

Problems of Land Use, Management and Administration and their Impacts on Environment: Bangladesh Perspective

Md. Asif Akram*

***Abstract:** This article is an attempt to illuminate on the different aspects of land use and management in Bangladesh and their impacts on the environment. Different modes of land use and management which is leading to a negative impact on our environment have been highlighted in this study. While land is one of the vital components of environment, we are using the land in such a way which is harmful to environment and ecosystem. Environmental pollution and degradation is a major concern of the present world and improper use and mismanagement of land in our country is accelerating this problem. The paper aims at exploring the aspects of land use which are attributing to the environmental degradation in Bangladesh and the major lacunas of existing laws in Bangladesh in this regard. An attempt has also been made to formulate some recommendations on the issue of land use and management in Bangladesh.*

1.0 Introduction

Land use, management and administration are well discussed topics of the day all over the world. These aspects are not only related to agricultural production but also with overall economic growth and development of the country. In recent years new dimension of environmental impact has been added with land use, management and administration. In this process the basic point is that land should be used and managed in an environment friendly manner. Bangladesh is a developing country of South Asia. It has small surface but a large population to support¹. Density of population is very high, 75% people live in village area and most of them are engaged in agriculture based profession.² So in the situational context of Bangladesh, land constitutes the most significant basis for socio-political power and common factor of production. Our land management and administration system are surrounded by many problems. One of the basic problem is that land is

* Lecturer, Department of Law and Justice, Southeast University, Dhaka, Bangladesh

¹ Alim, A. Land Reforms in Bangladesh, published by Samina, 1st edition, Dhaka - 1979, p.3.

² Alamgir, Mahiuddin Khan, Land Reforms in Bangladesh, Centre for Social Studies, Dhaka, 19981, p.194.

used both in urban and rural areas without caring for environment and ecosystem. This unplanned and unconscious use of land often causes damage to the environment as well as ecosystem and results in different natural calamities like drought, cyclone etc. So it the crying need of the day to concentrate more on proper use and management of land. In this process land should be used and managed with the aim of ensuring the welfare of the people in an ecologically sustainable manner. Keeping this view into consideration, the Government of Bangladesh has taken different measures in different times. Among them the most significant are the promulgation of different laws, forming different organizations to maintain land related matters, eviction of illegal occupants etc. This paper will focus on the major problems of land use, management and administration in Bangladesh including their environmental impact. It will also try to forward some recommendations for future improvement.

2.0 Definition of Land

To understand the impact of land use on environment at first we need to define the term land. Land has been defined in the Osborn's Concise Law Dictionary as any ground, soil or earth whatsoever. It legally includes also all castles, houses and other buildings, also water. It includes land of any tenure, mines and minerals, whether or not held apart from the surface, buildings or parts of buildings (whether the division is horizontal, vertical or made in any other way) and other corporeal hereditaments, also a manor, an advowson and a rent and other incorporeal hereditaments and an easement, right, privilege or benefit in, or over or derived from land, but not an undivided share in land³. This definition is extensive and has included anything, which is connected with land. It can be simplified in the words of Blackstone that the term land includes both corporeal hereditaments i. e. intangible rights enjoyed over or in respect of land⁴. The definition of land provided in Section 2(16) of State Acquisition and Tenancy Act 1950 has got the same signification with the dual characteristics of corporeal and incorporeal hereditaments when it says: 'land means land which is cultivated, uncultivated or covered with water, at any time of the year and includes benefit to arise of land, houses of buildings and also things attached to the earth.' Here in the definition corporeal hereditaments is meant land, which is cultivated, uncultivated or covered with water, at any time of the

³ Bird, Roger. Osborn's Concise Law Dictionary. 7th edition. Delhi, 1983. p.195.

⁴ Gray, Kevin, Elements of Land Law, Butterworth, Second Edition, London, 1993. p.1.

year and incorporeal hereditaments is meant benefit to arise of land, houses or buildings some judicial decisions can be taken into consideration in this regard. Firstly, in 1959 the High Court held that the right of fishery in navigable river is not acquirable within the meaning of Sections 20 and 39 where no compensation was mentioned to be payable for the acquisition and as such it is not a benefit arising out of land⁵. By Ordinance No. XII of 1960, Section 20(2a) was inserted in the SAT Act 1950 where right to fishery in water irrespective of its being several or territorial other any fishery constructed solely in the process of excavation was made acquirable and consequently this decision has been made inoperative when it says that the definition of land includes all fisheries, several or territorial⁶. Secondly, in another decision in 1961 the High Court held that the right to collect rent or profits from a hat is acquirable for compensation as it is a benefit arising out of land⁷. So what can be acquired or transferred for consideration or compensation can be termed as land.

Nowhere in the statute is land classified. For the purpose of land law, land can be divided into Agricultural land and Non-Agricultural land. Agricultural land can be defined as land, which is used for purposes connected with agriculture or horticulture. Section 2(4) of the Non-Agricultural Tenancy Act 1949 (commonly known as the NAT Act) defines non-agricultural land as land which is used for purposes not connected with agriculture or horticulture and includes any land which is held on lease for purposes not connected with horticulture irrespective of whether it is used for any such purposes or not and a parcel of agricultural land converted into a tenancy by the order of the Collector⁸ to which the NAT Act applies and but does not include-

- a) a homestead to which the provisions of Section 182 of the Bengal Tenancy Act 1885 (commonly known as the BT Act) apply,
- b) land which was originally leased for agriculture or horticultural purposes but is being used for purposes not connected with agriculture or horticulture without the consent either express or implied of the landlord, if the period for which such land has been so used is less than twelve years, and

⁵ Tozammel Hossain vs. Province of East Pakistan 11DLR 145.

