŋYtK`^ ejv nq| GB kni i tqtQ  
ejsvt`tki cŋg I DcthvMx mgy`e`i| GB e`iKt KtK`^ Kti PÆMög Mto  
DtVtQ wefFbæmkí-KviLvbr| ZvQvor Avg`vbx i Bvbx cŋquv GLvtb Kgms`vbi  
GK Abb`tK`ŋ| B.wc.tRW Mto I Vvi dtj PÆMög weťkx webtqvm w`b w`b  
ew`cvt`Q| ejsvt`tki webtqvm ew`xi Ab`Zg KviY nt`Q m`i ktj| PÆMögi  
Mög AĀj I cwnmo GjvKvi RbMtYi GK weivU AĀj GBme Kj KviLvbrq KivR  
Kti| cveZ` PÆMög cŋž evlvj xmn wefFbæDcRwZt`i emevm| hvť`i Dbqtb  
miKvix Kvhpjg LgB Kg| dtj D<sup>3</sup> AĀj Ges Ab`vb` AĀj i RbMtYiv Gtm  
PÆMögi Kj KviLvbrq KivR Kti| hvť`i Avq AwZ w`æGť`i cťŋ kni i DbZ  
AvevmK GjvKvq evmv fvor wbtq emevm Kiv mæe bq| hvi dtj Gme kŋgK  
Ges w`æAvťqi tjvKRbt`i wbtq PÆMög kni Mto DtVtQ ew~l GB  
ew~lvmt`i gta` Avevi tRjt`i I GKwU weivU Ask i tqtQ| hvť`i Rxeb cŋvn  
wbfP Kti mgy`i Dci| A\_Š wKí vqtb i ŋgaviq PÆMögi ew~lmgm`v w`b w`b  
cŋKU nt`Q| Zte mvgwMkZvq Ab`vb` kni i Zžbqv PÆMög ew~lvmt`i msL`v Kg|  
PÆMög kni 2000 Gi Awak tQvU eo ew~ i tqtQ mi KviX RvqMvq ew~li msL`v  
100 Gi Awak| PÆMög wmiU Ktcŋikb GjvKvq ew~l i tqtQ 22wU| Dtj wLZ  
ew~i gta` 8wU ew~lnt`Q gwZSbP, teš evRvi, evgP Ktj vbx, wmwWG Qovi cvo,  
tm\_b emwo, tij l tq tWeri cvo ew~l, gtbvni Lvjx, wbgZjv, ZvQvor i tqtQ,  
Rijj ver`, cwnvZjx, tlvj Keni, evKwq qv, gv`viemwo, AvMŋev`, cívrbUžx  
GjvKvq ew~l i tqtQ|

## MtelYvi Dt'ik"

cŋZwU MtelYvi B mgySMZ I mgyw`Š wKQyDt'ik`\_vtK| Dt'ik` MtelYvi ceRZP  
Dt'ik` e`ZxZ tKtbr MtelYv Kvhp`mæuv`b ntZ cvti br| GKB fite  
ŋew~lvmt`i Av\_ŠmvgwRK Rxeb e`e`w` kxlR Avgiv GB MtelYv Kgŋi I  
KZ\_tjv Dt'ik` i tqtQ| wbtæZžj aiv ntjv-

1) ew<sup>-</sup>évmx I Zv<sup>-</sup>i mǵvR Rxeḅ m<sup>-</sup>útk<sup>o</sup>mvavi Y avi Yv ARḅ; 2) PÆMǵ knṭi ew<sup>-</sup>li Drci<sup>ē</sup> I we<sup>-</sup>vi m<sup>-</sup>útk<sup>o</sup>Ávb ARḅ; 3) Acii Kwi Zfiṭe ew<sup>-</sup>l Mto DVvi Kvi Ymǵr D<sup>-</sup>ÁvUḅ; 4) ew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Ae<sup>-</sup>v m<sup>-</sup>útk<sup>o</sup>AbḡveY; 5) mǵvRRxeḅ ew<sup>-</sup>évmx<sup>-</sup>i BvZevPK I tbiZevPK cfi<sup>-</sup>ve mǵr D<sup>-</sup>ÁvUḅ; 6) ew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Dbqṭḅ miKvix I temiKvix Dt<sup>-</sup>v<sup>3</sup>v KZḂ MpxZ Kvih<sup>-</sup>ej x m<sup>-</sup>útk<sup>o</sup>AbḡveY; 7) mǵvR Rxeḅ ew<sup>-</sup>évmx<sup>-</sup>i mǵ mǵm<sup>-</sup>vej x ubi<sup>-</sup>fcY Ges Gi mǵvavṭḅ m<sup>-</sup>te<sup>-</sup> mǵzvi k ubYḡKiY; 8) ew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Dbqṭḅ mǵzvi kǵvj v ubi<sup>-</sup>fcY Kiv|

Dctiv<sup>3</sup> Dt<sup>-</sup>i<sup>3</sup>tk<sup>-</sup> Dci wfi<sup>ē</sup> Kṭi MtelK ŌPÆMǵ ew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Ae<sup>-</sup>vó kxl<sup>ē</sup> GB Mtel Yv Kvih<sup>ū</sup> cwi Pvj bv Kiv ntqṭQ|

## MtelYv c<sup>-</sup>uZ I tKŠkj

Mtelbv GjvKv cwiPvZ t cǻZiU MtelYv KṭǵP GKiu ubw<sup>-</sup>ḡ weli<sup>-</sup>q<sup>-</sup>v<sup>-</sup>tk| Ōew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Rxeḅ e<sup>-</sup>e<sup>-</sup>vó MtelYvi weli<sup>-</sup>q<sup>-</sup>u<sup>-</sup> cwi Pviy Z nq PÆMǵ knṭii AvMǵev<sup>-</sup> GjvKvi 24bs I qv<sup>-</sup>W<sup>-</sup>P Ašf<sup>-</sup>ḡ<sup>-</sup> ṭecwi ciov ew<sup>-</sup>ṭZ|

PÆMǵ evsj<sup>-</sup>ṭ<sup>-</sup>tki<sup>-</sup> wfi<sup>-</sup>Y-c<sup>-</sup>te<sup>-</sup>Aw<sup>-</sup>Z wǻZxh ep<sup>-</sup>Ēg bMix I cǻbv mǵ<sup>-</sup>e<sup>-</sup>i| PÆMǵ kni 41uU I qv<sup>-</sup>W<sup>-</sup>ḡb<sup>-</sup>ṭq MvZ| Gi 24bs I qv<sup>-</sup>W<sup>-</sup>ḡ nviy kni ubṭq MvZ Ges Wej gvi<sup>-</sup>s<sup>-</sup>v<sup>-</sup>ri AŠM<sup>-</sup>Z|

## Z<sup>-</sup> msMḡ

ṭKvb MtelYv KgB mdj ntZ cvṭi bv hZ<sup>-</sup>Y chšf<sup>-</sup>bv Gi Z<sup>-</sup> mǵr m<sup>-</sup>úY<sup>-</sup>ṭe msMḡ Kiv nq| Avi Z<sup>-</sup> msMḡ Kivi GKiu gra<sup>-</sup>g nt<sup>-</sup>Q c<sup>-</sup>uZ| c<sup>-</sup>uZ Mtelbvi GKiu Acii nvh<sup>-</sup>Ask| thṭKvb aiṭYi Mtelbvq c<sup>-</sup>uZ cǻqm Kiv nq| mǵvR m<sup>-</sup>úuK<sup>-</sup>Z e<sup>-</sup>ḡbó| ubi<sup>-</sup>tc<sup>-</sup>Y I mǵsex Ávb ARḅbi Rb<sup>-</sup> gvb m<sup>-</sup>úbæ c<sup>-</sup>uZ Avek<sup>-</sup>K| ZvB mǵ<sup>-</sup>ḡ<sup>-</sup>ḡ j<sup>-</sup>Y<sup>-</sup> ARḅbi Rb<sup>-</sup> mǵvRK MtelYvi tKvb bv tKvb c<sup>-</sup>uZi Avkṭ ubṭZ nq| Ōew<sup>-</sup>évmx<sup>-</sup>i Av<sup>-</sup>ḡmǵvRK Rxeḅ e<sup>-</sup>e<sup>-</sup>vó kxl<sup>ē</sup> MtelYvi Z<sup>-</sup> msMḡ Kivi Rb<sup>-</sup> tmme c<sup>-</sup>uZ I tKŠkṭji mivv<sup>-</sup>h<sup>-</sup> MḡY Kiv ntqṭQ tm<sup>-</sup>, tjvi ub<sup>-</sup>ḡ<sup>-</sup>ḡc-

1) HwZnv<sup>-</sup>mK c<sup>-</sup>uZ

2) Rwi c c<sup>-</sup>uZ (mv<sup>-</sup>Y<sup>-</sup>vrKvi tKŠkj)

3) bZwi<sup>-</sup>ḡi tKŠkj (ch<sup>-</sup>ḡ<sup>-</sup>Y tKŠkj)

