

ISSN 1605-2021

লোক-প্রশাসন সাময়িকী

সংখ্যা: ৫৬

ভাদ্র ১৪১৯/সেপ্টেম্বর ২০১২

লোক প্রশাসন সাময়িকী

বাংলাদেশ লোক-প্রশাসন প্রশিক্ষণ কেন্দ্র
সাভার, ঢাকা



লোক-প্রশাসন সাময়িকী

সংখ্যা: ৫৬

ভাদ্র ১৪১৯/সেপ্টেম্বর ২০১২

সম্পাদনা পরিষদ

মোঃ নূর উদ্দিন আহম্মেদ

বণিক গৌর সুন্দর

কঙ্কা জামিল

আবদুল বাকী

মোঃ শফিকুল হক

সম্পাদক

মোঃ সানোয়ার জাহান ভূঁইয়া

সহযোগী সম্পাদক

সামসুল আলম খন্দকার

লোক-প্রশাসন সাময়িকী

(বাংলাদেশ লোক-প্রশাসন প্রশিক্ষণ কেন্দ্রের ত্রৈমাসিক জার্নাল)

সংখ্যা: ৫৬

ভাদ্র ১৪১৯/সেপ্টেম্বর ২০১২

প্রকৃত প্রকাশকাল: জুন ২০১৩/জ্যৈষ্ঠ ১৪২০

সম্পাদক: মোঃ সানোয়ার জাহান ভূঁইয়া

সহযোগী সম্পাদক: সামসুল আলম খন্দকার

টেলিফোন : ৭৭৪৫০১০-১৬ (পিএবিএক্স)

ফ্যাক্স : ৭৭৪৫০২৯

ওয়েব সাইট : <http://www.bpatc.org.bd>

বিপিএটিসি গ্রন্থাগার : ৩৫১.০০০৫

প্রচ্ছদ : নারায়ন সরকার

মূল্য : ১৮০ টাকা

US \$ 10

মুদ্রণ: তিথী প্রিন্টিং এন্ড প্যাকেজিং

২৮/সি-১, টয়েনবি সার্কুলার রোড, মতিঝিল, ঢাকা-১০০০

ফোন : ৯৫৫০৪১২, ৯৫৫৩৩০৩

LOK PROSHASON SAMOEKY

(Quarterly Journal of Bangladesh Public Administration Training Centre)

No. : 56

Actual Time of Publication : June 2013/Jaistha 1420

Editor: Md. Sanwar Jahan Bhuiyan

Associate Editor: Shamsul Alam Khandaker

Telephone : 7745010-16 (PABX)

Fax : 7745029

Editors' e-mail : sanwarsamia@gmail.com
sakhandaker@yahoo.com

Website : <http://www.bpatc.org.bd>

BPATC Library : 351.0005

Price : Tk. 180

US \$ 10

লোক-প্রশাসন সাময়িকীর প্রবন্ধসমূহে প্রকাশিত মতামত প্রবন্ধকারদের একান্ত নিজস্ব, এর জন্য সম্পাদনা পরিষদ কোন দায়িত্ব বহন করে না।

সূচিপত্র

Biocentric Resources in Our Indigenous Knowledge: Special Focus on Bengali Proverbs A S M Anwarullah Bhuiyan	০১
টেকসই সড়ক যোগাযোগ ব্যবস্থা: বাংলাদেশ প্রেক্ষিত -একটি ধারণাপত্র সুমন রেজা	২১
Digitization of Land Management: Maintenance of Ownership Records, Transfer, Registration and Mutation Md. Mahmudul Hassan, PhD Md. Kamrul Hassan Shamsul Alam Khandaker	৪৩
In Pursuit of A New Horizon in Tourism: Revisiting The Archive of An Ancient But Rich Civilization At Tahirpur ("Haweli"), Sunamganj Md. Mokhtar Ahmed	৬১
Achievement Motivation, Attitude towards Modernization and Academic Performance of Undergraduate Students Fatema-Tu-Zohra Binte Zaman Md. Saifur Rahman	৭৯
Measuring Socio-economic Conditions of Street Beggars at Dhaka City in Bangladesh: An Empirical Study Kazi Shahdat Kabir PhD Md. Abdullah Al Helal Md. Mahbubur Rahman	৯৭

Biocentric Resources in Our Indigenous Knowledge: Special Focus on Bengali Proverbs

A S M Anwarullah Bhuiyan*

Abstract: According to biocentrism, all living organisms have moral status. At first, biocentric view has been found in the Eastern religion Jainism. In the West, the first prominent exponent to advocate this notion was Albert Schweitzer. He introduces a view of reverence for life, and all living beings have a will to live. In nineties, Paul Taylor presents a sophisticated version of biocentrism. This article attempts to show that our indigenous knowledge is full of biocentric resources. Bearing this sense in mind, different section of this article searches conceptual resources of biocentrism in our popular proverbs. Therefore, present research come to the conclusion that different indigenous groups and folk people are living and believing biocentrism as their means of belief as well survival of daily life.

Introduction:

This article intends to show how proverbs and ethnic culture contains biocentric ideas in their expressions and wordings. In doing so, present article attempts to spell out the answer to this question: What functions do Bengali proverbs and ethnic culture play in providing knowledge of biocentrism? Section-2 of this article focuses a simple analysis of indigenous knowledge. The second part focuses on Bengali proverbs in as much depth as possible to find out the reflection of biocentrism.

2.0 Biocentric Resources

There are different sorts of ethical theories in environmental ethics, which can be divided into two major segments: the first one is termed as anthropocentrism and the second one as non-anthropocentrism. Non-anthropocentrism searches to find out an answer to this question: Who or what has moral standing? In contrary to non-anthropocentrism, different versions and forms of anthropocentrism uphold a view that only human beings have moral standing. But, as a notion, it has been criticized by many environmentalists. Commonly, the central point of this criticism states that human superiority does not imply that other non-human beings are of no value of life. In criticizing the view, critics also argue that each

* Associate Professor, Department of Philosophy, Jahangirnagar University, Savar, Dhaka, Bangladesh

of the non-human beings has intrinsic value. Having intrinsic value requires that we should consider their interest to life.

What has moral standing? In order to understand the term biocentrism, it is essential to find out the answer to this question. Already, we have been shown that anthropocentrism concentrating weigh the value of human beings only. But, the nature and its surroundings have important component of human livings. For example, in some way if we collapse the inhalation of oxygen, human beings will not survive for a moment. Oxygen as a component of nature helps human beings to survive. Without taking care of this component of nature, it is quite impossible to continue the life of human beings. Therefore, the value of human beings is not meaningful without sharing help of other components of nature. As such, it is wise to say that human beings, animals, living and non-living beings of nature have survived themselves interdependently. Everything is related to everything else.

Bio-centric journey has its origin from sentient beings. Those who have sentience, they have right to live.¹ And, therefore, it is morally wrong to wantonly kill or torture or injure them. Right based ethicist Tom Regan² argues the same points in a different way. He argues that all sentient beings are subject-of-life. In favor of subject-of-life, he states:

"[It] involves more than merely being alive and more than merely being conscious. ... individuals are subjects-of-a-life if they have beliefs and desires; perception, memory, and a sense of the future, including their own future; an emotional life together with feelings of pleasure and pain; preference- and welfare-interests; the ability to initiate action in pursuit of their desires and goals; a psychophysical identity over time; and an individual welfare in the sense that their experiential life fares well or ill for them, logically independently of their utility for others and logically independently of their being the object of anyone else's interests."³

¹ Singer, Peter, 1975/1976. *Animal Liberation*. New York : Avon Books

² Regan, Tom, 1983. *The Case for Animal Rights*, USA: University of California Press.

³ Regan 1983, p. 243.

This view is relevant to animal rights. But, the concept of "subject-of-a-life" criterion is the first theoretical basis of biocentrism. However, this is true that Regan has failed to extend this view beyond the sentient being only. He would have been a consistent environmental theorist if he had held that not only animals but also beings those who can satisfy the notion of "subject-of-life" have "inherent value." And, this inherent value would be the only basis of biocentrism, a clue we have found in Regan's animal right philosophy.

This is in our mind that biocentrism is a life-centric view. It brings a view that all living beings have inherent value. Because of their "inherent value" all living organisms should be treated equally. Hence they have an equal right to life. The bio-centric journey or extension of moral values can be shown through the following diagram:

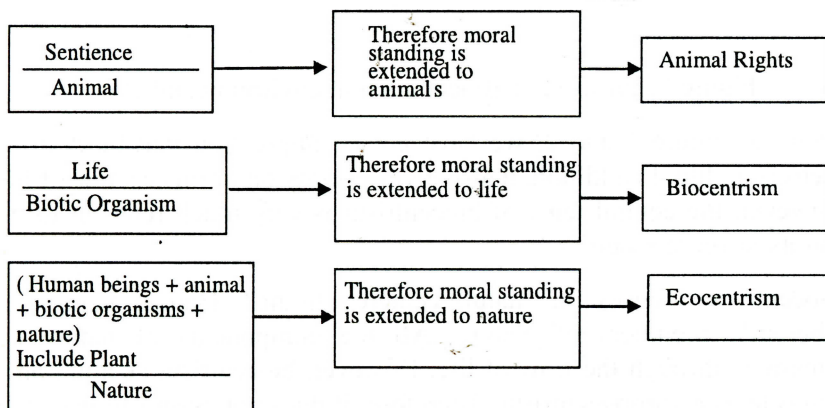


Figure 1: Extension of morality

The stages of expansion of life could be understood more clearly in the following cycle :

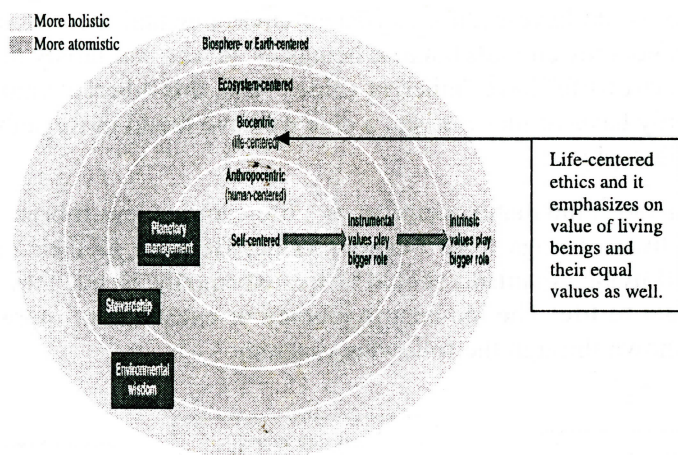


Figure 2: Position of Biocentrism in environmental ethics

From the figure 1 and 2, we have got an impression that biocentrism focuses on life. In addition, it also gives priority on intrinsic value of life. However, the central tenet of biocentrism is very much relevant to life and its intrinsic value.

Biocentrism focuses on "nature-centered living". Human beings are inherently members of Nature. All the components of nature are integrated through the flow of life. However, biocentrism as a notion is opposite to anthropocentrism. Therefore, it does not permit to use other components of Nature for consumption of human beings; rather it considers non-human species as equally valuable in Nature. For example, we should protect natural beings or different species from extinctions. However, this is clear to us that like other species or organisms, human beings are also an integral part of world life cycle.

There are different expressions of biocentrism. In western tradition, Aristotle's virtue ethics is a philosophical basis of biocentrism. He stresses that each of the life has inherent worth. A different version can be found in Schweitzer's modern versions of life. His notion of "reverence for life" is known as a most developed form of biocentrism. Paul Taylor's⁴ view is known as egalitarian biocentrism. It is biocentrism because it

⁴ Taylor, Paul, 1986. *Respect for Nature*, Princeton, NJ: Princeton University Press, pp. 99-100.

upholds that human are member of earth's community of life as the other things are member of that community of life too. Even the survival of each member depends on its relations to other living organisms. It is egalitarian, because this notion holds that every living being has equal intrinsic value. It also agrees with the view that "all organisms have teleological centers of life in the sense that each is a unique individual pursuing its own good in its own way."⁵ Biocentric pluralism argues that life has different expression, and different expressions have different degrees of values. It also upholds that only human should not be treated as superior over the other living organisms. All organisms should be treated as equal overall to other living organisms. Recently James Lovelock and Lawrence develop a new form of biocentrism.

According to Lovelock, the earth is full of life and they have mutual interaction. The term biocentrism is used in James E Lovelock's book *Gaia: a New Look at Life on Earth*. He proposes a new formation of hypothesis which holds a view that living and non-living organisms of this earth⁶ are closely connected to form a "self-regulatory complex system"⁷. This regulatory process maintains the condition for life on the earth. The same urge already has been found in the Humberto Maturana's notion of autopoiesis.⁸ It also indicates that the earth and its living organisms have an interacting process that has an inter-dependent relationship.

⁵ Taylor, Paul, 1986, p.100.

⁶ Lovelock, J.E., 1982. *Gaia : a New Look at Life on Earth*, Nature, Vol. 295, January 7 : 1.

⁷ "Biocentrism" available in <http://www.seas.harvard.edu/climate/eli/Courses/EPs281r/Sources/Gaia/Gaia-hypothesis-wikipedia.pdf>.

⁸ Aristotle was pioneer of this notion. In his philosophy of natural philosophy, Aristotle holds a view that every living being has capacity to develop by its own self.

On the other hand, different expressions of biocentrism can be shown here through the following diagram:

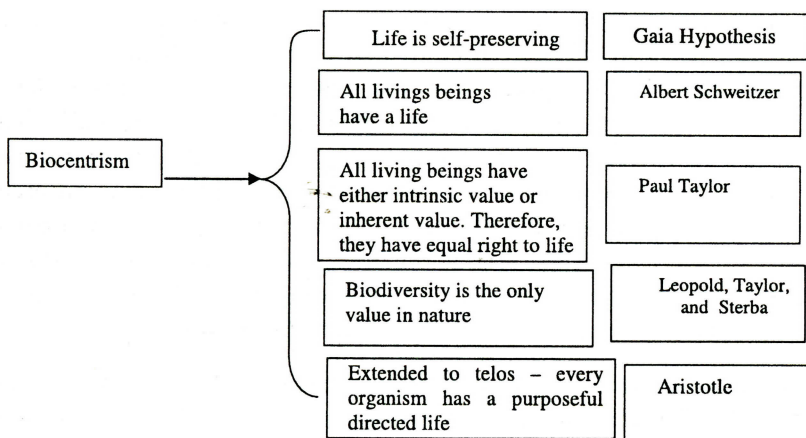


Figure 3: Different versions of biocentrism

The diagram gives us an impression that all living components of nature are equal, having their intrinsic or inherent value and having values implies that they have a right to life. In that sense, biocentrism gives emphasis on biodiversity and it assumes the highest value for living organisms. As a notion, it also holds that all living organisms in the nature are centers of life.

However, as a notion biocentrism has lots of inner force that can be useful for saving the nature from dangerous anthropocentric worldview. Though, we cannot avoid the drawbacks of this notion. Firstly, human beings are treated from outside of natural process. In the same manner, a serious dichotomy between human beings and nature has drawn sharply. When biocentrists emphasize on "life" they consider it equally, but it requires to consider that the difference between "life of human beings" and "life of an ant" is important. In our daily life, while we are walking, ploughing a land, hundred of worms, ants and various kinds of animal life are being killed. But, none of a human right activist or biocentrists ever claims that killing of "life" has occurred in agriculture which is one kind of massacre. As we attribute the term genocide for the killing of the mass people of Bangladesh in 71, in Herzegovina, in the second World War and recently in Iraq, we do not consider the killing as such.

In fact, Nature and natural balance is not considered in biocentrism. In natural system predation and killing are very simple phenomena for

survival of the wild animal. Food cycle and natural process need to continue only because of their mutual existence of life. Suppose, in a forest if number of deer increase rapidly that would create food scarcity, or causes of deforestation there. Therefore, other wild carnivores would target them as a food, thus a balance of animals in the forest may be maintained on the basis of mutual taking of life. Therefore, all the time mutual interdependency is not a kind of solidarity, rather sometimes hostility, conflicting competition, and adversarial as a means of natural state of affairs.

Biocentrism considers ethical values which indicate to preserve the value of environment. Such a view is problematic in the sense that living beings are considered in biocentrism as central focus isolated from the whole environment. Suppose, when we ask a biocentrist which of the value we should have to give priority? Number of biocentrists would have possibly to give emphasis on value of living beings. Hence, it may cause conflicting relationship between living beings and environment. We know there are lots of components such as stone, soil, sand, water, mountain and plants, which are not treated in biocentrism as living beings. The survival and existence of living beings cannot be thought of a moment without helping of the other living and non-living beings. For example, animal's life cannot exist without taking water. So, the claim of Gaia hypothesis is accurately true that there is interactive relationship between living and non-living organisms. In that sense biocentric exposition is a contradictory ecological notion.

However, Irrespective of all sorts of criticism, biocentrism has lot of significance. Firstly, the true versions of biocentrism can be found in Indian religious scriptures, ethnic and indigenous knowledge. Therefore, we may construe a new paradigm of biocentric environmentalism in south Asian context on the basis of their local knowledge and religious belief. Keeping this idea in mind; I have searched two ethnic communities: Oraons and Chakma, and Bengali proverbs as a conceptual source of biocentrism.

2.1 Indigenous Knowledge

Indigenous knowledge is often been treated as an alternative knowledge of modern scientific research. As a pattern of knowledge, indigenous knowledge is local and has specialty to a given society that has particular tradition of culture and convention. Sometimes our scientific knowledge may have failed to facilitate the local problem, or may be harmful to our

health, and environmental integrity. Ellen and Harris mention some comprehensive characteristics of indigenous knowledge. However, local knowledge, folk knowledge, ethno-knowledge and traditional knowledge have often been known as indigenous knowledge. Sometimes, it is also regarded as an approach of people's science.⁹ Among the academics, the importance of this science is gradually increasing. Some exponents succinctly observed such an urge in these following lines:

"Knowledge produced by universities and research institutes around the world is gathered, documented and disseminated in a coherent and systematic way. The same should be done with community-based, local or indigenous knowledge [which] should be included alongside the more usual scientific knowledge."¹⁰

However, indigenous knowledge has great contribution to the development of our main-stream knowledge. In the case of maintaining environmental integrity, indigenous knowledge has enough capacity to reinforce it. Particularly, in our ethnic cult, proverbs and local knowledge bear lot of ecological senses that are helpful to realize the nature.

Recent story of environmental degradation is a very well-concerned phenomenon. Over consumptive attitude, industrialization, excessive use of fossil fuel, and processing of natural resources are the main reasons of this degradation. Most of our indigenous knowledge acknowledges the relationship between nature and humanity. But, our consumptive life style, invention of new techniques for processing natural resources for our use, burning the fuel, and discharging atomic energy are the factors that have separated humanity from nature. Anthropogenic activities over the last few decades have severely affected the relationship between humanity and nature and life-supporting ecosystems. This is why it is essential to go back to the indigenous life style.

This urge can be supported by Vandana Shiva's analysis. In her theory, Shiva mentions that there are three economic policy: nature's economy, sustenance economy, and market economy. Nature's economy and

⁹ Ellen, R. and Harris, H., 1996. "Concepts of Indigenous Environmental Knowledge in Scientific and Development Studies Literature - A Critical Assessment", draft paper East-West Environmental Linkages Network Workshop 3, Canterbury, pp.1, 3.

URL : http://lucy.ukc.ac.uk/Rainforest/SML_files/Occpap/indigknow.occpap_TOC.html.

¹⁰ Brokensha et al. 1993. Indigenous Knowledge and Development Monitor, vol. 1(3).

sustenance economy are the vital economies, but from the development point of view market economy is the priority.¹¹ Through the following diagram, we can show these types of economies practice:

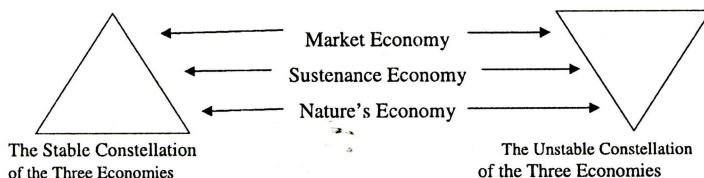


Figure 4 : Different Types of Economy¹²

Shiva views that market economy is the culprit for ecological crisis. According to Shiva, environmental injustice comes to the scenario when market economy is recognized as the basic economy. In the ideology of development, natural products are brought into the market economy as raw material for commodity production. In this case, reductionism becomes the important characteristic, and natural resources are seen as a commodity and means of production. Conservation is reduced to "wilderness" management. Natural resources do not exist anymore because of privatization and patenting.

There is another effective economic system known as sustenance economy, which involves the economy of the two-thirds of the humanity engaged in craft production, peasant agriculture, artisan fishing, and indigenous forest economies. However, the sustenance economy is a place where people work to provide the conditions necessary to maintain their lives.

In terms of ecological sense, the first type of economic policy is despotic. In this economic policy, the efficiency and productivity of industrial agriculture, depletion of soils, exploitation of groundwater, erosion, and extinction of biodiversity are happening in nature.¹³ Moreover, climate crisis could lead to social and political conflicts in society while their natural resources and survival are at stake. On the other hand, sustenance economy is anthropocentric. As a theory, anthropocentrism holds that human beings are the most significant part of this world and that non-human nature exists only to sub-serve human beings. From the value

¹¹ Shiva, Vandana, 2005. *Earth Democracy: Justice, Sustainability, and Peace*. Cambridge, MA: South End Press, pp.13-72.

¹² Shiva, 2005: 52.

¹³ Shiva, 2005: 32

perspective, this notion holds that human beings are the center of all values and all values originate from humans. The rest of the beings, i.e. non-human and objects, have value only in relation to human beings. Some exponents also believe that human beings are the higher creation of this world, the rest of the creatures are the means of their survival. Sustainable economic policy does not consider nature from the perspective of ecological balance. Therefore, the present study likes to reject such kind of economic policy as a source of human-centric worldview.

Indigenous knowledge is consistent with the third type of economy: nature's economy. In this regard, Shiva upholds it as the first economy. Natural resources, through a complex network of ecological processes, provide people's basic need. Nature's economy consists of the production of goods and services by Nature. Such an ecological norm we find in our indigenous knowledge and proverbs. An example can be given here from Shiva's explanation. For example, she explores the living soil in her most recent book, *Soil Not Oil*. She describes how soil has its own way to fertilize itself and how important is the role of earthworms. Earthworms contribute to soil fertility by maintaining soil structure, aeration, and drainage. She quotes Darwin who was amazed at the role of earthworms. The invisible work of earthworms shows an example of the importance of nature with the complexities-in the economy.¹⁴ This view is also prevalent in indigenous knowledge from a different perspective.

However, it may be a question whether indigenous knowledge is effective or not for a course of time. An objection has come from Agarwal. He argues that indigenous knowledge is local and emerges on the basis of local people's beliefs. Sometimes these are constructed on the basis of local people's irrational emotion as well as their common sense. Not only that, indigenous knowledge is also scattered by nature. Agarwal states:

"... indigenous knowledge is inherently scattered and local in character, and gains its vitality from being deeply implicated in people's lives, then the attempt to essentialize, isolate, archive and transfer such knowledge can only seem contradictory."¹⁵

To some extent, proverbs and indigenous knowledge are not only basic but also authentic sources of knowledge. But, in both the perceptions, we

¹⁴ Shiva, 2008, pp. 110-114.

¹⁵ Agarwal, A. 1995. *Indigenous Knowledge and Development*, Monitor, 3(3), 5.

may get some clue of solutions of the problem. In fact, local people's experience has value to construct a new knowledge. Not only that, most of the local knowledges are eco-friendly. This is why, these two means of knowledge have been chosen as the basis of biocentrism.

3.0 In this section, focus have been given on two means of indigenous knowledge and proverbs.

3.1 Biocentrism in Bengali Proverbs

In Bengali culture, proverbs and bachans have a common pithy use. It contains local ways of thought, cultural conditions, local people's belief and response to their nature and neighborhood. Proverbs are found all over the world. Sometimes the knowledge and content of proverbs or adages are all the same, but their meaning, significance and cultural expressions are different in manners. However, almost all the bachans contain some comment about life, nature, and our social life based on common sense or experiences of local people. If we seriously search the inner meaning of a particular proverb, it is not difficult to find out the cultural, social, ethical and religious belief of that particular area. Even, historical, geographical and political background of a particular nation is also found on the proverbs.

In Bengali proverb, social reality is metaphorically expressed by using nature and its objects. In most of the cases, these natural objects or phenomena reflect the concept of life with animistic approach. Even the plants and their medicinal impact on health are also expressed through the proverbs. In one of the proverbs, it has been said that "neem jatha, manush ki morey tatha" (if there is neem tree, there is no event of human death).¹⁶ This proverb reflects a view that the neem tree is very beneficial and should be planted near house. Around the countryside, people have enough consciousness for plantation of neem trees. Planting neem trees at the south-side of a house is a provision of rural people. In Indian system of treatment Ayurveda often called this tree as means of cure of all ills and ailment (in Bengali it is often called "Sarva Roga Nivarini"). However, neem has become a life-sustenance means in Bengali's culture.

We can refer another proverb: "Gacher bakol, mayer anchol"¹⁷. In this proverb bark of trees (gacher bakol) is being compared with the affection

¹⁶ Zamir, Muhammad. 2003. Anthology of Bengali Proverbs and Bachans. Dhaka: Bangla Academy, p. 26.

¹⁷ Zamir. 2003. p.28.

and love of mother (mayer anchol). Naturally the bark of the tree can protect the trees life; similarly, every mother loves her children. In Bengali culture ancala is the marginal side of woman's cloth. Acala has often been referred to as kindness and affection of mother. Here, bark has been compared with ancala. This comparison reflects an idea that mother's affection is a requirement for children's development; similarly bark is the protection of the life of trees. Both the cases the importance of life has taken a place.

We may follow some proverbs which have got significance of meaning in life:

(i) "Jaar achey mati, tarey nahi aati" (if anybody has land/ no body can defeat him)

(ii) "Jodi hobey khatti/ tabey ho mati" (soil has capacity of tolerance).¹⁸

Both the proverbs explore an important significance. Firstly, in Bengali culture land is a symbol of power; it can make people strengthen in any respect. Secondly, soil/land in Bengali culture is the symbol of tolerance: all-enduring and the sources of all life. Trees, grain, vegetables and many essential things are produced there. We harvest crops by ploughing land/soil. Land is also greening the world which maintains the life for all living beings on earth. But, she does not keep herself aloof from us in any reasons from her affectionate contribution.

These adages also suggest that a person should be as tolerant as the soil. In Bengali's life, the 'tolerance' and 'life' are used dynamically. That also reflects its mystical thought of pattern. If we focus on the three main religious beliefs, we will (Tantric/Hinduism, Buddhism and Islam) find tolerance that has historically influenced the people of this region. Veda, particularly the views of Rig-Veda is source of Nature and life. It explained beauty of Nature and life which extremely brings poetic values. Most verses of Rigveda recall the name of Natural elements such as water, earth, air, rain, sun and light. Rita and Varuna represent the law and governor of this cosmos respectively. As a law of the Universe, Rita governs everything in this Universe spontaneously. The universe cannot be manifested without playing that role of Rita. In Veda the deity Varuna is a lord of Rita. He keeps the Universe in order and under His control. The heaven and earth are held together. In Veda, the deity Varuna

¹⁸ Zamir, 2003, pp. 32, 35.

represents as a conscious force of balancing and ordering of the natural forces in environment.

The central point of Buddhist ethics is respect for life. The karma of sentient being can alter the Nature. Karma in Buddhism fosters the relationship between mental and physical activities. In fact, Buddhist karma-based ethics depends on the principle of ahimsa (non-violence) and respect for life. The first principle ahimsa suggests not killing or injuring any form of life, and the second principle is to respect for life. It does not imply only to respect for human beings, but it also refers to the respect for all sorts of manifestation of life on the earth. The most important thing in Buddhism is purification of mind and actions. If one's mind is purified, certainly his/her actions must be purified. Such purification helps one to lead a more peaceful life in relation to Nature.

The central point of Jainism is not so far from Vedic and Buddhist tradition. Ahimsa is common in all of the Indian religious tradition. Life and Nature appears in Jainism with a great tie. In the proclamation of Mahavira: "One who neglects or disregards the existence of earth, air, fire, water and vegetation disregards his own existence which is entwined with them." According to them, all forms of life are mutually interdependent. The term *Parasparopagraho jivanan* refers to interdependency. They hold a view that life is an integrated form as they terms it *Parasparopagraho jivanan*. All components of living earth belong together and they are bound in a mutual relationship.

Hinduism and Jainism also have become the main resources of our thought construction. In the name of *Vokti* (reverence) and mystic propagation of Vaishnavism, *Sohjiya* and sufi traditions in fact reveal the notion of dignity towards creatures. Belief of tolerance can be found in their vegetarian insight. They do not accept meat, fish, and egg in their food-menu. But, they also acknowledge vegetable plants as living things. Vaishnav tradition had got this lesson from the life of Krishna. In the holy *Bhagavadgita* Krishna utters that if anybody entertains Him with love and devotion of vegetarian food, He will take it. It reflects a view that Vaishnavism has received this insight from *Bhagavadgita*. However, the lesson of *Vokti* tradition brings two things: firstly it teaches us to lead our life according to the standard of conduct and morality; secondly it takes into consideration "life of all living beings". However, *vokti* in this area teaches us to live in harmony with the universe. In the inner sense of the above proverbs (i & ii) brings the same sense that is ingrained in

Voktivada. At a time it teaches us to lead a life with tolerance and get importance in life. In fact these two proverbs would be a suitable example of biocentrism which reflects on social and Natural sphere.

The social life is also reflected in many Bengali proverbs. The following proverbs can be mentioned in this regard :¹⁹

- (i) "Ajharo kola bajaroto jai" (If planted in Ashar, a banana plant has a bumper harvest)
- (ii) "Ashini kurostey osta nashtam" (if it rains in Ashwin, it destroys the harvest)
- (iii) "Maghey mukhi, Falguney chukhi/ Chaitey lata/ Baishakhey pata." (One should plant arum during Magh for best results. Planted either in Chaitro or Baisahakh, the plant will have more leaves than vegetables content.)