⁶ Section 16(a) of the SAT Act 1950.

⁷ Abdul Aziz vs. Province of East Pakistan 13 DLR 873.

⁸ Kabir, Lutful, Land Laws of Bangladesh, Vol. iv, Law House, Dhaka, 1982, pp 38-47

- c) land which held for purposes connected with cultivation or manufacture of tea.

With the introduction of the SAT Act, of which Section 80 has repealed the BT Act 1885 and equaled the status of the raiyats as maliks, Homestead of malik is now governed by the SAT Act and excluded from the operation of the NAT Act 1949.

Non-agricultural land does not include lease of structures with land but the cases of tenants of non-agricultural land, who have erected structures thereon, are governed by the provisions of the NAT Act 1949.

In 1970 the Supreme Court held in a decision⁹ that 'a non-agricultural lease, according to the provisions of the Act is a lease in respect of non-agricultural land alone, but does not include any building or hut occupied by a tenant if such building or hut has been erected or is owned by the lessor. A non-agricultural lease in respect of both land and huts standing thereon is clearly outside the ambit of the Act.' If this decision is read with an earlier decision¹⁰ given by the High Court by in 1960 it can be said that a user can play very important role in determining whether a land will be identified as non-agricultural land or not. Moreover, under Sections 5(c) (ii) and 85 of the NAT Act, non-agricultural land does not include the lands held for the exercise of rights over forests or rights over fisheries or rights to minerals.

3.0 Land use in Bangladesh and its Environmental Impact

Bangladesh is a small country of 55000 square miles. But in has a large population of about 150 million. To meet the demand of this huge population, land are being used in various ways and for different purposes such as for accommodation for agriculture, for building industry and many other purposes. By doing these activities in an unplanned manner, people are damaging most of the sweet parts of our land and at the same time they are causing environmental pollution. So at present it is the matter of thought that how we can ensure the proper utilization of our small surface without causing any harm to the environment as well as ecosystem.

3.1 Use of Insecticides in land and its effects on environment

Pesticide or insecticide is very much needed for keeping our crops protected from harmful insects. But it causes harmful effect on our land

⁹ Abdul Mutaleb vs. Mst. Rezia Begum 22 DLR (SC) 134.

¹⁰ 12 DLR 758

and environment due to its toxic characteristics. A survey was conducted in 1999 on the use of pesticides in Bangladesh as part of the IAEA agrochemical residues project and it was found that total pesticides consumption doubled over the 6 years. It was also found that most of those pesticides were environmentally caustic¹¹.

Some insecticides kill on harm other creatures in addition to those they are indented to kill¹². For example, birds may be poisoned when they eat food that was recently sprayed with insecticides or when they mistake insecticides granules on the ground for food and eat it¹³. Sprayed insecticides may drift from the area to which it is applied and into wild life areas especially when it is sprayed aerially¹⁴. Insecticide can kill bees and may be a cause of pollinator decline. Loss of pollinators will mean a reduction in crop yields¹⁵. Use of harmful insecticides can reduce the fertility of land by killing those useful insects which live under the soil, makes hole on it and helps to move the water and air into the soil. Very often these harmful insecticides mix with water and kill small fishes as well as small animal like frog which is needed for keeping ecological balance.

3.2 Use of fertilizer and its impact on environment

This present era of agro-industrialization and agricultural commercialization has lead to increase the production in agricultural sectors. As fertilizers are necessary for increasing production, people are using them at a huge extent throughout the Bangladesh. But this excessive use of fertilizers has an adverse impact on the environment as well as on ecosystem. The excess amount of fertilizer in soil creates toxicity to plant, pollutes soil, creates health hazard to animal and finally to man¹⁶.

¹¹ Paper presented by M.A Malek and M.A. Matin, Institute of Food Radiation Biology, AERE, Savar, Bangladesh, Dated- February 11, 1994, at page-26

¹² <http://www.en.wikipedia.org>, last visited-12.04.08

¹³ Ibid.

¹⁴ Ibid

¹⁵ Ibid

¹⁶ Effect of Different Fertilizers on Concentration and Uptake of Cadmium by Rice Plant, paper written by A.K.M.M Rahman. <http://www.solutionstoearthdestruction.com>. Last vsited-12.04.08.

Sometimes natural fertility of soil is damaged due to unplanned and excessive use of chemical fertilizers. The outer surface of the earth becomes contaminated and it may cause different skin diseases. Sometimes these fertilizers are mixed with rain water and falls on the river or canals. As a result fishes and other water species are destroyed¹⁷.

3.3 Effects of chemicals and polythene on land

Our land is increasingly being polluted by different kinds of garbage like polythene, plastic and above all by chemicals produced by industries. A recent survey has shown that Dhaka, which produces nearly 3500 tons of garbage a day, has a huge problem with waste disposal. It is one of the most crowded cities in the world but its space is at a premium. Around half of this garbage is not collected because the city council lacks the cash and the manpower¹⁸. This uncollected garbage causes serious environmental pollution including land pollution not only within the city but also in the surrounding areas. Further, polythene and plastic made wastes cause harmful effect on our land. Polythene or plastic made wastes are such that never get rotten and they also do not mix with soil. So, these wastes harm the fertility of soil. Poly bags obstruct the movement of water and air into the soil which is essential for the fertility of land. Polythene and plastic substances make our land barren because they are made of a chemical named "ethylene" which is harmful for land.