Dctiv<sup>3</sup> tKŠkj<sup>-</sup> tjv Avgvi MtelYvq cǻqv<sup>-</sup>Mi wCQṭḅ thme h<sup>-</sup>ḡ<sup>-</sup> iṭqṭQ Zv ubṭæ Dc<sup>-</sup>vcb Kiv ntj<sup>-</sup>v-

AZṭZi Dci wfi<sup>ē</sup> KṭiB eZḡvb I f<sup>-</sup>iel<sup>-</sup>r MvZ nq| tKvb mǵm<sup>-</sup>vi eZḡvb Ae<sup>-</sup>v m<sup>-</sup>útk<sup>o</sup>RvṭZ ntj Zvi AZxZ Ae<sup>-</sup>v m<sup>-</sup>útk<sup>o</sup>Rv<sup>-</sup> cǻqv<sup>-</sup>Rb| tKvb mǵm<sup>-</sup>vq

AZxZ m<sup>u</sup>tK<sup>o</sup>RvbZ civv tMtj B Zvi eZg<sup>u</sup>b m<sup>u</sup>tK<sup>o</sup>aviYv Kiv hvq|  
 0ew<sup>u</sup>lvmt<sup>u</sup>i Av<sup>u</sup>mgv<sup>u</sup>RK Rxb e<sup>u</sup>e<sup>u</sup>o kxl<sup>u</sup>R melq<sup>u</sup>Ui D<sup>u</sup>me, mg<sup>u</sup>ieKiv c<sup>u</sup>f<sup>u</sup>Z  
 mel<sup>u</sup>qi Z<sup>u</sup> msM<sup>u</sup>h KiZ tMtj H<sup>u</sup>ZnwmK c<sup>u</sup>x<sup>u</sup>Z Ae<sup>u</sup>j<sup>u</sup> B Kiv Qvov Ab<sup>u</sup> tKvb  
 c<sup>u</sup>x<sup>u</sup>ZtZ Z<sup>u</sup> msM<sup>u</sup>h Kiv Am<sup>u</sup>e| ZvB M<sup>u</sup>telK D<sup>u</sup>3 M<sup>u</sup>telbvq AZx<sup>u</sup>Zi NUbv  
 ms<sup>u</sup>lv<sup>u</sup>SlZ<sup>u</sup> msM<sup>u</sup>h Kivi Rb<sup>u</sup> H<sup>u</sup>ZnwmK c<sup>u</sup>x<sup>u</sup>Z M<sup>u</sup>hY K<sup>u</sup>ti<sup>u</sup>Q|

uK<sup>u</sup>S<sup>u</sup> eZg<sup>u</sup>b mgv<sup>u</sup>Ri ev<sup>u</sup>e Ae<sup>u</sup>vi t<sup>u</sup>fc I c<sup>u</sup>K<sup>u</sup>Z m<sup>u</sup>u<sup>u</sup>tK<sup>o</sup>RvbZ tMtj  
 H<sup>u</sup>ZnwmK c<sup>u</sup>x<sup>u</sup>Z GLv<sup>u</sup>b AKv<sup>u</sup>h<sup>u</sup>Ri nq| ZvB Avgvi M<sup>u</sup>telYv Kg<sup>u</sup>l m<sup>u</sup>u<sup>u</sup>b<sup>u</sup>Kivi  
 t<sup>u</sup>c<sup>u</sup>l<sup>u</sup>q<sup>u</sup>iZ eZg<sup>u</sup>b mgv<sup>u</sup>Ri ev<sup>u</sup>e Ae<sup>u</sup>vi t<sup>u</sup>fc I c<sup>u</sup>K<sup>u</sup>Z ms<sup>u</sup>lv<sup>u</sup>SlZ<sup>u</sup> msM<sup>u</sup>h Kivi  
 Rb<sup>u</sup> Rwi c<sup>u</sup>x<sup>u</sup>Zi mv<sup>u</sup>q<sup>u</sup>lv<sup>u</sup>Kvi tK<sup>u</sup>Skj c<sup>u</sup>l<sup>u</sup>qvRb| tKbbv GB c<sup>u</sup>x<sup>u</sup>ZtZ mgv<sup>u</sup>R  
 we<sup>u</sup>fb<sup>u</sup>mgm<sup>u</sup>vi KviY D<sup>u</sup>lv<sup>u</sup>Ub, mgm<sup>u</sup>v mgv<sup>u</sup>l<sup>u</sup>bi e<sup>u</sup>A<sup>u</sup>v<sup>u</sup>bK v<sup>u</sup>b<sup>u</sup>t<sup>u</sup>Rb<sup>u</sup> t<sup>u</sup>qv nq|  
 ZvQvov GB c<sup>u</sup>x<sup>u</sup>ZtZ thme Z<sup>u</sup> msM<sup>u</sup>h Kiv nq Zv ev<sup>u</sup>e I h<sup>u</sup>vh<sup>u</sup> weav<sup>u</sup>q M<sup>u</sup>telYv  
 Z<sup>u</sup> msM<sup>u</sup>h Kivi Rb<sup>u</sup> Rwi c<sup>u</sup>x<sup>u</sup>Zi mv<sup>u</sup>q<sup>u</sup>lv<sup>u</sup>Kvi tK<sup>u</sup>Skj M<sup>u</sup>hY Kiv nt<sup>u</sup>q<sup>u</sup>Q|

Zte Rwi c<sup>u</sup>x<sup>u</sup>ZtZ msM<sup>u</sup>pxZ Z<sup>u</sup> i g<sup>u</sup>ta<sup>u</sup> A<sup>u</sup>tbK mgq m<sup>u</sup>lv<sup>u</sup>K Z<sup>u</sup> cvl<sup>u</sup>qv m<sup>u</sup>e  
 bq| GRb<sup>u</sup> Rwi c<sup>u</sup>x<sup>u</sup>Zi cvk<sup>u</sup>cv<sup>u</sup>mk b<sup>u</sup>Z<sup>u</sup>u<sup>u</sup>E<sup>u</sup>K c<sup>u</sup>x<sup>u</sup>Zi ch<sup>u</sup>q<sup>u</sup>Y tK<sup>u</sup>Skj Ae<sup>u</sup>j<sup>u</sup> B  
 Kiv nt<sup>u</sup>q<sup>u</sup>Q| tKbbv ch<sup>u</sup>q<sup>u</sup>Y tK<sup>u</sup>Skj thme Z<sup>u</sup> msM<sup>u</sup>h K<sup>u</sup>ib weav<sup>u</sup>q M<sup>u</sup>telYv GB  
 me Z<sup>u</sup> L<sup>u</sup>yB Kiv<sup>u</sup>h<sup>u</sup>Ri| tKvb mel<sup>u</sup>q M<sup>u</sup>telYv Rb<sup>u</sup> Rwi t<sup>u</sup>ci g<sup>u</sup>va<sup>u</sup>tg M<sup>u</sup>telbv  
 Gj<sup>u</sup>v<sup>u</sup>Kvi tgv<sup>u</sup>U mgM<sup>u</sup>Qv<sup>u</sup> t<sup>u</sup> t<sup>u</sup>K Z<sup>u</sup> msM<sup>u</sup>h Kiv L<sup>u</sup>yB K<sup>u</sup>oKi| A<sup>u</sup> c<sup>u</sup>l<sup>u</sup>e<sup>u</sup> e<sup>u</sup>q nq|  
 uK<sup>u</sup>S<sup>u</sup> mgM<sup>u</sup>K t<sup>u</sup> t<sup>u</sup>K bg<sup>u</sup>lv<sup>u</sup> v<sup>u</sup>mt<sup>u</sup>te c<sup>u</sup>l<sup>u</sup>Z<sup>u</sup>lv<sup>u</sup>iaZ<sup>u</sup> K<sup>u</sup>ti Ggb uK<sup>u</sup>QzGKK t<sup>u</sup>et<sup>u</sup>Q v<sup>u</sup>b<sup>u</sup>t<sup>u</sup>q Rwi c<sup>u</sup>  
 KvR c<sup>u</sup>vi<sup>u</sup>Pj<sup>u</sup>bv Kiv hvq| G<sup>u</sup>tZ M<sup>u</sup>telYv Kv<sup>u</sup>h<sup>u</sup>l<sup>u</sup> L<sup>u</sup>y m<sup>u</sup>n<sup>u</sup>t<sup>u</sup>R Ges Kg mg<sup>u</sup>t<sup>u</sup>q m<sup>u</sup>u<sup>u</sup>b<sup>u</sup>K  
 Kiv m<sup>u</sup>e<sup>u</sup>ci nq| ZvB 0ew<sup>u</sup>lvmt<sup>u</sup>i Av<sup>u</sup>mgv<sup>u</sup>RK Rxb e<sup>u</sup>e<sup>u</sup>o kxl<sup>u</sup>R M<sup>u</sup>telYv  
 mel<sup>u</sup>qi M<sup>u</sup>telYv Kg<sup>u</sup>l m<sup>u</sup>u<sup>u</sup>b<sup>u</sup>Kivi Rb<sup>u</sup> M<sup>u</sup>telYv Gj<sup>u</sup>v<sup>u</sup>Kvi tgv<sup>u</sup>U mgM<sup>u</sup>Q<sup>u</sup>Ki ga<sup>u</sup> t<sup>u</sup> t<sup>u</sup>K  
 20 Rb<sup>u</sup>t<sup>u</sup>K Av<sup>u</sup>K<sup>u</sup>u<sup>u</sup>g<sup>u</sup> bg<sup>u</sup>lv<sup>u</sup>q<sup>u</sup>bi g<sup>u</sup>va<sup>u</sup>tg bg<sup>u</sup>lv<sup>u</sup> v<sup>u</sup>mt<sup>u</sup>te v<sup>u</sup>b<sup>u</sup>t<sup>u</sup>q Rwi c<sup>u</sup> Kiv nt<sup>u</sup>q<sup>u</sup>Q|