All these proverbs are related to our agriculture. Through these, people can realize the time-table of their harvesting. The inner meaning of these proverbs also brings a sense that natural seasons and productivity are identical in terms of harvesting crops. In other words, life is determined by Nature. If we cultivate particular crops in odd-season it will not give us proper and satisfactory result. It implies that the strength of life and its reproductive force are determined by Natural system. These proverbs establish an experience based knowledge aroused from mass people within their direct study of Nature.

Present study has used in the questionnaires some significant Bengali proverbs. Here, I have taken 30 people from different groups. At the beginning, I classified these groups into three: each group included ten people both educated and illiterate. The first group consisted of graduates, the second group was below matriculation and third group was illiterate. The following tables show the Bengali proverbs that are used in the questionnaires :²⁰

Table 1: Public response to the proverbs

Education level	profession	Total Number	Equivalent Answer	Percentage
Graduate	School Teacher	10	8	80%
Under matriculation	Land Lord	10	7	70%
illiterate	Farmer	10	9	90%

¹⁹ Zamir, 2003, pp. 222, 223.

²⁰ See index -I

Some proverbs can be mentioned here which represent the "life" and biocentric approach:

(iv) Jotro Jiva Totro Shiva (Where there is life there is Shiva).²¹

Bengal was a part of greater India before 1200 A.D and most of the people were the followers of Vedic or Budha religion. The concept of Shiva and Sakti are much adored in this local area. Shiva is also a symbol of sakti (power).²² On the other hand, Jiva means a living being. Shiva is the cause of mukti (salvation) as well the cause of bondhan (bondage) of this jiva. Sometimes, Shiva plays the role of the creator of jiva. In order to get the kind of Lord Shiva, at first Jiva knows the pattern of his relationship with Shiva. He realizes the prana (life) in his body and Shiva exists within that life. Prana (life) and body are identical. If there is no prana, there is no life or Shiva. Without life, the body is only corps and that body cannot perform any activities even. In the proverb, the name of heavenly deity Shiva and jiva for life has got importance.

(v) "Kaley ful no poya pani, dhanmora adho beej jobani"

In this Bengali proverb, life of crops has got great emphasis. The proverb reflects a view of agro-based agriculture. It means that if we do not irrigate the paddy plant at the time of their growth, it affects production of the rice seeds within their kernels.

(vi) "Jiban jiban anne" (Life brings life/There is no life without life)

This proverb shows connectivity amongst lives - a life, how tiny it may be co-exists with each other, and an integral part of the total life-cycle on earth. One life enhances the other life. If there is no life, and no interdependency, it is quite impossible to think a life.

The conception of life and its connectivity appears in this proverb as the life science already has proved. To the above proverbs a group of people's responses are made through the following table:

²¹ Rahman, Muhammad Habibur, Bachon O Probachon (Sentence and Proverb), Dhaka : Somoy, p. 65.

²² Sivananda, Sri Swami, 2000. Lord Siva and His Worship, Uttar Pradesh, India : The Divine Life Society, p. URL : WWW site: <http://www.SivanandaDlshq.org>

Table 2: Public response to the proverbs (iv, v, vi)

Education level	profession	Total Number	Equivalent Answer	Percentage
Graduate	School Teacher	10	9	90%
Under matriculation	Land Lord	10	7	70%
illiterate	Farmer	10	8	80%

Comparison between two sets of proverbs can be shown in the following:

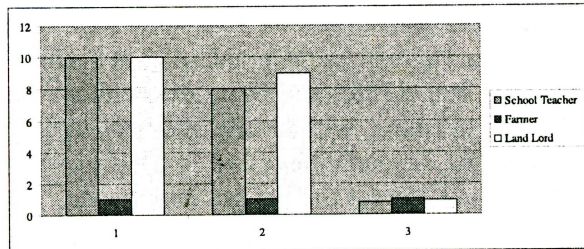


Figure 1 : For Table 1

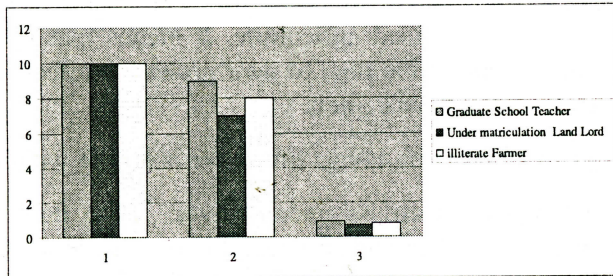


Figure 2 : For Table 2

Figure 1 and 2 shows some data of public response to proverbs. The first table contains some issues of agricultural experiences of common people. In this process, farmer involvement is direct, therefore, the importance of life and agro-learning are affirmed by this group of people. Where land lord and school teacher (here, I took interview of 10 teachers from non-urban areas/ village area) do not keep enough knowledge in this regard. But, in the second table, most proverbs are involved with our spiritual or mystic knowledge. In this regard, school teacher are more familiar with this proverb and their respondent percentage is high compared to the group of people of farmers. It means proverbs have some sensitive responses; accordingly such responses are coming from a particular group of people. For example, knowledge on agricultural seasons and its

correspondent crops are very much essential for farmer. In a similar manner, school teacher are involved with the processes of knowledge.

Now, we will focus on some other Bengali proverbs which reflects a view of blood relationship. In the social life, these relationships affirm in our various scripts and literatures. Blood connection implies a view of mutual dependency and relationship. It is common in our rural life that a neighbor might look after his relatives as well as the children of neighbor. Not only that sharing pain and pleasure, inviting on different ceremonial occasions, exchanging ideas and advice, seeking cooperation in case of danger are very common phenomena in our daily life. In our rituals, customs and belief such neighborhood are also affirmed in the context of Nature. However, in the context of nature, neighborhood implies interdependency of different natural objects. This interdependency is the essence of biocentrism. For example, we can look into the following proverbs:

(i) "khet lakhirey airona, ma lakhirey chairona"²⁴

The proverb reflects a view that nobody should leave his or her land and mother in any circumstance. Land can serve his/her desire for food; on the other hand mother would serve his/her family's well-being. However, the inner meaning of this proverb is related to the significance of relationship. We can mention another one:

(ii) "Macher panitey lau barey/ dhenô matitey jhal barey"²⁵

In this proverb, it has been advised that the gourd plants grow better if anyone pours fish-washed water on their roots. Similarly, it is being advised in the second phrase that fermented paddy should be used as fertilizer for the chilly field. However, appropriateness of natural components and their proper way of growth are being emphasized here. To some extent, inter relevancy or interdependency of objects of nature are the key.

4.0 Concluding Remarks

Indigenous knowledge and proverbs both have a particular role in developing a sense and responsibility towards nature and its fellow beings. In proverbs, we have found lots of ideals and advice to preserve the Nature and life of animals. Here, it is necessary to mention that the

²⁴ Zamir. 2003. p.182.

²⁵ Zamir. 2003. p.182.

Bengali and its different ethnic society's social structure is dependent on solidarity and integrity. This approach can be found in our proverbs and also in religious beliefs of the ethnic community. In order to achieve their goal, Bengal people use their proverbs. A common and popular use of proverb is "when you face any problem seek help from your relative, neighbors or others without any embarrassment." However, proverbs represent life, social solidarity, and also reflect public experiences, their customs, conventions and the way of looking at their social and natural surroundings.

This article has shown that through proverbs we reflect our attitudes towards society, nature and people's values. In the context of environmentalism, Bengali proverbs have much significance and important roles to express their biocentric outlook. Some selected proverbs mentioned in this article have conveyed specific values. From this analysis, this article comes to a conclusion that proverbs can play essential role in our real life situation, as such, it can help us make a sense of ecological perception. In construing biocentric ecological sense, some proverbs are more effective than any other normative or pedagogical means. That outcome of proverbs comes from the experience of the local people. On the other hand, the proverbs mentioned in this article are considered as a corner stone of the Bengali culture and social life as well.

References:

- Agrawal, A. 1995. *Indigenous Knowledge and Development*, Monitor, 3(3), 5.
- Bechert, Heinz, 1973. "The Chakmas : A Buddhist Community in Bangladesh" in *Jagajjyoti a Jayanti Annaul*, Calcutra.
- Brokensha et al. 1993. "Indigenous Knowledge and Development" Monitor, vol. 1(3).
- Burnett, David, 1992. *Unearthly Powers: A Christian's Handbook on Primal and Folk Religions*, Nashville: Oliver-Nelson Books.
- Ellen, R. and Harris, H., 1996. "Concepts of Indigenous Environmental Knowledge in Scientific and Development Studies Literature - A Critical Assessment", draft paper East-West Environmental Linkages Network Workshop 3, Canterbury, pp.1, 3.
- Lovelock, J.E., 1982. Gaia : a New Look at Life on Earth, Nature, Vol. 295, January 7 : I. "Biocentrism" available in <http://www.seas.harvard.edu/climate/eli/Courses/EPS281r/Sources/Gaia/Gaia-hypothesis-wikipedia.pdf>.
- URL : http://lucy.ukc.ac.uk/Rainforest/SML_files/Occpap/indigknow.occpap_TOC.html.
- Marrett, R.R., 1914. *The Threshold of Religion*, London.
- Mizzoni, John, 2004. "St. Francis, Paul Taylor, and Franciscan Biocentrism", *Environmental Ethics*, Vol. 26, September.
- Rahman, Muhammad Habibur, Bachon O Probachon (Sentence and Proverb), Dhaka : Somoy, p. 65.
- Risely, L.S.S., 1900. *Gazetieer of the Chittagong District*, London.
- Rheenen, Gailyn Van., 199. *Communicating Christ in Animistic Contexts*, Grand Rapids: Baker Book House Company.
- Sattar, Abdus, 1983. *The Sylvan Shadows*, Dhaka: Bangla Academy, p.2.
- Shiva, Vandana, 2005. *Earth Democracy: Justice, Sustainability, and Peace*. Cambridge, MA: South End Press, pp.13-72.
- Sivananda, Sri Swami, 2000. *Lord Siva and His Worship*, Uttar Pradesh, India : The Divine Life Socieity, p.

URL : WWW site: <http://www.SivanandaDlshq.org>

Zamir, Muhammad, 2003. *Anthology of Bengali Proverbs and Bachans*, Dhaka: Bangla Academy, p. 26.

Chakma religious book : *Gojener Lama* cf. Sattar, 1983, p.380.

Francis, Saint, "Canticle of Brother Sun"

টেকসই সড়ক যোগাযোগ ব্যবস্থা: বাংলাদেশ প্রেক্ষিত -একটি ধারণাপত্র

সুমন রেজা*

Abstract: The main objective of the Government is to achieve poverty reduction through economic growth. To accomplish that goal, the importance of an effective and efficient communication system can not be overstated. Hence the road and transport sector is one of the topmost priorities of the government. For last five years the average contribution of road and communication sector to GDP has been 10.6 percent. During that period the growth rate of the sector was 8.04 percent. Target has been fixed to elevate the GDP growth rate at 8.2 percent in 2015-16. To achieve this goal, transport and communication sector's contribution to GDP should be 11.8 percent and to have a sectoral growth rate of 10.5 percent in 2015-16. For materializing the vision of achieving a higher growth trajectory, a sustainable road communication system is essential for Bangladesh.

The major obstacles for achieving a sustainable road communication system in Bangladesh include increased resource demand for maintaining a widely distributed highly priced road network; distortion of modal balance among different communication modalities due to disproportionate growth of road transport; investment imbalance because of competing demands from so many development projects; delimiting of new road construction due to the above mentioned constraints. Through rapid implementation of the 'Integrated Multimodal Transport Policy' and thereby ensuring balanced investment in the communication sector may alleviate some of the problems. Strategy should also include regular and periodic maintenance, priority based resource allocation for repairing projects, ensuring public private partnership for road development and maintenance, devising and implementing a policy for toll collection from roads and bridges, updating motor vehicle registration fees, and above all introducing an effective 'road pricing' mechanism as well as having a permanent resource supply base for road construction and rehabilitation. Bangladesh can have a sustainable road communication system by adopting the aforesaid initiatives.

১.০ ভূমিকা

অর্থনৈতিক প্রবৃদ্ধি অর্জনের মাধ্যমে দারিদ্র্য হ্রাস সরকারের প্রধানতম লক্ষ্য। আর এ লক্ষ্য অর্জনে কার্যকর ও দক্ষ যোগাযোগ ব্যবস্থার ভূমিকা অনস্বীকার্য। এ কারণে যোগাযোগ তথা সড়ক যোগাযোগ সরকারের অন্যতম অগ্রাধিকারপ্রাপ্ত খাত। বিগত ৫ (পাঁচ) বছরে জিডিপিতে পরিবহন ও যোগাযোগ খাতের অবদান ছিল গড়ে ১০.৬ শতাংশ^১। উক্ত সময়ে এ খাতে প্রবৃদ্ধির হার ছিল গড়ে ৮.০৪ শতাংশ^২। ২০১৫-১৬ সাল নাগাদ দেশের জিডিপি প্রবৃদ্ধির হার ৮.২ এ উন্নীত করার লক্ষ্যমাত্রা নির্ধারণ করা

* সিনিয়র সহকারী সচিব, অর্থ বিভাগ, বাংলাদেশ সচিবালয়

১ বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১১, পৃষ্ঠা-২২

২ বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১১, পৃষ্ঠা-১৯

হয়েছে। এ লক্ষ্যমাত্রা অর্জন করতে হলে ২০১৫-১৬ সালে জিডিপিতে পরিবহন ও যোগাযোগ খাতের অবদান হতে হবে ১১.৮ শতাংশ এবং এ খাতে প্রবৃদ্ধির হার হতে হবে ১০.৫ শতাংশ^৩। এ লক্ষ্য অর্জনে এবং পরবর্তীতে প্রবৃদ্ধির উচ্চতর সোপানে আরোহণের রূপকল্প বাস্তবায়নে বাংলাদেশের জন্য একটি টেকসই সড়ক যোগাযোগ ব্যবস্থা অপরিহার্য। টেকসই সড়ক পরিবহন ব্যবস্থা অর্জনের লক্ষ্যে কতিপয় নীতি-পরামর্শ প্রণয়ন বর্তমান ধারণাপত্রের প্রধান উদ্দেশ্য।

১.১ উদ্দেশ্য

- সড়ক খাতে^৪ সাম্প্রতিক সময়ে সম্পদ প্রবাহ, সম্পদ ব্যবহার ও সম্পদ সৃজন পরিস্থিতির সংক্ষিপ্ত চিত্র উপস্থাপন।
- সড়ক খাতে সৃষ্ট সম্পদের মানসম্পন্ন রক্ষণাবেক্ষণের উপায় চিহ্নিতকরণ।
- সড়ক-সম্পদ উন্নয়ন ও রক্ষণাবেক্ষণের জন্য এ খাত হতে বর্ধিত সম্পদ সৃজনের পদ্ধতি চিহ্নিতকরণ।

১.২. তথ্য-উপাত্ত সংগ্রহের উৎস

প্রবন্ধে নিম্নবর্ণিত উৎস হতে তথ্য-উপাত্ত সংগ্রহ করা হয়েছে-

- Integrated Budget and Accounting System (i-Bas)
- বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১১
- বিশ্বব্যাংকের ওয়েবসাইট web.worldbank.org
- পরিকল্পনা কমিশন প্রকাশিত সংশোধিত বার্ষিক উন্নয়ন কর্মসূচী, ২০১১-১২
- Medium Term Macroeconomic Framework (MTMF) এবং
- যোগাযোগ মন্ত্রণালয়ের প্রকাশনা ‘অগ্রযাত্রার দুই বছর’
- Outline Perspective Plan of Bangladesh 2010-2021 (making vision 2021 a reality)
- জাতীয় স্থল পরিবহন নীতিমালা
- বিশ্বব্যাংক এর Bangladesh Transport Policy Note (Draft Final)

১.৩ তথ্য ও উপাত্ত বিশ্লেষণ

- * সংগৃহীত Secondary Data হতে ক্ষেত্রমত Trend, Average ইত্যাদি বের করা হয়েছে। প্রযোজ্য ক্ষেত্রে Comparison দেখানো হয়েছে।

^৩ MTMF

^৪ সড়ক বিভাগ ও স্থানীয় সরকার বিভাগের অধীনে সড়কসমূহ

২.০ যোগাযোগ খাত সংশ্লিষ্ট সরকারের নীতি বিশ্লেষণ

সরকারের লক্ষ্য ও উদ্দেশ্য ধারণকারী নীতি-নির্ধারণী দলিল Outline Perspective Plan of Bangladesh 2010-2021 (making vision 2021 a reality) এ সাধারণভাবে পরিবহন অবকাঠামো উন্নয়নের মাধ্যমে Integrated Multi-Modal Transport চালুর বিষয়ে গুরুত্ব আরোপ করা হয়েছে:

'Infrastructure development will improve integrated multi-modal transport encompassing railways, roads and inland water transport having connectivity with our neighbors'.^৫

২.১ Perspective Plan (2010-2021) এ বর্ণিত সড়ক খাত সংশ্লিষ্ট অতীষ্ট লক্ষ্যসমূহ (vision):

- নিরাপদ ও দক্ষ পরিবহন ব্যবস্থা;
- জাতীয় মহাসড়ক ১ হতে ৮ এ অগ্রাধিকারের ভিত্তিতে উচ্চ মান, সেবা ও নিরাপত্তা নিশ্চিতকরণ;
- ঢাকা-চট্টগ্রাম মহাসড়ক সর্বাত্মে ৪ লেনে উন্নীতকরণ;
- অপর ৭টি মহাসড়ক পর্যায়ক্রমে ২০২১ সালের মধ্যে ৪ লেনে উন্নীতকরণ;
- এই মহাসড়কসমূহকে আঞ্চলিক ও ট্রান্স এশিয়ান সড়ক নেটওয়ার্কের অংশ হিসেবে প্রতিষ্ঠা;
- মেইনটেন্যান্স, বিশেষত রুটিন ও পিরিয়ডিক মেইনটেন্যান্স এ পরবর্তী ১০ বছরে মনোযোগ প্রদান;

'Maintenance will be given importance to get maximum value from the investment in rebuilding. Routine maintenance will replace occasional maintenance'.^৬

- বাংলাদেশে ইতোমধ্যে বিবস্তৃত সড়ক নেটওয়ার্ক তৈরী হওয়ায় নতুন সড়ক নির্মাণ সীমিত রাখা;

২.২ Perspective Plan (2010-2021) এর vision সমূহ বাস্তবায়নের লক্ষ্যে Sixth Five Year Plan, 2011-15 এ বর্ণিত কৌশলগত পরিকল্পনাসমূহ:

- চট্টগ্রাম ও মংলা সমুদ্রবন্দরকে আঞ্চলিক যোগাযোগ নেটওয়ার্কে সংযুক্ত করার লক্ষ্যে যে সমস্ত Transport Corridor নির্মাণ করা প্রয়োজন, সেগুলো অগ্রাধিকার ভিত্তিতে নির্মাণ;
- দেশের অর্থনৈতিক উন্নয়নে গুরুত্বপূর্ণ ভূমিকা বিবেচনায় ঢাকা শহরের যানজট নিরসনে উদ্যোগ গ্রহণ;

^৫ Outline Perspective Plan of Bangladesh 2010-21 (making vision 2021 a reality), page 1

^৬ Outline Perspective Plan of Bangladesh 2010-21 (making vision 2021 a reality), page 71

২.৩ জাতীয় স্থল পরিবহন নীতিমালায় রয়েছে :

- যানবাহন পরিচালনা ও সড়ক রক্ষণাবেক্ষণের ব্যয় সড়ক ব্যবহারকারীদের থেকে আদায় করার লক্ষ্যে সরকার ক্রমান্বয়ে প্রয়োজনীয় ব্যবস্থা প্রবর্তন করবে;
- বিদ্যমান অবকাঠামোর পূর্ণতর ব্যবহারের লক্ষ্যে প্রধান সড়ক নেটওয়ার্ক -- missing link সমূহের নির্মাণ সমাপ্ত করা হবে;
- সড়ক খাতের বিনিয়োগ সংরক্ষণার্থে রক্ষণাবেক্ষণ ব্যয় যুক্তিযুক্ত পর্যায়ে উন্নীত করা হবে;
- Routine ও Periodic রক্ষণাবেক্ষণের জন্য যথোপযুক্ত কর্মসূচি গ্রহণের মাধ্যমে পূঞ্জীভূত রক্ষণাবেক্ষণ সমস্যার পুনরাবৃত্তি পরিহার করা হবে;
- ভবিষ্যতে মহাসড়ক রক্ষণাবেক্ষণে বেসরকারি খাতকে উৎসাহিত করা হবে;
- পরিবহন মাধ্যম (Transport Mode) বদল করে শাশ্রু এবং সহজে এবং সহজে গন্তব্যে পৌঁছার জন্য রেল, বাস, ট্যাক্সি এবং নৌ-টার্মিনালের সমন্বিত পরিবহন ব্যবস্থা প্রবর্তন করা হবে। পরিবহন চাহিদা পূরণে একটি দীর্ঘ মেয়াদি বহুমাত্রিক পরিবহন কৌশল (Multimodal Transport Strategy) প্রণয়ন করা হবে।

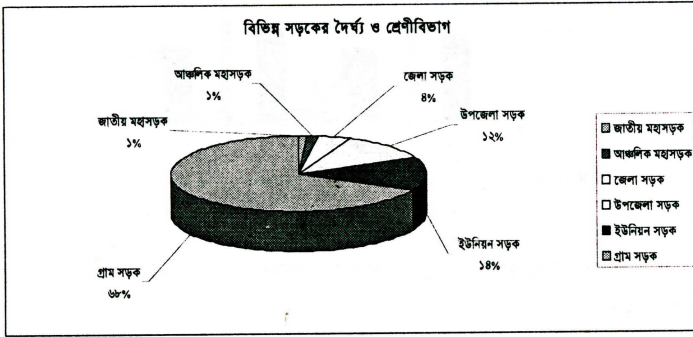
উপর্যুক্ত নীতি, কৌশল ও পরিকল্পনাসমূহ পর্যালোচনায় যোগাযোগ খাত সংশ্লিষ্ট সরকারের প্রধান লক্ষ্যসমূহ নিম্নরূপ:

- নিরাপদ ও দক্ষ যোগাযোগ ব্যবস্থা যা অর্থনৈতিক প্রবৃদ্ধি অর্জন ও দারিদ্র্য নিরসনে ভূমিকা রাখবে;
- সমন্বিত বহুমাত্রিক পরিবহন ব্যবস্থা (Integrated Multimodal Transport System) প্রবর্তন;
- যানজট নিরসন ও গণপরিবহন ব্যবস্থার উন্নয়ন;
- নতুন সড়ক নির্মাণ অপেক্ষা বিদ্যমান সড়কসমূহের উন্নয়ন ও মানসম্মত রক্ষণাবেক্ষণ ও রক্ষণাবেক্ষণে সড়ক ব্যবহারকারী ও বেসরকারি খাতকে সম্পৃক্ত করা;

৩.০ সড়ক নেটওয়ার্ক ও সড়ক খাতে সৃষ্ট সম্পদ

দেশের বিদ্যমান সড়ক নেটওয়ার্ক মূলত সড়ক বিভাগের অধীন সড়ক ও জনপথ অধিদপ্তর এবং স্থানীয় সরকার বিভাগের অধীন স্থানীয় সরকার প্রকৌশল অধিদপ্তর ও স্থানীয় সরকার সংস্থাসমূহের আওতাভুক্ত। বাংলাদেশ সরকারের ৬ নভেম্বর ২০০৩

তারিখে পিসি/টিএস/ক্লাসিফিকেশন কমিটি/০৬ নম্বর গেজেট প্রজ্ঞাপন অনুযায়ী দেশের সকল সড়ক শ্রেণীবিন্যাস করা হয়েছে। এই শ্রেণীবিন্যাস অনুযায়ী জাতীয় মহাসড়ক, আঞ্চলিক মহাসড়ক ও জেলাসড়কসমূহ সড়ক ও জনপথ অধিদপ্তরের আওতাধীন। অপরদিকে, উপজেলা সড়ক, ইউনিয়ন সড়ক ও গ্রাম সড়ক এলজিইডি অথবা এলজিআই এর অধিক্ষেত্রভুক্ত^১। দেশের সড়ক নেটওয়ার্কের আওতাধীন বিভিন্ন শ্রেণীর সড়কের মোট দৈর্ঘ্য প্রায় ৩,১৯,০০০ কিমি^২। এর মধ্যে সড়ক ও জনপথ অধিদপ্তরের আওতাধীন সড়ক মোট ২১,০০০ কিমি এবং এলজিইডি'র আওতাধীন সড়ক প্রায় ১,৯৮,০০০ কিমি। এর মধ্যে পাকা সড়ক প্রায় ৮৪,০০০ কিমি।



- এই সড়ক নেটওয়ার্কের মোট সম্পদমূল্য প্রায় ১,০৬,১১৬ কোটি টাকা।
- বাংলাদেশে Road Density পৃথিবীর মধ্যে সর্বোচ্চ^২। এখানে প্রতি ১০০০ বর্গ কিমি এ সড়ক রয়েছে ২০৭৯ কিমি। প্রতিবেশী ভারতে রয়েছে ১১১৫ কিমি, পাকিস্তানে ৩৩৫ কিমি এবং শ্রীলংকায় ১৪২২ কিমি। মূলত এই বিপুল সড়ক নেটওয়ার্কের ফলে যোগাযোগ খাতে সৃষ্ট সম্পদের নিয়মিত ও মেয়াদি রক্ষণাবেক্ষণ জরুরি। এ সম্পদের পরিমাণ বৃদ্ধির সাথে সাথে যোগাযোগ খাতে রক্ষণাবেক্ষণ চাহিদা ও ব্যয় বৃদ্ধি পাচ্ছে।
- নিয়মিত ও মেয়াদি রক্ষণাবেক্ষণ প্রয়োজন অনুযায়ী না করায় এ ক্ষেত্রে Back-log সৃষ্টি হচ্ছে।
- মেরামত ও রক্ষণাবেক্ষণের জন্য রাজস্ব বাজেটের আওতায় বরাদ্দ প্রদান করা হচ্ছে আবার উন্নয়ন বাজেটে আওতায়ও প্রকল্প গৃহীত হচ্ছে।

^১ পরিশিষ্ট ১

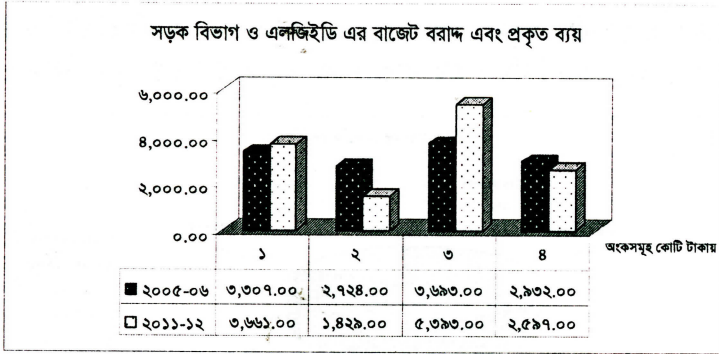
^২ পরিশিষ্ট ২

^৩ বিশ্বব্যাংক ওয়েবসাইট web.worldbank.org

৪.০ সড়ক খাতে সাম্প্রতিক সময়ে সম্পদ প্রবাহ, সম্পদ ব্যবহার ও সম্পদ সৃষ্টি^{১০}

৪.১ বাজেট

- ২০০৫-০৬ অর্থবছরে সড়ক খাতে বাজেট বরাদ্দ ছিল ৭,০০০ কোটি টাকা। ২০১১-১২ অর্থবছরে এ বরাদ্দ বেড়ে দাঁড়িয়েছে ৯,০৫৪ কোটি টাকায়। ৭ বছরে প্রবৃদ্ধি ২৯%^{১১}।



উপর্যুক্ত বিশ্লেষণের ভিত্তিতে সড়ক খাতে সম্পদ বরাদ্দের ক্ষেত্রে উল্লেখযোগ্য বৈশিষ্ট্যসমূহ নিম্নরূপ:

- বিগত ৬ বছরে সড়ক খাতে মেট বরাদ্দ বৃদ্ধি পেয়েছে;
- মহাসড়ক, আঞ্চলিক সড়ক ও জেলা সড়কে (সওজের অধিভুক্ত সড়ক) বরাদ্দ বৃদ্ধি পেয়েছে ১০%; অপরদিকে পল্লি সড়কে (এলজিইডি'র অধিভুক্ত সড়ক) বরাদ্দ বৃদ্ধি পেয়েছে প্রায় ৪৬%।
- সড়ক খাতের ধারাবাহিক উন্নয়নের জন্য এ খাতে জিডিপি'র ১.৫-২% অব্যাহতভাবে ব্যয় করা প্রয়োজন। মেরামতের পুঞ্জীভূত ব্যয় মেটাতে হলে এ বরাদ্দ জিডিপি'র ২.৫ শতাংশে উন্নীত করা প্রয়োজন^{১২}।

৪.২ রাজস্ব আয়

- সড়ক খাতে গত ৩ বছরের (২০০৮-০৯ হতে ২০১০-১১) মোট রাজস্ব আয় ৩,০৮৯ কোটি টাকা। সওজ অধিদপ্তর হতে আয় হয়েছে ২,৭৩৭ কোটি টাকা এবং এলজিইডি'র আয় ৩৫২ কোটি টাকা। সড়ক খাত হতে বছরে গড়ে আয় ১,০০০ কোটি টাকার কিছু বেশি^{১৩}।