Another great source of land pollution is from chemical substances from different industries. A recent survey shows that Bangladesh has almost 200 tanneries which are mostly located in Dhaka. These tanneries are releasing a large quantity of toxic waste at the time of processing of leather, causing a serve environmental pollution. The quality of liquid waste discharged from these tanneries varies from 10 to 15 gallons per square feet of hides and skins processed¹⁹. Apart from tanneries there are many other industries in Bangladesh. These industries discharge their waste water, organic particular and toxic chemicals in open drains which ultimately find their way into land surfaces and in natural waters in the vicinity. As a result, our land is getting continuously polluted.

¹⁷ Hasan, Mahub, Bangladesh: Physical Geography and Environment, Bangla Academy, 1st edition, Dhaka, 1995, p.211.

¹⁸ Telecasted on BBC World, Wednesday, 30 October, 2002, 17:36GMT.

¹⁹ <http://www.soiltech.com>, Last visited-12.04.08.

3.4 Deforestation and its impact on land

Cutting of trees from the forest and from locality to meet the various types of human needs causes dangerous harmful effect on our land. Trees are very essential to keep land fertile and to save it from erosion. If there is no tree on a particular locality, that locality turns to be a desert. Because trees are essential for rainfall. The primary cause of deforestation in Bangladesh has been population increase, in addition to such other factors as demand for forest products and fuel wood, and conversion of forest land to such other uses as agricultural, industrial, urbanization and development of infrastructures for transportation, energy production and so on. The other aspect is that forestlands are being encroached upon illegally. Up to 1989, about 76,596 ha of forestlands have been encroached upon in different forest areas. According to one estimate, forest cover in Bangladesh has declined from about 15 percent of the total area to 5 percent. Out of a total area of 2 million ha of forestland, less than half of this area is actually covered with trees, the estimated rate of deforestation being 8,000 ha per year; 40 percent of forestlands have reportedly been lost from 1960 to 1990. Deforestation rate was 0.9 percent in 1970, but rose to 2.7 percent in 1984-90. Some sources quote satellite surveys and note that forests are declining at a rate of nearly 70,000 ha per year and Bangladesh has less than 0.02 ha of forest land per person, one of the lowest forest-man ratios in the world. If the current trend continues, forests are likely to disappear altogether in the next 35-40 years or earlier²⁰. A recent report published on Janakhantho that for the lack of the sufficient forests, hills are collapsed²¹. The natural beauty of the forest is going to be disappeared day by day.

Again the implications of continued deforestation are alarming. They may include the extinction of various species, loss of habitat, the environmental and soil degradation, flooding, erosion, bad effect on the indigenous people and above all the danger of climate change. Some of them are discussed below so far as they are required for our assignment -

1. Deforestation makes soil more exposed to wind and water and ultimately results in soil erosion. Heavy rainfall has much more adverse effect than it did before deforestation took place. As there is no tree to support the soil, the run-off of the land surface has a great tendency to cause flood. Moreover, the silt that is carried by rainwater is deposited in dams, which furthermore disrupts the

²⁰ Banglapedia, National Encyclopedia of Bangladesh.

²¹ Daily Janakhantho, 15 June 2007.

generation of hydroelectricity. This disruption of water naturally affects crops and as a result agricultural production is reduced. From ecological stand point deforestation also affects the food chain as it contributes to the extinction of many species.²²

2. Primarily deforestation brings an abrupt change in temperature in the nearby areas. Forest naturally cools down because they help in retaining moisture in the air. In the long-run it contributes to global warming.
3. The ozone layer is a mass of oxygen or O_3 atoms that serves as shield in the atmosphere against the harmful ultraviolet rays from the sun. Because ozone is made up of oxygen atoms, oxygen reacts with carbon monoxide. Such reaction would make up oxygen atoms. It follows that when there is more carbon monoxide going to the atmosphere, the volume of oxygen would decline. Such is the case of ozone depletion.
4. Water table beneath the ground is the common source of natural drinking water by the people living around forests. Water table is replenishing. That means the supply of underground water would dry up if not replenished regularly. When there is rain, forests hold much of rainfall to the soil through their roots. Thus, water sinks in deeper to the ground, and eventually replenishing the supply of water in the water table. But if there is not enough forest anymore, the soil cannot retain rain-water or rain-water would not stay in the soil longer, for the process of evaporation. Thus the water is not replenished leading to drying up of wells²³.
5. Forests are natural habitat to the many types of animals and organisms. That is why, when there is deforestation, many animals are left without shelters. It is estimated that there are millions of plant and extinct animal species that have been wiped out because they have been deprived of home. Thus the biodiversity is significantly lowered because of the savage deforestation practices of some people. Wildlife advocates have been constantly reminding that several wild animals left in the world still would be saved if the deforested areas would be

²² <http://www.blurtit.com>, last visited -10. 04. 08.

²³ <http://www.solutionstoearthdestruction.com>, last visited,-12.04.08.

reforested and the practice of slash and burning of forests would be totally abandoned²⁴.

6. Indigenous people are badly affected by the deforestation. They are compelled to live elsewhere and to become mendicants in rural and urban areas.