## **djvdj netk- IY**

### **RbmsL<sup>u</sup> v KvMtgv**

Av<sup>u</sup>gv<sup>u</sup> i t<sup>u</sup> k GK<sup>u</sup>U Rbe<sup>u</sup>j t<sup>u</sup> k| G<sup>u</sup>t<sup>u</sup>ki RbmsL<sup>u</sup> v v<sup>u</sup> b v<sup>u</sup> b e<sup>u</sup>lv<sup>u</sup> cv<sup>u</sup>t<sup>u</sup>Q, uK<sup>u</sup>S<sup>u</sup>  
 e<sup>u</sup>lv<sup>u</sup> cv<sup>u</sup>t<sup>u</sup>Q bv m<sup>u</sup>u<sup>u</sup>, Rb<sup>u</sup>ie<sup>u</sup>Av<sup>u</sup>bx g<sup>u</sup>v<sup>u</sup> v<sup>u</sup>mi g<sup>u</sup>tZ 0RbmsL<sup>u</sup> v e<sup>u</sup>lv<sup>u</sup> cv<sup>u</sup>q R<sup>u</sup>vg<sup>u</sup>u<sup>u</sup>ZK  
 n<sup>u</sup>ti Ges Lv<sup>u</sup> Drcv<sup>u</sup> b e<sup>u</sup>lv<sup>u</sup> cv<sup>u</sup>q M<sup>u</sup>lv<sup>u</sup>u<sup>u</sup>ZK n<sup>u</sup>ti0 Ari G Kv<sup>u</sup>iY M<sup>u</sup>tg Lv<sup>u</sup> i  
 msKU t<sup>u</sup> Lv<sup>u</sup> v<sup>u</sup> t<sup>u</sup> uK<sup>u</sup>sev c<sup>u</sup>K<sup>u</sup>u<sup>u</sup>ZK t<sup>u</sup>h<sup>u</sup>l<sup>u</sup> MZ Kv<sup>u</sup>iY GK<sup>u</sup>u<sup>u</sup>zi<sup>u</sup>v<sup>u</sup>Rm<sup>u</sup>ti i m<sup>u</sup>lv<sup>u</sup>tb g<sup>u</sup>v<sup>u</sup>lv<sup>u</sup>  
 kn<sup>u</sup>ti c<sup>u</sup>mo Rgv<sup>u</sup>q| Gi dtj mgv<sup>u</sup>R v<sup>u</sup> b v<sup>u</sup> b e<sup>u</sup>lv<sup>u</sup> msL<sup>u</sup> v t<sup>u</sup>et<sup>u</sup>OB Pj<sup>u</sup>t<sup>u</sup>Q|

e<sup>u</sup>lv<sup>u</sup> t<sup>u</sup>ki tgv<sup>u</sup>U RbmsL<sup>u</sup> v 15 1.6 v<sup>u</sup>gv<sup>u</sup> qb (2012) Ges Av<sup>u</sup> g<sup>u</sup>i<sup>u</sup>gv<sup>u</sup>ix Ab<sup>u</sup>lv<sup>u</sup>qx  
 14, 316.000 Rb (Rj<sup>u</sup>vB-2011) Gi g<sup>u</sup>ta<sup>u</sup> P<sup>u</sup>EM<sup>u</sup>ti g<sup>u</sup>lv<sup>u</sup>U RbmsL<sup>u</sup> v 4.009,  
 423 Rb Ges Gi g<sup>u</sup>ta<sup>u</sup> Wej<sup>u</sup>gv<sup>u</sup>s v<sup>u</sup>bvi RbmsL<sup>u</sup> v c<sup>u</sup>l<sup>u</sup>q 361.154 Rb (2011)|  
 P<sup>u</sup>EM<sup>u</sup>ti c<sup>u</sup>l<sup>u</sup>q 7 j q<sup>u</sup> g<sup>u</sup>v<sup>u</sup>lv<sup>u</sup> e<sup>u</sup>lv<sup>u</sup> t<sup>u</sup>Z em<sup>u</sup>em K<sup>u</sup>ti |



tecvix ciov ew<sup>-</sup>tZ RbmSL'v AvbgmbK 1000 Rb| hı̇'i cȳal AvbgmbK  
600Rb Ges gı̇njv 400 Rb| GB ew<sup>-</sup>tZ emevmKvix Rbmȳi gta" 99%  
gı̇njg l 1% Ab'vb" atg®, G ew<sup>-</sup>tZ emevmKvix Rbmȳiv wewfbaetckvi mıt\_  
RioZ| Gi gta" ¶İ² e'emvqx PıKxRme, wi· vPıj K, MıtgU Kgx,® Kıřti egv  
Ab'Zg| ZvQvor l itq̄Q wbgRȳ tdwıl qı̇vj wf¶ıveE mn Ab'vb" tkȳxi  
tj vtKi |

<i>İckivRme</i>	<i>kZKiv nvi</i>
<i>iii · v Pivj K</i>	10%
<i>e`emivRlex</i>	20%
<i>PivKİzvRlex</i>	20%
<i>İRİj</i>	10%
<i>KivRi egiv</i>	15%
<i>ivFİjivE</i>	10%
<i>Ab`iv`</i>	15%

tecvix crov ew`fZ cwiertii mSL`v AvbgnbK 200uU| cāZuU cwiertii Mto 7-8  
Rb tjvK emevm Kti| GB ew`li`b ZZxqsk cwiervi ew`fZ fivov`vK| emv  
fivov 1000-1200 Gi gta` GB ew`fZ tgvU 50% cwiervi tQvU GK Kvgiqv  
`vK| thLvB i`ta tmLvBb Ngvq| GB ew`fZ cāq cāZuU cwierviB`v`g`  
Zi`i mšlb`btq emevm Kti AtbKuv GKK cwiertii gZ| cwiervi`tjvi cāq  
cāZuU m`m`B tKvb bv tKvb Ktg`mv` RwoZ| Zte th cwiervi`tjvZ ever-gr  
ex A`hriv tKvb Arq KitZ criQ bv Zriv cwiertii L`B Aetnij Z Giv  
cwiertii t`Kl newQob` Giv`vR`i Lveri thMvbi Rb`



tetQ ubt"Q wffveſſe | cſq cwi exi B mšlbiv GKUzeo ntq wetq Kitj B ever-gv  
 t\_ſK newQbæntq hvq | Zviv bZb Kti Mto Zžj Zvt"i cwi evi | dtj  
 cwi evi ,tj vtZ fivb j vſM Ges ex wczgvZv Amnvq ntq cto |  
 GB ew-ſZ emevmKvix cwi exi i ukkjv tKvb aiſbi cwi ewi K mšhvm mſeav cvq  
 bv | ſki ſ"i I GKUzeqm ntj B tKvb bv tKvb A\_ſbuzK KgRvſſi mſ\_ hſ Kiv  
 nt"Q | Ab"ſK tſtqiv nt"Q evj ſeevſni ukKvi | GB ſki ſ"i I AwfveſKiv  
 Zvt"i ſK ſkſvi mſ\_ mſ\_ Kti bv |

GB ew-ſZ emevmKvix cwi evi ,tjv AſbKUv hvhvei tKſxi, ew-ſi cwi evi ,tjv  
 newfbæGjvKv t\_ſK AvMZ hvi dtj cwi evi ,tjvi gſa" cſžtekx mſyf mſ\_ſK<sup>©</sup>  
 Mto DſV bv | Gſ"i tKvb mgſſvZv, mnvbfvZKxj Zv\_ſK bv | dtj GB cwi evi  
 ,tjv GſK Aſb"i ſeſ" cſq mgqB mnvſh"i nvZ emotq t"q bv, GB ew-ſZ  
 cwi evi ,tjv GKB cwi gſſtj emevm Kitj I GſK Ab" t\_ſK wfbſ ſbſRiv  
 ſbſRſ"i ſbſqB ew-ſ\_ſK |

ew-ſemvſ"i Av\_ſmvgwRK Ae-ſ

ſecvixciov ew-ſemvſ"i Av\_ſmvgwRK Ae-ſ ej ſZ ew-ſZ emevmKvix RbMſYi  
 A\_ſbuzK, ſkſvi, tckv, ſ"ſ" em-ſb, Lv"ſſv, fiv, wPmKrmv, wetb"b  
 BZ"ſK eſvq | ſbſſſecvixciov ew-ſi Av\_ſmvgwRK Ae-ſ Avſj vPbv Kiv ntj v t