^{১০} এই অংশে ব্যবহৃত ডাটাসমূহ অর্থ বিভাগের ডাটাবেজ হতে নেয়া হয়েছে

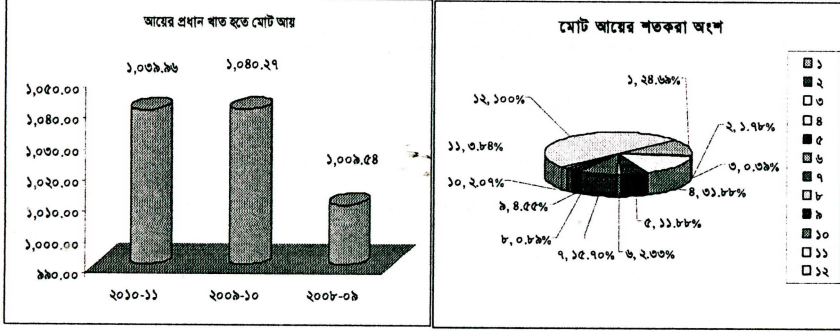
^{১১} পরিশিষ্ট ৩

^{১২} পরিশিষ্ট ৩

^{১৩} World Bank: Bangladesh Transport Policy Note, 2009

^{১৪} পরিশিষ্ট ৫

সড়ক খাতে আয়ের প্রধান উৎসসমূহের বিবর্তন এবং মোট আয়ে বিভিন্ন উৎসের অবদান নিচের লেখচিত্রে উপস্থাপন করা হলোঃ



- সড়ক খাতে আয়ের প্রধান উৎস সওজ অধিদপ্তরের সড়ক ও সেতু হতে প্রাপ্ত টোল এবং বিআরটিএ'র সড়ক কর ও ফিসমূহ যেমন: রেজিস্ট্রেশন, ড্রাইভিং লাইসেন্স, ফিটনেস, রুট পারমিট এবং এলজিইডি'র বিবিধ আয়।
- সওজের মাত্র ৩টি সড়ক ও ৫৮টি ব্রিজের মধ্যে) টোলের আওতাভুক্ত।
- বিআরটিএ'র বর্তমান কর ও ফিসমূহ ২০০২-০৩ অর্থবছর হতে কার্যকর রয়েছে, যা দীর্ঘদিন থেকে বৃদ্ধি না করার ফলে সড়ক খাত হতে আশানুরূপ রাজস্ব আয় সম্ভব হচ্ছে না।

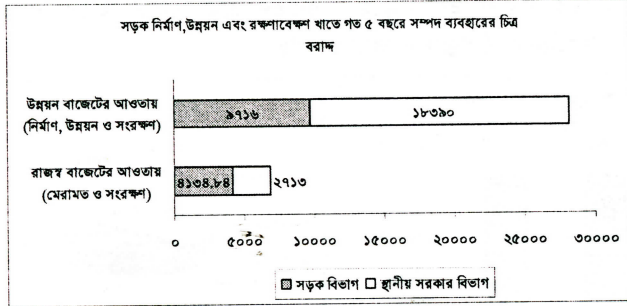
৪.৩ সম্পদ ব্যবহার

সড়ক খাতের মেরামত, উন্নয়ন ও পুনর্বাসন খাতে রাজস্ব ও উন্নয়ন বাজেট মিলিয়ে গত ৫ বছরে প্রায় ৩৫,০০০ কোটি টাকা বরাদ্দ প্রদান করা হয়েছে, যার মধ্যে প্রায় ২৮,০০০ কোটি টাকা ব্যয় করা হয়েছে। উক্ত বরাদ্দের মধ্যে সড়ক মেরামতে ব্যয় করা হয়েছে ৮,৫০০ কোটি টাকা। অবশিষ্ট ১৯,৫০০ কোটি টাকা সড়ক উন্নয়ন অর্থাৎ নির্মাণ, পুনর্বাসন, প্রশস্তকরণ, আংশিক পুনর্নির্মাণ ইত্যাদি খাতে ব্যয় করা হয়েছে। এ থেকে প্রতীয়মান হয় যে, মেরামত বিশেষত নিয়মিত ও সময়ান্তর মেরামত অপেক্ষা সড়ক নির্মাণ ও পুনর্নির্মাণে অধিক সম্পদ ব্যয় করা হচ্ছে।

সড়ক নির্মাণ, উন্নয়ন এবং রক্ষণাবেক্ষণ খাতে গত ৫ বছরে সম্পদ ব্যবহারের চিত্র নিম্নরূপ:

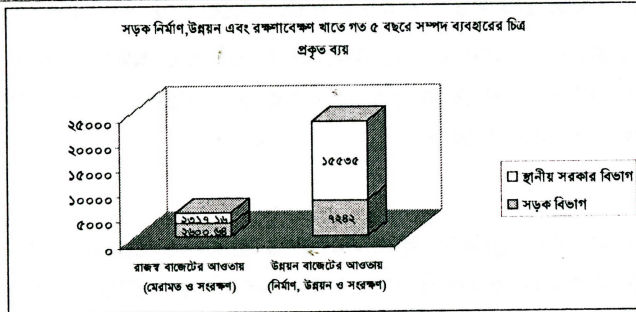
বরাদ্দ

সংস্থা	(অকসমূহ কোটি টাকা)	
	রাজস্ব বাজেটের আওতায় (মেরামত ও সংরক্ষণ)	উন্নয়ন বাজেটের আওতায় (নির্মাণ, উন্নয়ন ও সংরক্ষণ)
সড়ক বিভাগ	৪,১৩৪.৮৪	৯,৭১৬.০০
স্থানীয় সরকার বিভাগ	২,৭১৩.০০	১৮,৩৯০.০০
মোট =	৬,৮৪৭.৮৪	২৮,১০৬.০০



প্রকৃত ব্যয়

সংস্থা	(অকেসমুহ কোটি টাকায়)	
	রাজস্ব বাজেটের আওতায় (মেরামত ও সংরক্ষণ)	উন্নয়ন বাজেটের আওতায় (নির্মাণ, উন্নয়ন ও সংরক্ষণ)
সড়ক বিভাগ	২,৬০০.৬৪	৭,২৪২.০০
স্থানীয় সরকার বিভাগ	২,৩১৭.১৬	১৫,৫৩৫.০০
মোট=	৪,৯১৭.৮০	২২,৭৭৭



৫.০ সড়ক নেটওয়ার্কের রক্ষণাবেক্ষণ-টেকসই সড়ক যোগাযোগ ব্যবস্থা অর্জনের মূল চ্যালেঞ্জ

৫.১ সড়ক রক্ষণাবেক্ষণ-একটি দৃঢ় চাহিদা

বাংলাদেশ মুখ্যত একটি গ্রাম-প্রধান দেশ। দেশের জনসংখ্যার প্রায় ৮০ শতাংশই পল্লি এলাকায় বাস করে। কৃষি খাতের মাধ্যমে গ্রামীণ অর্থনীতি এ দেশের জাতীয় অর্থনীতিতে উল্লেখযোগ্য অবদান রাখে। এ প্রেক্ষাপটে, দেশের অধিকাংশ জনগণের জীবন যাত্রার মান উন্নয়ন গ্রামীণ অর্থনীতি বিকাশের ওপর নির্ভর করে, যা মূলত উন্নত যোগাযোগ ব্যবস্থা, বিশেষ করে সড়ক যোগাযোগ ব্যবস্থার সাথে সম্পর্কিত।

বাংলাদেশের বিস্তৃত সড়ক নেটওয়ার্কের অধিকাংশই সড়ক বিভাগ ও স্থানীয় সরকার বিভাগের আওতাধীন সড়ক দ্বারা গঠিত। এশিয়ার উন্নয়নশীল দেশগুলোর মধ্যে এ

সড়ক ব্যবস্থা সর্বাধিক নিবিড়-যা গ্রামীণ বাংলাদেশে যোগাযোগের ক্ষেত্রে অপরিমেয় সেবা প্রদান করছে। তবে, সড়ক রক্ষণাবেক্ষণ চাহিদার উত্তরোত্তর বৃদ্ধির পরিপূরক আর্থিক সম্পদের সংস্থান সম্ভব নয় বিধায় রক্ষণাবেক্ষণের চাহিদা এবং অর্থায়ন ব্যবস্থার মধ্যকার দূরত্ব ক্রমাগত বিস্তৃত হচ্ছে।

৫.২ সড়ক নেটওয়ার্কের চলমান অবস্থা এবং বিদ্যমান চ্যালেঞ্জ

দেশের সড়ক নেটওয়ার্ক মোট ৩ লাখ ১৯ হাজার কিলোমিটার সড়ক দ্বারা গঠিত। এর মধ্যে সড়ক ও জনপথ অধিদপ্তরের আওতাধীন প্রায় ২১,০০০ কিমি সড়কের সম্পূর্ণ এবং স্থানীয় সরকার বিভাগের আওতাধীন সড়ক সমূহের মধ্যে উপজেলা সড়কের ২৭ হাজার ২৫৪ কিলোমিটার (৭২%), ইউনিয়ন সড়কের ১৭ হাজার ৭৪২ কিলোমিটার (৪০%), গ্রাম সড়কের (ক-শ্রেণী) ১৩ হাজার ৯৯৪ কিলোমিটার (১২.৭৬%) এবং গ্রাম সড়কের (খ-শ্রেণী) ৪ হাজার ২৮১ কিলোমিটার (৪%), অর্থাৎ মোট ৮৪,২০০ কিমি সড়ক স্বাধীনতাপ্তের কাল হতে এ পর্যন্ত উন্নয়ন করা হয়েছে^{১৪}। এ পাকা সড়কগুলি যথাযথভাবে রক্ষণাবেক্ষণ করা না হলে এ সকল বিনিয়োগের ফলাফল হবে হতাশাব্যঞ্জক এবং এর প্রকৃত সুফল অর্জন ব্যর্থ হবে। প্রয়োজনানুযায়ী সময়মত মেরামত না করার কারণে সড়ক রক্ষণাবেক্ষণ খাতে অর্থের চাহিদা গুণিতক হারে বৃদ্ধি পায়। তাই এ বিষয়ে প্রয়োজনীয় অর্থ সম্পদের সংস্থান করাই বর্তমানে প্রকৃত চ্যালেঞ্জ। বন্যা এবং সাইক্লোনের মত ঘন ঘন প্রাকৃতিক দুর্যোগ ঘটনাপ্রবাহের কালে এবং সড়কে প্রতিনিয়ত অতিবোধাই যানবাহনের চলাচল এই চ্যালেঞ্জকে অস্বাভাবিকভাবে কঠিন করে তুলছে।

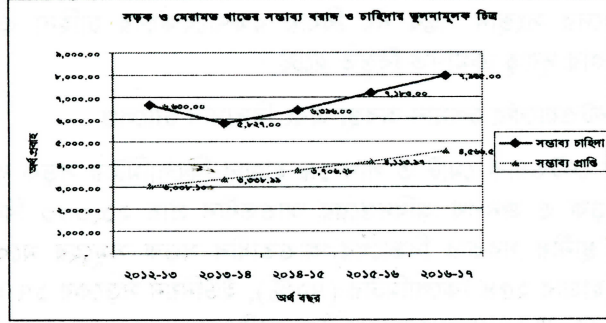
৫.৩ সড়ক মেরামত খাতে চাহিদা ও বরাদ্দ

Rapid Road Condition Survey (RRCS) বা Roughness Survey এর উপর ভিত্তি করে দেশের সড়ক নেটওয়ার্কের মেরামত ও রক্ষণাবেক্ষণ চাহিদা তথা জরুরি (Emergency), নিয়মিত (Routine) এবং সময়ান্তর (Periodic) মেরামত চাহিদা নিরূপণ করা হয়ে থাকে। এক্ষেত্রে International Roughness Index (IRI) নামক একটি সূচক (Index) ব্যবহৃত হয়। সওজ অধিদপ্তরে আওতাধীন সড়কসমূহের ক্ষেত্রে IRI value 0-5.9 হলে এবং স্থানীয় সরকার প্রকৌশল অধিদপ্তরের রাস্তাসমূহের ক্ষেত্রে IRI ≤ 7 হলে তা উত্তম মর্মে বিবেচিত হয়ে থাকে। IRI সূচকের উপর ভিত্তি করে সওজ অধিদপ্তরের সড়কসমূহের জন্য ২০১১-১২ অর্থবছরের মেরামত চাহিদা^{১৫} ছিল ৯,২৭৬ কোটি টাকা এবং এলজিইডির আওতাধীন সড়কসমূহের জন্য ছিল ২,৭২৪ কোটি টাকা (Off pavement সহ)। পক্ষান্তরে, আগামী ৫ বছরে (২০১২-১৩ হতে ২০১৬-১৭ পর্যন্ত) দেশের পাকা সড়কসমূহ রক্ষণাবেক্ষণে মোট চাহিদা দাঁড়াবে ৩৪,০০১.০০ কোটি টাকা, বর্তমান বরাদ্দ ও প্রবৃদ্ধির হার বিবেচনায় আগামী

^{১৪} পরিশিষ্ট ২

^{১৫} জরুরি, নিয়মিত, সময়ান্তর, পুনঃনির্মাণ/পুনর্বাসন (আংশিক/সম্পূর্ণ) মেরামত চাহিদা অন্তর্ভুক্ত

৫ বছরে এ খাতে রাজস্ব বাজেট হতে সম্ভাব্য বরাদ্দ দেয়া হতে পারে ১৮,৭৩৩.৮৫ কোটি টাকা^{১৬}।



৫.৪ উপর্যুক্ত অনুচ্ছেদে বর্ণিত বিশ্লেষণ হতে দেখা যায়, বাংলাদেশে সড়ক মেরামত খাতে চাহিদা ও বরাদ্দের মধ্যে যে ব্যবধান রয়েছে এবং এ ব্যবধান উত্তরোত্তর বৃদ্ধির যে সম্ভাবনা রয়েছে, তা দূরীকরণে সরকারি বরাদ্দের পাশাপাশি সড়ক ব্যবহারকারীদের অংশগ্রহণ (Road Pricing) আন্তর্জাতিক অভিজ্ঞতার আলোকে বিবেচনা করা যেতে পারে।

বিশ্বের বিভিন্ন দেশে বিভিন্ন পদ্ধতিতে Road Pricing চালু রয়েছে। অনেক ক্ষেত্রে এ পদ্ধতি সফল হলেও কতিপয় ক্ষেত্রে তা প্রত্যাশিত সুফল বয়ে আনতে পারেনি। আন্তর্জাতিক পরিসরে সফল Road Pricing এর কতিপয় দৃষ্টান্ত নিচের সারণিতে উপস্থাপন করা হলো:

দেশ/শহরের নাম	Road Pricing এর ধরন	সংজ্ঞা/পদ্ধতি	উদ্দেশ্য
সিলাপুর, লন্ডন, স্টকহোম, রোম, নরওয়ে	Cordon tolling	Cordon toll হলো যানবাহন ব্যবহারকারী কর্তৃক কোন Cordon Line (যেমন toll ring) অতিক্রম কিংবা কোন বিশেষ Cordon Area (বিশেষতঃ নগরকেন্দ্র ইত্যাদি) প্রবেশের ফলে প্রদেয় টোল। যে সকল এলাকায় গণপরিবহন ব্যবস্থা সুপ্রতিষ্ঠিত, সেখানে এ পদ্ধতি অধিক কার্যকর।	Cordon tolling এর উদ্দেশ্য হলো Travel Demand ত্রাস করা ও সড়ক ব্যবস্থা উন্নয়নের লক্ষ্যে ভ্রমণ সৃষ্টি করা।
জার্মানি, সুইজারল্যান্ড, অস্ট্রিয়া	Distance based pricing	এ পদ্ধতিতে অধিক দূরত্ব অতিক্রমকারী যানবাহনকে অধিক হারে টোল প্রদান করতে হয়। এ পদ্ধতি মূলত ইইউভুক্ত যে সকল দেশের সড়কসমূহ অন্য দেশের যানবাহন ব্যবহার করে, সে সকল যানবাহন হতে আদায় করা হয়। কারণ এ সমস্ত যানবাহন হতে জ্বালানী কর আদায় করা সম্ভব নয়।	এ পদ্ধতির উদ্দেশ্য হলো empty return haul এর সংখ্যা ত্রাস, সড়কে অধিক free space নিশ্চিত করণ, যানবাহন ও পণ্য পরিবহনে সড়ক ব্যতীত অন্যান্য পরিবহন মাধ্যম যথা- নৌ, রেল ইত্যাদিকে উৎসাহ প্রদান এবং রাজস্ব আয় বৃদ্ধি। উক্ত বর্ধিত রাজস্ব দিয়ে সড়ক ও রেল অবকাঠামো উন্নয়ন।
ফ্রান্স, জাপান	Variable road pricing	ভিন্ন ভিন্ন সময়ে সড়ক ব্যবহারের কারণে ভিন্ন ভিন্ন হারে প্রদেয় টোল। সাধারণতঃ peak period এ অধিক হারে ও off peak period এ নিম্ন হারে টোল আদায় করা হয়।	congestion hour এ সড়ক ব্যবহারকারীর সংখ্যা ত্রাসের মাধ্যমে ট্রাফিক ত্রাস, ভিন্ন পরিবহন মাধ্যম কিংবা রুট ব্যবহার উৎসাহিতকরণ। রাজস্ব আদায় মুখ্য উদ্দেশ্য নয়।

সুতরাং দেখা যাচ্ছে উন্নত দেশসমূহে road pricing সফলভাবে চালু রয়েছে। সেখানে road pricing এর উদ্দেশ্যসমূহ নিম্নরূপ :

- ট্রাফিক congestion হ্রাস
- বায়ু দূষণ হ্রাস
- বিকল্প পরিবহন ব্যবস্থা/মাধ্যমসমূহের উন্নয়ন
- বিদ্যমান পরিবহন সুবিধাদির উন্নয়ন ও সক্ষমতা বৃদ্ধি।

বাংলাদেশে Road pricing এর উদ্দেশ্য মুখ্যত সড়ক উন্নয়ন ও রক্ষণাবেক্ষণে সম্পদের ঘাটতি পূরণ ও এক্ষেত্রে বেসরকারি খাত ও সড়ক ব্যবহারকারীদের সম্পৃক্তকরণ। এ বিবেচনায় উন্নত বিশ্বে Road pricing এর উদ্দেশ্য হতে বাংলাদেশে Road pricing এর উদ্দেশ্যের কিছুটা ভিন্নতা রয়েছে। Road pricing এর প্রতিষ্ঠিত ধারণায় সড়ক ব্যবহারকারী যানবাহনের রেজিস্ট্রেশন ফিসসমূহ অন্তর্ভুক্ত না হলেও বাংলাদেশের বাস্তবতায় একে Road pricing এর অন্তর্ভুক্ত করা যেতে পারে। এ খাত হতে অর্জিত রাজস্ব, সড়ক টোল এবং জ্বালানী লেভি ইত্যাদি বাংলাদেশে Road pricing এর প্রধান উৎস হতে পারে।

বাংলাদেশের টোলের আওতাভুক্ত সদক/মহাসড়কের সংখ্যা অত্যন্ত কম। সড়ক ও জনপথ অধিদপ্তরের মাত্র ৩টি সড়ক ও ৫৬টি সেতু টোলের আওতাধীন। পাকা সড়কসমূহের মধ্যে ৮টি জাতীয় মহাসড়ক, যা করিডোর সড়ক নামে অভিহিত সেগুলো, ২০০ মিটার এর অধিক দৈর্ঘ্যের সেতু এবং ট্রানজিটের উদ্দেশ্য ব্যবহৃত হবে এমন আঞ্চলিক ও উপ-আঞ্চলিক সংযোগ প্রদানকারী সড়ক টোলের আওতায় নিয়ে আসা হলে সড়ক খাতে আয় অনেক বৃদ্ধি পাবে। উক্ত আয়, সড়ক ব্যবহারকারী যানবাহনের রেজিস্ট্রেশন খাতসমূহ হতে প্রাপ্ত আয় এবং এ খাতে সরকারি বরাদ্দ সম্মিলিতভাবে সড়ক গ্রামীণ প্রান্তিক জনগোষ্ঠী কর্তৃক ব্যবহৃত হওয়ায় এবং এগুলোর সাথে কৃষিপণ্য উৎপাদন ও বিপণন ব্যয় সরাসরি সম্পর্কিত বিধায় সামষ্টিক অর্থনীতির স্বার্থে উক্ত সড়কসমূহ Road pricing এর আওতাভুক্ত করা বাঞ্ছনীয় নয়। আঞ্চলিক সড়কসমূহ টোলের আওতায় আসবে কিনা, তা অধিকতর বিচার বিশ্লেষণের পর ঠিক করা যেতে পারে।

উপর্যুক্ত ধারণার ভিত্তিতে Road pricing এর ফলে বাংলাদেশের সড়কসমূহ হতে ১ বছরে অর্জনযোগ্য আয় ও তার সাথে স্বাভাবিক সরকারি বরাদ্দ যোগ করে সড়ক খাতে ১ বছরে প্রাপ্য সম্পদের একটি হিসাব নিচের সারণিতে উপস্থাপন করা হলো:

সড়কসমূহ হতে প্রাপ্ত টোল:

- মোট দৈর্ঘ্য = ১৩৫ কি.মি.
- বাৎসরিক গড় টোল আদায় = ৯,৫৯,১৪,৪০০ টাকা
- বাৎসরিক টোল ফ্যাক্টর = ৭,১০,৪৭৭ টাকা/কি.মি.
- জাতীয় মহাসড়কসমূহের মোট দৈর্ঘ্য = ৩,৫৩৮ কি.মি.
- সম্ভাব্য মোট বাৎসরিক টোল আদায় $(৭,১০,৪৭৭ \times ৩,৫৩৮) = ২৫১,৩৬,৬৭,৬২৬$ টাকা।

● সেতুসমূহ হতে গত ৫ বছরে গড়ে প্রতিবছর আদায়কৃত টোল = ২৫৪ কোটি টাকা

● বিআরটিএ হতে বছরে আয় = ৬৩৬ কোটি টাকা।

উপর্যুক্ত হিসাবের প্রেক্ষিতে Road pricing এর ফলে সড়ক মেরামত ও রক্ষণাবেক্ষণ খাতে ১ বছরে প্রাপ্য মোট সম্পদ সাঁড়ায়ে

সড়ক হতে প্রাপ্ত টোল	সেতু হতে প্রাপ্ত টোল	ফেরী হতে প্রাপ্ত টোল	বিআরটিএ'র আয়	সরকারের বাজেট হতে বরাদ্দ	মোট
৬২৫১	২৫৪	১৫৪৪	৬৩৬	৩০০	৮,১৪৫

কোটি টাকা।

সুতরাং দেখা যাচ্ছে, Road pricing এর পুরণ সড়ক মেরামতের চাহিদা পূরোপূর্ণ পূরণ করা সম্ভব হবে না। উপর্যুক্ত হিসাবটি বিদ্যমান হারসমূহের উপর ভিত্তি করে করা হয়েছে। এক্ষেত্রে সমস্যাসমূহ হলো:

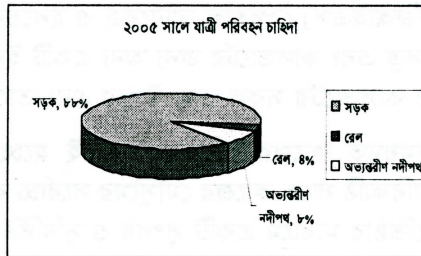
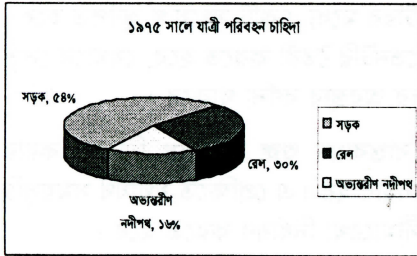
- সড়কসমূহের টোল আদায়ের ক্ষেত্রে কোন নীতিমালা না থাকায় সঠিকভাবে টোল নির্ধারণ কিংবা আদায় করা সম্ভব হচ্ছে না। বৃহৎ সেতুসমূহে Operation and Maintenance (O & M) পদ্ধতিতে টোল আদায় করা হচ্ছে আবার অন্যান্য সেতুসমূহে ইজারাভিত্তিতে টোল আদায় করা হচ্ছে। টোল আদায় বৃদ্ধির জন্য সড়ক ও সেতুসমূহে টোল প্রাঙ্গী নির্মাণ জরুরি। এগুলো নির্মাণে প্রয়োজনীয় অর্থ/বিনিয়োগের সংস্থান থাকা প্রয়োজন।

● বিআরটিএ'র বিদ্যমান হারসমূহ দীর্ঘদিন পূর্ব হতে কার্যকর রয়েছে। এগুলো তৎপূর্ণ নির্ধারণ না করার ফলে এ খাতে আয়ের প্রবৃদ্ধি প্রায় স্বাধীন হয়ে পড়েছে।

- Road Pricing এর অন্যতম উৎস হিসেবে জালানি মূল্যের উপর আরোপযোগ্য লেভির বিষয়ে কোন কার্যকর পস্থা এখন পর্যন্ত খতিয়ে দেখা হয়নি।

৫.৫ সমন্বিত যোগাযোগ মাধ্যম

স্বাধীনতার পর পরিবহন চাহিদা বৃদ্ধি পেয়েছে বছরে গড়ে ৯ শতাংশ হারে। ১৯৭৫ সালে বিভিন্ন মাধ্যমে (Road Pricing) যাত্রী পরিবহন চাহিদা ছিল সড়ক ৫৪%, রেল-৩০% ও অভ্যন্তরীণ নদীপথ-১৬%। ২০০৫ সালে সড়ক-৮৮%, রেল-৪%, অভ্যন্তরীণ নদীপথ-৮%। ১৯৭৫ সালে দেশে সড়কপথের দৈর্ঘ্য ছিল ৪,৩৮২ কিমি, রেলপথ ১,৭৮৬ কিমি এবং অভ্যন্তরীণ নৌপথ ৮,০০০ কিমি^{১৭}। বর্তমানে সড়ক ৩,১৯,০০০ কিমি (স্থানীয় সরকার বিভাগের সড়কসহ), রেলপথ ২,৮৩৫ কিমি ও অভ্যন্তরীণ নৌপথ ৬,০০০ কিমি^{১৮}।



পরিবহনে বিভিন্ন মাধ্যমের চাহিদার বিবর্তন

রেলপথ ও রেল পরিসেবার আশানুরূপ সম্প্রসারণ ঘটেনি এবং অভ্যন্তরীণ নৌপথ সংকুচিত হয়েছে। অপরদিকে, সড়কপথের দৈর্ঘ্য ও সড়ক পরিবহনের চাহিদা বহুগুন বৃদ্ধি পেয়েছে। এর ফলে জনসাধারণের যাতায়াত সহজতর এবং অর্থনৈতিক প্রবৃদ্ধি ও দারিদ্র নিরসন ত্বরান্বিত হলেও এতে করে রেলপথ ও অভ্যন্তরীণ নৌপথের চাহিদা হ্রাস পেয়েছে। কিন্তু বৈশ্বিক আর্থিক সংকট, জ্বালানীর মূল্যবৃদ্ধি এবং জলবায়ু ও পরিবেশের উপর প্রভাব বিবেচনায় বিভিন্ন পরিবহন মাধ্যম যথা- সড়ক, রেল ও নৌপথের সমন্বয়ে একটি সমন্বিত যোগাযোগ ব্যবস্থা বাংলাদেশের জন্য সবচেয়ে উপযোগী। এ লক্ষ্যে জাতীয় স্থল পরিবহন নীতিমালার আলোকে একটি সমন্বিত বহুমুখী পরিবহন নীতিমালা (Integrated Multimodal Transport Policy) প্রণীত হয়েছে। এ নীতিমালায় চ্যাক তালিকা

● যৌক্তিক ও ভরসাম্যপূর্ণ বিনিয়োগ নিশ্চিত করে বিভিন্ন পরিবহন মাধ্যমের Transport Modes মধ্যে সমন্বয় ঘটাবে।

● পরিবহন সংশ্লিষ্ট তিনটি মন্ত্রণালয় ও বিভিন্ন সংস্থার কার্যক্রম ও নীতিসমূহের মধ্যে সমন্বয় সাধনে সহায়ক হবে।

তথ্যসূত্র: শিচি (১৩) চাকচাক্যাকচক চাকচাকচক চাকচাকচক চাকচাকচক চাকচাকচক

^{১৭} বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১০, পৃষ্ঠা-২৮৩, ২৮৫

^{১৮} বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১০ ও World Bank: Bangladesh Transport Policy Note. 2009; স্থানীয় সরকার বিভাগের আওতাধীন সড়ক সহ

৬.০ টেকসই সড়ক যোগাযোগ ব্যবস্থা অর্জনের লক্ষ্যে কতিপয় নীতি-পরামর্শ

৬.১ পরিকল্পনা ও কর্মসূচি

সড়ক রক্ষণাবেক্ষণ চাহিদা নিরূপণের পূর্বশর্ত হলো সুবিন্যস্ত এবং নির্ভরযোগ্য সড়ক ইনভেনটরী প্রতিষ্ঠা করা, যেখানে সড়ক পরিচিতি (আইডি সম্বন্ধসহ সড়কের নাম, সড়কের শুরু এবং সমাপ্তির শুরু এবং সমাপ্তির স্থান, সড়কের দৈর্ঘ্য, সংযোগ স্থল ইত্যাদি), সড়কের অবস্থা (পৃষ্ঠতলের অবস্থা, অমসৃনতা) এবং যানবাহন তথ্যাদির [বার্ষিক দৈনিক গড় যানবাহন (এএডিটি), দৈনিক ব্যবসায়িক যানবাহন (সিভিডি), এবং স্ট্যান্ডার্ড এক্সেলের সমতুল্য (ইএসএ)] উল্লেখ থাকবে। ভৌগলিক তথ্য পদ্ধতির (জিআইএস) স্পেশাল ডাটাবেজ ও ইনভেনটরির মধ্যে একটি সংযোগ স্থাপিত হবে। সেতু এবং কালভার্টের জন্য অন্য একটি ইনভেনটরি তৈরী করতে হবে, যেখানে সেতু ও কালভার্টের সকল তথ্য উপাত্ত এবং তাদের অবস্থার বর্ণনা থাকবে।