3.5 Harmful effect of brick fields

Brick is one of the major construction materials in Bangladesh. Most of the buildings and houses are built with bricks. These bricks come from the brick field. Most of these brick fields around the country are situated near the urban areas. For making these brick fields they are damaging 100 acres of our cultivable land. Because the brick kilns are usually built in cultivable land. Most of the brick fields use firewood and coal as their fuel. So brick fields discharge a lot of smoke, dusts and ashes which are spread out around a large area near the fields²⁵. Thus brick fields damage the fertility of the nearest cultivable land of those fields. Brick fields require huge sum of soil this soil are collected from agricultural land on cutting down hills. This is another reason for the reduction of our agricultural land. The people living in the area adjacent to the brick fields are always at the risk of being affected by respiratory diseases²⁶. The thick layer of dust on the leaves of crops and trees bars the photosynthesis process which may destroy the vegetation if continued for a long time. According to the DOE one major reason of the increasing level of Suspended Particulate Matter (SPM) is the dust thrown into the land from the brick fields²⁷.

Brick kilns emit SO_2 , CO_2 , CO particulate waters and volatile organic compounds that deteriorate the quality of air. The air pollution from these kilns is not only due to the type and fuel used, but also due to the thermal inefficiencies and the conventional kilns²⁸. So for avoiding these problems the use of fire wood and coal should be reduced, wastes and garbage produce from fields should not be thrown in everywhere.

²⁴ ibid

²⁵ <http://www.Sdnpsd.Org>, last visited- 12.04.08.

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid

3.6 Cutting down hills

Hills are created in order to keeping environment etiologically balanced by Almighty Allah. So they are very much important for our environment. If we remove soil from one part of this hill it will bring disaster towards us because everything created by Allah has a balance of its own. In recent few years cutting down hills brings alarming news in Chittagong Division because of continuous cutting of hills.

On June 2007 due to heavy rainfall hills in various parts of Chittagong division were collapsed. A report published in daily Janakantha revealed that,²⁹ collapsed hill killed 84. On that day many persons were killed. In Chittagong University campus 5 persons were killed from one family. Report published on July 2007³⁰ that more than 126 persons were killed on that day. It is known from the local sources that cutting down hill people made their house on hill tracks. It is the real cause of so much death. On that day many people were wounded, many become houseless and many other people whose sorrow knew no bounds.

- Real cause of 11 June collapse:

Cutting down hills and use its land soil in various purpose was the real cause of 11 June collapse in Chittagong city. A report four district including Chittagong 200 persons and industries are related to cut down hills³¹. The report farther says from survey in 11 districts in Chittagong division it is known that 155 points in 5 districts including Chittagong Cox's Bazar, Rangamati and Khagrabori hills have cut down. By cutting hills people made more than 100 Brick fields. Even this report says that they do not stop their hill cutting activities even after the dangerous collapse on 11 June.

- What people do by cutting hills:

A report publishes in Prothom Alo³² says people are doing following activities by cutting hills. Cutting hill people are making residential house. On that point a report³³ shows 25 institutions are found who are related with this scheme.

²⁹ Daily Janakantha, 12.06.07, Year 15, number-109 p.1

³⁰ The Prothom Alo, July, 9, 2007.

³¹ The daily Prothom Alo, July, 3, 2007.

³² Ibid

³³ Ibid

- Brick field making

In Chittagong city and Hathazari area ৪৩ brick fields are found which was made of cutting off hills. In Mirzapur union ৩৩ and Fateyabad union ৫০ brick fields are found out side the city in Rangunia ১৫ fields are founds. All of this fields activities run by cutting the hills.

- Influential person's activities

Influential persons are cutting hill for the need of there various purpose report shows from ১৯৯৭-৯৮ to ২০০৫-০৬ ১০ acres of hill is cut down by the influential persons.

- More effects

People of this area are living with risk in every moment. A report published in Janakantha^{৩৪} that ৫০ thousand people are living with risk in hill tracks area there live is not safe from farther danger. Moreover cutting down hills causes imbalance on the environment of Chittagong city. Animals, live relying on these hills, are not safe now. They either take resort on locality or die. Trees and shrubs on that area are clean now. This creates a harmful effect on our environment.

৩.৭. Shrimp Cultivation and saltiness on our land

Most of our land in the southern part of our country is low land. During the rainy season this land goes under water. Water stands on this land ৩ to ৪ feet high thus in this rainy season farmers can't grow crops. But in this period some people cultivate Shrimp on that land. They bring water in land from river and that water is very salty. Some influential persons create pressure on farmer to cultivate Shrimp on that land. Thus most of the farmers who do not want to cultivate shrimp and want to grow a crop become bound to cultivate shrimp. But the alarming news is that the salty water which enters in the land from river harms the fertility of the land. In dry season when the water goes away a small layer of salt mixes with the upper layer of land. That is very much harmful for fertility of land. No crop can be grown on a salty land. Thus most parts of our cultivable land in Khulna division became uncultivable.

There is hardly seen greenery on that land because growing crops are becoming white instead of being green due to saltiness of those lands. Thus we are losing a large part of our fertile land by cultivating shrimp. While growing crops is more profitable than cultivating shrimp. Farmers could grow crops ৩ times during the year if they can protect entering salt

^{৩৪} The Janakantho, ১৬ June, ২০০৭

water in to the land. While because of cultivating shrimp they are deprived of growing more crops. On the other hand, farmers are not benefited by cultivating shrimp because they are not getting equitable cost³⁵.