ſkſvi t ſkſvi GKU tſſj K Pmſ"v | ſkſvi Avſj vQov tKvb gvby GKRb mſPZb  
 bſſvi K ſſmſe Mto DVſZ cvſi bv | ſKſ"ſecvix ciov ew-ſZ ew-ſemvſ mſ\_ſK<sup>©</sup>  
 ſkſvi j vſſi mšhvm t\_ſK ewſZ | gvſ 10% ſki ſ"ž hvq | Zv I Avei teſki  
 fivm ſki iv cſ\_ſK ſ"ž i ſ"i tctivq bv, GB ew-ſi AwfveſKiv ſki ſK ſ"ž  
 cvſſbvi tſtq A\_ſbuzK KgRvſſi ſbſqmRZ Kiv teſk j vſRbK gſb Kſib |  
 gj-Z A\_ſbuzK nZvſe"ſK Ae-ſ t\_ſK cwi ſvY cvlqvi Kvgbv Ges Abſſj-  
 mšhvm mſeav cſvſi AfveB Gi Rb"ſvq | dtj G ew-ſi ſki iv ſb ſb ſkſvi  
 mšhvm t\_ſK ſcſq coſQ |

tckv t G ew-ſi RbMY newfbæQvU tQvU tckvq ſbſqmRZ Gi gſa" ſſž"e"emvq  
 ſi Kkv Pij K, ſſž" PſKžx, Mſtgſm Kgx, tRſj, ſbgRſj Ab"Zg | G ew-ſi  
 AwſKvſ gſj v i v Aſb"i emvq KvR Kti | ukkjv nKvi, ſbgRſj, PſKžx BZ"ſ  
 KvR Kti\_ſK, AwſKvſ ex hviv KvR KiſZ Aſſg Zviv wffveſſe i mſ\_  
 RſoZ | G ew-ſZ 20% e"emv, 20% PſKžx, 10% ſi· vPij K, 10% tRſj,  
 10% wffveſſe, 10% KvſRi egv Ges 15% gvby Ab"b" tckvq hſ | ſki iv  
 gvſ 9.43% ſ"ž hvq, ewſſi gſa" 3.77% e"emv, ſſž" PſKžx 1.55%  
 ſbgRſj 1.89% ſi· vPij K 15.09% Aſb"i emvq KvR Kti 7.55%, everi

KvR mrvqZv Kti 5.65% teKvi 37.78% itqtQ| tqtq mki`i gta`  
AvaKisk ejv` meevn t`qv nq| tmiU mki`i gta` 11.37% kZvsk meq nq  
hvq|

~r` t G ew`fZ emevmKvix RbmYi tenki fMB Acybi Afve \_vK| ew`fZ  
Pricvfk gqv AveRbv, tWb \_vKvi dtj GLvfb A`r`Ki cwi`tek me`gib|  
GQovl itqtQ mei`x Avtjv evZvmi Afve| Avil itqtQ mei`x Lveri cmbi  
`viab Afve| me ugij tq G ew`fZ emevmKvix RbmYi ~r`i Ae`v LyB  
bvRk|

Avq t ew`fZ mefbaetckvi tjuKRb emevm Kti, Zv`i Avqil cv`R` j`q`  
Kiv hvq| ew`fZ emevmZ gvbji bivr aiYi tckv \_vKtjI Zviv Gme tckv  
MhY Kti Rxeib tZgb DbmZ Kitz cvti bv| Zviv tm UvKv Avq Kti Zv`i  
msmvi Pjv vZB teM tctZ nq| A`bK A`bK mgq GK tckvB msmvi Pjv vZ bv  
tcti Ab` tckv MhY Kti \_vK, ZviciI ew`evmxt`i Rxebgvbvi tKvb DbmZ  
j`q` Kiv hvq bv| w`bgRj 2500-3000 UvKv, t`vKvb`vi 2000-2500 UvKv  
Avq Kti| hvZ Zv`i msmvi Pjv vZ Kó nq| GKRb miKkv Pjv K mviw`b  
miKkv Pwjtq 150-200 UvKv Avq Kti| tdmI lqv`vi Avq gwmK 300-3500  
UvKv, hv`viv tm msmvi Pjv vZ cvti bv| tgvU K\_v ew`evmxt`i Avq LyB Kg|

cwi`vii AvKvi t Mtelyvq hv`itK ubePb Kiv ntqtQ Zviv mevB ew`fZ  
emevm Ktib| Z`vZviv mevB cwi`vi vbtq emevm Kti| ew`fZ emevmKvixiv  
GKK ev thS\_ cwi`vi vbtq emevm Kti| GKK cwi`vii AvKvi nt`Q ~gx-`x I  
Zv`i mšlb`i vbtq emevm Kti| Avevi thS\_ cwi`vii AvKvi nt`Q mZv-  
gvZv, ~gx-`x, fivbtev I Zv`i mšlb vbtq emevm Kti \_vK| GKK cwi`vi  
vbtq emevmKvixi msL`v metPtq tekx, ~gx-`x I Zv`i mšlbvi msL`vi cwi`vY  
LyB tenk| GK cwi`vii 7-8 Rb m`m` itqtQ| Zv`i tgšuj K tKvb Pwv`v ci-Y  
nq bv|

RbmsL`v ew`i nvi t G ew`fZ RbmsL`v ew`i nvi AZ`š- tenk| G ew`fZ  
emevmKvix RbmYiv cwi`vi cwi`Kí bv m`úKmtPZb bq| tenki fMB cwi`vii B  
`tqi AvaK tQtj tqtq j`q` Kiv hvq Giv A`bK mš-ib \_vKv fvtjv gtb Ktib|  
tecvix cvov ew`fZ mZtbi AvaK mšlb itqtQ G iKg cwi`vii msL`v  
43.75% kZvsk|

evm`vbi aiY t G ew`li tenki fMB Ni`tjv mvariYZ evka, cji`vtrv UvB, Lo,  
PU BZ`w` Qviv ubugZ Szno G ew`fZ AvZ Nbfrte mibtenkZ tQvU tQvU Szno  
tjvZ A`bK tjvK GKtI emevm Kti \_vK| cji`vtrv UvB w`tq Ntii Pjv `Zvi  
dtj ew`v ntjB Ntii w`fZi cmb cto| `mi`gvytj`v G aiYi NtiiB evm

Kti G ew<sup>-</sup>ŁZ/

Lv<sup>-</sup>vfim t G ew<sup>-</sup>ŁZ emevmKvix RbMłYi Lv<sup>-</sup>vfim mvariY gubłi gZ/ mvariYZ mKtj cvł<sup>-</sup>v fvZ, ȝłj l ivłZ fvZ, memR BZ<sup>-</sup>w<sup>-</sup> tŁtqB tetP \_vłK/ Ał Llevi tŁtqB w<sup>-</sup>b hvcb Kti, Avevi KLłbv GK tej vB Lvq/

bvixi ghP<sup>-</sup>v t G ew<sup>-</sup>li bvixiv memgq tKvb bv tKvb KłR włłRł<sup>-</sup>i e<sup>-</sup>łivłL/ telki fivm bvixivB Ałb<sup>-</sup>i emvq MłKtȝP KłR A<sup>-</sup>ev Młȝłłm Pvkłł Kti \_vłK/ Gici l gınj vł<sup>-</sup> i tKvb ghP<sup>-</sup>v tB G ew<sup>-</sup>ŁZ/ G ew<sup>-</sup>li cȝłliv gınj vł<sup>-</sup> i tKvb gȝ<sup>-</sup>vqB Kti bv/ AłbK mgq t<sup>-</sup>Lv hvq cȝłliv GKwłK weevn KtiłQ włhłZb KiłQ gınj vł<sup>-</sup> i Dci/ gȝ<sup>-</sup>Z AłbK cwi evłi gınj vł<sup>-</sup> i DcvRłB msmvi cwi Pwłj Z nq/

włłv<sup>-</sup>b t G ew<sup>-</sup>ŁZ RbMYł<sup>-</sup>i włłv<sup>-</sup>łbi tKvb e<sup>-</sup>e<sup>-</sup>v tB ej tȝ B Płȝ/ G ew<sup>-</sup>li włłiv cvł<sup>-</sup>Q bv tKvb ałłYi tŁjvi tKvb cvK<sup>-</sup>łKsev gıvıi mȝev włłiv Qrov Ab<sup>-</sup>w<sup>-</sup> RbMłYi Rb<sup>-</sup> tB tKvb ałłYi włłv<sup>-</sup>łbi e<sup>-</sup>e<sup>-</sup>v/ Zıv ew<sup>-</sup>łvmxiv GłK Ałb<sup>-</sup>i młł<sup>-</sup> Mł w<sup>-</sup>tqB mgq Kwłłtq t<sup>-</sup>q/