সময়মত কাজের পরিকল্পনা করাই হচ্ছে বাস্তবায়ন শুরু ও শেষ নিশ্চিত করার চাবিকাঠি যাতে কাজের মৌসুমের সর্বোচ্চ ব্যবহার হয়। এ প্রেক্ষিতে যথাযথ সময়সূচি প্রতিষ্ঠার মাধ্যমে একটি সুস্পষ্ট ও সুনির্দিষ্ট সীমারেখা নির্ধারণ করতে হবে।

বিগত পাঁচ বছরে রক্ষণাবেক্ষণ কাজের পারফরমেন্স, সম্পদের চাহিদা এবং প্রাপ্যতার উপর ভিত্তি করে মধ্যমেয়াদি বাজেট ফ্রেমওয়ার্ক (এমটিবিএফ) থেকে বাৎসরিক রক্ষণাবেক্ষণ বরাদ্দ পাওয়ার জন্য রক্ষণাবেক্ষণ বাজেট চাহিদার একটি ত্রি-বার্ষিক প্রক্ষেপণ তৈরী করতে হবে।

৬.২ সড়ক রক্ষণাবেক্ষণ অগ্রাধিকার নিরূপণ

স্বাভাবিকভাবে রক্ষণাবেক্ষণের জন্য প্রকৃত চাহিদার তুলনায় অব্যাহত অর্থ প্রবাহে ঘাটতি রয়েছে। এজন্য গুরুত্ব এবং প্রয়োজন বিবেচনায় টেকসই রক্ষণাবেক্ষণের স্বার্থে সড়কের অগ্রাধিকার নির্ধারণ সর্বাধিক বিবেচ্য, যা গুরুত্বপূর্ণ সড়কসমূহকে চিহ্নিত করবে। এছাড়া টেকসই রাখার বিবেচনায় সেগুলোতে অধিকতর গুরুত্ব আরোপ করতে হবে। এই প্রক্রিয়ায় যানবাহনের বিস্তারিত তথ্য এবং উন্নততর কারিগরি বিশ্লেষণের প্রয়োজন হবে। এ বিশ্লেষণের ওপর ভিত্তি করে এবং সড়কের সামাজিক ও বাণিজ্যিক গুরুত্ব বিবেচনায় রেখে সড়কসমূহের একটি অগ্রাধিকার তালিকা তৈরী করতে হবে। এলক্ষ্যে অগ্রাধিকার নির্বাচনের জন্য নিম্নলিখিত বিষয়সমূহ বিবেচনায় নির্দেশক তৈরী করবে, তবে শুধু এই বিবেচনাগুলোর মধ্যেই বিষয়টি সীমাবদ্ধ থাকবে না:

- সড়কের নিয়মিত রক্ষণাবেক্ষণ সময়ান্তর রক্ষণাবেক্ষণের চেয়ে বেশি গুরুত্ব পাবে;

- মহাসড়কসমূহ আঞ্চলিক সড়ক ও পল্লি সড়কের চেয়ে অধিকতর গুরুত্ব পাবে;
- অধিকতর যানবাহন চলাচলকারী সড়ক;
- অনুমোদিত বাস চলাচল রুট;
- উন্নয়ন সহযোগীদের অর্থায়নে উন্নয়নকৃত সড়ক;
- সম্পূর্ণ উন্নয়নকৃত ও নিরবচ্ছিন্ন যোগাযোগ সড়ক অগ্রাধিকার পাবে;
- অধিক সংখ্যক হাটবাজার, গ্রাম এবং সেবাকেন্দ্র ও প্রতিষ্ঠান সংযোগকারী সড়ক।

৬.৩ অর্থায়ন

সড়ক টেকসই রাখার স্বার্থে, পর্যাপ্ত সম্পদ এবং সম্পদের অব্যাহত প্রবাহ নিশ্চিত করার জন্য একটি টেকসই অর্থায়ন পদ্ধতি গড়ে তোলা খুবই জরুরি। সরকার প্রতিবছর রক্ষণাবেক্ষণ খাতে ক্রমবর্ধমান হারে সড়ক খাতে বরাদ্দ দিলেও সড়ক রক্ষণাবেক্ষণের জন্য এ বরাদ্দ অত্যন্ত অপ্রতুল। সরকার অবশ্যই এ অর্থ ঘাটতি মেটাতে সচেষ্ট হবে এবং সড়ক রক্ষণাবেক্ষণের জন্য অব্যাহত অর্থায়ন প্রবাহ নিশ্চিত করবে এবং বিভিন্নভাবে তা বৃদ্ধি করবে। স্থানীয় সরকার প্রতিষ্ঠান কর্তৃক এ ক্ষেত্রে অর্থায়নে সরকার বিশেষ জোর দেবে। উন্নয়ন প্রকল্পে সড়ক রক্ষণাবেক্ষণের জন্য সীমিত আকারে অর্থ চিহ্নিত করে রাখবে এবং ব্যক্তিমালিকানাধীন উদ্যোক্তাদেরও অর্থায়নে উৎসাহিত করবে।

সড়কসমূহের মানসম্মত রক্ষণাবেক্ষণের জন্য এবং মেরামত ও রক্ষণাবেক্ষণ কাজের প্রয়োজনীয় সম্পদের অব্যাহত যোগান নিশ্চিতকল্পে Road Pricing এর বিকল্প নেই। বিভিন্ন বাস্তব কারণে গ্রামীণ সড়কসমূহকে Road Pricing এর আওতায় আনা সম্ভব না হলেও জাতীয় মহাসড়ক ও সেতুসমূহ, যানবাহন রেজিস্ট্রেশন ফিস, জ্বালানি লেভি ইত্যাদি আয়ের উৎস অন্তর্ভুক্তি সাপেক্ষে Dedicated Road Fund গঠন করতে হবে। তবে এর পূর্বে সড়ক ও সেতুসমূহে টোল আরোপ ও আদায়ের নীতিমালা প্রণয়ন করতে হবে, নতুবা বর্তমান ধারণাপত্রের finding অনুযায়ী এ খাত হতে সম্ভাব্য সর্বোচ্চ আয় প্রাপ্তি সম্ভব হবে না। এছাড়া উন্নত বিশ্বের ধারণাসম্মত Road Pricing কে বাংলাদেশের বাস্তবতার নিরিখে পুনর্মূল্যায়নপূর্বক একটি mechanism উদ্ভাবন করতে হবে।

৬.৪ রাজস্ব খাতে সরকারি তহবিল

সড়ক রক্ষণাবেক্ষণের সর্বশেষ হিসাব মোতাবেক চাহিদা ১২,০০০ কোটি টাকার বিপরীতে সরকারের রাজস্ব খাত থেকে বরাদ্দের পরিমাণ মাত্র ২,০৮৫ কোটি টাকা^{১৯}।

^{১৯} পরিশিষ্ট

ফলে প্রায় ১০,০০০ কোটি টাকা ঘাটতি থেকে গেছে। বিশাল এ ঘাটতি রাতারাতি দূর করা সম্ভব নয়। এই পরিস্থিতিতে রক্ষণাবেক্ষণ চাহিদা এবং এর অর্থায়নের মধ্যকার পার্থক্য কমপক্ষে ২৫% এ নেমে না আসা পর্যন্ত রাজস্ব বাজেট হতে সড়ক খাতের জন্য সরকার রক্ষণাবেক্ষণে ও সংরক্ষণ খাতের বরাদ্দ প্রতি বছর অন্তত ২০% হারে বর্ধিত করবে। সরকারের আয় বৃদ্ধি পেলেই কেবল এই বর্ধিত বরাদ্দের সংস্থান করা সম্ভব। বিআরটিএ হতেই এ খাতের সিংহভাগ রাজস্ব আদায় হয়ে থাকে।

সড়কের টোল আদায় সংক্রান্ত নীতিমালা কার্যকর হলে এবং নিয়মিত বিরতিতে Consumer Price Index ও Per Capita Income বৃদ্ধির ভিত্তিতে টোল হার পুনর্নির্ধারণ করা হলে এবং বিআরটিএ'র রেটসমূহ বাড়ানো হলে সড়ক খাত থেকে আয় অনেক বৃদ্ধি পাবে।

৬.৫ সড়ক রক্ষণাবেক্ষণের উন্নয়ন প্রকল্পসমূহের আর্থিক অংশগ্রহণ

রক্ষণাবেক্ষণে উন্নয়ন প্রকল্পের প্রকল্প দলিলে প্রকল্প ব্যয়ের কিয়দংশ রক্ষণাবেক্ষণ খাতে বরাদ্দ রাখা যেতে পারে। প্রকল্প বাস্তবায়নের পুরো সময়কালে বরাদ্দকৃত উক্ত তহবিল সংশ্লিষ্ট প্রকল্প এলাকার সড়ক রক্ষণাবেক্ষণে ব্যবহার করা হবে। তদনুযায়ী প্রকল্প দলিলসমূহ তৈরী করতে হবে এবং পরিকল্পনা কমিশন ও সরকারের অন্যান্য সংশ্লিষ্ট কর্তৃপক্ষ প্রকল্প দলিলে উল্লিখিত ব্যস্থায় সম্মতি দিবে।

৬.৬ পুঞ্জীভূত রক্ষণাবেক্ষণের (Backlog Maintenance) কর্মসূচি সম্বলিত উন্নয়ন প্রকল্প মেরামত খাতে অপ্রতুল সম্পদপ্রাপ্তির কারণে দেশের বিপুল সড়ক নেটওয়ার্কের আওতাধীন অনেক সড়কের অবস্থার ক্রমাগত অবনতি হচ্ছে। উপযুক্ত রক্ষণাবেক্ষণ কর্মসূচি গ্রহণের মাধ্যমে ঐ সড়কগুলো রক্ষার ক্ষেত্রে অর্থ স্বল্পতা এই অবস্থাকে আরও সঙ্গিন করেছে এবং সড়কসমূহ যান চলাচলের জন্য ক্রমশ অযোগ্য হয়ে পড়ছে। অতীতের পুঞ্জীভূত রক্ষণাবেক্ষণের (Backlog Maintenance) পরিমাণ এভাবে প্রতিবছরই বেড়ে চলছে। পরিকল্পিত উপায়ে আলাদা প্রকল্প গ্রহণের মাধ্যমে এই ব্যাকলগ রক্ষণাবেক্ষণের পরিমাণ হ্রাস করতে হবে।

৬.৭ স্থানীয় সরকার প্রতিষ্ঠান কর্তৃক অর্থায়ন

যে গ্রাম সড়কসমূহ (পাকা ও মাটির রাস্তা) এলজিইডি রক্ষণাবেক্ষণ করবে না, জেলা পরিষদ এবং উপজেলা পরিষদ সে সকল গ্রাম সড়ক রক্ষণাবেক্ষণের জন্য তাদের উন্নয়ন বাজেটের ২৫% অর্থ নির্দিষ্ট রাখবে এবং এরূপ সড়কের একটি অগ্রাধিকার তালিকা তৈরী করবে। এলজিইডি অগ্রাধিকার নির্দেশক অনুসরণপূর্বক উক্ত অগ্রাধিকার তালিকা তৈরী করে তা সংশ্লিষ্ট জেলা পরিষদ এবং উপজেলা পরিষদকে প্রদান করবে। ইউনিয়ন পরিষদ উভয় প্রকার গ্রাম সড়ক রক্ষণাবেক্ষণের জন্য শ্রম অথবা আর্থিক অনুদান প্রদানে স্থানীয় জনগণকে উদ্বুদ্ধ করবে।

৬.৮ বেসরকারি খাতের অর্থায়ন

সড়ক খাতে অবশ্যই সরকারি-বেসরকারি অংশীদারিত্ব (পিপিপি) পদ্ধতি, যেমন-কোনও নির্দিষ্ট সময়ের জন্য গুণগত মান নির্ভর রক্ষণাবেক্ষণ চুক্তি (Performance-Based Maintenance Contracts-PBMC) পদ্ধতি প্রবর্তন করে একই সাথে রক্ষণাবেক্ষণের মান উন্নয়ন ও অতীতের পুঞ্জীভূত রক্ষণাবেক্ষণের পরিমাণ হ্রাসে উদ্যোগ গ্রহণ করবে। ইতোমধ্যে এলজিইডি এই পদ্ধতি পরীক্ষামূলকভাবে চালু করেছে। পরীক্ষামূলক কাজের ফলাফল থেকে এই পদ্ধতি কার্যকর, ফলপ্রসূ ও নির্ভরযোগ্য প্রতীয়মান হলেই কেবল সড়ক খাতে নিয়মিতভাবে PBMC পদ্ধতির প্রবর্তন করা সম্ভব হবে।

মহাসড়ক সমূহের অনুভূমিক (Horizontal) সম্প্রসারণের ক্ষেত্রে ভূমি অধিগ্রহণ সংক্রান্ত বাস্তব সমস্যার প্রেক্ষিতে মহাসড়ক সমূহের উল্লম্ব সম্প্রসারণ (Vertical Expansion) তথা দ্বি-তল, ত্রিতল সড়ক নির্মাণে পিপিপি পদ্ধতি অনুসরণ করতে হবে।

স্থানীয় যানবাহন পরিচালক ও ব্যবসায়ীগণ পল্লি সড়কের সুবিধাভোগীদের অন্যতম এবং সারা বছরব্যাপী যানবাহনের চলাচল উপযোগী পল্লি সড়ক পেতে তারা সমান ভাবে উদগ্রীব। তারাই পল্লি সড়ক থেকে প্রত্যক্ষভাবে আর্থিক সুবিধাভোগী। পল্লি সড়ক রক্ষণাবেক্ষণের কাজে যে বিশাল অংকের অর্থায়ন প্রয়োজন তাতে তাদের অংশীদার হওয়া আবশ্যিক। পল্লি সড়ক রক্ষণাবেক্ষণের জন্য প্রয়োজনীয় অর্থের ন্যূনতম ১০ শতাংশ এলজিইডির রক্ষণাবেক্ষণ তহবিলে তাদের আর্থিক অংশ হিসেবে প্রদান করা উচিত, যা কিছুটা হলেও রক্ষণাবেক্ষণের জন্য প্রয়োজনীয় অর্থের বর্তমান ঘাটতি মেটাতে সহায়ক হবে। প্রদত্ত এরূপ অর্থ সংশ্লিষ্ট অর্থ প্রদানকারীদের ভৌগলিক এলাকার সড়কসমূহের রক্ষণাবেক্ষণে ব্যয় করতে হবে।

৬.৯ স্টেকহোল্ডারদের অংশগ্রহণ

সড়ক ব্যবহারকারী এবং পল্লি সড়ক পার্শ্ববর্তী এলাকায় বসবাসকারী জনগোষ্ঠী সড়কের প্রধান ভোক্তা। সড়ক রক্ষণাবেক্ষণের বিভিন্ন স্তরে ভোক্তাদের অংশগ্রহণ উৎসাহিত করতে হবে, যাতে তাদের মাঝেও সড়কের মালিকানাবোধ সৃষ্টি হয়। এজন্য সরকারি সংস্থাসমূহ এবং স্থানীয় সরকার প্রতিষ্ঠানসমূহকে সহযোগিতা দিতে হবে যাতে ভোক্তাগণ স্বতঃস্ফূর্তভাবে সড়ক রক্ষণাবেক্ষণ কর্মসূচি বাস্তবায়ন, অতিরিক্ত মাল বোঝাই যানবাহন চলাচল নিয়ন্ত্রণ এবং স্বেচ্ছায় রক্ষণাবেক্ষণের জন্য শ্রম বা অর্থ প্রদানে আন্তরিকতার সংগে অংশগ্রহণ করে।

৬.১০ জেতার সমতা ও অংশগ্রহণ

পল্লি সড়ক রক্ষণাবেক্ষণের পরিকল্পনা থেকে বাস্তবায়ন পর্যন্ত সকল স্তরে মহিলাদের সম্পৃক্ত করতে হবে। এজন্য কর্মসূচি চিহ্নিতকরণ, ক্ষিম প্রণয়ন ও ডিজাইন, কর্মসূচি যাচাই, বাস্তবায়ন, পরিদর্শন, পরিবীক্ষণ ও মূল্যায়ন কার্যাদি স্তর হিসেবে নির্ধারিত হতে পারে। সড়কের কাঁচা অংশ রক্ষণাবেক্ষণ কাজে প্রধানত মহিলা শ্রমিকদের নিয়োগ দিতে হবে। তবে উপযোগী হলে সড়কের পাকা অংশ রক্ষণাবেক্ষণ কাজেও তাঁদেরকে নিযুক্ত করা যেতে পারে। এ প্রসঙ্গে এলজিইডি প্রয়োজনীয় সকল কৌশল ও পদক্ষেপ গ্রহণ করবে, সেগুলির ব্যাপক প্রচার চালাবে এবং যথাযথ প্রয়োগ করবে।

৬.১১ যানবাহনে অতিরিক্ত বোঝাই নিয়ন্ত্রণ

সড়ক ক্ষতিগ্রস্ত হওয়ার মুখ্য কারণগুলির একটি হলো সড়কে অতিরিক্ত মালামাল বোঝাই যানবাহন চলাচল। মহাসড়কসমূহে ২০ টন, উপজেলা সড়ক ও ইউনিয়ন সড়কে ৮.২ টন ও গ্রাম সড়কে ৫.০ টন এক্সেল লোডের অধিক পরিবহনের ওপর নিষেধাজ্ঞা আরোপ করতে হবে। পল্লি সড়কেও অতিরিক্ত মালামাল বোঝাই যানবাহন নিয়ন্ত্রণ করতে হবে এবং এ ক্ষেত্রে বর্তমানে বলবৎ সরকারকর্তৃক অনুমোদিত জাতীয় স্থল পরিবহন নীতিমালার প্রযোজ্য বিধানের পূর্ণ অনুসরণ করতে হবে। সওজ অধিদপ্তরের আওতাধীন এক্সেল লোড নিয়ন্ত্রণ কেন্দ্রসমূহ চালু ও কার্যকর করতে হবে।

৬.১২ প্রাতিষ্ঠানিক নীতিমালা

সড়ক রক্ষণাবেক্ষণে ক্রমবর্ধমান আর্থিক চাহিদা পূরণ ও রক্ষণাবেক্ষণ কাজের চাহিদা নিরূপণের লক্ষ্যে একটি data base প্রতিষ্ঠাসহ এ সংক্রান্ত সার্বিক বিষয়াদি নিয়ে একটি সমন্বিত সড়ক রক্ষণাবেক্ষণ নীতিমালা প্রণয়ন করা যেতে পারে।

৬.১৩ জনবল উন্নয়ন

রক্ষণাবেক্ষণ কর্মসূচি বাস্তবায়ন ও পরিবীক্ষণে অংশগ্রহণকারী নিজস্ব জনবল, রক্ষণাবেক্ষণ ক্রু/কর্মী ও স্থানীয় সরকার প্রতিষ্ঠানের কর্মচারীদের দক্ষতা, যোগ্যতা ও কার্যক্ষমতা উন্নয়নের জন্য সরকার প্রচেষ্টা গ্রহণ করবে। এই লক্ষ্যে টেকসই প্রযুক্তি অনুসরণ করতে হবে এবং কর্মসূচি বাস্তবায়ন গুরুত্ব প্রাক্কালে প্রতিবছর নিয়মিতভাবে সংশ্লিষ্ট সকলের জন্য প্রশিক্ষণ কর্মসূচি গ্রহণ করা হবে। সড়কের কাঁচা অংশ রক্ষণাবেক্ষণের জন্য মহিলা শ্রমিকদের কর্মদক্ষ জনবলে পরিণত করার উদ্দেশ্যে এলজিইডি বিশেষ নজর দেবে এবং বাড়তি প্রশিক্ষণের আয়োজন করবে। সঠিক রক্ষণাবেক্ষণ কর্মসূচি/ক্ষিম নির্বাচন ও যথাযথ প্রযুক্তি প্রয়োগ করে এবং সীমিত সম্পদের সর্বোৎকৃষ্ট ব্যবহারের মাধ্যমে ব্যয়-সাশ্রয়ী কর্মসূচি প্রণয়নের লক্ষ্যে রক্ষণাবেক্ষণ কর্মসূচির পরিকল্পনা ও প্রণয়ন কাজে অংশগ্রহণকারীদের জন্য সড়ক কর্তৃপক্ষ বিশেষ ওরিয়েন্টেশন কোর্সের আয়োজন করবে।

৬.১৪ রক্ষণাবেক্ষণ কাজের মূল্যায়ন

রক্ষণাবেক্ষণ ব্যয় অধিকতর স্বচ্ছ ও Performance-based করার জন্য এ ক্ষেত্রে Third-party monitoring এর ব্যবস্থা প্রণয়ন করা যেতে পারে। রক্ষণাবেক্ষণ কাজের ও উন্নয়ন প্রকল্প মূল্যায়নের ক্ষেত্রে মন্ত্রণালয়ের রাজস্ব বাজেটে ‘সমীক্ষা ফি’ খাতের বরাদ্দ ব্যবহার করা যেতে পারে। সংশ্লিষ্ট মন্ত্রণালয়সমূহ মধ্যম্যোদি বাজেট কাঠামোর আওতায় এ খাতে বর্ধিত বরাদ্দের সংস্থান করতে পারে।

৭.০ উপসংহার

বাংলাদেশে টেকসই সড়ক যোগাযোগ ব্যবস্থা অর্জনের মূল প্রতিবন্ধকতাসমূহ হলো- বিস্তৃত সড়ক নেটওয়ার্কের অতি উচ্চ সম্পদমূল্যের জন্য প্রয়োজনীয় রক্ষণাবেক্ষণ ব্যয়ের লক্ষ্যে সম্পদের যোগান বৃদ্ধি না পাওয়া, সড়কপথের অনুপাতবর্জিত প্রবৃদ্ধির ফলে যাতায়াতের বিভিন্ন মাধ্যমের মধ্যে Modal Balance বিনষ্ট হওয়া ও সড়ক নির্মাণ-উন্নয়নের অত্যধিক প্রকল্পের ফলে বিনিয়োগের ভারসাম্য বিনষ্ট হওয়া এবং এ কারণে সীমিত সম্পদের জন্য Competing Demand বৃদ্ধি পাওয়া, একই কারণে মেরামত ও রক্ষণাবেক্ষণে সরকারের অগ্রাধিকার অনুযায়ী সম্পদ প্রবাহ নিশ্চিত করতে না পারা। এ সকল প্রতিবন্ধকতা দূরীকরণের লক্ষ্যে নতুন সড়ক নির্মাণ সীমিত রাখা, Integrated Multimodal Transport Policy দ্রুত বাস্তবায়ন করা এবং এর আলোকে যোগাযোগ খাতে ভারসাম্যপূর্ণ বিনিয়োগ নিশ্চিত করা, নিয়মিত ও মেয়াদি রক্ষণাবেক্ষণ ও মেরামত খাতের প্রকল্পসমূহে অগ্রাধিকার ভিত্তিতে সম্পদ বরাদ্দ নিশ্চিত করা, সড়ক উন্নয়ন ও রক্ষণাবেক্ষণে বেসরকারি/ব্যক্তিখাতের অংশগ্রহণ নিশ্চিত করা, সড়ক ও সেতুসমূহ হতে টোল আদায়ের জন্য একটি নীতিমালা প্রণয়ন ও কার্যকর করা, মোটর যানবাহন রেজিস্ট্রেশন ফিসমূহ হালনাগাদকরণ এবং সর্বোপরি বাংলাদেশের প্রেক্ষাপটে একটি কার্যকর Road pricing ব্যবস্থা চালুকরণের মাধ্যমে সড়ক উন্নয়ন, পুনর্বাসন ও মেরামতে স্থায়ী সম্পদ সরবরাহের একটি ব্যবস্থাপনা প্রণয়ন করা যেতে পারে। এ সমস্ত উদ্যোগ গৃহীত হলে বাংলাদেশে একটি টেকসই সড়ক যোগাযোগ ব্যবস্থা গড়ে উঠবে।

পরিশিষ্ট-১

বাংলাদেশ সরকারের ৬ নভেম্বর ২০০৩ তারিখে পিসি/টিএস/ক্লাসিফিকেশন কমিটি/০৬ নম্বর গেজেট প্রজ্ঞাপন অনুযায়ী দেশের সকল সড়ক নিম্নরূপভাবে শ্রেণীবিন্যাস করা হয়েছে:

ক্রমিক নং	ধরন	সংজ্ঞা	মালিকানা ও দায়িত্ব
১	জাতীয় মহাসড়ক	জাতীয় রাজধানীর সাথে বিভাগীয় শহর সমুদ্র বন্দর বা স্থল বন্দর অথবা এশিয়া মহা সড়কের সাথে সংযোগকারী মহাসড়ক।	আরএইচডি*
২	আঞ্চলিক মহাসড়ক	জেলা শহর অথবা প্রধান নদী অথবা স্থল বন্দর অথবা একে অন্যের সাথে সংযোগকারী মহাসড়ক বা জাতীয় মহাসড়ক দ্বারা সংযুক্ত নয়।	আরএইচডি
৩	জেলা সড়ক	জেলা শহরের সাথে উপজেলা শহর অথবা এক উপজেলার সাথে অন্য উপজেলার সংযোগকারী একক প্রধান সংযোগকারী সড়ক যা স্বল্প দৈর্ঘ্য জাতীয়/আঞ্চলিক মহাসড়কের সাথে সংযোগ স্থাপন করেছে।	আরএইচডি
৪	উপজেলা সড়ক	উপজেলা শহরের সাথে গ্রোথ সেন্টার অথবা এক গ্রোথ সেন্টারের সাথে অন্য গ্রোথ সেন্টারের সংযোগকারী একক সড়ক অথবা গ্রোথ সেন্টারের থেকে উচ্চতর সড়ক ব্যবহার** সাথে স্বল্প দৈর্ঘ্য সংযুক্ত সড়ক।	এলজিইডি/এলজিআই*
৫	ইউনিয়ন সড়ক	ইউনিয়নের সাথে উপজেলা শহর, গ্রোথ সেন্টার অথবা স্থানীয় বাজার অথবা একে অন্যের সাথে সংযোগকারী সড়ক	এলজিইডি/এলজিআই
৬	গ্রাম সড়ক	(ক) গ্রামকে ইউনিয়ন, স্থানীয় বাজার, খামার এবং ঘাট অথবা একে অন্যের সাথে সংযোগকারী সড়ক (খ) গ্রামের মধ্যবর্তী সড়ক।	এলজিইডি/এলজিআই

পরিশিষ্ট-২

বিভিন্ন সড়কের দৈর্ঘ্য ও শ্রেণীবিভাগ

সড়ক নেটওয়ার্ক						
সড়কের ধরন	মোট সংখ্যা	মোট দৈর্ঘ্য (কিমিঃ)	উন্নীত (কিমিঃ)			মাটির রাস্তা (কিমিঃ)
			বিসি	আরসিসি/সিসি	এইচবিসি/বিএফএস	মোট
সংজ্ঞা অমিদপ্তর						
জাতীয় মহাসড়ক	৭১	৩,৪৯২				
আঞ্চলিক মহাসড়ক	১২১	৪,২৬৮				
জেলা সড়ক	৬৩৫	১৩,২৮০				
মোট	৮২৭	২১,০৪০				
এলজিইডি/এলজিআই						
উপজেলা সড়ক	৪,৪৯৪	৩৭,৮১৯	২৬,৭৮৩	৪৭১	২,৪৮১	২৯,৭৩৫
ইউনিয়ন সড়ক	৭,৯৭৪	৪৪,৭৫২	১৭,২৩৮	৫০৪	৪,২৭৬	২২,০১৮
গ্রাম সড়ক (ক-শ্রেণী)	৩৭,৫৭২	১,০৯,৬২২	১৩,৪৮৬	৫০৮	৬,৯৫৬	২০,৯৫০
গ্রাম সড়ক (খ-শ্রেণী)	৫৬,৯৭৪	১,০৬,১৫২	৩,৯৯৫	২৮৬	৩,৪৬৫	৭,৭৪৬
মোট	১,০৭,০১৪	৩,১৯,৩৮৪	৬১,৫০২	১,৭৬৯	১৭,১৭৮	৮০,৪৪৯
						২,১৭,৮৯৫

পরিশিষ্ট-৩

সড়ক খাতে বাজেট বরাদ্দ ও ব্যয়ের ক্রমবৃদ্ধি

অর্থ বছর	সড়ক বিভাগ		এলজিইডি	
	বাজেট	প্রকৃত ব্যয়	বাজেট	প্রকৃত ব্যয়
২০০৫-০৬	৩,৩০৭.০০	২,৭২৪.০০	৩,৬৯৩.০০	২,৯৩২.০০
২০১১-১২	৩,৬৬১.০০	১,৪২৯.০০	৫,৩৯৩.০০	২,৫৯৭.০০

পরিশিষ্ট-৪

সড়ক মেরামত খাতে সম্ভাব্য চাহিদা ও বরাদ্দ

অংকসমূহ কোটি টাকায়

অর্থবছর	সড়ক বিভাগ		এলজিইডি		মোট বরাদ্দ	মোট বরাদ্দ
	সম্ভাব্য বরাদ্দ চাহিদা	সম্ভাব্য বরাদ্দ প্রাপ্তি	সম্ভাব্য বরাদ্দ চাহিদা	সম্ভাব্য বরাদ্দ প্রাপ্তি	সম্ভাব্য চাহিদা	সম্ভাব্য প্রাপ্তি
২০১২-১৩	৩,০২৪.০০	৬৯৩.৭৫	৩,৬০৬.০০	২,৩১৪.৩৫	৬,৬৩০.০০	৩,০০৮.১০
২০১৩-১৪	১,৬২১.০০	৭৭০.০৬	৪,২০৬.০০	২,৫৬৮.৯৩	৫,৮২৭.০০	৩,৩৩৮.৯৯
২০১৪-১৫	১,৫০০.০০	৮৫৪.৭৭	৪,৮৯৬.০০	২৮৫১.৫১	৬,৩৯৬.০০	৩,৭০৬.২৮
২০১৫-১৬	১,৪৯২.০০	৯৪৮.৭৯	৫,৬৯১.০০	৩,১৬৫.১৮	৭,১৮৩.০০	৪,১১৩.৯৭
২০১৬-১৭	১,৪০০.০০	১,০৫৩.১৬	৬,৫৬৫.০০	৩,৫১৩.৩৫	৭,৯৬৫.০০	৪,৫৬৬.৫১
মোট=	৯,০৩৭.০০	৪,৩২০.৫৩	২৪,৯৬৪.০০	১৪,৪১৩.৩২	৩৪,০০১.০০	১৮,৭৩৩.৮৫

পরিশিষ্ট-৫

সড়ক খাতের রাজস্ব আয়ের প্রধান উৎস এবং প্রাপ্তি

(অংকসমূহ কোটি টাকায়)

		আয়ের প্রধান খাত	২০১০-১১	২০০৯-১০	২০০৮-০৯	মোট	মোট আয়ের শতকরা অংশ
জ ও দ	১	২২১১-টোল (সেতু)	২৮০	২৪৬	২৩৭	৭৬৩	২৪.৬৯%
	২	২২২১-টোল (সড়ক)	১৩	২০	২২	৫৫	১.৭৮%
	৩	২০৩৯-ফেরি	৪	৪	৪	১২	০.৩৯%
এ এ এ এ এ	৪	১১০১-রেজিস্ট্রেশন	২০১	৩৭২	৪১২	৯৮৫	৩১.৮৮%
	৫	১১০৫-সড়ক কর	২৩৭	৯৬	৩৪	৩৬৭	১১.৮৮%
	৬	১১১১-ড্রাইভিং লাইসেন্স	২৬	২৬	২০	৭২	২.৩৩%
	৭	১১২১-কন্ট পারমিট, ফিটনেস ইত্যাদি	১৪৬	১৫৩	১৮৬	৪৮৫	১৫.৭০%
উ উ উ উ উ	৮	১৯০১- জরিমানা ও দণ্ড	৭.৬৮	৯.৮৮	৯.৯৯	২৭.৫৫	০.৮৯%
	৯	২০১৭-পরিষ্করণ ফি	৫৩.০৭	৪৮.৭৮	৩৮.৮১	১৪০.৬৬	৪.৫৫%
	১০	২১৩১- যন্ত্র ও সরঞ্জামাদি ভাড়া	২২.৮২	২১.৭৩	১৯.৪০	৬৩.৯৫	২.০৭%
	১১	২৩৬৬-টোল ও অন্যান্য দলিলপত্র	৪৯.৩৯	৪২.৮৮	২৬.৩৪	১১৮.৬৭	৩.৮৪%
	১২	সড়ক খাতে মোট আয় =	১,০৩৯.৯৬	১,০৪০.২৭	১,০০৯.৫৪	৩,০৮৯.৮৩	১০০%

তথ্যসূত্র :

১. বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১০
২. বাংলাদেশ অর্থনৈতিক সমীক্ষা, ২০১১
৩. বিশ্বব্যাংক ওয়েবসাইট web.worldbank.org
৪. Outline Perspective Plan of Bangladesh 2010-21 (making vision 2021 a reality)
৫. World Bank: Bangladesh Transport Policy Note. 2009;

Digitization of Land Management: Maintenance of Ownership Records, Transfer, Registration and Mutation

Md. Mahmudul Hassan, PhD¹

Md. Kamrul Hassan²

Shamsul Alam Khandaker³

Abstract: Land is an important asset on which fulfillment of our all basic needs like food, clothing, habitat, etc. depends directly or indirectly. Its proper management, justifiably, relates to ensure the fulfillment of those basic needs. But land management system in Bangladesh, as a legacy of colonial administration, is neither people oriented nor goal oriented but a revenue based one. It is one of the most complicated and public sufferings-prone sectors. Even after so many years of the independence, insignificant development has been made in this regard. This paper identifies management weaknesses in preparing ROR, Mouza Maps, maintaining records of land ownership, processing of transfer of ownership i.e. registration and mutation. It finds that current traditional land management system is complicated, time-consuming and involves personal discretionary decision process - which affects transparency and accountability. The paper recommends that an integrated single data-base on land holdings and ownership, registration and transfer under one single umbrella would reduce public sufferings, facilitate ensuring transparency and accountability; reduce land related disputes and contribute to overall development process of the country.