4.0 Laws relating to Land Use

4.1 Laws regarding land use in rural area

Govt. is under obligation to materialize development activities in both rural and urban areas. For the development activities, the income and living standard in the areas where development activities have been done, increase. Therefore the Govt. has a right to impose an important levy on that area. According to the section 3 of the development Act, 1935(Bengal Act No.XVI of 1935) whenever, in the opinion of the Government, any improvement work has increased or is likely to increase the profits from the produce from any agricultural land, or to increase the outturn of such produce, within any area, the Government may, by notification, declare its intention to impose an improvement levy within that area. The Government may publish by notification a list of rivers or depression which it intends to declare to be dead or decayed rivers³⁶. As per section 2(4) of that Act "dead or decayed river" includes any river into which, or along any part of which, water has ceased to flow as freely as it would have flowed if it had not been diverted or obstructed whether owing to natural causes or as a result of interference by man, and includes also any depression which at one time formed part of a riverbed but through which there is no longer any perennial flow of water. The clear purpose of the notification under the section 33 is to make improvement or revival of such river. In doing the development works, one may sustain damage, but the development works cannot be stopped on that ground. Again he cannot claim damages in view of the section 34 of the Development Act. According to the section 34, no person shall be entitled to claim any compensation under this or any other Act for any injury, damage or loss caused by damage or decayed river which has been revived as a result of an improvement work, or by any other rivers into which it flows or spills. However the person may claim if -

- (a) the river had not been revived and
- (b) Such injury, damage or loss is such as would have rendered the Government liable to pay compensation.

³⁵ Sayada Rizwana Hasan, Lecture on Environmental Law, presented at Dept. of law, date-20.04.08.

³⁶ Section 33 of the Development Act, 1935.

So revival of the rivers is an important factor to determine whether a person is entitled to stand for damages. According to Explanation of the section 34, a dead or decayed river is said to be revived when an increased volume of water is, by any means whatsoever, caused to flow freely into or along any part of such dead or decayed river.

Section 35 of the Development Act, is to some extent similar to the section 34. Under the section though, a person's land or right of property is injuriously affected by any improvement work in respect of which an improvement levy is imposed under this Act, he shall not be entitled to claim any compensation for such damage or loss under any other Act. However as the section 35 is subject to the section 34, he may have the benefit under the section 34. Again such person may, not later than six months after the first occurrence of the injury in respect of which the claim is preferred, prefer to the Collector a claim for compensation under the provisions of the section 3

4.2 Land use in urban areas

4.2.1 Cities

For the urban development, there are various development institution under the various laws. The Chittagong Development Authority Ordinance, 1959 (E.P. Ordinance No. LI of 1959), Rajshahi Town Development Authority Ordinance, 1976 (Ordinance No. LXXVIII of 1976) and Khulna Development Authority Ordinance, 1961 (Ordinance No. II of 1961) are note-worthy. Under the section 3 the Chittagong Development Authority Ordinance, 1959, the Government may, by notification, establish an Authority to be known as the Chittagong Development Authority. This authority is under the obligation to make a master plan for the development for the Municipality and other areas. Such master plan shall include such maps and such descriptive matter as may be necessary to illustrate the proposals aforesaid with such degree of particularity as may be appropriate between different parts of the town and any such plan may, in particular, define the sites of proposed roads, public and other buildings and works, or fields, parks, pleasure-grounds and other open spaces or allocate areas of land for use for agricultural, residential, industrial or other purposes of any class specified in the Master Plan³⁷. Such master plan is subject to the approval of the Govt. After approval, all future development and construction, both private and

³⁷ Section 22(2) of the Chittagong Development Authority Ordinance, 1959.

public, shall be in conformity with the Master plan. According to the 28(1) after publication of the Master Plan under sub-section (3) of section 22, the Authority shall prepare, and submit to the Government Five year Programmes of development and improvement of the areas covered by the Master Plan, on the basis of the said Plan, listing the schemes of development and improvement, including works of water supply and sewerage in their approximate order of execution and with approximate cost of each. As per the section 30, an improvement or development scheme may provide for all or any of the following matters namely:-

- (a) the acquisition by the Authority of any land, in the area comprised in the scheme, which will, in their opinion, be required for the execution of the scheme or be affected by the execution of the scheme;
- (b) the laying out or re-laying out of the land in the said area;
- (c) such demolition, alteration or reconstruction of buildings situated on land which it is proposed to acquire in the said area, as the Authority may think necessary;
- (d) the construction of any buildings which the Authority may consider it necessary to erect for any purpose other than sale;
- (e) the laying out or alteration of streets (including bridges, causeways and culverts);
- (f) the leveling, paving, metalling, flagging, channeling, swearing and draining of the said streets and the provision therein of water, lighting and other sanitary conveniences ordinarily provided in a Municipality;
- (g) the raising, lowering or leveling of any land in the area comprised in the scheme;
- (h) the formation, establishment, retention or enlargement of open spaces, parks, recreational zones, play grounds, markets, bazars, shopping areas, or any other type of development, as may be considered necessary for urban communities;
- (i) the augmentation of the present water-supply, or any other scheme for the improvement of the water-supply;
- (j) the making of a drainage and sewerage scheme including outfall works; and
- (k) the development of residential areas, commercial areas, industrial areas, recreational areas, educational zones and administrative zones;

- (l) the development of such areas outside, but contiguous to, the area of a particular scheme or schemes as the Authority may think fit to develop; and
- (m) any other matters consistent with this Ordinance which the Authority may think fit.