A<sup>-</sup>łwłZ t RbMłYi A<sup>-</sup>łwłZi Ae<sup>-</sup>v włłfP KiłQ Zvł<sup>-</sup>i ȝłł<sup>-</sup>Avtqi Dci/ Zviv gȝ<sup>-</sup>Z ȝłł<sup>-</sup>e<sup>-</sup>emv wı<sup>-</sup> vPıj K, w<sup>-</sup>bgRȝ, ȝłł<sup>-</sup>Pvkłł BZ<sup>-</sup>w<sup>-</sup> tckvq włłqwmłZ \_vłKł/ Zvł<sup>-</sup>i bȝ<sup>-</sup>Zȝ tȝłłj K Pwłł<sup>-</sup>v<sup>-</sup> tȝv Zviv tȝłłZ cvł<sup>-</sup>Q bv/ GLvłb Zvł<sup>-</sup>i Rxełhvłvi włłȝvcb cłKU AvKvi avıY KiłQ/ Zte Gł<sup>-</sup>i gıłS tKD tKD włłRł<sup>-</sup>i Rxełgvb Dbłłb tPóv Kti hvł<sup>-</sup>Q/ Giv młłłȝ Zfıte Młto ZȝłQ mȝevq mıȝvZ/ Gł<sup>-</sup>i gıłS 45% tȝvK mȝevq KiłQ/ Giv mȝevłqi Gi ȝvł<sup>-</sup>tȝ UvKv Rıȝtq włłRł<sup>-</sup>i fivM Dbłłb tPóv KiłQ/

ew<sup>-</sup>łvmłł<sup>-</sup>i mȝm<sup>-</sup>v t ew<sup>-</sup>łvmłł<sup>-</sup>i Rxełb mȝm<sup>-</sup>vi Ałł tB/ ew<sup>-</sup>łvmxiv t<sup>-</sup>łki bvMvi K ntȝ l cvł<sup>-</sup>Q bv tKvbıfı bvMvi K mȝev/ dtȝ nıRvıiv mȝm<sup>-</sup>vi ȝvł<sup>-</sup> Zvł<sup>-</sup>i emevm/ ew<sup>-</sup>li gıblȝ<sup>-</sup> tȝv wıfıbımgm<sup>-</sup>vi gıłS gıvłteZi Rxełhvcb KiłQ/

ew<sup>-</sup>łvmłł<sup>-</sup>i cıvıb cıvıb mȝm<sup>-</sup>v<sup>-</sup> tȝv włłłłAvłȝ wPZ nj t

1) włłȝv mȝm<sup>-</sup>v t ew<sup>-</sup>łvmłł<sup>-</sup>i AıvKıskB włłȝvi młłıvM t<sup>-</sup>łK eZȝvłb ewłZ/ Rxeł młMłȝ włłK \_vKvi ZvıM<sup>-</sup> l nZıkvı<sup>-</sup>ÄK Ae<sup>-</sup>v t<sup>-</sup>łK cwi łvıb cvł qvi eımbv Ges Abłłj<sup>-</sup> młłıvM mȝev cłvłbi AfıvıB Gi Rb<sup>-</sup> vqı/

K) wııȝıZıv t ew<sup>-</sup>łvmłł<sup>-</sup>i AıvKıskB wııȝı, Głȝłł AłłKB Avȝıı K Ávb jvłfi tZgb tKvb cłqıRb ȝłb Kti bv/ włłıvı wııȝıZıv Kıv Młłm włłȝıZ nł<sup>-</sup>Q/

L) mȝvıRK włłȝvi Afıv t ew<sup>-</sup>łvmxiv mȝvıRKfıte młPZb bȝ/ AÁZıv l

M) tckmZ Átbi Afie t Dchÿ tckmZ Átbi Afite RbmsL'v `Z epv  
cvi"Q| Gi/c RbmsL'v wbtRi A\_9wZK fite `fej x ntZ thgb cvi"Q bv  
tZgub mignvRKfiteI `¶ klgK wntnte `wqZ:cjv tb e" \_nq|

3) A-ŕ'Ki cwiŕek t Gt'ŕki ew-l, tjtŕZ mb=Avqfŕ tjtŕKRb emevm Kti | tckvMZ w'K w'tq Giv AnaKvskB wi-v Pvj K, ŕŕZ'e'emvqx, w'bgRŕj, tdmil qvjv, tQvU PvkŕRvex, nKvi, Zvŕ'i evm-vb ev ew- mŕ-nvZxZ fŕŕB -ŕ'mŕZ bq| evka, Lo, gmvU wKsev PU w'tq ŕZwi Lgmo i gŕa' Zvŕ'i evm Gme Ni, tjtŕm'ZtmtZ Ges tŕsviv| ew-li Pricvŕk -vŕK tWb, gqjv AveRv BZ'w' Averi AŕbK ew-lZ cqtub=ukb e'e-v br -vKvi KviŕY thLvŕb tmLvŕb gjgŕ Qvotq -vŕK| hvi dtj memgq -mŕgq cwiŕek meivR Kti | ew-l, tjtŕZ meiv Avŕjv evZvŕmi LgB Afive| ew ntj B ew-i gvtS GgbvK Nŕii wŕZŕil cmb XtŕK hvq| ZLb ew-l, tjtŕZ Avil tŕvPbxq Ae-vi mŕvŕ nq|

5) Niewo ew ewm<sup>~</sup>ʋbi mgm<sup>~</sup>v t ew<sup>~</sup>ewm<sup>~</sup>ʋ i Niewo<sup>~</sup>ti v ew<sup>~</sup>ki<sup>~</sup> ʋwi Dc<sup>~</sup>ti  
 ʋb, ʋbP Qb, KvMR l c<sup>~</sup>ʋZb ʋb BZ<sup>~</sup>ʋ | Avi Ni<sup>~</sup> t<sup>~</sup>vi AvKvi L<sup>~</sup>ʋB t<sup>~</sup>ʋv  
 GB t<sup>~</sup>ʋv t<sup>~</sup>ʋv N<sup>~</sup>ti Zviv c<sup>~</sup>ʋew<sup>~</sup>ti mevB ʋgtj GKB ʋeQ<sup>~</sup>v<sup>~</sup>ʋq Ng<sup>~</sup>v<sup>~</sup>q | Z<sup>~</sup>ʋ<sup>~</sup>i  
 Niewo<sup>~</sup> t<sup>~</sup>ʋv m<sup>~</sup>gv<sup>~</sup>b ew<sup>~</sup>ʋZB ʋf<sup>~</sup>R h<sup>~</sup>vq l t<sup>~</sup>f<sup>~</sup>z c<sup>~</sup>ʋo h<sup>~</sup>vq | c<sup>~</sup>ʋ<sup>~</sup>v<sup>~</sup>q t<sup>~</sup>g<sup>~</sup>v<sup>~</sup>z Ki<sup>~</sup>z  
 nq | Gf<sup>~</sup>ʋte m<sup>~</sup>gv<sup>~</sup>b Rv<sup>~</sup>qM<sup>~</sup>vq ewem K<sup>~</sup>ti ʋ<sup>~</sup>fK | ew<sup>~</sup>ewm<sup>~</sup>ʋv g<sup>~</sup>ʋbe ewem<sup>~</sup>ʋi  
 Abg<sup>~</sup>ʋh<sup>~</sup>M<sup>~</sup>x c<sup>~</sup>ʋi<sup>~</sup>ʋek ewem K<sup>~</sup>ti b | h<sup>~</sup>ʋz b<sup>~</sup>v<sup>~</sup>b ai<sup>~</sup>ʋi g<sup>~</sup>qj v AveR<sup>~</sup>ʋ ew<sup>~</sup>ʋz  
 A<sup>~</sup>ʋ<sup>~</sup>ʋKi c<sup>~</sup>ʋi<sup>~</sup>ʋek ʋwi K<sup>~</sup>ti | GBme A<sup>~</sup>ʋ<sup>~</sup>ʋKi c<sup>~</sup>ʋi<sup>~</sup>ʋekB A<sup>~</sup>ʋq<sup>~</sup>x Niewo<sup>~</sup> ʋwi  
 K<sup>~</sup>ti ew<sup>~</sup>ewm<sup>~</sup>ʋ ewem K<sup>~</sup>ti ʋ<sup>~</sup>fK | A<sup>~</sup>ʋ<sup>~</sup>ʋKi c<sup>~</sup>ʋi<sup>~</sup>ʋek ewem Kiv n<sup>~</sup>tj v



## Kivnj t

### BizetPK t

mgvR emevmKvix newfbæ~\*Qj cwi evt i i Mp KvthP egv mvariYZ ewl,tj vtZ  
emevmKvix gvnj viv newfbævmq MpKvthP KvR Kti \_vtK|

GQovov mgvRi newfbæwOy~t i i KvR,tj v GB ewl'evmxiv mæuv`b Ki tQ etj  
mgvRi DPZt i i RbMY wæwðšf emevm Ki tZ cvi tQ| thgb- wi Kkv I tVj vMwo  
Pij K, tew U'w I UvKp j K, wbgRj, Kz, nKvi, Svo yvi, tg\_i BZ'w |  
wPy~t i i KvR,tj v mvariYZ GivB mæuv`b Kti \_vtK| hvi dtj mgvR Rxe t b  
fvi mvg Ae~v weivR Kti |