Introduction:

Land is an important asset on which fulfillment of our all basic needs like food, clothing, habitat, etc. depends directly or indirectly. Its proper management, justifiably, relates to ensure the fulfillment of those basic needs. But land management system in Bangladesh, as a legacy of colonial administration, is neither people oriented nor goal oriented but a revenue based one. It is one of the most complicated and corruption-prone sectors. Even after so many years of the independence, insignificant development has been made in this regard.

¹ MDS (Joint Secretary to the Government). BPATC, Savar, Dhaka:

² Senior Asst. Secretary, Cabinet Division, Bangladesh Secretariat

³ Office Supervisor, BPATC, Savar, Dhaka:

Despite a number of land reform programmes taken by the Government of Bangladesh since its inception, management of land still remains one of the complicated tasks for the government of Bangladesh. Reform initiatives including promulgation of Presidential Order (PO) 96/1972, PO 98/72, promulgation of Land Reform Ordinance, 1984, promulgation of Non-Agricultural Khas Land Management and Settlement Policy, 1995 and Agricultural Khas Land Management and Settlement Policy, 1997 made to ensure the best use of land. In addition, a number of projects namely computerized land management system as a pilot project, implementation of Computerized Land Ownership as a pilot project, land record archiving and automation of record room at the Office of the Deputy Commissioner, Manikganj, preparation of mouza map and khatian of the five mouzas of Savar upazila and digital database of Dhaka city land records were implemented but none of them made sustained impacts as originally planned. All these efforts were in different locations and were implemented separately where there was a clear lack of coordination. Although efforts were seen at a regular interval to streamline the land management including promulgation of various laws and rules at different times but implementation of rules and regulation were not so evident. In addition, there was a clear lack of proper database in case of preparation of land records that is, records of rights (ROR) and Mouza Maps, transfer and registration and updating ROR through mutation etc.

1.1 Objectives

Land Management covers a plenty of activities like, maintaining records relating to ownership, transfer of ownership, right to use, access to use, records of land characters and so on; which is one of the core businesses of the state. Ensuring citizen's entitlement, ownership rights, rights to use, rights to access are the constitutional responsibilities of the state. Bangladesh inherited a traditional land management system which is mainly dealt with by manual process and procedure. Because of traditional process and procedure land management is affected by the personal discretion, authority and decisions which makes the system ineffective, non-responsive and unfriendly to the service recipients. Against this backdrop, this article is attempted keeping in view to achieving the following objectives:

- identify the major weaknesses in the process of preparing ROR

and Mouza Maps, transfer and registration of ownership of land and updating ROR through mutation,

- identify the areas of digitization and find the ways which can reduce land related problems; and
- find the ways to ensure transparency, reduce corruption, public sufferings and make land records accessible to the beneficiaries and stakeholders.

1.2 Rationale

As land is one of the most valuable physical assets of mankind so the development of a country depends largely on the manner this resource is managed. Major development activities of a country such as poverty alleviation, agriculture and food security, shelter and housing, natural resource management etc. all are closely linked to the factors of land and how the land is managed. Without sound management of land it is very difficult to meet the goals of development. Present land management includes preparation of ROR and mouza maps, transfer and registration of land due to sale or any other forms of transferring ownership and updating ROR through mutation and other day to day activities relating to ownership, rights, entitlement, use and access to land. Among them ROR and mouza maps are prepared through the process of survey and published by DLRS and handed over to Deputy Commissioners, Upazila and Union Land Offices for land management between two surveys are conducted. Records are used either for the implementation of land use policy or settlement of khas land or updating ROR through mutation as a consequence of any transfer or registrations.

Due to lack of proper land database and faulty updating of records sometimes a single piece of land is transferred several times to different persons leading to land litigation. Due to complex process and lack of coordination among different departments responsible for land management, it is not easy to have access to the land matters by the land owners to get the real picture of their land. At the same time, more time and money are to spend to get the information as well as service.

Introduction of digital land management system can facilitate the management authorities to maintain records with less cost, time and human resources. Digitization can facilitate the service recipients to obtain information quickly. At the same time, with updated data

coordination among the departments involved in land management will be easier which will eventually lead to a transparent and efficient land management. With transparency and efficiency it will be easier to serve the people best as well as to implement different land use policies of the government. This paper attempts to identify the weaknesses of land management particularly the problems of existing ROR and mouza maps, problems in the process of preparing ROR and mouza maps, problems of transferring and registering land as well as updating ROR through mutation. For a better land management including recording, transferring, registering and updating records through mutation the use of modern technology through digitization for the optimum use of land.

1.3 Methodology

The study is based on secondary data and information. Relevant books, journals, periodicals and daily news papers have been consulted to have a conceptual framework. Data regarding weaknesses and areas of improvement through digitization have been collected mainly from experiences of the field level personnel involved in the process of land management. Intensive searches have been made especially for sharing the experiences of digitized land management across countries.

2.0 Historical background of land management in Bangladesh

The present land management system in Bangladesh is the legacy of colonial land administration which was neither people oriented nor goal oriented but a revenue based one. The land revenue system was first introduced at the time of Hindu Rulers of ancient India. Sher Shah introduced a regular system of land measurement together with the assessment and collection of revenue. He worked on land record survey from 1540 to 1545. Then Akber, the great Mughal Emperor introduced a universal and standard way of land record and survey (Debnath: 2000: 16). The British established an elaborate system of land survey and registration based on the concept of net assets. In 1793, the Permanent Settlement Regulation vested rights to own land to a class of Zaminders. From 1888 to 1940, a Cadastral Survey (CS) of undivided Bengal created the original record of land rights. This is often still accepted as evidence by modern courts.

In 1947, the then Pakistan continued with a version of the net assets system but this declined in importance due to reduced frequency of settlements and poor maintenance of land records. After the enactment of The State Acquisition and Tenancy Act, 1950, the Zamindari system was

abolished. State Acquisition Survey was conducted from 1956 to 62, based on the CS blueprint. Although revisional settlement operation commenced in 1965, but progress was very slow and by 1995 it had only been completed 10% of all thanas. (The Daily Star: 2006). In this procedure the preparation of land records are entrusted with the Directorate of Land Records and Survey (DLRS) with the direct supervision of Zonal Settlement Officer. After preparation, land records are handed over to the collector and Upazila and union land offices. In between two settlement operations the land records are updated by the Assistant Commissioner (Land) as a result of sale or any other form of transfer under the supervision of Deputy Commissioner.

Immediate after the liberation of Bangladesh, a number of initiatives were taken for streamlining land management. In 1972 through the promulgation of Presidential Order-98/1972 a ceiling of 100 standard bighas was established and The Bangladesh Land Holding (Limitation) Rule, 1972 was made for the recovery of access land with a view to distributing excess land among landless. In 1984 promulgation of the Land Reform Ordinance limited future land acquisition to 60 bighas whilst retaining present ceiling of 100 bighas. Benami (not in real name) transfer were outlawed, legal recognition to the rights of sharecroppers was given for the first time and sharecropping was established as the admissible form of tenancy contract.

In 1988, Cluster Village Program started resettling landless people but the success is also a very little. In 1997, a new Agricultural Khas Land Management and Settlement Policy was introduced for providing land to the landless for ensuring justice and equity. Recently government has decided to provide land to the landless as part of land reforms. In 2004 Registration Act has been amended to minimize corruption and reduce litigation in the case of registration imposing some compulsion upon registrar to register a piece of land or any other documents. The present government has declared in the charter of change namely Vision 2021 at page 10 that "All records will be computerized and a land reform commission will be formed to ensure increased production and social justice in the distribution of land and water resources".

2.1 Legal Basis of Land Management

Land management is a complex matter which is operated and controlled by a number of laws. Among them The State Acquisition and Tenancy Act, 1950 is treated as the mother law for land management. To comply

with the objectives of the said act Tenancy Rules, 1955 is the supplementary rule. Rule 26-35 of the Tenancy Rules, 1955 are used to prepare the Record of Rights, section 116 and 117 of The State Acquisition and Tenancy Act, 1950 is used to update the land records through the amalgamation and separation of holdings respectively. Survey Act, 1935 is the mother law for survey and settlement operation which is supported by the Survey and Settlement Manual, 1935 and Technical Rules on Survey, 1957 (Mia: 2003: 31-97). Transfer and registration of any land is done as per Registration Act (Amendment), 2006 which is supported by Registration Rules (Rahman: 2006). All these acts and rules are supported by some other substantive rules and regulations.

3.0 Understanding Digitization of Land Management

This article uses the conventional definitions of various concepts relating to land management as clarified below:

3.1 Land

According to The Concise Oxford Dictionary, 'Land' means the 'solid part of the earth's surface'. The word 'land' is also defined in subsection 16 of section 2 of The State Acquisition & Tenancy Act, 1950 as 'Land means land which is cultivated, uncultivated or covered with water at any time of the year, and includes benefits to arise of land, houses or buildings and also things attached to the earth, or permanently fastened to anything attached to the earth' (Alam: 2007: 172)

3.2 Land Management

Traditionally, land management refers to i. preparation of land records specifying the characteristics of land holdings (e.g. high land, low land, paddy land, household land etc.), ownership and use of land; ii. registration of transfer of ownership by selling, donating by any other legal forms of transfer; iii. mutation, i.e. establishing records of rights and maintenance of records of rights. These three basic functions of land management in Bangladesh are performed by the Directorate of Land Records and Survey (DLRS), Department of Cooperatives and Registrar and Deputy Commissioner under different ministries. These three departments are not mutually accountable, rather, they work independently.

Land Management includes preparation of ROR, maintenance of ROR,

implementation of land reform programs, assessment and collection of land development taxes, settlement of agricultural and non-agricultural khas lands and char land, maintaining the ceiling of land, recovery of excess land, management of public easement on land and sairat mahal, implementation of National Land Use Policy and other day to day functions of land management authorities.

Land management means the existing day to day and routine state interventions and regulations in the existing land system of a country/state/province. In other words, good land management tries to improve the existing land related practices and processes within the overall relation existing between the population, the land, and the state' (Siddiqui: 1997: 2).

International Journal of Land Management (1996) has defined Land Management as the 'means by which the resources of the earth with particular reference to land and all that is contained upon and below, is managed. The management includes the collection of data about land, the processing, analysis and presentation, followed by the decision to its use as dictated by imposed rules and regulations related to its ownership, valuation, rights, registration and its impact on the environment'.(Siddiqui: 1997: 3).

Modern land management is not limited to these three activities rather it comprises use of land, development of land, protection of land texture, maintain characteristics of land holdings to sustain environmental, ecological balance, social and cultural heritage and sustainable economic development. Traditional manual and revenue-oriented land management cannot address all those issues. Thus, use of IT and modern technology in each and every step of land management is imperative.

3.3 Land Record Management

Land record management means preparation of ROR with mouza map, updating ROR through mutation and maintenance of ROR.

3.4 Digitization of Land Management

Digitization is the process of converting information into a digital format. In this process text and images can be digitized similarly: a scanner captures an image and converts it to an image file. In the process of digitization continuously variable signal is changed, without altering its essential content, into a digital signal. In case of digitization of land management we mean all the present land records including ROR and

mouza maps will be stored into computer without altering any data, further preparation of ROR and mouza maps will be done with the use of modern technology like Document Management and Retrieval System and Geographical Information System. After getting ROR and mouza maps will be supplied to other offices related to land management through online.

A data base having a interdepartmental compatibility standard will be created and will be stored in different offices related to land management. Data base will be in a form where everybody will be able to share the information but not to make any change in the data except the authorized personnel involved in the process of land management. The process of registering a land and updating ROR either as a consequence of sale or any other form of transfer will be completed with the use of modern technology. After registering a piece of land data will be sent to AC (Land) through online and it will be automatically updated by the AC (Land) as a routine work. After getting the work done a copy will be stored in a soft form and another copy will be stored in the form of hardcopy.

The database of land records will be connected to the databases of different offices relating to land management and web addresses will be created for each department and it will also be connected to the internet, where the people will be able to search, locate, view and download government reports, studies, computer software, data files and databases.

4.0 Problems of Land Management in Bangladesh

Land management in Bangladesh bears a colonial heritage which is very complex with archaic terms and conditions and there is a general lack of land holder's confidence in all sectors of land management. The major areas of land management are preparation of ROR and mouza maps, updating ROR, identification of khas lands, khas water bodies, khas ponds, vested property, abandoned property, unused land under different government offices, monitoring the land ceiling as prescribed by differential presidential orders. Among them ROR and mouza maps are prepared and published by the Directorate of Land Records and Survey (DLRS), updated by AC (Land) as a consequence of sale or any other forms of transfer which is registered by the office of the Sub-Registrar. So the functions mentioned above broadly categorized as record keeping, settlement and registration of land which is done by legally constituted three separate departments under three different ministries.

Among them, Directorate of Land Records and Survey (DLRS) under the ministry of land prepares and process land record; record keeping and updating records is dealt with by the Deputy Commissioner, where as registration is done by the Sub-Registrar which is supervised by the office of the District Registrar. Those supervising authorities are controlled by the Ministry of Land and the Ministry of Law, Justice and Parliamentary Affairs, Ministry of Public Administration and the Cabinet Division. Activities of preparing records, maintaining records, updating records, registering land by different authorities are the causes of lack of effective coordination at all stages of record keeping and registration which is the key problem for land management.

Secondly, ownership rights are being prepared with the appointment of contract basis seasonal workers. There are shortages of properly trained, experienced and educated personnel like Chainman, Surveyer Supervisor etc. In addition, there is a clear lack of transparency in the process of preparing records. As they are not the permanent staff, it is difficult to ensure their accountability. The records are maintained by two different offices. At the lowest tier, the function of record keeping is the responsibility of union land office, while registration is done by the Sub-Registrars, and a different office handles the issues of settlement. As land records are prepared, maintained and updated by different offices, it becomes difficult to ensure in time disposal of disputes. Multiplicity of documents regarding land records is a common phenomenon leading to further complexity. As a result, the absence of an updated, systematic and universally accepted source of information on land resource availability and land rights lie at the root of much of the problems associated with land and its reform programs.

Thirdly, the process of land management is time consuming and complex. This is probably due to the absence of or minimum use of modern technology and traditional attitude of the personnel involved in the process of land management. Due to the use of traditional method there is no updated land database. In the present system, there is no appropriate process to identify an inheritor of land. Because birth and death registers were not maintained for identification of inheritance. Officials are to depend on local government bodies where registers of birth and death were also not maintained.

Fourthly, deed writing process is too old continuing since the Mughal era. Land registration is totally done manually. Lack of sufficient registers is

also a common phenomenon in land registration offices. Due to lack of use of modern technology there is no land database regarding the land registration. Searching of registered document is also complex. It is time consuming as well as confusing due to lack of database. Lack of supervision in land registration offices is also evident. Due to absence of Balam Bahi (Register) it takes time to get the copy of register land.

Fifthly, disposal of mutation cases is very complex. Mutation takes more time and money than fixed by the government. It is one of the main areas of public sufferings and harassment by the personnel involved in processing of mutation cases. Process server assistant, land officer, surveyor, Kanongo, AC Land are involved in the disposal of mutation cases. If data base is maintained and updated regularly, processing time and procedure could be minimized. Issuing notices to the owner, acknowledging the receipt of notices, hearing of parties can be done at one stop.

Sixthly, fraud and tricks in all the sectors related to land management have gone out of control in Bangladesh. Which, it seems, as the main reason behind slow, poor quality and faulty land records, in case of preparation and its maintenance as well. Due to absence of transparency, all kinds of irregularities are common. People in the administration who are responsible for creating and maintaining land records often prepare incorrect records intentionally and land owners are forced to pay and suffer for that. And the situation paves the way for both? the management officials get the chance to be corrupt and the land sharks, on the other hand, to get ownership transferred and recorded illegally in their names leaving the real owners running pillar to post to get justice. Aparna Ray, in her research work, 'Digitizing Land Records to Combat Corruption in Bangladesh' finds that in 2006 alone, bribe worth about 83 billion Bangladeshi Taka were paid for land related services such as registration and altering records (Ray:2010).

Finally, the current land management system is pretty much archaic. At present there is no database where a person searching the database can get all the information pertaining to the land at a glance: history of ownership, registration, mutation, transfer, disputes, land status, legal disputes cases, land map, land tax information, land related wills and such other legal documents. No data-base on khas land, poor families/households, is maintained. Lack of data-base facilitates distorted discretionary decisions in distribution and use of khas land. Due to lack

of authorized data-base, external influence is rampant, and powerful elite land grabbers occupies alluvial land, char land, marshy land, and the land management authority can hardly take preventive measures against those irregularities.

The problems of land management in Bangladesh, as discussed above can be summarized as follows:

- process is complicated and time-consuming;
- personal discretion affects transparency and accountability;
- inadequate access to land management process;
- influence of external forces;
- scope of deflation in sale price for tax evasion;
- single data-base on land is absent; and
- the total system hinders development process.

5.0 Experiences of other countries

Effective land information is of particular importance to developing countries. They are the ones who are in the dire need of Land Information System to prevent wastage of their scarce resources. The cost of introducing new system and technology is high and the availability of skilled man-power is almost non-existent. Countries like Canada, UK, New Zealand, India and Malaysia are the examples of using modern technology in for information regarding land and land management. Among them India and Malaysia presents an interesting example of developing countries. In India a project named Bhoomi is notable in case of land management which working excellently to ensure service to its citizen regarding land management.

Bhoomi (meaning land) is the project of on-line delivery and management of land records in Karnataka. It provides transparency in land records management with better citizen services and takes discretion away from civil servants at service delivery levels.

The Revenue Department in Karnataka, with the technical assistance from National Informatics Centre (NIC), Bangalore, has built and operationalised the BHOOMI system throughout the state. The BHOOMI has computerized 20 million records of land ownership of 6.7 million farmers in the state.

BHOOMI has reduced the discretion of public officials by introducing provisions for recording a mutation request online. Farmers can now access the database and can follow up the process. In the BHOOMI project, a printed copy of the RTC can be obtained online by providing the name of the owner or plot number at computerized land record kiosks in 177 taluk offices, for a fee of Rs.15. A second computer screen faces the clients to enable them to see the transaction being performed. A land owner can check the status of a mutation application on Touch Screen Kiosks. If the revenue inspector does not complete the mutation within 45 days, a farmer can approach a senior officer with their grievance (available on: <http://www.bhoomi.karnataka.gov.in>).

Malaysia develops the process of introducing new and innovative land information. As mentioned in GDI for Land Management that Malaysian land management includes the development of the National Geospatial Data Centre (NGDC) and State Geospatial Data Centre (SGDC) as well as standardization of names and codes of land administrative boundaries, known as Unique Parcel Identifier (UPI). Along the similar focus to establish standardized data to enable consistency in the usage, a project was carried out to match the cadastral data in Sistem Pengurusan Tanah Berkomputer (SPTB) and cadastral data in Pengkalan Data Ukur Kadaster (PDUK) (<http://www.mygeoportal.gov.my/node/365>).

This project for the District of Pekan covered 33,738 lots in the SPTB. In PDUK, the project covered 34,848 cadastral lots that had been surveyed as of November 2007. In the process of land administration, the Land Office registers a lot in SPTB as temporary title and after the lot has been surveyed in detail by a land surveyor, the lot will be assigned the final title. The final titles are registered in PDUK. Due to some discrepancies, there are lots with temporary titles that have been surveyed and registered to have final titles in PDUK but are not updated in SPTB. The works to match the lots in the project identified 3 layers, namely, the lots that have the final titles, the lots that have temporary titles, and other lots that fall in neither category. Apart from these 3 layers, the works also created two additional layers; specifically, the lots with final titles as well as those with temporary titles that could not be matched. Since the status of all of the lot ownership in SPTB and the status of cadastral lot in PDUK has been ascertained, further steps to solve the outstanding unmatched lots can be further identified (available on:

<http://www.mygeoportal.gov.my/node/365>).

6.0 Effective Land Management

Land management is very crucial for the development of a country. Major activities relating to the development of a country such as poverty alleviation, agriculture and food security, adequate shelter and housing, natural resource management, equitable and secure access to land, etc. all are closely linked to the factors of land and how the land is managed. Without sound management of land it is very difficult to meet the goals of development. For an effective land management with other procedural and administrative changes following steps are desired:

Firstly, in order to ensure well managed, effective, efficient and quick disposal of mutation, registration, survey and land records - all related offices required to be brought under one umbrella. At Upazila level, for effective coordination among the Office of the Sub-Registrar, Office of the AC (Land) and Office of the ASO single management unit is needed. If these offices are brought under one umbrella with the supervision of one Officer, it will facilitate better services to people. Particularly in updating ROR, after the registration of a piece of land one copy of registered deed will be sent to Upazila Land Office and after receiving the copy of registered deed AC (Land) will start the process of mutation. It would be worthwhile to mention that three copies of original deed will be signed at a time by the Sub-Registrar. One copy will be sent to Upazila Land Office, one copy will be given to purchaser of the land and the rest copy will be preserved at the office of the Sub-Registrar as an official document. After the completion of mutation the updated information of the land will be sent to the Office of the ASO. The communication between AC (Land), ASO and Sub-Registrar will be reciprocal. As a routine work it is not necessary that the process of mutation would be initiated by AC (Land). AC (Land) should be meant for supervising authority of the three departments related to preparation and maintenance of ROR as well as land management rather than service provider. At the time of Survey operation AC (Land) will coordinate the activities of record preparation. Collector will be informed about the overall activities of land in an Upazila by the AC (Land). At present there is a post of AC (Land) at every Upazila but in the proposed system AC (Land) will work as AC (Land) Circle. A Circle will be comprised of two or three Upazila on the basis of its area and economic importance. As a result, it will be possible for the Government to provide a fulltime officer to ensure service to the people related to land litigation. As a supervising authority AC (Land) Circle should be given authority to hear about the primary

land litigation which is civil in nature. He will be solely responsible to ensure service to people with the general supervision of the Deputy Commissioner who will be assisted by ADC (Revenue). At the same time AC (Land) Circle will be held accountable to ZSO. District Registrar will also be held accountable to Deputy Commissioner. District Registrar and AC (Land) Circle will be meant for supervising authority and they will be working in coordination with each other. It will eventually lead to introduction of quick and effective updating of ROR to ensure citizen-centric service regarding land management. It is the need of the time to ensure quick and effective service to people specially for a democratically elected government. For this only strong political commitment is needed.

Secondly, the use of modern technology for preparation of ROR and mouza maps, updating ROR as well as registration of land due to sale or any other means of transfer. For survey operation GIS and aerial mapping can be used. After survey operation data can be stored in the digital format and can be linked with digital land database for the use of different offices involved in land management. For effective survey operation it is also very important to engage properly trained, skilled and experienced manpower who are capable to use modern technology in all the processes of land management namely in survey and mapping works, record keeping, maintaining record and registration of land.

Thirdly, establishment of a server station at Upazila level is a must which will update and maintain the land database immediate after any transaction. Land database will be created through LAN for the official use of land related departments. When any transaction will be done by any of the departments related to land management it will be updated by that department which will open the door to use the updated data to reduce multiplicity of documents.

Fourthly, with updated record when any land will be registered either as a consequence of sale or any other transfer it will be updated by the Sub-Registrar and immediate after registration of any land it will be automatically updated by AC (Land). With this process a land database will be updated regularly which will help to get the data by the land users or the beneficiaries. The database may be connected with the district web portal for ensuring information to the people.

Finally, simplification of archaic terms for the easy understanding of the stakeholders with different level of education is essential. At the same time for ensuring clientele services as well as to minimize massive

corruption which is prevailing in land management stick and carrot policy can be the best option. For ensuring clientele services like completion of mutation cases, providing certified copies of any documents related to land management or land registration and management of different sort of government land there should have a system of one stop service which is only possible with the formation of land database. Land database can only be created with the process of digitization. So, there is no alternative of digitization for proper management of land. For these different types of measures like short term, mid term and long term measures should be taken immediately after a need based analysis which may be conducted by a team of land experts. In this process land database which will be created may be the end result of digitization to ensure transparency, accountability on the way to reduce corruption. The following measures may be considered to modernize our land management:

- an integrated land management system may be introduced; a land management authority may be established and coordination unit under the authority at every administrative and local government unit (at Division, District, Upazila and Union) may be established. This coordination unit shall be responsible for maintaining integrated data base and coordination among all departments and agencies with regard to land management information system.
- a separate and independent body may be formed to settle disputes relating to land ownership, transfer, registration;
- all kinds of records relating to land to be digitized;
- readymade data-base and installation of server, in every local government unit to be ensured;
- private partners or contracting out method may be applied as digitization of all records involves huge cost which would be difficult to finance from public sources; and
- while applying the process, involvement of the land owners may also be considered as cost-sharers;

7.0 Conclusion

Digitization all over the world is treated as a means of expanded government service with simplified procedures of dealing with government to make the government efficient and transparent and accountable for all its decisions and actions. Modernization of land management through digitization of all processes involved in ROR and Mouza Maps, transferring and registration of land ownership, updating ROR through mutation will reduce public sufferings, ensure transparency of decisions and facilitate the enforcement of accountability of all officials involved in the delivery of services.

Digitization will not only accelerate the service delivery in an efficient manner it will also pave the way for a better land management as well as implementation of land use policy. With proper implementation of land use policy, proper urban planning, optimum use of land for optimum production and other purposes leading to boost up countries economy as well as ensure food security of the people will be ensured. For all these, digitization of land management can be the best step. For digitization proper use of resources for creating skilled manpower is necessary. At the same time positive attitude to use ICT is also essential.