4.2.2 Paurashava

For the proper use of land in the urban areas, the steps taken by the Paurashava are important. According to the section 63 of the Paurashava Ordinance, 1977 (ordinance No. XXVI of 1977), a Paurashava shall be responsible for the sanitation of the municipality and for the control of the environmental pollution. It has to ensure sanitary building⁴¹. Paurashava takes steps for the clean public latrines and urinals, establishment of health and maternity centers, hospitals and dispensaries, supply and disposal of water, establishment of public and private drains, public ferries and fisheries etc. It also determines the places of the establishment of the public and private market and the places for the disposal of carcass etc. For doing these functions, Paurashava needs to use its land carefully. Therefore master plan as per under section 95 needs to be made.

Again in view of the section 127, it may prepare and implement development plan for the prevention of environmental pollution the promotion, improvement and development of such function of the function of the Paurashava etc.

No person shall make an encroachment, movable and immovable, on over or under a street, drain or public places. If made, such encroachment may be removed under the section 143(2).

For the proper use of land, our existing laws give some important directions. The Building Construction Act, 1952 (E.B. Act II of 1952) is one of such kind of laws. This act puts restriction on construction of building and excavation of tanks, proper use of lands and buildings, cutting of hills etc. This act also keeps provisions for removal of construction. stopping and razing of hills etc. According to the section 3 of the Building Construction Act, 1952 (E.B. Act II of 1952) , no person shall, without the previous sanction of an authorized Officer, construct or re-construct or make addition or alternation to any building, or excavate or re-excavate any tank and such sanction shall be subject to such terms and conditions as the authorized Officer may think fit to impose. Again as per the section 3A (1) no owner or occupier of a building shall, without

obtaining previous permission from the authorized Officer or the Committee, as the case may be, use the building for the purpose other than that mentioned in the sanction. When the authorized Officer is satisfied that the existing use of any land or building does not conform the scheme of land utilization indicated in the Master Plan³⁸, the authorised Officer may, by an order in writing, direct the owner, occupier or the person in charge of the land or building to discontinue such use and, in the case of a building also to remove or dismantle such building³⁹. However the owner-occupier or the person in charge of the land or building shall be given six months' time before effect is given to the order of discontinuance of such use and twelve months' time before effect is given to the order of removal or dismantlement of the building. Again no existing or further use of any land or building for combined residential and commercial purpose shall be discontinued or prohibited unless, in any particular case, such use militates against the dominant character of the scheme of land utilization as indicated in the Master Plan and constitutes a nuisance generally to the zone and particularly to the neighborhood in which the land or building is situated. According to the section 3B (1) where it appears to the authorized Officer or the Committee that-

- (a) any building has been constructed or re-constructed, or any addition or alteration to any building has been made, or any tank has been excavated or re-excavated, before or after the commencement of the Building Construction (Amendment) Ordinance, 1986 (Ordinance No. LXXII of 1986
- (c) any building is being constructed, or re-constructed, or any addition or alteration to any building is being made or any tank is being excavated or re-excavated, without obtaining the sanction under section 3, or in breach of any of the terms or conditions subject to which sanction was granted under that section, he or it may, by a notice, direct the owner, the occupier and the person in-charge of the building or the tank to show cause, within such period, not being less than seven days, as may be mentioned in the notice, why-

³⁸ Section 64 the Paurashava Ordinance, 1977.

³⁹ According to the section 2(ccc) of the Building Construction Act, 1952 master plan means plan prepared and approved under any law for the time being in force for the utilisation of any land anywhere in Bangladesh.

- (i) the building or any portion thereof, whether constructed or under construction, as may be specified in the notice, should not be removed or dismantled; or
- (ii) the tank or any portion thereof, whether excavated or under excavation, specified in the notice, should not be filled up; or
- (iii) further construction or re-construction of, or addition or alteration to, the building, or excavation or re-excavation of the tank, should not be stopped.

After hearing the notice he or it may by an order in writing stating reasons therefore, direct the owner, the occupier and the person in-charge of the building or the tank to remove or dismantle the building or any portion thereof or to fill up the tank or any portion thereof as specified in the order within such time as may be fixed by him or to stop further construction or re-construction, addition or alteration or excavation or re-excavation.

Shall be punishable with imprisonment for a term which may extend to seven years, or with fine not less than taka fifty thousand, or with both; and the Court convicting the accused shall, if an application in writing is made by the prosecution in this behalf, fix a date within which the building or tank or portion thereof, in respect of which the offence has been committed shall be removed or dismantled or filled up, as the case may be by the person convicted and may, for sufficient reason, extend such date. If the person fails to comply with the direction of the Court within the date fixed or within the date as so extended, the Court may cause the building or portion thereof or the tank or portion thereof filled up, and the cost thus incurred may be realized from the convicted person in the manner laid down for recovery of fine under section 386 of the Code of Criminal Procedure, 1898⁴⁰.

Again under the section 12(1A) whoever commits an offence by-

- (a) contravening the provision of section 3C, or
- (b) failing to comply with any direction given to him by an Authorised Officer or Committee or Police Officer under section 3D, shall be punishable with imprisonment for a term which may extend to seven years, or with fine, or with both; and the Court convicting the accused shall, if an application in writing is made

⁴⁰ Section 3A(2), *ibid*.

by the prosecution in this behalf, forfeit any vehicle, instrument, material or animal used for the purpose of or in connection with the commission of the offence or carrying the earth.