### tbwZetPK t

mgvR Rxe t bi ewl'i BizetPK cfi vte i tPtq tbwZetPK cfi ve A t b K te n k | ewl'i  
te n k i f i M h g K B te K v i | G i v t K v b K v R b v t c t q g v K v m<sup>3</sup> n t q h v q | G i d t j  
G i v g v t K i U v R t R v M v o K i v i R b " w Q b Z v B i v n v R w b, L j B Z ' w " i i æ K t i d t j  
mgvRi m g c w i t e k w e b o n q | k n t i i A t b K m j e a v e w t j v K A v t Q h v i v e w - i  
h g K t i i w t q A t b K A c i v a g j - K K v R K w i t q \_ v t K | ewl'i t j v K R b t h t n Z z ' w i<sup>a</sup>  
Z v t i c w i e v t i i A k w s t j t M B \_ v t K | ewl'i GB `w i<sup>a</sup> R b t M w x i v `y t e j v `y g t v  
L v l q v i R b " m g v R i m j e a v t f i M t i i K \_ v g t Z v A b i q K v R K t i \_ v t K | t h g b G i v  
L j, i v n v R w b w Q b Z v B, B Z ' w A w w Z K K g R v t U i m v t \_ R w o t q c t o | d t j  
b M t i i t f w e K c w i t e k e ' v n Z n q | ewl'i te n k i f i M n k i I e x w f q l v e i i m v t \_  
R w o Z | d t j m g v R i w f q t K i m S L ' v e w x c v t " Q G e s w e k ; L j c w i t e k m j o n t " Q |  
G Q o v o v c l q e w l , t j v m v a r i Y Z A v e v m K G j v K v q M t o D t V | ewl,tj v \_ v t K t b v i s i v  
I `M g g | d t j A v e v m K G j v K v i e m e v m i Z t j v K R t b i R x e b A w Z o K t i t Z v t j  
ewl'i GB t b v i s i v M U g q c w i t e k |

ewl,tj vtK tK<sup>a</sup> Kti Mto DtV Aciva tK<sup>a</sup> GLvtb Mto DtV gv`K e'emv/  
gv`K t`tki meP mieivn Kiv nq mvariY ewl'i tQtj t g t q t i w t q | d t j  
mgvR gv`K e'emv e'vck fite ewx cvt"Q| gj-Z tPri, ctKugvi, Rgvix, Uv I  
gv`K e'emvqt i kZKiv beYB RbB ewl'tZ emevm Kti \_vtK, ew-B ntq DtV  
Zvt i Rb " MPr " | ZvQovov knivAtj ewl,tj v newfbæmsvgK I gnvgvix  
ti vtMi Avevmfng| eZgub mg tqi metPtq fqsKi ti vtMi t q t i t ewl'evmxiv  
Awak SgKM l Gt i gva t g GB ti vtMi RxebyngvR Qwotq cotQ|

ZvQovov RbmsL'v ewx i t q t i t ewl'evmx t i t b B t K v b c w i K i b v | Z v i v `Z  
RbmsL'v ewx B Kti Pj tQ| ewl'i RbMtYi cwi evi cwi K i b v m æ u t K © A m t P Z b  
n l q v i d t j G L v t b R b m s L ' v `æ Z e w x n q | h v m v g M K m g v R e ' e - v i D c i  
e'vck cfi ve w l i K t i \_ v t K | G f i t e m g v R R x e t b n e w f b æ t q t i t ewl,tj v



e'vcKfite c'fve we~vi Ki#Q| hv KL#bv BwZevPK Avevi KL#bv tbwZevPK,  
 wkS' tbwZevPK c'fve metPtq tewk, hv Avgv#i mgvR Rxeb#K Awó K#i  
 Z#tQ|

## ew'lvmt# i Av\_#mgvRK Ae~vi Dbq#b MpxZ c`t#C

ew'lvjtjv Avgv#i mgvRi GKw Ask| mgvRi Dbq#b Ki#Z tMtj| ew'lvjtjvi  
 Dbq#b Ki#Z nte| ew'lvjtjvi Dbq#b miKvix I temiKvix ms~lvjtjv KvR  
 Ki#Q| GB ms~lvjtjv ew'lvjtjv Dbq#b newfbæmtPZbgj-K c`t#C M#Y K#i  
 \_vtK| we. wkbm gvk#j i gZvbyvqx ÓAvanbK Rxebi m#eav thgb ~#j, cvK,  
 tLjvi gvV Ges ~#~ tK#~a m#eav m#úK©AenwZ bq etj Zv#i mgvRK  
 Rxebtera D'vmbZv I A'øev#K tK#~a K#i cwiPwj Z nt"Q dtj Rxeb aviv  
 m#lg ntq DVtZ c#ti bv|Ó Zv#i GB Rxebtera#K Db# Kivi Rb'B newfbæ  
 miKvix I temiKvix ms~lvjtjv KvR Ki#Q| miKvii mgvRKj ~vb gšYvj q,  
 ~#~ gšYvj q ew'lv Dbq#b KvR K#i hv#Q| ~#~ gšYvj #i Aaxtb newfbæKvLv  
 thgb cwi evi cwi Kíbv, tnj\_ ew'lvmt# i Dbq#b e'vcKfve KvR K#i hv#Q|

cwievi cwi Kíbv Aw#Bi ew'lv RbmsL'v ew# tivta mtPZbZvgj-K KvR K#i  
 hv#Q| ew'lv RbMY#K cwievi cwi Kíbv M#Y AvM#x Kiv nt"Q RbmsL'v ew#i  
 K#j m#úK©Ávb ~vb Kiv nt"Q| tnj\_ ew'lvmt# i ~#~ m#Y#vi t#t# KvR  
 K#i hv#Q| wkiv ~#~ m#Y#vi Rb" Giv c#qvRbxq c`t#C M#Y Ki#Q| ew'lv  
 emevmKvix gwnjv#i c#K#Y w't"Q wbtRi I cwi ev#i ~#~ wKfite m#i ivLv  
 hvq|

~vbxq miKvi gšYvj #i t#Si-2 ew'lvmt# i Dbq#b e'vcK Kv#lg M#Y Ki#Q  
 Giv ew'lv m'wbtUkb e'e~v wbuóZ, wei# cwi e'e~v Ki#Q| evsjv#k  
 miKvi ew'lv tQ#j t#t# i wk#v t'qvi Rb" ew'lv Mto Z#tQ KgRvex wk#i i  
 ~#j| tKbbv ew'lv AwKvsk tQ#j t#t# newfbæA\_#wZK KgRv#U mvt\_ RwoZ|  
 Gme tQ#j t#t# K#Ri Rb" m#viY ~#j cotZ th#Z c#ti bv| G#i wk#vi  
 Rb" Mto tZvjv ntq#Q ~#vUvi GB w#kl ~#j| Gi dtj ew'lv emevmiz  
 tQ#j t#t# wk#vi Av#jvq Av#jwKZ nt"Q|

GQovv ew'lv cwi#ek Dbq#b I miKvi A#bK Kv#lg M#Y Ki#Q| wkQymKQz  
 t#t# ew'lvmt# i c#e#b e'e~v Kiv nt"Q| hw I c#e#b KgRv#U GLtbv  
 tZgb GKUv ew# cvqub| miKvii cvkvck newfbætemiKvix ms~lvjtjv ew'lv  
 ew'lvmt# i Dbq#b KvR Ki#Q| G#i g#a e'vK, Avkv, I qv# w#kb,

BZ'w' Ab'Zg| GB ms'v' t'jv cwi'evi , t'jv t'K Zv' i c'k'f' i Av' Zv'q Gtb FY  
w' t'q \_v' t'K| G FbKZ. UvKv ew' l'v m'x' i m'v B'v n'K w' K'ev g'v m'K w' K'w' l' t'k'v K' i  
w' t'Z n'q|