Reference:

- Alam Hasan Jahangir (2007) The Sub-Continental Land Dictionary, Imran Prokashoni, Dhaka.
- Banglanews (2008) Digitization must for land reforms, September 24.
- Debnath, N. C. (2000) Bangladesher Bhumi Babosthapana, Nity Debnath, Sylhet.
- GDI for Land Management available at <http://www.mygeoportal.gov.my/node/365> accessed on 02/12/2010.
- Land Records on Web available at <http://www.bhoomi.karnataka.gov.in> accessed on 02/12/2010
- Mia Md. Abdul Quader (2003) Land Survey and Land Management, 31-37, A. K. Prokashoni, 45, New Eskaton Road, Dhaka.
- Morshed, K.A.M. and Rahman M. (2009) Strategic Priority of Digital Bangladesh: Land, UNDP
- Potder, B. V. Land Information System in the present day context available at theovel@blr.vsnl.net.in
- Rahman Md. Mizanur (2006) An Introduction to Registration Act and Rules, 56-57, Sidweswari Road, Ramna, Dhaka.
- Ray, Aparna (2010) Digitizing Land Records to Combat Corruption in Bangladesh cited on <http://globalvoicesonline.org/2010/09/19>.
- Siddiqui, Kamal (1997) "Land Management in South Asia", Dhaka, The University Press Limited.
- The Daily Star (2006) The Problem with land priority, August 25.
- TIB (2008) National Household Survey 2007 on Corruption in Bangladesh, Dhaka, June 18.

In Pursuit of a New Horizon in Tourism: Revisiting the Archive of an Ancient But Rich Civilization at Tahirpur ("Haweli"), Sunamganj*

Md. Mokhtar Ahmed¹

Abstract: Sunamganj, one of the remotest districts of Sylhet Division, is marked for its spiritual sanctity, rich cultural heritage and ancient civilization teeming with scholarly 'Bouls', 'Spiritual Songsters' and many other performing musicians and stalwart artists with diverse quality, genius and creativity. Apart from being the breeding ground of numerous saints and lyricists, Sufis and musicians, it is also popularly known as the land of 'Hasan Raja' a celebrated saint, lyrist and musician while it is also featured as the spiritual ground of 'Hazrat Shah Arefin'- a spiritual religious leader, legendary figure and preacher of Islam in Sunamganj, which was once a lagging- behind region in terms of religious enlightenment, social advancement and educational enrichment. The underlying article reflects some facts and figures of the bygone glories and achievements of Sunamganj with particular emphasis on Tahirpur, an Upazila of Sunamganj lying towards the western part of the district surrounded by the ranges of the Meghalaya mountain.

The paper mainly concentrates the erudite research on 'Haweli', a Royal Palace which is at the verge of extinction in the jurisdiction of Tahirpur upazila. The paper describes about the various facts and figures of the 'Haweli' at Tahirpur. Its main concentration hinges around to establish the proposition that the 'Haweli' at Tahirpur can emerge as a potential tourist spot.

* **Acknowledgement:** With profound gratitude, I acknowledge the erudite contribution and kind support of Dr. Muhammed Sadique, Secretary, Election Commission. His affectionate guidance, assistance and lively deliberation during the depiction of various episodes of this historically important and archeologically significant site have enabled me to ponder on and perceive from different standpoints on the underlying topic. I am ever grateful to him.

I appreciate the inspiration provided by poet Shamsul Alam Khandaker, who has helped me with editing the topic as well reviewing the whole document. I will always carry his inspirations with me.

¹ Deputy Director, (Sr. Asst. Secretary) BPATC, Savar, Dhaka

Introduction:

Sunamganj is the pathway both to a spiritually rich and culturally prospective civilization embellished with ambience of flora and fauna. The district is split into 11 Upazilas (Smallest Administrative Unit) and this paper would highlight some special features on one of the Upazilas of Sunamganj- Tahirpur with particular emphasis on 'Haweli'- a Royal Palace and the archive of ancient but rich civilization which has unfortunately been exposed to the verge of extinction from the human history. This paper would examine the pros and cons of this Royal Place and also flash some considerable light on its archeological -aesthetic aspects, ecological rationale, topographic harmonies as well as tourism value in the context of Bangladesh and also examine the rationality of its turning into a prospective tourism spot with burgeoning tourists in future. It would later discuss the impact of tourism contributing positively on the ecology and topography of Tahirpur- the mentor of Sunamganj district and also the foster child of the Meghalayas, surrounded by strenuous range of hills, dales and valleys.

1.1 Objective

This article intends to orient the tourists and all those concerned with the tourism administration and business to ponder over this burning environmental and ecological issues and consider 'Haweli' at Tahirpur as a potential tourist spot which would open new horizon and scopes in the realm of tourism in Bangladesh for days to come. It is certain that some spots are still beyond our sight remaining still unearthed, undiscovered and unexplored. This write up throws considerable light on these issues as well. The mushrooming of tourism industry in coastal areas attracts thousands of tourists, dwellers, settlers and opportunists to urbanize the area along with the heavy surge of developers and real-estate agents who rush with their paraphernalia to distort the natural elevation, topography and ecology of such tourist spots in order to turn them into a city of din and bustle and pandemonium. Thus, the paper concentrates mainly on the hypothesis that the establishment of tourist spot in popular and easily accessible places is very likely to expose potential threat to the environment, exert highly negative impact on the ecology, distort the topographical harmony of the respective area in contrast to those places full of natural beauties and bounties, less accessible and considerably remote while at the same time alluring and attractive in nature. The proposed tourist spots are more likely to yield pure enjoyment and solid

entertainment of mental faculty of the tourists while potentially restricting the unwanted mushrooming of tourism industry, localization of market and migration of settlers likewise what happens with the present tourist spots. These tourist spots in question in this report are very likely to exert positive impact on the flora and fauna of the respective region as well.

1.2 Methodology

While preparing this article, the writer has mainly depended on the primary data collected from the place of occurrence yet some data have been derived from secondary source as well. The writer, in effect, physically visited the spot and interacted with the neighbors, elites and the commoners and asked as many questions about 'Haweli' as possible based on a preset standard questionnaire (annex-1). The direct interaction with the common people gave the author some new insights into the issue and also gave vent to both some myth and reality about 'Haweli'. While visit, some important snaps were also taken to juxtapose them with the relevant facts and myths and with a view to enriching the report with some vivid and self-explanatory pictorial representation on the subject matter of the underlying report. While collecting primary data, physical visit and active interaction with heterogeneous group of people formed the major part in the collection of primary data. It is also to be noted that some relevant books, official documents, revenue reports and revenue-related land statistics did serve as the basis of secondary data that have profusely enriched the report. Some printed materials have also been carefully studied to bring the paper under a proper conceptual framework. The paper also reflects some other facts and opinions of the author while he worked there as chief executive and representative of the government (UNO).

1.3 Route Plan to Haweli

The map of both Sunamganj district and Tahirpur is appended here for the convenience of the tourists to understand the route to this traditional 'Haweli'. Tourists may like to visit Tahirpur in the following order and in compliance with the route shown in the map. This guideline describes the direction from Dhaka, the capital, to Tahirpur, the 'Haweli' at South Bordol. The whole journey from Dhaka to Tahirpur and 'Haweli' roughly takes about 10 to 12 hours.

Steps to be followed:

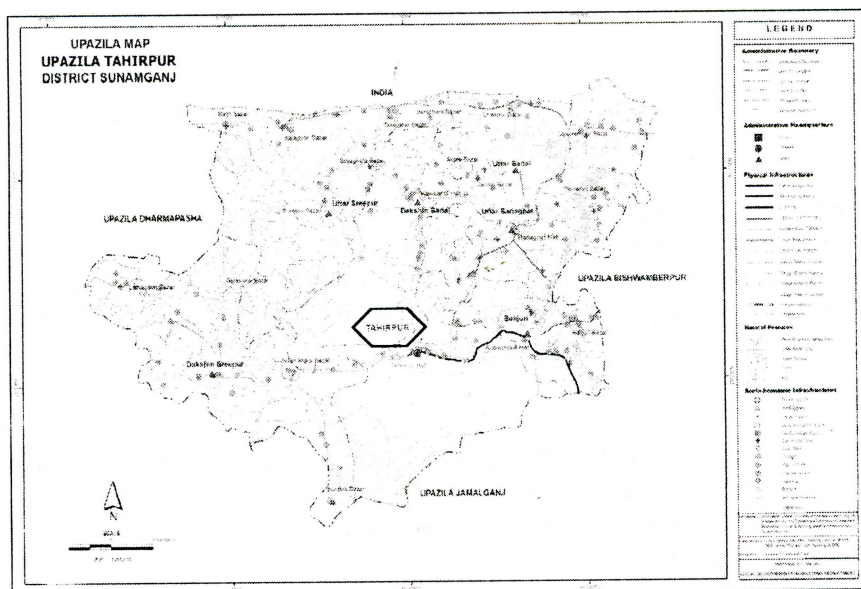
- i) Purchasing a ticket from Bus Counter of either Hanif or Shyamoli at Saydabad for Sunamganj;
- ii) The bus will arrive there at Sunamganj main road, Dhaka Counter within 6-8 hours.
- iii) The tourist may hire a richshaw or can opt for pedestrian journey which would take utmost five to fifteen minutes to reach the Surma river ghat/shore, just on the western part of the Dhaka Counter Bus Stand.
- iv) The country-boat or trawler or normal boat would take the tourist to the other bank of river within maximum ten minutes. The river Surma has to be crossed by width only and the other part of the bank is very much visible from the starting point. That it is nearly 100 meters in width to the most.
- v) The tourist would then have to hire a motorcycle to reach the spot which might take about an hour and a half. One may also go direct from the bank of Surma river to the near by 'Haweli' but he or she would have to again hire motorcycle or walk for ten minutes to reach the place. During rainy season, when the river inundates with water, one can reach any place of Tahirpur by country-boat or speed-boat or canoe boat.
- vi) The motorcyclist themselves serve as the tourist-guide gratis except the transport fare and they have adopted this profession as the basic means of their livelihood.
- vii) A tourist can come back just in the reverse manner and system. Mostly, motorcyclist-cum-guides have fare contact known as up and down cost. So, they help the tourists visit the place and stay with them as long as they are there and then come back with them to the river Surma, which is adjacent to the Dhaka Bus Counter.

2.0 The Haweli: The Detail Description of the Royal Palace

2.1 The underlying place is located in one of the unions of Tahirpur Upazila called Bordol (South). It is also locally known as 'Haweli Dewan Hawri' or 'Raj Bari' or the 'Palace'. The writer of this article being the chief executive of this Upazila, has personally visited the place, talked to the common folk and the elites of this place and endeavored at his level

2.2 Location

'Haweli Dewan Hawri' or 'Raj Bari' or the 'Palace' is under 'Holholia' mauza. The 'Haweli Dewan Howri Bari' or 'Bella King's Palace' is situated at 'Holholia' village of Laur Pargona under Bordol (South) Union of Tahirpur.



১৪
 ১৫
 ১৬
 ১৭
 ১৮
 ১৯
 ২০
 ২১
 ২২
 ২৩
 ২৪
 ২৫
 ২৬
 ২৭
 ২৮
 ২৯
 ৩০
 ৩১
 ৩২
 ৩৩
 ৩৪
 ৩৫
 ৩৬
 ৩৭
 ৩৮
 ৩৯
 ৪০
 ৪১
 ৪২
 ৪৩
 ৪৪
 ৪৫
 ৪৬
 ৪৭
 ৪৮
 ৪৯
 ৫০
 ৫১
 ৫২
 ৫৩
 ৫৪
 ৫৫
 ৫৬
 ৫৭
 ৫৮
 ৫৯
 ৬০
 ৬১
 ৬২
 ৬৩
 ৬৪
 ৬৫
 ৬৬
 ৬৭
 ৬৮
 ৬৯
 ৭০
 ৭১
 ৭২
 ৭৩
 ৭৪
 ৭৫
 ৭৬
 ৭৭
 ৭৮
 ৭৯
 ৮০
 ৮১
 ৮২
 ৮৩
 ৮৪
 ৮৫
 ৮৬
 ৮৭
 ৮৮
 ৮৯
 ৯০
 ৯১
 ৯২
 ৯৩
 ৯৪
 ৯৫
 ৯৬
 ৯৭
 ৯৮
 ৯৯
 ১০০

During the author's visit to 'Haweli Dewan Hawri' or 'Raj Bari' or the 'Palace', most of the commoners and natives were present describing the factual and fantastic evidence and whereabouts of this Royal Palace. It is known from the natives that about 500 to 600 years ago, there lived a king

named 'Bella'. He was cruel and selfish and basically a cannibal by nature. He used to put those khasias coming from Assam to the sacrificial altar in the river 'Khaimara' in the name of Deity to have the divine pleasure and bliss. Being aggrieved at such cruel act of the king, the Khasias burst into revolt and finally they shot a spell-whiffed arrow at the wife of the king who died on the spot. The king was very shocked at the incident and he left the Porgona bag and baggage along with the family members to another place not known to the natives. This is a very popular hearsay about this king 'Bella'.

After the disappearance of 'Bella' king, there appeared later some 'Zinda Ali Fakir' from Shimul village of Brahmanbaria. He came to this palace as a vagabond and became self-declared caretaker of 'Haweli'. It is heard that he put on red gown and had a sharp 'Sickle' or 'Spade' in his hand. That saint, as popularly recalled by the dwellers of Bordol, stayed there for long but no one knows the exact time or date of his death. His forerunners are still there at the 'Haweli' living under abject poverty. The author of this paper talked to an aged woman who claimed her to be the granddaughter of that Fakir. There was a short interaction with her but she could not provide mentionable information regarding her grandfather rather she thought the author to be some NGO officer and wanted some financial and homestead support for her livelihood. At the 'Haweli' area, 30/35 families are found to have built their habitat and it is known from the revenue office that they are all illegal occupants but no one disturbs them as they are the ancestors of that spiritual fakir, Zinda Ali.

2.5 The Physical Description of Haweli:

While visiting the area physically, it is found that there exist a number of architectural designs and cuttings on the wall which perhaps dates back to 300 to 400 years known from the local source. The building is in a very dilapidated state and most of the signs of this 'Haweli' have disappeared by this time. Inscriptions blurred . . .

This is evident from the pictures shown below:





The excavation of bricks, stones and other building materials by the local people have been going on for hundreds of years and the site is somehow surviving at stake and may be permanently vanished in no time if not immediately preserved by the concerned authority. It is learnt from the local source that stealing and removing of bricks and big and small stones are rampant from time immemorial. A spectator commented that a few years back, he saw more walls and structure but now a few remnants are there. All are gone. While examining the boundary walls and the archives, the author found the walls to be about 03(three) feet wide. The wall has a few layers. Both side of the wall is coated with a kind of reddish clay locally known as 'Surki' which is heard to have been prepared with the wet earth, limestone and some other chemical all mixed together to make powerful glue so as to join the baked special type of brick. The size of the brick is smaller than the usual brick available now-a-days with some inscriptions not clear. Two sets of brick are installed on each side with a big size stone in the middle. The bricks on both sides and stones in the middle seems to be well compacted with that special joining spice. The people have broken the walls and stolen mainly thousands of tons of valuable stones and the process is rampant and uncontrolled for a pretty long time. These stones are sold at a higher rate to the importers and business men and there had never been any measure to stop this theft. The author has also found some marble stones which seem to have been stolen in huge amount earlier. The author has still found some stones of various size and shape with various range of weight, i.e. weighing from 10 kg up to 2 to 3 tons.

2.6 The Haweli at a Glance

The 'Haweli' at present has 07 (seven) boundary walls and two Archways which have been halved by the landslide while the main gateway locally known as 'Singho Dwar' stands inclined to 70° angle.

These Archways are 15 (fifteen) feet long and 07 (seven) feet high. It is known from the local source that one more Archway has already sunken into the earth and no trace of this archway has ever been found.

The author came across a visibly beautiful water tank girdled with valuable marble stones with a wonderful reflection of silhouette for the one who stands on the stoop designed for the king, the then time. It was a 100 (hundred) feet long and 100 feet wide square pond stretching to the eastern part of the 'Haweli'. Stones of different shapes and sizes have been placed on the periphery and the bed of the pond gives a unique view of

the pond especially in the moonlit night. But ill luck would have it; the pond has lost its beauty and charm due to continuous and colossal human sabotage.

The author has fabricated his own imagination and intuition to describe on the existing pond to determine the exact location and original condition of that pond at present. The author to his utter dismay came across one dilapidated toilet and relics of other 3 to 4 broken walls which were also detected while ransacking the historically rich and archeologically important 'Haweli'.

On paying visit to another site, the author found the main residential area of the Dewan king. It seemed to have been aristocratically designed with the taste and delicacy vogue in that time. The residential area of the master bed of the king was measured to be 41 (forty one) feet long and 26 (twenty six) feet wide with 06 (six) doors. The average height of the door was measured to be about 07 (seven) feet. The average thickness of the wall of the residential area of the king, the boundary and the decayed and broken wall were measured to be 03 (three) feet wide.

The palace seems to have been fortified with rich and valuable stones and foliage which are found in almost every structure of this 'Haweli'.

The following pictures yield some flavor of this dynasty:



The Main Gate or 'Singho Dwar'







3.0 Findings:

01. While giving allotment from the Revenue Office, this place was not considered important and worthy of conservation in terms of its archeological and historical value.
02. Like the government, the dwellers and common people are also indifferent having no urge or impulse or zeal at all for the conservation of such an important archeological site.
03. It is also revealed that 0.20 and 0.52 acres are allotted from Plot No-255. Through another khas Land Allotment Case No 2427/90-91, 25870/91-92, 1.5 acre and 2.00 acre of land have also been allotted and thus a total of 4.22 acres out of 5.65 acres have been allotted to the allottees from this 'Haweli'. Thus the 'Haweli' which is about 5.65 acres have already lost 4.22 acres of land due to awkward and unreasonable allotment ignoring the underlying rules and regulation of land management and land administration system of the country.
04. The still un-leased land there simply indicates that these places of land are not supposed to be leased out. Here it is crystal clear that two contradictory principles have been followed by leasing some part of the 'Haweli' while un-leasing or keeping intact a smaller portion, which itself ultimately culminates into a gross anomaly in the allotment process of the land by the then revenue authority.
05. The very practice is also reflective of insincerity and indifference of the common mass, the elites, political top brass and the media as well as local administration both pertaining to revenue and development wing.
06. A place of archeology simply cannot be leased out is the clear and transparent principle of the government and it is also evident from the circumstances that the then authority never acknowledged or perceived the value of this important historical site and never did take any preventive measure for the conservation of such site rather leased it out being motivated by political or local or personal interest or whatever the case may be.

4.0 Recommendation

- i) The awkward and inconsiderate allotments should be immediately cancelled in order to protect this rare archaeological site and the whole area of 'Haweli' should be consequently brought under the direct government control and management.
- ii) The government may of its own initiative create ample of scopes for the preservers, environmentalists, researchers and think tanks to do about something for preservation of this diminishing valuable architectural site or the government on its discretion may outsource this site to some consulting and research agency who ever shows expression of interest in the conservation of this treasure trove of history and archeology.
- iii) Both the legal and illegal occupants should be shifted or ousted from this palace replacing them with another suitable land from the reservoir of other Khas land.
- iv) The unauthorized and uncontrolled excavation work should be immediately stopped. This can definitely help protect this archeological site from being sunken into oblivion.
- v) Active measures can be taken and budget from the concerned head can be allocated and released to categorically and gradually develop this 'Haweli' as a unique tourist spot in conjunction with the connectivity and linkage with another lucrative tourist spot the 'Tangua Haor'- a proposed and unparallel going to be tourist spot at Tahirpur.
- vi) The Royal Palace or 'Haweli' is a treasure trove of anthropology and archeology with rare and valuable stones which are definitely an object of research. Hence, some pecuniary penalty system may be imposed upon those who randomly and irrationally excavate this site. This would definitely help to protect the archeologically and anthropologically significant topography with a rich cultural heritage.

5.0 Conclusion

The palace or the 'Haweli' undoubtedly holds immense possibilities and prospects for Bangladesh and the author of this paper firmly believes that it can unfurl some new or unexplored areas of research and expertise with the underlying facts and information found about the ancient civilization of Bangladesh. It can add new dimension in the thesaurus of ancient conservable civilization like 'Mahasthan Gar' or 'Lalmai-Maynamati' or even 'Mohenjo Daro and Harappa' civilization. Moreover, this can be turned into an ideal research lab for the archeologists, researchers, conservationists, environmentalists and think tanks of the country who perpetually hover for innovation, exploration and creation. The 'Haweli' can also decipher a new and unknown chapter about the culture and heritage of our race paving ways and means for the anthropologists to go ahead with newer findings. The place can very easily be turned into an attractive, high-income yielding tourist spot which would have connectivity with 'Tanguar Haor' tourist spot. This sort of tourist spot has mainly two-fold advantages. These are that, they uniquely serve as treasure trove of beauty and bounty and yield genuine pleasure and pure entertainment to the tourists while being remote and inaccessible; such a tourist-spot would not allure other stakeholders in the urbanization process in contrast to other tourist spots. The second advantage that this sort of tourist-spot can yield is that such tourism centre can bring about a radical change in the socio-economic life of the poverty-stricken natives of Tahirpur. The government should come forward with initiatives and mission, proper budgets and allocation along with a host of archeologists, researchers, conservationists, environmentalists, think tanks and researchers who can make positive, important and valuable contribution in this respect. The author believes that the 'Haweli' should be immediately declared as 'Safe Zone' and be brought under safe-custody and protection network of the government machinery. Upon considering the findings and suggestion and if timely action and measures are taken, it can be concluded with optimism that this important treasure trove of archeology would not extinct rather it would attract tourists, serve as treasure trove of the rich beauties and bounties of Nature, a gnomonic home of information for the archeologists, environmentalists, anthropologist and many other think-tanks of the society.

তথ্যসূত্রঃ

- অচ্যুতচরণ চৌধুরী (১৩১৭) : শ্রীহট্টের ইতিবৃত্ত, প্রকাশক, শ্রী উপেন্দ্রনাথ পাল, চৌধুরী, কলিকাতা
- আবদুল হক চৌধুরী (১৯৮১) : সিলেটের ইতিহাস প্রসঙ্গ, চট্টগ্রাম
- আবু আলী সাজ্জাদ হোসাইন (১৯৯৫) : সুনামগঞ্জ জেলার ইতিহাস ও ঐতিহ্য, জালালাবাদ এসোসিয়েশন, ঢাকা
- আছদ আলী পীর, শাহ (১৩৯০ ব.) : শহর চরিত, সুনামগঞ্জ, সিলেট
- উষারঞ্জন ভট্টাচার্য (১৪০০ ব.) : শ্রীহট্ট সাহিত্য পরিষৎ ও পত্রিকা, কলিকাতা
- উপেন্দ্রচন্দ্র গুহ (১৯৭১) : কাছাড়ের ইতিবৃত্ত, অসম প্রকাশন পরিষদ গুয়াহাটী
- কমলাকান্ত গুপ্তচৌধুরী (১৩৪৭ ব.) : শ্রীহট্টের প্রাচীন ইতিহাস, শ্রীহট্ট
- জেলা প্রশাসন সুনামগঞ্জ (২০০২) : সুনামগঞ্জ পরিচিতি, জেলা প্রশাসন সুনামগঞ্জ ও জেলা উন্নয়ন সমন্বয় কমিটি, সুনামগঞ্জ
- জ্যোতিন্দ্রনাথ চৌধুরী (১৯৯৬) : শ্রীহট্ট-কাছাড়ের প্রাচীন ইতিহাস ও সংস্কৃতির রূপরেখা, বঙ্গীয় সাহিত্য পরিষদ, শিলং

তথ্যসূত্রঃ

- অচ্যুতচরণ চৌধুরী (১৩১৭) : শ্রীহট্টের ইতিবৃত্ত, প্রকাশক, শ্রী উপেন্দ্রনাথ পাল, চৌধুরী, কলিকাতা
- আবদুল হক চৌধুরী (১৯৮১) : সিলেটের ইতিহাস প্রসঙ্গ, চট্টগ্রাম
- আবু আলী সাজ্জাদ হোসাইন (১৯৯৫) : সুনামগঞ্জ জেলার ইতিহাস ও ঐতিহ্য, জালালাবাদ এসোসিয়েশন, ঢাকা
- আছদ আলী পীর, শাহ (১৩৯০ ব.) : শহর চরিত, সুনামগঞ্জ, সিলেট
- উষারঞ্জন ভট্টাচার্য (১৪০০ ব.): শ্রীহট্ট সাহিত্য পরিষৎ ও পত্রিকা, কলিকাতা
- উপেন্দ্রচন্দ্র গুহ (১৯৭১) : কাছাড়ের ইতিবৃত্ত, অসম প্রকাশন পরিষদ গুয়াহাটী
- কমলাকান্ত গুপ্তচৌধুরী (১৩৪৭ ব.) : শ্রীহট্টের প্রাচীন ইতিহাস, শ্রীহট্ট
- জেলা প্রশাসন সুনামগঞ্জ (২০০২) : সুনামগঞ্জ পরিচিতি, জেলা প্রশাসন সুনামগঞ্জ ও জেলা উন্নয়ন সমন্বয় কমিটি, সুনামগঞ্জ
- জ্যোতিন্দ্রনাথ চৌধুরী (১৯৯৬) : শ্রীহট্ট-কাছাড়ের প্রাচীন ইতিহাস ও সংস্কৃতির রূপরেখা, বঙ্গীয় সাহিত্য পরিষদ, শিলং

Achievement Motivation, Attitude towards Modernization and Academic Performance of Undergraduate Students

Fatema-Tu-Zohra Binte Zaman¹
Md. Saifur Rahman²

Abstract: *The present study aims to examine the relationships of achievement motivation, attitude towards modernization and academic performance among male and female undergraduate students. It was hypothesized that, achievement motivation and attitude towards modernization of male and female students will be significantly differing. It was also hypothesized that achievement motivation, attitude towards modernization and academic performance of students which will be positively correlated. Employing purposive sampling technique, 120 undergraduate students were drawn from two reputed Public Universities of Dhaka to serve as subjects in the present study. In order to measure the dependent variable original Bengali version of the "Achievement Motivation Scale" (Prayag Metha, 1969) and "Short form of the Modernity Scale" (Inkeles & Smith, 1976) was used which was suitable and applicable for use in Bangladesh. Academic performances were collected by using "Personal Information Form (PIF)". The statistical treatment of the data was done by t-test and Pearson product moment correlation. Analysis of the result revealed that achievement motivation did not differ according to gender. However, male students scored higher on modernization than female students. Analysis also reveals that achievement motivation, attitude towards modernization and academic performance are positively co-related.*

Introduction:

In education, as in other realms of life, achievement motivation plays a crucial role in the performance of students. Everyone has a need to achieve and a fear of failure, but these needs vary from person to person and from situation to situation. Each student acts on the levels of motivation differently, but some students are predisposed to having little desire to accomplish certain tasks (Atkinson, 1999). Some individuals have a need to achieve. They want to be successful at whatever they attempt. They have a high attitude toward success and work hard to

¹ Assistant Professor, Dept. of Psychology, Jagannath University, Dhaka 1100:

² 8th Semester Graduate Student, Dept. of Psychology, Jagannath University, Dhaka-1100

ensure they are successful (Atkinson, 1974). Other individuals have a fear of failure. They will avoid failure at all costs. Usually the individual will not even attempt the task. It has been shown that all students are influenced by achievement motivation (Atkinson, 1999).

Motivation, as it relates to students, is very important. Students who have high motivation to achieve generally do well academically and vice versa. But motivation does not guarantee achievement. Similarly, achievement does not reflect motivation (Keefe and Jenkins, 1993). Achievement motivation means to accomplish something difficult and to master physical objects, human beings, or ideas most rapidly and independently (Murray, 1938). Cassidy and Lynn (1989) define achievement motivation in general as the personal striving of individuals to attain goals within their social environment.

Atkinson and Feather (1966) addressed that one's perception of probability for achievement came from two types of motives: to achieve success (a need to achieve), and to avoid failure (a fear of failure). The motive to achieve success is based on (1) the need to succeed, (2) the individual's perception of the probability of success, and (3) the individual's perception of the value of the outcome (Atkinson & Feather, 1966; Atkinson & Raynor, 1978). The motive to avoid failure is based on (1) the need to avoid failure, (2) the individual's perception of the probability of failure, and (3) the individual's perception of the effect of the failure. "The strength of motivation to perform some act is assumed to be a multiplicative function of the strength of the motive, the expectancy (subjective probability) that the act will have as a consequence the attainment of an incentive, and the value of the incentive: $\text{Motivation} = f(\text{Motive} \times \text{Expectancy} \times \text{Incentive})$ " (Atkinson & Feather, 1966, p. 13).

Achievement motivation is often correlated with actual achievement behaviour (Camara, 1986, cited from Tella, 2007). Individuals' actual achievement behaviour depends not only on their motivation to achieve but also on whether they expect to achieve and whether they fear failure. People are more likely to work hard when they perceive a reasonable chance to succeed than when they perceive a goal to be out of reach (Atkinson, 1964). Children's expectations of success can be measured by asking them to predict a certain grade, indicate how sure they are that they can solve a particular problem, and select the hardest task they think they can do from a collection of tasks varying by degree of difficulty

(Philips, 1987). Researchers (Carr et. al.1991) have found that children with high IQs and high expectations of success in school get higher grades than children with low IQs and low expectations.

Achievement motivation has long been associated with task difficulty preferences. In an early formulation of achievement motivation theory, Atkinson (1957) proposed that positively motivated subjects would prefer tasks of moderate difficulty, whereas negatively motivated subjects would prefer either very easy or very difficult tasks. In dealing with the probability of success, Atkinson and Feather (1966) found in a study, "The person more motivated to achieve should prefer a moderate risk. His level of aspiration will fall at the point where his positive motivation is strongest, at the point where the odds seem to be 50 - 50" (p. 18). A person with a fear of failure does not want to take any risk, but when forced will choose either a task so easy it cannot be failed, or a task so difficult it cannot be expected to be accomplished.