5.0 Laws relating to land management and administration in Bangladesh

5.1. Bangladesh Land Holding Limitation Order 1972

This order was promulgated to provide for the reduction of maximum quantity of land that may be held by a family or a body in Bangladesh. It was provided in this order that no or body shall be entitled to retain any land held by him in excess of one hundred standard bighas in the aggregate and all lands held by it in excess of that quantity shall be surrendered to the govt.

5.2 The Land Reform Ordinance 1984

The maximum quantity of land that could be held by a family or body under the P. O. 98 of 1972 was further reduced by ordinance no. x of 1984. Under this ordinance it has been provided that no malik who or whose family owns more than 60 standard bighas of agricultural land shall acquire any new agricultural land by transfer, inheritance, gift or any other means. It further provides that a malik who or whose family owns less than 60 standard bighas of agricultural land may acquire new agricultural land by any means but such new land, together with the agricultural land owned by him, shall not exceed 60 standard bighas. It has further been provided that if a man acquires more land in contravention of this Ordinance; it shall absolutely be vested upon the govt. without payment of any compensation⁴¹.

5.3 The Transfer of property Act 1882

This Act was promulgated to amend the laws relating to transfer of property by act of parties. Under this Act transfer of property means an act by which a living person conveys property in present or in future, to one or more other living persons or to himself and one or more other living persons. Again under this Act, living person means a company or association or a body of individuals whether incorporated or not⁴². Under this Act property of any kind may be transferred except as otherwise provided by this Act or any other law for the time being in force⁴³. This

⁴¹ Section 12(2) of the Building Construction Act 1952.

⁴² Section 4 of The land reform ordinance 1984.

Act contains provisions for transfer of property by various means such as sale⁴⁴ mortgage⁴⁵ lease⁴⁶ exchange⁴⁷ and gift⁴⁸.

5.4 The State Acquisition and Tenancy Act 1950 (Act No XXVIII of 1950)

This Act was provided for the acquisition by the state of the interests of rent receivers and certain other interests in land in Bangladesh and to define the law relating to tenancies to be held under the state after such acquisition and other matters connected there with. At any time after the commencement of this Act. It shall be lawful for the govt. to acquire all interests of such of the rent receivers as may be specified by the government⁴⁹. According the interests of the rent-receivers were acquired throughout the country which first started in Patuakhali district in 5th August 1954 and ended in Faridpur in 5th August 1965. When the acquisition is complete, part V of this Act came into force which deals with tenancy laws. This Act also contains provisions that no transfer by an aboriginal raiyat of his right in his holding or in any portion thereof shall be valid unless it is made to another aboriginal domiciled in Bangladesh. But an aboriginal person can transfer his land to non aboriginal person through an application made to the revenue officer⁵⁰.

5.5 The Non-Agricultural Tenancy Act 1949

This Act was promulgated to make better provisions in respect of certain non-agricultural tenancies. Non-agricultural land means land which is used for purposes not connected with agriculture or horticulture and includes any land which is held on lease for purposes not connected with agriculture or horticultural purposes but is being used for purposes not connected with agriculture or horticulture for less than 12 years and also land held for purposes connected with the cultivation or manufacture of tea⁵¹. A non-agricultural tenant may hold non-agricultural land for

⁴³ Section 5 of The Transfer of property Act 1882

⁴⁴ Section 6, ibid.

⁴⁵ Section 54, ibid

⁴⁶ Section 58, ibid

⁴⁷ Section 105, ibid

⁴⁸ Section 118, ibid

⁴⁹ Section 122, ibid

⁵⁰ Section 3 of The state Acquisition and Tenancy Act 1950.

homestead or residential purposes, manufacturing or business purposes or religious or other purposes⁵². A tenant holding non-agricultural land shall be entitled to erect any structure to erect a mosque, a temple or any other place of worship, to dig tank and to plant, enjoy the flowers, fruits and other products of and feel and utilize and dispose of the timber of any tree on such land⁵³.

5.6 The Acquisition of Wasteland Act 1950 (Act No. XIX of 1950)

This Act was promulgated for the acquisition for public purposes of waste land. "Wasteland" means any land including marshy tracts, water courses, and jungle areas which has not grown crop for five consecutive years or more immediately proceeding the date of publication of the notification under this Act. Public purpose includes the production of foods or the forestation of land or the carrying out of irrigation of land or the carrying out of irrigation or drainage schemes or the provision of sites for the setting up of model villages or the reclamation of land for bringing it under cultivation⁵⁴.

5.7 The Cultivable Wasteland (utilization) Ordinance 1959

This ordinance was promulgated to utilize the cultivable wastelands. Under this ordinance 'cultivable waste land means any land classified in the record of rights published under the BT Act 1885 or the SAT Act 195 as petty or jangle and includes any land which has not been cultivated during the last two preceding years and no preparation for its cultivation has been made on the day of making a declaration under this ordinance⁵⁵. The collector may declare that the provisions of this ordinance shall apply to any cultivable wasteland and on and from the making of such declaration, the possession of such land shall vest in the collector⁵⁶. When the possession of any cultivable wasteland has vested in the collector, he may lease it out on such terms and conditions as he thinks proper to any person for purpose of cultivation for production of food crops⁵⁷.

⁵¹ Section 97, *ibid*

⁵² Section 2 of the The Non-Agricultural Tenancy Act 1949.

⁵³ Section 4, *ibid*

⁵⁴ Section 6, *ibid*

⁵⁵ Section 2 of the Acquisition of Wasteland Act 1950.