### ew' l' Db'q' b m'g'v i k t

e'Z'v' t'v Av'g'v' i t' t' k' i m'v g'v n'K m'g'v' , t'jv i g'v' t' ew' l' m'g'v' n' Ab'Zg|  
ew' l' v' m'x' i v c'v' b m'g'v' i g'v' t' e' m'v m' K' i \_v' t'K| Gi c'v' b K'v i Y n' t' Q  
ew' l' v' m'x' i Av' \_m'v g'v n'K Db'q' b m'v K' f'v' t' e n' t' Q b'v| GB c'v' t' U' d' ew' l' v' m'x' i  
Av' \_m'v g'v n'K R' i e' b' e' e' v' G Av' \_m'v g'v n'K e' e' v' e' j' t' Z ew' l' v' m'x' i t' h' w' e' l' q  
, t'jv GB g'v b'v M'v' d' c' t' e' D' c' v' c' b K' i v n' t' q' t' Q t' m' , t'jv GKUz' j' K' i t' j' B' t' L' v  
h'v' q' t' h' c'v' Z' u' t' j' t' B' Z' v' i v m'g'v' i M'v' | GB M'v' e' l' b'v K' g'v' c'w' i P'v' j' b'v K' i t' Z' w' t' q  
t' L' v t' M'v' Q, ew' l' v' m'x' i m'g'v' i A' s' - t' b' B' | ew' l' v' m'x' i Db'q' b c'v' g' c' h' i' q  
c'v' q' v' R' b Z' v' i Av' Z' v' t' P' Z' b' Z' v' e' w' x' K' i v| ew' l' v' m'x' i g'v' t' S' m' t' P' Z' b' Z' v' A' v' b' q' b  
A' m' s' M' v' Z' f'v' t' e K' i t' j' P' j' t' e b'v| Gi R' b' c'v' q' v' R' b m'g'v' , m' s' M' v' Z' , c'v' q' v' R' b \_v' b' x' q  
t' b' Z' t' Z' j' w' e' K' v' k' , M' Y' g' v' a' g' e' v' m' g'v' R' t' m' e' v g' j' - K' K' v' R' , m' g'v' R' K' g' x' p' \_j' t' K' w' \_K' I  
e' v' v' t' K' w' \_K' m' g'v' o' t' K' \_i' q' K' w' e' f' b' e' K' v' h' p' i' g' M' v' Y' c' v' i Y' i' g' j' - K' e' e' v' m' v' j' v' R' v' i  
BZ' w' | w' Z' v' q' c' h' i' q' ew' l' v' m'x' i R' b' m'g'v' I ew' l' e' m' s' Z' c'w' i K' i' b' v' c'v' q' v' R' b|  
c'w' i K' i' b' v' c'v' q' b' I c'w' i K' i' b' v' ew' l' v' q' t' b' \_v' b' x' q' t' i' g' Z' v' g' Z' I Z' v' t' i' R' b'  
c'w' i K' v' i' Z' m' j' h' v' m' m' y' e' a' v' i m'v g' A' h' Z' v' G' e' s' m' v' e' Z' v' h' \_v' m' v' e' c' y' l' v' b' g' y' l' f'v' t' e  
t' L' t' Z' n' t' e' | ew' l' v' m'x' i R' b' \_f' t' g' q' v' x' I \_x' N' f' g' q' v' x' \_B' a' i' t' Y' i c'w' i K' i' b' v'  
c'v' q' b' K' i v c'v' h' v' R' b| \_f' t' g' q' v' x' c'w' i K' i' b' v' , t'jv \_x' N' f' g' q' v' x' c'w' i K' i' b' v' ew' l' v' q' t' b' i  
m'v' v' h' K' A' e' \_v' t' f' t' A' v' s' l' m' g' v' a' v' t' b' i w' b' d' q' Z' v' t' t' e' |

### ew' l' v' m'x' i I ew' l' Db'q' b' i R' b' \_x' N' f' g' q' v' x' c'w' i K' i' b' v' , t'jv n' l' q' v' D' v' P' Z' w' b' e' f' c'

- ew' l' v' m'x' i t' g' s' i' j' K' P' v' n' v' c' i' t' Y' i R' b' A' \_w' o' v' Z' K' m' j' h' v' m' m' y' e' a' v' i e' e' v' K' i v  
G' e' s' c'v' Z' o' v' b' K' e' e' v' M' v' o' t' Z' v' j' v' | G' m' g' l' e' e' v' i' q' m' e' v' i A' s' k' M' v' Y' w' b' v' d' Z' K' i' Y'  
I t' m' R' b' D' c' h' y' c'w' i t' e' k' \_Z' w' i K' i v;
- Db'z' R' i e' b' t' e' v' a' M' v' o' t' Z' v' j' v' | G' e' s' A' v' Z' v' w' b' f' P' k' v' j' Z' v' A' R' b' c'v' Z' K' t' K' I m' g'v' o' t' K'  
m'v' v' h' K' i v| ew' l' G' j' v' K' v' i w' K' v' m'g'v' \_j' K' i | G' e' s' K' j' v' Y' K' i w' e' t' b' v' b' g' j' v' K'  
e' e' v' M' v' o' t' Z' v' j' v' | D' t' j' m' L' Z' D' t' i' t' k' i' R' b' w' b' a' i' f' c' K' v' h' R' i' e' e' v' w' e' t' e' P' b' v' K' i v  
t' h' t' Z' c' v' t' i;
- A' \_w' o' v' Z' K' I m'v g'v' n'K m' j' h' v' m' m' y' e' a' v' M' v' t' Y' i R' b' m'g'v' c'v' Z' o' v' b' K' e' e' v' M' v' o'  
t' Z' v' j' v' t' h' g' b' - m' g'v' o' Db'q' b' m'v g'v' Z' ;
- A' \_w' o' v' Z' K' w' K' w' t' q' m' j' h' v' m' m' y' e' a' v' c'v' t' v' t' b' i R' b' e' w' E' g' j' - K' c'v' k' v' Y' t' K' \_v' BZ' w'  
M' v' o' t' Z' v' j' v' ;
- w' e' b' v' t' e' Z' b' w' K' v' M' v' t' Y' i m' j' h' v' t' M' i R' b' A' \_w' o' v' Z' b' K' w' e' \_v' j' q' c'v' Z' o' v' b' K' i v  
\_f' t' g' q' v' x' c'w' i K' i' b' v' , t'jv i' D' t' i' t' k' i' n' l' q' v' D' v' P' Z' w' b' e' f' c' -



- ʔi Ki cwi tek Mto tʔv
- newfbamvgnRK uk ʔvgj-K Kvhɕig MhY Kiv
- tKvb weʔk ev Riʔx Aeʔq mKj tK mslmWZ Kiv I H mgʔAeʔq  
newfbamsMVBgj-K cʔʔc tbqv/

1) *cwi*<sup>®</sup>/*vi* *cwi*/*Qbz*/*Awfhvb*

2) *mgvR†mervgj-K Kqkwei*

3)  $mvgwRK \text{ uk} \eta v \text{ Kv} h \mu t g \text{ ubi} \eta i \text{ Zv} \text{ `ixKiY Awf} h v b$

4)  $t^{-1} Q_{\nu q} t m e \nu g j - K e^+ e^- \nu$

5)  $Av \vdash j \vee Pb \vee mf \vee l \vee c \vee i \wedge Awf \vee hb$

6)  $k \nabla g_j - K P_j \nabla P^T c_0 k \nabla x$

GB \_tjv ntjv cwi Kí bvi wɛfɔbɔw K/ Gt ʔtɪ́ ʌKtɛ cwi Kí bvi Rb" cwi Kí bvi  
MhY Ges mɔhɪM mɛar ɪbaɪY Kiv/ cwi Kí bvi cɔqɔbi ci cwi Kí bvi ev ʌvqɔ  
wɛtɛPɔv KɪtZ ntɛ/ cwi Kí bvi ev ʌvqɔbi Rb" mɔ tKSkj l cɔqɔv cɔqɔRb  
Gɪfɔ cɔqɔv tKSkɔj KɪhRɪwɪZ ɪbɔfɔ Kɪ cwi Kí bvi ɪbɔtɛKZ mɔú mɔhɪ  
mɔɛenvi l cɔqɔv KɪhRi kɪ³ mɔhɪ mPj Zvi Dci/ ev ʌ cɔqɔv KɪhRi  
kɪ³ \_tjv tK mPj ɪvLvi e'vɔtɪ mɔvR KɔfɔK mɛv mɔPó ʌKtZ ntɛ/ Gt ʔtɪ́  
cɔqɔRb mɔvRKɔfɔ ʔZv/ mɔvR Kɔfɔ GB ʔZv ntɔ ʌ ʌbɔq tɔZZj. Mɔ  
tZjv/ ʌbɔq Dɛ ʌM MhY AbɔɪY Kiv/ mɔvRKɔfɔK ɛwɪ GjvKɪq KɪR  
KɪtZ ntj wɛfɔbɔgmɔvɔ cɔtZ ntZ cɔtɪ/ tɔRb" mɔvR Kɔfɔ ceɔ tKB Zvi  
KɪRi GKUvi cwi Kí bvi Mɔ ZɔtZ cɔtɪb/

Dctii DtjLZ cwiKrbv,tjv ev'lvqtbi gra'tg ew'li Dbqb mæ/ bMivqtbi  
cZēÜKZv inmtē cZÜU bMtii Rb' ew'lmgm'vi mgrarb GKvš cQvRb G  
tclvctU ubtæew'lmgm'vi mgrarb Kti wKQmzwik Zzj aivnj t

1) b`x fivzb tiva KiʔZ nte t b`x fivzb ersjvʔ ʔki Rb` GKwU fquen mgmʔv/  
b`x fivʔbi Gʔ ʔki eʔ gvbʔi emw Ni cʔZ eQi wejxb nʔq hʔʔQ/ Avi G  
mKj Mpnxb I ʔvʔPʔZ gvbʔy GKUZKgmʔvʔbi Rb` knʔi Gʔm fʔo Rgvq/ Avi  
G ewaʔ RbmsLʔmn Mʔo ZʔʔQ ewʔGjvKv/ b`xʔZ cʔqvRbxq ewa wbgʔy Kʔi  
b`x fivzb t ʔK gvbʔi emw Ni I RvqRv i ʔv Kiv mʔe/