Ibanez et al. (2004) found positive relationship between students' academic competence and their achievement motivation. Kuo (2006) found that, compared to those with low achievement motivation, employees with high achievement motivation adopted career strategies more frequently. Miron and McClelland (1979) pointed out that achievement motivation training could significantly enhance the performance of small business corporations. Stewart and Roth (2007) conducted a meta-analysis study and found that entrepreneurs had higher levels of achievement motivation than managers. Tucker (1988) found that entrepreneurs tended to have higher levels of achievement motivation than public-sector employees. Xue et al. (2006) investigated the relationship between achievement motivation, achievement goal orientation, career belief, and career choice of college students. Findings revealed that achievement motivation had a significant influence on career belief and choice. "Academic intrinsic motivation has been shown to be positively and significantly related to students' achievement and perception of their academic competence, and inversely related to their academic anxiety" (Eskeles-Gottfried, Fleming, Gottfried, 1998, p. 1448). Many students feel that if they make the effort and work hard, they will be successful. Effort is the key to success (Leondari, Syngollitou, and Kiosseoglou, 1998).

Alderman (1999) adds to the achievement theories, "Ability and effort have typically been found to be the most frequent reasons for success and

failure in achievement contexts" (p. 25). "For students who believe success is unlikely, the main priority is to avoid failure that is linked or attributed to ability through the use of failure - avoiding strategies" (Alderman, 1999, p. 68). Jenkins (1997) includes, "Children are born motivated to learn. Children enter Kindergarten still possessing this enthusiasm for learning. Educators need not motivate children to learn; their responsibility is to eliminate the loss of enthusiasm" (p. 111). Most children begin school with enthusiasm for learning. School is firmly fixed in their positive system of values. However, they seem to lose enthusiasm when school experiences fail to connect with their lives (Keefe and Jenkins (1993), p. 154). According to Parker and Johnson (1981), an individuals' achievement motive may be seen as a personality trait. Zhang and Lan (2007) found no significant relationship between motivation to achieve success and overall instrumental work values. However, this study showed that students with higher levels of motivation to achieve success scored higher on overall instrumental work values. Specifically, this study found that motivation to achieve success had significantly positive effects on five factors under the dimension of instrumental work values: Personality and interests, Morality and norms, Compensation and prestige, Occupational perspective, and Benefits. Zhang (2010) also found a significantly positive relationship between motivation to achieve success and perspective and development for students.

Miner (1980) concluded that achievement motivation is a male theory, and that it does not explain female behavior very well. In contrast, Cooper (1983) found that the predicted relationships generally held for women as well as men (i.e., the relationships for women were somewhat attenuated, but still significant). The conclusion of Miner that achievement motivation is primarily a male theory may have been valid previously, but Cooper suggested that the importance of gender differences in achievement motivation may be decreasing with time. One explanation is that the relative importance of achievement motivation has been increasing for women. Veroff, Depner, Kukla, and Douvan (1980) found that levels of achievement motive significantly increased among American women between 1957 and 1976. Likewise, in a longitudinal study Jenkins (1987) found that achievement motive increased for women between 1967 and 1981. As women have become more achievement oriented, gender may have decreased in importance as a boundary variable in achievement motivation.

Modernization refers to the mechanisms of inclusion, value pluralism, differentiation and status upgrading (i.e. welfare development) (Zapf 1991). Modernism is the movement to establish democratic institutions within the Islamic religious Diaspora, whereby some European ideas will be incorporated but Arabic socialism soundly rejected (Elger 2001). A more dynamic definition is given by Johannes Berger, 1996: "Modernization is the internal achievement of a society; the particular processes of modernization support each other in combination; the leading nations do not impede the followers; the processes of modernization are converging in a common goal". Modernization as a term in sociology is used to denote complex process of social change from traditional way of living and thinking. Modernization is historically inescapable and even irretrievable process of social change, which has been in a very wide sense, going on ever since man come out of his ice age and discovered the fire. Modernization, to be precise, refers to the deeper change in man's thinking and feeling, a change in his whole attitude to life's problems, the society and the universe. According to Inkeles et al. (1976) the modern man is distinguished by his rational belief, scientific outlook, readiness to master the environment and investigate into the mysteries of nature, willing participation in social, political activities and tolerance of views of others than his own. Modern man is almost diametrically opposed to the traditional man.

Professor Ashok K. Kalia (March 2012) conducted a study with 200 adolescents with an aim to examine empirically whether or not gender and academic achievement are capable of explaining variance of adolescence in attitude towards modernization. Analysis of results revealed that female adolescence is significantly higher on politics and general modernization in comparison to male adolescences. High achieving adolescence have more positive attitude towards modernization in comparison to low achieving adolescences.

A study of attitudes of B.Ed. trainees towards Modernization conducted by Chaudhari (April 2012) showed that the average score of attitudes of male trainees was 99.22 and female trainees was 91.35 toward modernization. The t-value was 13.11 which was signification at 0.01 levels so it was concluded that the attitudes of male B.Ed. trainees was higher than those of female B.Ed. trainees. The result also showed that the average score of attitudes of rural and urban B.Ed. trainees was 87.44 and 111 respectively. The t-value was found 30.21 which was significant at 0.01 level so it was concluded that the attitudes of urban B.Ed. trainees was found higher than those of rural B.Ed. trainees.

2.0 Rationale of the study

With the development of scientific management and the growth of new social values, changes have taken place in the attitude towards modernization. Due to modern industrial development achievement motivation has become a controversial factor in youths for success. Both achievement motivation and attitude towards modernization creates direct or indirect effect on youth's academic performance. An attitude may comprise characteristics of strength, magnitude or intensity, importance, salience or centrality complexity, flexibility etc. Attitude formation and motives for change in attitude are directly influenced through questioning, personal experience and positive or negative reinforcement, the modernization lead to attitude change.

Modernization attitude is a psychological term of behavior. Modernization attitude of university students are generally positive or negative views of a person , place , thing or event - this is often referred to as the attitude object. Many literatures indicate that achievement motivation and attitude towards modernization have significant effect on academic performance on youths. Most of the studies so far, have been conducted in the western country. No such study was conducted in our country regarding this issue. So, the present study would like to investigate in our country. The result of the study may be of help to the researcher, teachers and especially for youths to bring about positive changes in achievement motivation, attitude towards modernization and academic performances.

3.0 Objectives of the study

The present study was therefore undertaken with the following objectives

- ◆ To see whether there is any difference in achievement motivation and attitude towards modernization among male and female students.
- ◆ To investigate the relationship between achievement motivation and attitude towards modernization.
- ◆ To investigate the relationship between achievement motivation and academic performance.
- ◆ To investigate the relationship between attitude towards modernization and academic performance.

4.0 Limitations of the study

This study had a number of limitations just like any other study. One of the most major limitations was that the information was collected only from Dhaka city because collecting information from all corners of Bangladesh is difficult. Also when some participants came to know that they will not be benefited from this research directly, they showed unwillingness to participate and didn't cooperate properly. As a result, information collection faced serious problems. The samples were not perfect representative of youths and also small in number. Some limitations like economical, time, resource, logistic support and manpower hindered the study in different ways.

If the above limitations turned into positive sides, it will be easier for future researchers to conduct this type of research. Again the study recommends further research on larger sample from different socio-economic backgrounds and different areas of Bangladesh, that is, proper representative sample and with better methodological sophistication and analysis. Further, researcher should incorporate more associated variables with insecurity.

5.0 Hypotheses

In the light of the above literature and the objective, the following hypotheses were formulated to test in the present study.

- i. Achievement motivation of male students will be higher than female.
- ii. Attitude towards modernization of male students will be higher than female.
- iii. Achievement motivation would be positively co-related with attitude towards modernization.
- iv. Achievement motivation would be positively co-related with academic performance.
- v. Attitude towards modernization would be positively co-related with academic performance.

6.0 Method

6.1 Sample

This research was conducted on a sample of 120 male and female (60 each), 21 through 25 aged Undergraduate students recruited from two reputed Public Universities of the capital city, Dhaka. The education level of the participants was between 2nd years Honors to 4th year. While the schools were selected purposively the respondents within each school were selected conveniently. All respondents were matched in terms of socioeconomic status and faculty. It is to be noted that all participants willingly took part in the present study.

6.2 Measuring Instruments

The present investigation was conducted to find out the relations among achievement motivation, attitude toward modernization and academic performance in youths of Bangladesh. Total numbers of 120 respondents were taken from the capital of Bangladesh. For data collection in the present study the following instruments were used:

- ◆ Demographic and Personal Information Form.
- ◆ Achievement Motivation Questionnaire.
- ◆ Short form of the Modernity Questionnaire.

6.3 Demographic and Personal Information Form (PIF)

The first instrument being used for primary data collection was demographic information about the respondents. This PIF involved the respondents' few personal information about their academic and self history. These are respondents' age, gender, socio economic status, department, university, present year/semester, merit, result of previous class. It is to be noted that after the personal information fill up phase instructions of the scales used were given to the participants verbally and in writing. There was no fixed time mentioned to complete both the questionnaires but average completion time of the questionnaire was 45 to 60 minutes.

6.4 The self report instruments used in the study are described below.

6.4.1 Achievement Motivation Questionnaire:

The Bengali version of the Achievement Motivation Scale was used which was originally developed by Indian social- psychologist Prayag Metha in 1969. Achievement Motivation Scale is a self report measuring instrument contains 22 items. Each item has 6 alternative answers in which participants were asked to select any one of them according to their own view. The split-half reliability co-efficient of the scale found by Prayag Metha was 0.67. The scale has high extensive evidence of validity. To measure the level of youth's achievement motivation the self report instrument contains 22 items with six alternative answers. Among the 6 alternative answers only 2 of them indicate or related to achievement motivation which is unknown to participants. If participants selected any one of those 2 will get 1 and get 0 if they selected another 4 of them.

The following figure represents the answer sheet which indicates achievement motivation.

Table-1: Scoring system of achievement motivation

Items No.	Achievement Motivation Indicate	Items No.	Achievement Motivation Indicate
01	খ উ	12	ক ঘ
02	গ চ	13	খ উ
03	ক ঘ	14	গ চ
04	ক উ	15	খ উ
05	গ চ	16	ক ঘ
06	ক ঘ	17	খ উ
07	খ উ	18	গ উ
08	গ চ	19	ক ঘ
09	ক ঘ	20	খ উ
10	খ উ	21	গ চ
11	ক চ	22	ক ঘ

The total score is obtained by summing responses of the items giving each question equal weight. High score indicate high level of achievement motivation where's poor score indicate low level of achievement motivation. The scoring system of the Short form of the Modernity Scale is quite different from another instrument. As the instrument contains 16 items and each item has various alternative answer. The scoring system for each item were given below.

For question 1 → "yes" for 1 and "No" for 0

- For question 2 → respectively 0, 1, 2.
 For question 3 → respectively 1, 2, 3, 4, 5, 6, 7.
 For question 4 → respectively 1, 0.
 For question 5 → respectively 1, 2, 3, 4.
 For question 6 → respectively 4, 3, 2, 1.
 For question 7 → respectively 2, 1, 0.
 For question 8 → respectively 1, 0.
 For question 9 → respectively 5, 4, 3, 2, 1.
 For question 10 → respectively 1, 2, 3, 4.
 For question 11 → "yes" for 1 and "No" for 0
 For question 12 → total number of organization indicate the score, but less then 7
 For question 13 → total number of problem - 1, but less then 5
 For question 14 → both answer for 2, one answer for 1, no correct answer for 0.
 For question 15 → "yes" for 1 and "No" for 0
 For question 16 → respectively 2, 1, 0.

6.4.2 Short form of the Modernity Questionnaire:

To measure the youth's Attitude toward Modernization the bangle version (Niharronjon Sorcar, 1993) of the short form of the overall modernity scale was used. This self report instrument was originally developed by Inkeles & Smith in 1976. The measuring instrument contains 16 items. Each item has two or more several alternative answers, in which a participant can give one answer according to their own view. Each item is an adjective or short phrase that is descriptive of the modernization attitude such as public opinions, crowd behavior, women's right, to accept the change easily, political functions, family planning, information, religious activities, to give opinion and the use of mass media etc The reliability of the scale found 0.95 and correlation co-coefficient of all the items varied from 0.08 to 0.42. This was widely popular for its extensive evidence of validity.

The modernization attitude score is obtained by summing responses of the items giving each question equal weight. High score indicate high level of modernization attitude where poor score is indicating low level of modernization attitude.

6.5 Procedure

After taking permission from the authority to conduct this research two standardized self report questionnaires and one personal information form (which was attached to the first page) were used. Before administering the test necessary rapport was established with the respondents. Respondents completed the Bengali version of the questionnaires in a relaxed setting. All the subjects were treated individually for each condition by the investigators. The respondents were informed that their responses were confidential and that they could not be personally identified in later publications. Finally respondents were encouraged to ask any questions they might have, and they were informed of their right to withdraw from the study at any time. It took one hour on an average to complete the task. It is also necessary to mention that academic performance was calculated from students' previous semester result. After the performance all the respondents were thanked by the investigators for their cooperation and participation in the study.

7.0 Result

The present study utilized the data gathered by the survey instruments to prove all the hypotheses. The data obtained from the returned surveys were analyzed and responses to the research question were made using descriptive and the inferential statistics, including item means, standard deviations, t-test and Pearson product moment correlation. The obtained results are presented in table 2 and 3. All statistical analyses were carried out using the statistical program SPSS version 11.5 for windows with the significance level.

Table-2: Achievement motivation, attitude towards modernization and academic performance of male and female students

Variables	Gender	Mean	Std. Deviation	t	Sig. level
Achievement Motivation	Male	8.2333	2.39609	.573	0.05
	Female	7.9833	2.38279		
Attitude towards Modernization	Male	31.5667	3.46590	2.480*	0.05
	Female	29.5833	5.13312		

The result presented in Table-2 indicates that there is no significant difference in achievement motivation among male and female students. [$t = 0.573$, $p < 0.05$]. The findings further indicate that although the male students obtained higher scores (Mean = 8.2333, Std. Deviation = 2.39609, Std. Error Mean = .30933) on achievement motivation than the female students (Mean = 7.9833, Std. Deviation = 2.38279, Std. Error Mean = .30762), the difference is not significant. The result did not confirm the 1st hypothesis.

The result also indicates that there is significant difference in attitude toward modernization among male and female students. [$t = 2.48$, $p < 0.05$]. The findings further indicate that the male students obtained higher scores (Mean = 31.5667, Std. Deviation = 3.46590, Std. Error Mean = .44745) on attitude towards modernization (Mean = 29.5833, Std. Deviation = 5.13312, Std. Error Mean = .44745) than the female and the difference is significant. The result confirmed the 2nd hypothesis.

Table-3: Correlation co-efficient of Achievement motivation, Attitude towards modernization and Academic performance

Correlation	r	significant level
Achievement motivation and Attitude towards modernization	.046	0.05
Achievement motivation and Academic performance	.102	0.05
Attitude towards modernization and Academic performance	.362	0.05

Result of Table-3 correlation indicate that achievement motivation and attitude towards modernization are positively correlated ($r = .046$, $p < 0.05$). The result therefore confirmed the 3rd hypothesis. Result also indicate that achievement motivation and academic performance are positively correlated ($r = .102$, $p < 0.05$). The result confirms the 4th hypothesis. Result also indicate that attitude towards modernization and academic performance are positively correlated ($r = .362$, $p < 0.05$). The result therefore confirms the 5th hypothesis.

8.0 Discussion

The present study was designed to explore the relationships of achievement motivation, attitude towards modernization and academic performance of university students.

No significant difference was found in achievement motivation among male and female students. In 1983 Cooper suggested that the importance of gender differences in achievement motivation may be decreasing with time. As women have become more achievement oriented, gender may have decreased in importance as a boundary variable in achievement motivation. Therefore, Cooper's study supports the findings of the present study and is unsupportive of the 1st hypothesis. Cooper's study also revealed that there is significant difference in attitude towards modernization among male and female students. It also indicates that the male students obtained higher scores on attitude towards modernization than the female and the difference is significant. The result supports the 2nd hypotheses. Similar findings were also found by Wilen Shy and While Inglehard in 1990. Girls of Bangladesh, in general, live in strict restriction. Our socio-culture system is quite different from the culture of advanced world. The activity of a girl is restricted and over protected, whereas boys don't have such restrictions. This is the basic for girls to have less than boys in attitude towards modernization. The results presented in Table-3 indicate that Achievement motivation and attitude towards modernization are positively correlated. The present is a modern age. In this modern age people of all sectors always have a target to achieve more than what they have. This achievement motivation works as a catalyst in modernization. This is because if one lags behind in the race towards modernization, he/ she will also lag behind in the race towards achieving their goal. The above are facts that are supportive of the 3rd hypotheses. Further the results in table 3 reveals that achievement motivation and academic performance are positively correlated. In 1993, Keefe and Jenkins found that students who have high motivation to achieve generally do well academically. Students with low motivation do not do well academically. Their findings are supportive of the 4th hypothesis. Table-3 finally reveals that attitude towards modernization is positively correlated with academic performance and confirms the 5th hypothesis. Modernization has far reaching effects on education system and the academic performance of students. For example, earlier a student had to go through a heap of books to find out a piece of information. Nowadays they can simply search the net. This is less time consuming

and very interesting for the students. When students find learning interesting their academic performance automatically increases.

9.0 Conclusion

Everyone has a need to achieve and a fear of failure. However, these needs vary from person to person and from situation to situation. Career development is becoming more and more important in youths, both male and female. In this study, there are three important factors related to career development which is important and challenging for youths. So there is a need to observe the relationships between achievement motivation, attitude towards modernization and academic performance among the university youths. Modernization brings about changes, both positive and negative, in social norms and way of life. The present study was undertaken so that youths could accept the positive changes and use their achievement motivation along with it to do better in their academics. Because, future career and socio-economic position of a student directly depends on his/ her academic results. Successful youths will be responsible to build a better future in our country. Because, "Today's youth are tomorrow's future."

References:

- Alderman, M. (1999). Motivation for achievement: Possibilities for teaching and learning. New Jersey: Lawrence Erlbaum Associates, Inc., Publishers
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, 64, 359-372.
- Atkinson, J. W. (1964). An introduction of motivation. Princeton, N.J :D. Van Nostrand.
- Atkinson, J. W., & Feather, N. T. (1966). A theory of achievement motivation. Huntington, NY: John Wiley and Sons.
- Atkinson, J. (1974). Motivation and achievement. Washington, D. C.: V. H. Winston and Sons.
- Atkinson, J. W., & Raynor, J. O. (1978). Personality, motivation, and achievement. Washington, DC: Hemisphere Publishing Corporation
- Atkinson, E. (1999). Key factors influencing pupil motivation in design and technology.
- Retrieved September 19, 2000. Website:<http://scholar.lib.vt.edu/ejournals/JTE/v10n2/atkindon.html>.
- Berger, J. (1996), "Was bedeutet die Modernisierungstheorie wirklich - und was wird ihr bloß unterstellt?", *Leviathan* (24), pp. 45-62.
- Cassidy, T., & Lynn, R. (1989). A multi factorial approach to achievement motivation: The development of a comprehensive measure. *Journal of Occupational Psychology*, 62(4), 301-312.
- Chaudhari, R. A.(2012) A study of attitudes of B.Ed. Trainees Towards Modernization.
- International Indexed & Referred Research Journal, ISSN- 2250-2556; Vol. I *ISSUE-1, April, 2012.
- Cooper, W. H. (1983). An achievement motivation nomological network. *Journal of Personality and Social Psychology*, 44, 841 -861.

Elger, Ralf (ed.) (2001), *Kleines Islam-Lexikon*, München: Beck.

Eskeles-Gottfried, A., Fleming, J., & Gottfried, A. (1998). Role of cognitively stimulating home environment in children's academic intrinsic motivation: A longitudinal study.

Child Development, 69, 1448-1460.

Ibanez, G. E., Kuperminc, G. P., Jurkovic, G., & Perilla, J. (2004). Cultural attributes and adaptations linked to achievement motivation among Latino adolescents. *Journal of Youth and Adolescence*, 33(6), 559-568.

Inkeles, A. and Smith D. H. (1976) *Becoming Modern! Individual Change in Six Developing Country (2nd Pregnant)*. Cambridge, Massachusetts: Harvard Univ. Press.

Jenkins, S. R. (1987). Need for achievement and women's careers over 14 years: Evidence for occupational structure effects. *Journal of Personality and Social Psychology*, 53, 922-932.

Jenkins, L. (1997). *Improving student learning: Applying Deming's quality principles in classrooms*. ASQC Quality Press.

Kalia, A. K. (2012). Attitude of Adolescence Towards Modernization in Relation to Gender and Academic Achievement. *Bhartiyam International Journal Of Education & Research*, March 2012 Volume 1 Issue 11 ISSN:2277-1255.

Keefe, J. & Jenkins, J. (1993). *Eye on education: Instruction and the learning environment*.

Larchmont, NY.

Kuo, Y.-F. (2006). Influences on employee career strategy adoption in the information service industry: Superior leadership style or employee achievement motivation?

International Journal of Management, 23(1), 176186.

Leondari, A., Syngollitou, E., & Kiosseoglou, G. (1998). Academic Achievement, motivation, and possible selves. *Journal of Adolescence*. 21(2), 219-222.

- Metha, P. (1969) Achievement motivation in high school, boys. New Delhi; National Council for Educational Reseal Training (NCERT), 1969.
- Miron, D., & McClelland, D. C. (1979). The impact of achievement motivation training on small businesses. California Management Review, 21(4), 13-28.
- Miner, J. B. (1980). Theories of organizational behavior, Hinsdale, Dryden Press.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.
- Parker, J. & Johnson, C. (1981). Affecting Achievement Motivation. Charlottesville, VA: University of Virginia. (ERIC Document Reproduction Service Number ED 226 833).
- Philips, D.(1987). Validity in qualitative research. Why the worry with warrant will not wane? Education and Urban Society,20(1),9-24.
- Stewart, W. H., Jr, & Roth, P. L. (2007). A meta-analysis of achievement motivation differences between entrepreneurs and managers. Journal of Small Business Management, 45(4), 401-421.
- Tella, A. (2007). The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in Nigeria. Eurasia Journal of Mathematics, Science & Technology Education, 2007, 3(2), 149- 156.
- Tucker, I. B., III (1988). Entrepreneurs and public-sector employees: The role of achievement motivation and risk in occupational choice. Journal of Economic Education, 19(3), 259-268.
- Veroff, J., Depner, C, Kukla, R, & Douvan, E. (1980). Comparison of American motives: 1957 versus 1976. Journal of Personality and Social Psychology, 39,1004-1013.

- Xue, H., Zhang, W., & Yu, J. (2006). Analysis of the relationships of achievement goal orientation and motive with career belief and choice in undergraduates. *Chinese. Journal of Clinical Rehabilitation*, 10(2), 46-48.
- Zapf, Wolfgang (1991), "Modernisierung und Modernisierungstheorien", pp . 23-39 in: W.
- Zapf (ed.), *Die Modernisierung moderner Gesellschaften*, Frankfurt: Campus.
- Zhang, D., & Lan, J. (2007). Research on the relationship between college students' job values and their achievement motivation. *Journal of Shijiazhuang University*, 9(6), 100- 103.
- Zhang, L. (2010). The relationship between work values and achievement motivation of students in teachers colleges. *Youth Sciences*, 7, 121-122.

Measuring Socio-economic Conditions of Street Beggars at Dhaka City in Bangladesh: An Empirical Study

Kazi Shahdat Kabir PhD¹

Md. Abdullah Al Helal²

Md. Mahbubur Rahman³

Abstract: The article explores the living standards, health conditions, education background of street beggars in Dhaka city. It illustrates that compared to the increasing population in Dhaka city capital of Bangladesh; beggars are also increasing in an alarming rate. It is such a life style in which one kind of people depends on other to earn their livelihood. Though beggars are the part of human society, they cannot enjoy their rights properly. Even they lead a miserable life depriving from education, food, shelter facilities of the city. Better treatment is beyond their means. Besides, many social crimes are also being committed by them. A large number of beggars mean non utilization of available human resources and drag upon the existing resources of the society. Basically they are the victim of vicious cycle of poverty. Apart from this, some are forced to beg by vested quarter. Besides, we have suggested some possible solutions to stop increasing beggars. In this regard a questionnaire survey study has been conducted to explore the socioeconomic conditions of street beggars in Dhaka city.

Introduction:

Nowadays the low income countries of the world are experiencing several problems without adequate solutions such as poverty, malnutrition, unemployment etc. Bangladesh is not exceptional of these. Associating with these problems beggary has created a grave concern in Bangladesh especially in the city of Dhaka, which is one of the megacities in the world. In Bangladesh about 1,141 persons living in per sq km in the countryside whereas 18,055 persons living in Dhaka city with a birth rate of 1.4 per couple, there would be about 20 lakh new mouths to be added every year (Khan, Asaduzzaman 2011). Experts opine that according to the infrastructural facilities and carrying capacity maximum 50,000 people can live in Dhaka city. Another report shows

¹ Associate Professor, Dept. of Development & Governance Studies, Northern University, Bangladesh

² Senior Lecturer in Social Work, Center for GED, Northern University, Bangladesh

³ Senior Lecturer in Anthropology, Center for GED, Northern University, Bangladesh

that in Dhaka there are more than 13 million inhabitants. Moreover, daily 2136 people are newly entering in capital. According to the statistics it is supposed to add 7,80,000 people annually in Dhaka city (K. Zehadul, 2010). With a population of more than 13 million, Dhaka has been ranked the most densely-populated city in the world. Along with bulk inhabitants higher beggar population creates manifold problems such as traffic congestion, proliferation of slums and heightening pressure on utility services." They cause troubles: Sometimes they cause accident (Ahmed, K. Neaz). Pedestrians and passengers are being annoyed by the increasing beggars. It is said that beggars are also liable to demolish beautification of the city. In abroad, the beggars beg of showing or doing some activities for giving pleasure to the mass people, but in Bangladesh things are totally different. This large number of beggar has questionable contributions in the overall socio-economic development in the country. Rather they consume a great percentage of our national income. Thus they are treated as unused human resource in the society as well as burden in the national life.

1.2 Rationale of the study

In the capital and other major cities in Bangladesh, various government agencies said that the number of beggars will be not less than one million and it is increasing in an alarming rate. Although there is no specific documents about the number of beggar in the country, yet approximately around 6,00,000 to 7,00,000 here living across the country a few years back, but has increased substantially (<http://balita.ph/2010>). For this reason, the street beggars have become a socio-economic and policy issue of Bangladesh government and they have planned to eradicate begging in the next five years, in addition to the national parliament passed anti-beggar bill on 1st April 2009. As the citizen of Bangladesh the street beggars have right to get facilities from the government in order to fill their basic needs. The development initiatives of the government will not be successful if this segment of people is excluded from the government support. For the betterment of the street beggars it is necessary to know their overall condition such as demographic information, livelihood patterns, family background, housing condition etc. So far we know no study was conducted especially on this area. We have found very few studies which have covered some of the above aspects. So, to address the problem of the street beggars first it is necessary to conduct some primary studies, so that the policy makers can take some steps on the basis of the findings. Considering these

necessities the present study leads to be one of the pioneers in this arena.

1.3 Beggar and Its correlates

(i) Socio-economic Condition

The term Socio comes from social, and refers to any number of demographic and social conditions, such as the age structure, racial composition, sex ratio, marriage and divorce rates and so on. Economic refers to the economic conditions, such as income, unemployment rates, savings rates, and so on. Social scientists use socioeconomic as an umbrella term to cover a wide variety of interrelated social and economic factors that might tend to explain an observed phenomenon, event or set of events. Social scientists have long observed that crime rates are associated with low income, birth rates, the divorce rate, and other factors. None of these occur in isolation. They are all related to each other.

(ii) Street Beggar

A street beggar is a person who begs in the street and asks for alms or charity or performance such actions which derive sympathy from others and who give something in return. So, street beggar refers who beg in the street requesting a donation in a supplication manner. Beggars are commonly found in public places such as street corners of public transport, where they request money, most commonly in the form of spare change. They may use cups, boxes or hats to collect donations (wiktionary.org).

(iii) Beggary

Beggary means begging on the roads or on door to door standing or entering a dwelling, house or a place of business or otherwise for the maintenance of himself and his dependants (Hyderabad Beggary Act, 1941). In addition to, soliciting or receiving alms, in a public place whether or not doing such as singing, dancing, fortune telling, performing or offering any activities for sale. It also denotes, having no visible subsistence and wandering, about or remaining in any public place in such condition or manner, as makes it likely that the person doing so exist soliciting or receiving alms.

1.4 Beggary: A Common Scenario of Dhaka City

The vast rural population often undergo natural calamities, mainly river erosion which render millions homeless and without provision for earning livelihood. A sizeable portion of such rootless people find its way into cities and towns in search of jobs. They work as day laborers, domestic helps, rickshaw-pullers and vendors. Those who are physically disabled and too old find begging as a profession. Their numbers are on the rise (The Financial Express, 2012). There is no place in the Dhaka city where beggars are not found. Mainly they gather on Friday near the mosques in the towns, bus stand, and railway stations, in front of markets and in the traffic signals. Almost all of the city's intersections, including Sonargaon Hotel, Sheraton Hotel, Kakrail, SAARC Fountain, Gulshan 1, Gulshan 2, Shahbagh, Motijheel and Baitul Mukarram, buzz with the whining beggars. Typical locations include -office building entrances, ATMs, parking meters, cultural precincts, particularly locations where there are queues for entry by tourists, major sports venues, petrol stations, fast food venues and restaurants, convenience and grocery stores (G. Rabbany 2007).