⁵⁶ Section 2 of the cultivable wasteland (utilization) ordinance 1959.

⁵⁷ Section 3, *ibid*

6.0 Lacunas of existing laws and some other problems of land administration in Bangladesh:

1. Most of the laws regarding land use, administration and management in Bangladesh have not concentrated properly on environmental issues.
2. There is no separate mechanism to address environmental impacts of land use in Bangladesh.
3. There is no proper technology to measure environmental impacts of land use in Bangladesh.
4. Unequal distribution of land.
5. Time consuming and nasty corruption in land administration system⁵⁸.
6. Small sizes of land holdings, lack of cultivation mechanisms and absence of co-operative cultivation.
7. Lack of proper knowledge and awareness of the land users on environmental issues.
8. Absence of systematic and up to date source of land information⁵⁹.
9. Non implementation of the legislation's regarding land use and environmental issues.
10. Absence of proper legislation and public oriented plan regarding land administration and environment conservation.

7.0 Recommendations for future improvement

To remove the lacunas existing in land administration and management system in Bangladesh and to ensure the use of land in a ecologically sustainable way we want to put forward the following recommendations.

- 1) Land should be defined more precisely with a view to for the purpose of environmental impact assessment.
- 2) Use of harmful insecticides the aldrin, chlordane dieldrin, endrin, heptachlor, mirex and other organic pollutants have to be reduced. Govt. should provide special directions in this regard.

⁵⁸ Section 4, *ibid*

⁵⁹ Centre for Policy Dialogue, Task Force Report, Dhaka, 2001, page-1.

- 3) Consideration should be given to use composed fertilizers instead of chemical fertilizers to reduce environmental damage.
- 4) Unplanned and unsafe disposal of toxic industrial and other chemical wastes on land should be prohibited. Special task force can be formed in this regard.
- 5) Existing laws regarding deforestation should be implemented properly. Government of Bangladesh should take more effective measures for forestation both in urban and rural areas.
- 6) Construction of brick fields should be done according to the standard provided by the govt. as well as other environmental institutions.
- 7) The laws and rules regulating cutting of hills have to be implemented properly and punishment under these laws should be increased.
- 8) The laws relating to land use, management and administration should concentrate more on environmental issues.
- 9) In addition to Department of Environment, a separate mechanism has to be formed to address land use and its impact on environment.
- 10) Department of environment should be equipped with more modern and developed technologies to assess the impact of land use on environment.
- 11) The small holdings of land should be consolidated and methods of co-operative farming should be introduced.
- 12) The Govt. should take initiatives to provide systematic and up to date source of land information.
- 13) Measures should be taken for the proper implementation of existing laws as well as enactment of new laws regarding land use and environment.
- 14) Steps should be taken to eliminate corruption from land as well as environmental section. Public interest has to be considered instead of private interest.

- 15) Steps should be taken to protect the lands of the southern part of the country Iron Saltiness cultivation of shampoo need to be reduced,
- 16) Campaign should be launched to raise awareness among people about land use and its impact on environment. Media as well as NGOs like BELA should Take important role in this regard.
- 17) People from all class should come forward to assist government to improve environmental Standard of Bangladesh.

8.0 Conclusion

Most of the Bangladeshis are prominently dependent on land for their daily living. Proper use, management and administration can protect the interest of the cultivators and promote economic development. To this end in view, the importance of reshuffling and introducing reform in the land management cannot be exaggerated. But in taking such steps, environmental aspects should be given utmost priority. Because it is our obligation to protect environment and ecosystem for present as well as future generation. Our constitution provides that for ensuring the basic necessities of the people, emancipation of peasants and workers, rural development, and agricultural revolution are essential. The Govt. should take proper initiatives to maintain these obligations in an ecologically sustainable way.

Bibliography:

Alamgir, Mahiuddin Khan, (1981) Land Reforms in Bangladesh, Centre for Social Studies, Dhaka .

Alim, A, (1979) Land Reforms in Bangladesh, 1st edition, Dhaka .
Banglopedia, National Encyclopedia of Bangladesh

Gray, Kevin, (1993) Elements of Land Law, Butterworth, Second Edition, London.

Kabir, Lutful, (1982) Land Laws of Bangladesh, Vol. iv, Law House, Dhaka.

Osborn's (1983) Concise Law Dictionary, 7th edition, Delhi, p.195.

Paper presented by M.A Malek and M.A. Matin, Institute of Food Radiation Biology, AERE, Savar, Bangladesh, Dated- February 11,1994.

Daily Janakhantha, 12.06.07, Year 15, number-109.

The Prothom Alo, July, 9, 2007.

The daily Prothom Alo, July, 3, 2007.

The Janakhantho, 16 June, 2007

The daily Prothom Alo, July, 8,2007

Daily Janakhantha, 12.06.07,Year 15, number-109 p.1

The Prothom Alo, July, 9, 2007.

The daily Prothom Alo, July, 3, 2007.

Daily Janakhantho, 15 June 2007

BBC World News,Wednesday,30 October,2010,17:36GMT

<http://www.en.wikipedia.org>,last visited-12.07.2011

<http://www.solutionstoeearthdestruction.com>. Last vsited-12.04.2011.

<http://www.soiltech.com>. Last visited-12.06.2011.

<http://www.blurtit.com>, last visited -10. 07.2011.

<http://www.Sdnpsbd.Org>, last visited- 12.04.08.