2) ~~chemb~~ t kn̄ii Awtkvtk tm me ewl tkKo tMtō etmtQ tm,tjvtK  
AcmvY Kiv tek KmB KvR miKwi fvte AvBb cQvM Kti ewl Dt̄Q` Kiv  
m̄e bv/ Gt̄i ~~chemb~~ ēe-v bv Kti Gt̄i Dt̄Q` Kiv m̄e bq Ges Zv wKI

bq| G`w fWtZB cŃqRtb mKvix cŃPónq knŃi A`Ńi Gt`i Rb` Avjv`  
evm`tb Mto tZvjv|

3) emio frov mngZ KiY t knŃi emio frov teuk \_vKvq knŃi Mwie klgKiv  
Zv enb KiŃZ cvŃi bv| teŃkl KŃi mKí GjvKvq klgKiv Zv`i Pwn`vi ZŃbvq  
AŃbK teuk frov \_vKvq Zviv eva` nŃq ew`ŃZ evm KŃi| Avevi gj- kni  
GjvKvq AwFRvZ tjvKRtbi mŃ\_ mŃ\_ Mwie, klgK, wi- vPvj K, KŃj, MŃgŃ  
klgK cŃFvZ tckvq RvOZ tjvKRb ew`ŃZ evm KŃi| Zviv th Avq KŃi Zv w`Ńq  
msmvi PujvŃbB KóKi, dŃj teuk emio frov t`qv Zv`i cŃŃ mŃe bq| ZvB  
mKí GjvKvi mŃ\_ mŃ\_ gjv kni GjvKvq emio frovi nvi AvBb KŃi mngZ  
ivLŃZ nŃe| hvŃZ KŃi emioi frov gngj Kiv B`QvgtZv evovŃZ bv cvŃi|

4) RbmsL`v mbqšY t MŃgi RbmsL`v ewx mbqšŃb tRvi`vi e`e`v MŃY Kiv  
GKw RiŃx KvR| tKbbr RbmsL`v ewx i nvi mbqšY Kiv bv tMŃj `wi`Zvi nvi  
Kgtvbr hvŃe bv Ges KgŃs`vŃbi mŃo nŃe bv|

5) fig ms`vi I fig e`e`v t knivĀŃj fig ms`vŃi gra`Ńg Ae`eüZ figi  
e`envi I figi gj- mŃúŃK`e`e`v MŃY KiŃZ nŃe| kni GjvKvi gZ MŃgl  
fig ms`vi cŃqRb hvŃZ mŃú` eUŃb ŃgeaŃv`elŃ` tjvc cvq|

6) MŃg tŃto knŃi Mgb`hKiY t MŃgi ŃgeaŃv`wi`a I teKviZj`i-  
KiŃZ cvŃj bMŃi bZb ew`ŃMto DVvi mŃeŃv KŃg AvŃe| MŃg nŃo-gjMxi  
LvŃi gvQ PrŃi e`e`v KŃi gvŃŃi KgŃs`vŃb I RŃeKvi e`e`v Kiv hvq|

7) MŃgi gvŃŃi MŃgB KgŃs`vŃbi e`e`v Kiv MŃgi gvŃŃ Ajm bq| Zviv  
KvR KiŃZ PŃq| Zv`i nŃŃZ KvR ZŃj w`ŃZ bv cvivq Zviv eva` nŃq knŃi QŃ  
AvŃm| MŃg th mKj DbŃbgjK KvR Kiv nq ZvŃZ G mKj gvŃŃi teuk KŃi  
mŃhŃM KŃi t`q| LvŃi`i wŃbgŃq KvR ZvQvov I miKvix wŃFbŃKvŃR mbŃqŃM  
KŃi Gt`i KgŃs`vŃbi e`e`v Kiv hvq|

8) AŃa AeKwŃgv DŃ`Q` t bMi cwiKí bvi evŃŃi th tKvb KvŃŃgv tŃŃŃ t`qv  
GKw iŃZŃŃŃ`ŃŃŃ| hvŃZ Zviv fij Niemo`ZwiŃZ mŃPó nb| mbqg ivLŃZ  
nŃe th AbŃgv`b Qvov tKD Ni`Zix KiŃZ cvŃe bv| cwiKí bvi evŃŃi KvDŃK  
AeKwŃgv`Zixi AbŃgv`b t`qv nŃe bv|

9) jŃ`jŃŃŃŃŃ tmev mŃeav cŃwiZ Kiv t mŃeav ewĀZ epr RbŃMvŃxi hvŃZ  
mŃvŃRK mŃhŃM mŃeav tŃvM KiŃZ cvŃi Zvi Rb` MŃgx gZv KvŃŃgvŃZ kŃl<sup>©</sup>  
Ae`vKvix mŃeav tŃvMŃŃi t`ŃiŃZŃi t`qv wŃvŃbvi e`e`v MŃY KiŃZ nŃe|  
Avi GKw jŃ`jŃK`ŃK tmev mŃeav cŃvŃbi e`e`v Kivi gra`Ńg AvvZZ  
mŃe nŃZ cvŃi| DŃŃv<sup>3</sup> AvŃjvPbvi tŃŃl ejv hvq th, ew`ŃbMŃi Rb` GKw

AwfKvc eU| KŠ' G ew' lQovv AbvZ t`tk bMi mæ bql kni GjvKvq ew' li  
 cñvi tiva Kiv cQvRb| Acwi Kiv Zfite ew' lvmx`i `B GKUv cyeimb gjvK  
 cKf G mgm'v mgvavbi ev`e cšv bql ew' lmgm'v mgvavbi Ab'Zg tKškj  
 ew' lvmx`i tK cyeimb Kiv| AZGe, ew' lmgm'v mgvavbi Rb' cQZiva  
 cyeimb I Dbqb G wlgx Kvhg MhY Kiv cQvRb|

## Dcmsnvi t

Rieb gvb eRvq ivLvi Rb' gvbJfK tgšj K cQvRb tgUvZ nq| GBme  
 cQvRb tgUvZ bv cvi tJ gvbJ mgvRi thvM' m'm'ifc MY' nZ cvi bv|  
 KviY ZLb Hme nZ gvbK mgm'v D'm e nq| Avi G KviY ew' l tJvZ mjo  
 n'Q bvbnea mgm'v| ew' lvmx`i cñv cñv mgm'v, tJv gta' itqQ cñv  
 mgm'v, cwi tek `IY, wPvKrmvi Afve, wvbr`bi Afve, A'wvZK mgm'v  
 BZ'w | Mtel K ðew' lvmx`i Av' mvgvRK Riebe'e`v kxl R Mtel Yv KtgP  
 gva'tg ew' lvmx`i Av' mvgvRK Ae`v, Zv`i mgm'v, tJvi wvfbwv K Ges  
 mgm'v mgvavb, tJv Zj aivi tPov KtiQ|

## Mšciv

- v ersj v`tki mvgvRK mgm'v `tfc I mgvavb, kI KZ Rvgv `mq`,  
 A'c'v cKvkb, wZxh ms`i Y (2001)|
- v mgvR Kj vY mgvY (ZZxq LÜ), kI KZ Rvgv `mq` ersj v GKvWgx  
 cÜg cKvK- 1991|
- v tčš mgvRvAvb, AvRg tgrt Mv Qj Ges Avj x tgrt Avk v d wgtj wqvq  
 crew tKkb cÜg cKvK- 2005
- v ersj v`tki Wtqix, Avj nRi Gm.Gg. nvejv (m'wv Z tM- ve  
 j vBteix (cÜ) wj wgtUW, 319Zg ms`i - 2004|
- v `wBk bqw Mš' Avj gMxi gvnDw' b, ti wR bs- wv.G 4005, ms`v- 165  
 RjvB 2005|
- v evKx Avaj (2003t tčš emvZ t mRtbyeyv gvtKØ, bxj tZ, XvKv|
- v bMi fMvj I bMi cwi Kf bv t gviav, KvRx (2004) fMvj wfvM  
 Xv wv' ersj v evRvi, XvKv|
- v bMi `w' ew' lvmx t wvvc (PDAP) (2003) t wvvc wgi c'j, XvKv|
- v ðersj v`tki kšRv gvbJ cñv tgv`bv (1985) t ersj v GKvWgx,  
 XvKv|
- v ðvAvY D'm wvKv I Mtel bv c'wZ tPšajx, Av'bvqvi Dj w I  
 i kx`, mvBdž (1995) t Abb'v, 38/2 ersj vevRvi, XvKv|

v ÖmvgwRK MteIYv c×uZ I cwi msL vY cwi iPuZ t gvbab, Avāj I tgi x,  
mvgmbyvi Lvbq (2002) t cZxK cKvkbx ms v, evsj vevRvi, XvKv|

## Authors Guideline for Social Change

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**Title page document :** A separate document containing the manuscript title,

author names, the corresponding author, author affiliations note on each author up to 80 words in length, 5 keywords and an abstract of up to 200 words.

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**Text :** 12 point Times New Roman font, 1.2 or 1.5 line spacing.

**Quotations :** indent quotations of more than 40 words. For shorter quotations, include them in the paragraph and use single quotation marks. Interview quotations should be indented, even where shorter than 40 words, and followed by italicized identifying information in brackets, for example: (Suzanne, daughter, regional area).

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