1.5 Beggars Classification and Way of Begging

The Following types of beggar can be seen in the street of Dhaka city. (i) Able-bodied adult beggars: They beg because they are unemployed or underemployed and have no other sources of money to support themselves. On the other hand some lazy who are not prepared to work hard are also tempted to become beggars. ii) Able-bodied child beggars: they are forced to beg due to family disorganizations. iii) Hereditary beggars: they consider begging as their hereditary profession. They beg without any hesitation. iv) Sick or Diseased beggars are suffering from chronic and incurable disease such as leprosy, T.13, skin diseases etc. v) Physically disabled beggars include blind, deaf dumb and crippled. vi) Mentally retarded beggars are fond to be mentally deranged. vii) Old and incapable beggars beg due to incapacity to work and earn a living. viii) Religion mendicants beg because they believe that beggary has the sanction of religion. (Rao, C.N. Shankar: 2000) Many of them recite verses from the holy "The Quran" and some are found singing Gazal (Islamic song). While begging in the street some of them utter peculiar sound to draw the attention of the passers-by. Some of them carry testimonial of the local chairman or from any important person, or from the physicians to help them for the time being. Some beg for the treatment, some for the help of his daughter's marriage. Nowadays they

play many tricks to draw the attention of the people. Many falsehoods are being played by them. There are countless false tricks they apply. Children also take some tricks to beg. Sometimes they sell used/stale flowers during traffic signal, seeking alms by washing glass of car during traffic signal. Sometimes they beg in the park saying false story like as "I have not taken any food whole day, my step mother does not give me food etc", then they try to cry but few minutes later they laugh. In some places some beggars are proved cheaters. Some able bodied are found pretending lame, blind or dump. Some healthy beggars pretend to be patients (G. Rabbany 2007).

1.6 Cruel Trade behind Beggary

It is found that children begging on the streets whose arms are amputated from the elbow or legs amputated from the knees. These children offer a very melancholic site and any soft person passing them cannot but help giving alms to them. These children are trained to play even musical instruments like a harmonium which they sometimes carry along. Some sing as well as they could, others play pranks and entertain the people mostly in rail compartments. Children are also trained how to cry and make melancholic faces so that people give them more alms. There are team leaders around them to watch the performance of these beggar children. Those who do not cry properly or beg properly are taken to task and their performance is monitored until they improve. In addition to, a vested syndicate is actively involved in this trade. They are adopting heinous strategies such as kidnapping children and making them disabled forever in order to deploy them in beggary. This sort of monstrous incidents has occurred in different parts of country. Last year on September 06, 2010, the media reported one such incident where a man named Omar Faraq kidnapped a seven-year-old named Niyamul from Kamrangir Char in Dhaka. The thugs severely injured the children with sharp blades. A case was lodged in this regard. However, the victim's family was threatened, allegedly in cooperation with the police. Some human rights organizations raised their voice against such barbaric activities. In the end, Law enforced group (Rapid Action Battalion) arrested Omar Faruk who confessed involvement with many illegal businesses. Reportedly, he used to intentionally impair healthy children in various cruel methods and forced them to get into beggary (Weekly Robbar 2011).

There are more than 30,000 beggars, under the control of about a hundred unscrupulous influential people, have been begging in groups in different places in Dhaka. The groups that trade in beggary collect paralyzed, blind, disfigured children, men and women and deploy them to beg at public places on a salary or commission basis. The owners of the beggars take all the money from them except their contractual salary or commission. The money earned in hardship by these beggars has turned these bosses into millionaires with luxurious houses and cars. There are lots of complains against the syndicate in the capital city. Some people have been arrested several times but released through bail after sometimes. Not only do they get the beggars into begging, but also they involve them in terrorist activities. They are also involved with drug business. In connection with some dishonest government officials, the bosses of beggars allegedly earn money in illegal ways (Daily New Age 2011).

2.0 Objectives of the Study

The main objective of the study is to assess the socio-economic conditions of the street beggars of some selected areas of Dhaka city. To achieve the major objective, the study also sets the following specific objectives. These are

- i) to find out the root causes of seeking alms;
- ii) to explore their livelihood (daily income and expenditure) pattern;
- iii) to examine their educational and health facilities;
- iv) to investigate the unmanageable problems they are to face usually security, police torture etc;
- v) to know the policy initiated by government and non-government organizations for them;

3.0 Literature Review

In the article "Categories of Street Beggars and Factors Influencing Street Begging In Central Tanzania" 2102 Baltazar M.L. Namwata et al. showed that street beggars fell into four categories namely beggars on the streets, beggars of the streets, beggars in the streets, and beggars of street families, based on where they slept after begging hours and contacts with their families. Furthermore, the phenomenon of street begging is an outcome of many factors, including poverty, unemployment, physical

challenges, death of parents and family disintegration. The study recommends that to address the phenomenon of street begging, policy planners and local government authorities must adopt multi-faceted, multi-targeted, and multi-tiered approaches in the form of preventative and responsive interventions.

CSID 2008 investigated that due to unfavorable situation many persons with disabilities (children, men, and women) are being bound to start begging on the street just for survival. Street beggars are being treated as lower cast in our society and they are being isolated. They do not have values and not even having minimum respect in the society. So, many disabled persons who are street beggar living inhuman lives. Their rights are being violated in every sphere of lives. The paper suggests that earning money and economic independence is the way to establish a person's self-confidence, self-esteem, acceptance and dignity in the family as well as society, but that must be in a dignified way or profession. Inaccessible infrastructure, transport system, unfriendly workplace environment and office equipment and inaccessibility in the financial support are the major barrier for employment of persons with disabilities in a dignified way. There is hardly any place in the world where beggars cannot be found. Even begging exists in the "advanced countries" of Europe and America. In some Middle Eastern countries such as Saudi Arabia where begging is officially outlawed, still one can still find some people begging. If they are not Saudi Arabian citizens, they are foreign nationals who come purposely to beg. This shows how serious the problem is (Omotoshio A. O 2001). People are doing beggary for many causes. Usually, people adopted begging because of destitution, broken homes, diseased, physical handicap and unguided childhood etc. Generally they are available at rubbish dump, road sides, and traffic lights and under flyovers. The term varies in terms of connotation, degree and kind (Devi Shanti 1962).

A Worldwide NGO World Vision (2010) explored that poverty, domestic abuse and violence, broken families or death of a caregiver(s) are some of the reasons why people become homeless and children unaccompanied. While some people are forced into begging, others turn to begging as a way to make money because there are few alternatives. The majority of adult beggars are disabled, elderly, mentally ill or afflicted with a stigmatized illness, such as leprosy. Children may also accompany adult beggars either through necessity or to be used to elicit greater sympathy from passersby.

Ojo, Y. A. (2005) showed that regardless of the reasons for which begging is taken to, the state of anomie of the city allows the beggar (of whatever category) to remain shameless, unidentifiable and 'faceless'. This attribute of facelessness resulting from the population thickness and heterogeneity of the city makes it difficult for the power that be and other concerned parties to get the urban street cleansed of beggars. It is no sooner that some of the state governments in the federation evacuate the beggars from the city than they reappear. Swanson, K. (2007) examined that indigenous beggars and street vendors are perceived to threaten the "proper" meaning of urban space or, rather, threaten the dominant ideological construction of space. If the ideological construction of urban space is to be a space of "beauty" or a space for tourism then, "ragged" beggars become incompatible with this meaning. These taken-for-granted aspects of place are thus used to turn attention away from social problems and reframe the issue in terms of the quality of a particular place. The issue thus becomes more about removing indigenous street vendors and beggars from the streets (framed in the common sense discourse that "the streets are no place for a child", for instance) rather than trying to alleviate the larger forces that push them there in the first place.

Baltazar M.L. Namwata, et al. (2011) showed that the appearance of beggars who seemed to spend most of their time on the streets and public spaces in many urban areas of developing countries can be traced back to the late 1960's. This situation is a reflection of urban complexities worldwide and has become a very common and familiar phenomenon for a long time. The population of beggars on our streets is growing exponentially. Today, their presence in the streets of urban areas of developing countries is recognized to be a serious problem that requires urgent redress. Not only have their numbers grown over the years, their lifestyles and the display of overtly aggressive behavior make them the subjects of suspicion and hostility by the public at large and the law enforcement agencies in particular. The menace of street begging as a potential threat to the environmental, economic and social survival of humanity societal fabric is evident. Jelili MO (2006) suggested that begging also constitutes economic threat to the society as beggars are not economically productive in any way since they contribute nothing to national economy. The city and national economy is retarded as considerable proportion of beggars population depend on the already overstretched workforce. The environmental implications of begging is made manifest not only in beggars' tendency to obstruct free flow of

human and vehicular traffic but also their high tendency to generate dirty materials either as waste or as parts of their belongings to their regular routes and stations. Although, the negative implications of begging discussed above have generated research efforts of various scholars, much has not been done on the social etiology of this social phenomenon.

Hitchcock, Tim (2005) examined that in the case of begging, we are confronted with a phenomenon that helps to remind us of the continuing importance of a moral economy in determining the everyday behavior of individual men and women. However compelling the new discourses of capitalism and utilitarianism might have been, most people, both beggars and almsgivers, continued to respond to the claims of social obligation and Christian charity. In the process, beggars were able to use subtly the varied rhetoric of social obligation to force the hands of their social superiors.

4.0 Methodology of the Study

This study is basically quantitative based on both secondary and primary data. A structured questionnaire was prepared to collect primary data considering the objectives of the study. A draft questionnaire was tested with 10 baggers to find out whether the questionnaire was understandable to them or if any changes were necessary. All the beggars of Dhaka city have been considered as population of the study and every street beggar aged 30 to 50 has been considered as unit of analysis. Cluster sampling has been used to select the respondents. Firstly, all the important points of Dhaka city, where significant number of street beggars live, have been identified. Secondly, twenty (20) significant points have been selected purposively i.e. New Market, Sodorghat, Baid Mokaram Masjid, Komlapur Railway Station, Shah Jalal International Airport etc. The total number of sample for the study was 200, which were drawn from the selected 20 different places of Dhaka city five (5) respondents have been interviewed [$20 \times 5 = 100$] from each 20 places and another 100 beggars have been selected as respondents randomly/ accidentally at any place of Dhaka city. They have been interviewed under questionnaire survey method. So, total sample size is two hundred 200.

5.0 Limitations of the Study

The beggar problem as such has seldom been a subject of rigid scientific inquiry. No doubt, there have been a few local studies and regional investigations but no definite research has been conducted on the problem

in its entirety and proper perspective in our country perspective. On the other hand beggars do not want to disclose their real information due to fear of being cheated or being eradicated by government or vested syndicate.

6.0 Major Findings of the Study

6.1 Respondents Profile

Gender	Frequency	Percentage (%)
Male	120	60
Female	80	40
Total	200	100%

Table-I : The data were collected from the significant points of Dhaka City Corporation area where street beggars are available. Among them 60% respondents were male and 40% were female.

6.2 Age of Respondents

Age	Frequency	Percentage (%)
30 - 34 Years	34	17
35 - 39 Years	26	13
40 - 44 Years	52	25
45 - 49 Years	41	21
50 - 54 Years	29	15
55 - 60 Years	18	9
Total	200	100%

Table-2 Data shows that majority respondents (25%) were 40 to 44 years of old while 21%, 17%, 15%, 13% and 9% were 45-49, 30-34, 50-54, 35-49 and 55-60 years of old respectively.

6.3 Residential Status

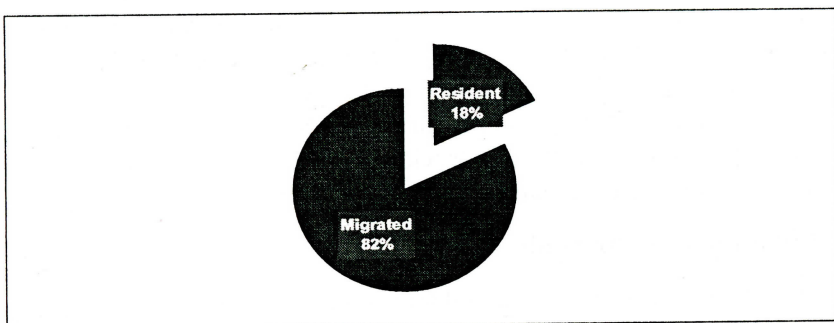


Figure-1

The above figure shows that only 18 percent beggars claimed that they are resident of Dhaka City Corporation. On the other hand 82 percent beggars confessed that they have migrated to Dhaka city from the country side. Among the migrated beggars 64 percent migrated with family and 36 percent migrated alone. Poverty, rural unemployment and frequent visit of natural disaster are the root causes of migration to Dhaka they mentioned.

6.4 Sleeping Arrangement



Figure-2

The survey reveals most of the street beggar's (46%) sleeping place at night is footpath. The second most (24%) sleeping position is public place such as bus terminals, rail stations etc. and do not use pillow or mat during sleeping. Mosquito appears their main enemy at sleeping time. Only a fraction of street beggars found in the survey who sleep in own house (5%), parent house (3%), sister/brother's house (2%) and relative's house (6%) as well.

6.5 Educational Background

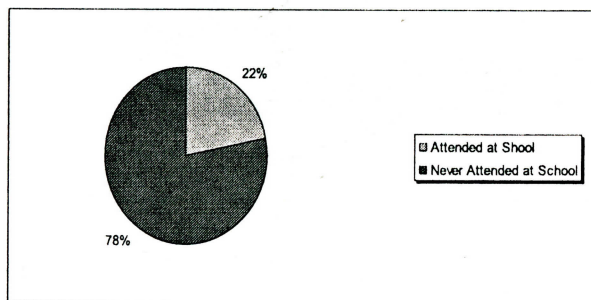


Figure-3

According to the survey, 22% street beggars of Dhaka City Corporation area attended at primary school where 3% completed class five which was the highest class they completed and the rests dropped out before that. In contrast 78% respondents never attended at school.

6.6 Reason of Begging

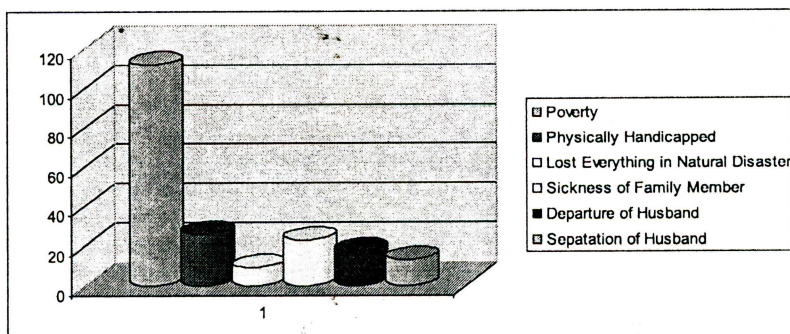


Figure-4

The survey shows that most of the beggars are the victim of vicious cycle of poverty- 551 percent street beggars disclosed that they beg due to poverty. In addition to, 12 percent forced to beg due to their physical impairment. Others also indicated natural disaster (51/o) specially river erosion and famine what made them destitute, sickness of family member (12%), departure of husband (9%) and separation of husband (7%) as additional factors behind their beggary.

6.7 Percentage Distribution of the Years of Begging

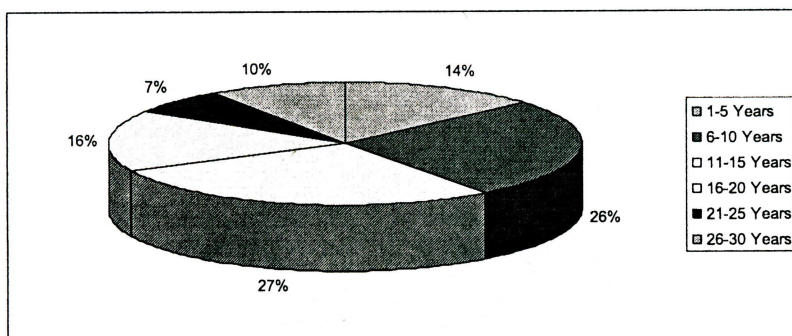


Figure-5

Among the respondents 14 percent had been begging around 1-5 years whilst 26%, 27%, 16%, 7% and 10% had been begging almost 6-10, 11-15, 16-20, 21-25 and 26-30 years in that order.

6.8 Begging Hours

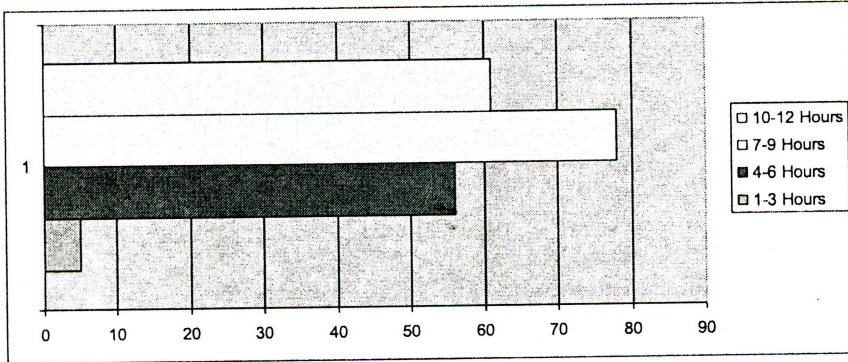


Figure-6

Figure shows that 31% of the street beggar interviewed in the survey was found to beg 10-12 hours per day. Besides, consequently 38%, 28% and 3% were seen to beg 7-9, 4-6 and 1-3 hours.

6.9 Percentage Distribution of Money Earned by Respondents

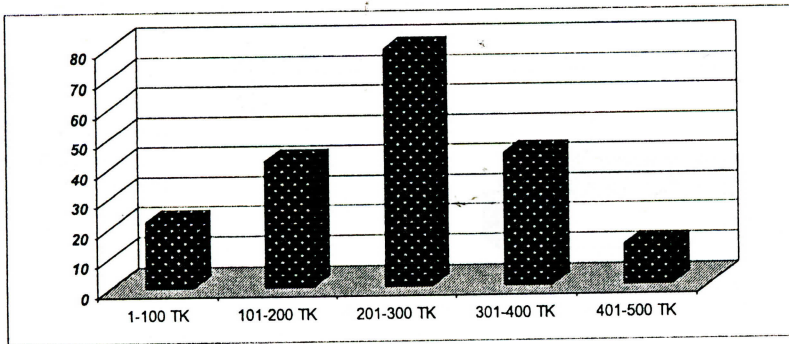


Figure-7

Highest amount of money earned by street beggars in Dhaka city is 401-500 TK daily basis and percentage 7% but average figure of earning of the beggars in the city is 201300 TK per day and 39 percent beggar earn that sum of money.

6.10 Nature of Expenditure

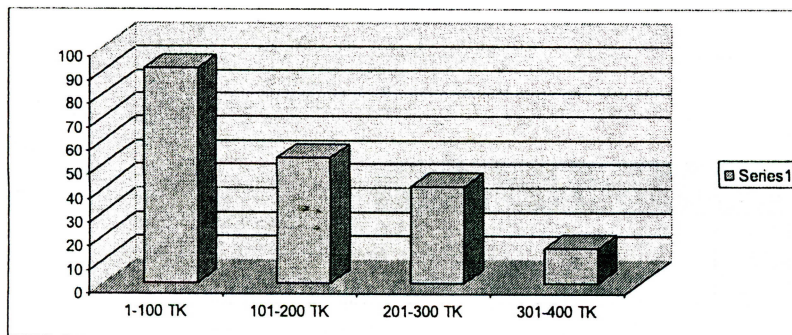


Figure-8

45% respondents said that they spend 1-100 Tk per day. Furthermore, 26% and 21% claimed that their each day expenditure 101-200TK and 201-300 respectively. Only few respondents (8%) informed, their daily disbursement 301-400 TK.

6.11 Major Sectors of Expenditure

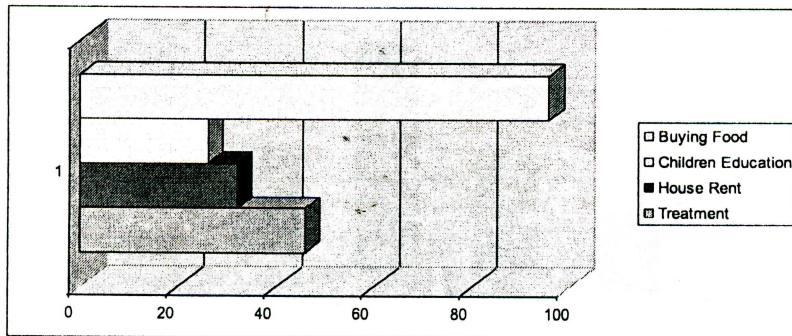


Figure-9

Most of the street beggars (48%) in the survey were found to spend for buying food. 23% and 13% used up for receiving treatment and children education purpose. 16% was also seen to spend house rent purpose who would live in rental house.

6.12 Access to Pure Drinking Water

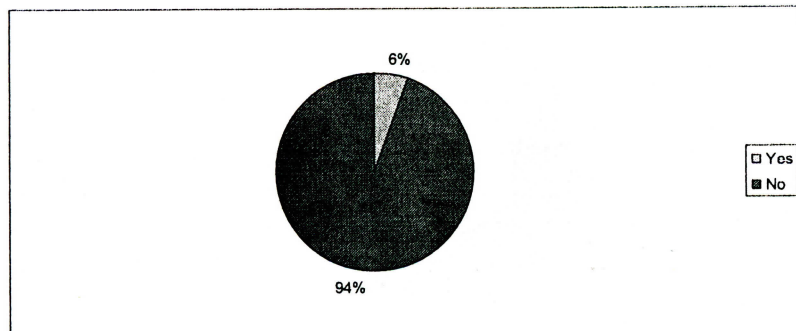


Figure-10

Street beggars have limited access to pure drinking water. Figure shows that only 6% percent drink pure drinking water. Others do not boil water for him as well as for family members. Commonly they drink water directly supplied by WASA. And very often they suffer from water born disease. Even they have limited access to hygienic latrine. Only 15% beggars depend on sanitary latrine.

6.13 Treatment Receiving Centre

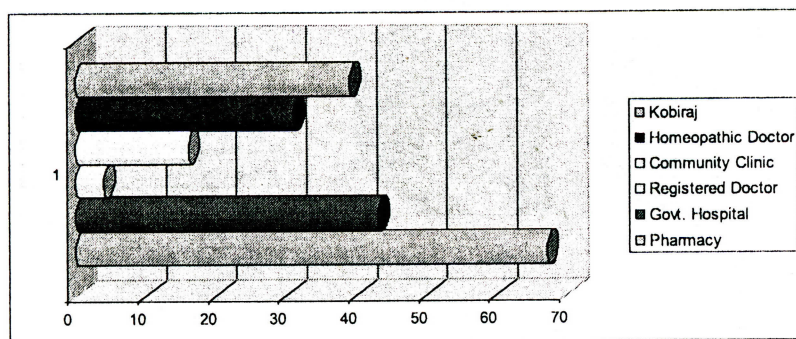


Figure-11

They usually depend on low cost treatment facilities such as pharmacy (33%), homeopathic doctor (16%), community clinic (8%), and government hospital (21%). They have the tendency to see the Kabiraj (20%) as well. Very few street beggars go to registered doctor (2%) in case of sickness because it is beyond their means to afford the charge.

6.14 Nature of health facilities provided by government

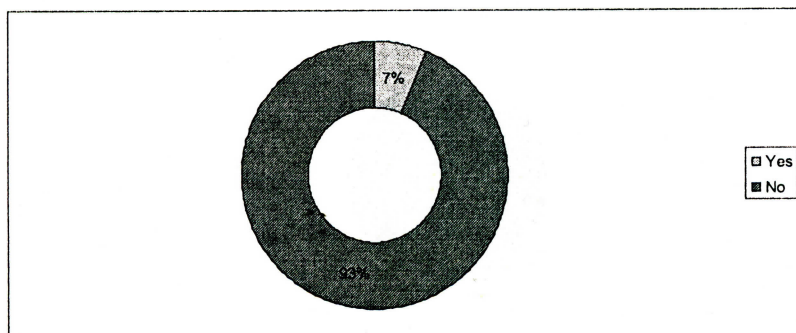


Figure-12

Regarding health service provided by government 93% unfortunate street beggar claimed during interviewed period that they never get such kind of health facilities. Only a fraction of street beggar (7%) fortune enough is getting government health facilities.

6.15 Source of Entertainment

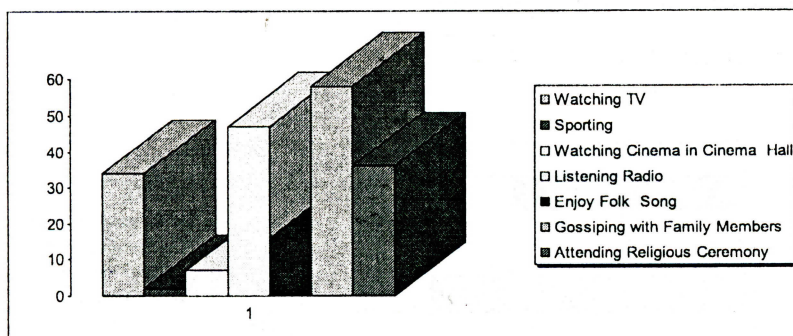


Figure-13

Gossiping with family members is the main source of entertainment to 28% street beggar. Others also depend on sporting (1/o), watching TV (17%), listening Radio (24%), Folk song (8%), Religious ceremony (18%) and cinema hall (4%) for recreation.

7.0 Recommendation and conclusion

1) Now they have no opportunity to get back in normal life or independent work who are deployed as the raw materials by powerful person. Government, various NGOs or wealthy people have to take their responsibility.

2) Making the family self reliant by creating job opportunity for their family member then the person, who is involved with begging, can be hand over to their family.

3) Training like weaving, spinning, dyeing, tailoring, carpentry, basket making, brick making, toy making, washing cloths and pressing diem, cooking etc. should be arranged so that they can be involved in any profession. In this regard Ministry of Social Welfare and different social service institutions can play a pioneer role.

4) Rehabilitation program should be designed and implemented. Otherwise beggar's eradication program by law enforcement force will not come to work.

5) It is also necessary to provide economic assistance to the widow and aged person.

6) In addition to, government have to take steps to alleviate poverty properly supervise the policies and programs taken for poverty alleviation. Because through the vicious cycle of poverty most of the beggar turns into beggary. In this regard government can collect Zakat and distribute properly among needy to alleviate poverty

7) At best we can create some rules for begging, for example a beggar will sit on a predestined place and will not reach out for people.

8) Moreover, those mastermind of begging business, who get the poor-helpless people in begging by stolen or making physically impaired as well as alluring them bread and butter, have to be brought under judge and have to be given exemplary punishment.

The overall socio economic condition of beggars in Dhaka city is not satisfactory at all. Beggars are the people who have no dignity in the society. They are always undermined and humiliated by the well off people. They are depriving of all the civil facilities from the country. They are considered themselves as stumpy categorized people in the society. But it is a noticeable mater that they can be the integral part of overall development of the nations, if they are properly trained up and utilized. Furthermore, Government and NGOs should take necessary steps to uplift their socio-economic conditions.

Reference:

A. L. Beier, *Masterless Men* (1985): The Vagrancy Problem in England, 1560-1640 London,

Ahmed, K. Neaz, (2010) "Report on Beggars", Daily Sun, 25 December, Bangladesh

Baltazar, M.L. et. al (2011); "Demographic Dimensions and their Implications on the Incidence of Street Begging in Urban Areas of Central Tanzania," *The Global Journal of Human Social Science*, Volume 11 Issue 4 (Version 1.0), Global Journals Inc. (USA), 56

Beggars Problems in Bangladesh," (2011) (posted 4 February 2008), retrieved 16th December. <http://hi-bangladesh.blogmot.com/2008/02/beggars:pLoblem-inbanpladesh.html>

Daily New Age (Dhaka), 17 October 2011.

Devi, Shanti (1962) *Beggary: Issue and Challenge for the City Beautiful*, Chandigar, P-1

Hitchcock, Tim (2005) "Begging on the Streets of Eighteenth-Century London", *Journal of British Studies* 44 (July 2005), The North American Conference on British Studies, 497.

<http://balita.ph/2010/03/09/bangladesh-plans-first-ever-headcount-of-beggars/> retrieved 11 March 2012.

Hyderabad Prevention of Beggary Act, 1941

Jelili, MO, (2006) "Environmental and Socio- economic Dimensions of Begging in Ilorin and Ogbomoso," Unpublished M.tech dissertation, Department of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomoso, Nigeria

Karim, Zehadul, (2010)"Over Population: A National Problem", *The Daily Nava Diganta*, 12 March

Khan, Asaduzzaman, (2011) "The Population Bomb Ticking", *The Daily Star*, 16 July ;

Ojo, Y. A. (2005), *Begging: A Lucrative, Booming Business*, Nigerian Tribune, Tuesday, June 21, 15-16.

- Omotosho A. O., (2001), "Begging, Idleness and the Economic Doctrine of Islam," Hamdard Islamicus, Vol xxiv, No 4, P. 67-72.
- Rabbany, Golarn 2007 "Beggars Problems in Bangladesh" 31 July, Bangladesh
- Rao, C.N. Shankar (2000) Sociology Primary Principles, S. Chand & Company Ltd, New Delhi, 576.
- Sohail, Shafaq (2012), "Beggars Mafia," Retrieved 11 January <http://ebookbrowse.com/beggars-mafia-pdf-d291580019>.
- Street Children and Child Baggers in Mumbai, Retrieved 20 April 2012 <http://vegaselias.hubpages.com/hub/STREET-CHILDREN-AND-CHILDBEGGARS-IN-MUMBAI>.
- Swanson, K., (2007), "Revanchist Urbanism Heads South: The Regulation of Indigenous Beggars and Street Vendors in Ecuador," Journal compilation, Department of Geographical and Earth Sciences, University of Glasgow, Glasgow, UK, 718.
- The Financial Express, 18 March 2012.
- The Financial Express, January 22, 2012.
- <http://narijibon.blogspot.coin/2007/07/beggars-problem-inbangladesh.html> posted on July 312007, downloaded 20th April 2012
- Weekly BLITZ, Volume # 7, Issue # 29, Dhaka, July 25, 2012.
- Weekly Robbar (a Bangla. Weekly), 27 issue, February 2011; P-22.
- wiktionary.org/wiki/beggar, Retrieved March 28, 2012.