

# Environmental reporting : Corporate social responsibility

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There has been an upsurge of interest and enthusiasms in the dilations and debates about Corporate Social Responsibility (CSR) and its reporting in the recent years. It is now almost unequivocally recognised that business firms must move beyond just the strict considerations of profit maximization, and address the wider interests of the society and the environment within the context of which they operate. Notwithstanding the growing popularity and use, the term CSR reporting defies any universally accepted definition. It has been variously defined and applied. The concerned academic literature deploys diverse terminology to refer to CSR reporting including such terms as 'sustainability reporting', 'social responsibility accounting', 'social accounting', 'corporate social disclosures', and 'social and ethical accounting, auditing and reporting'.

Put rather simply, CSR reporting may be defined as the external reporting of social, ethical and environmental aspects of a business organisation. It essentially concerns the process of communicating the social, ethical and environmental effects of business organisations' economic actions to particular interest groups within society and to society at large. It involves extending the accountability of firms beyond the traditional role of providing a financial account to the owners of capital or shareholders. Such an extension is predicated upon the assumption that companies do have wider responsibilities than simply make money for their shareholders.

This article presents partial findings of an extensive research on CSR practices in Bangladesh (for details, see A.R. Belal 2008 'Corporate Social Responsibility Reporting in Developing Countries: The Case of Bangladesh', Ashgate Publishing, Aldershot, England, 170pp.). Based on a systematic qualitative survey (including the use of such tools as content analysis and semi-structured interviews) of 87 business firms, representing such sectors as bank, insurance, textiles, pharmaceuticals, fuel, food, engineering, service, jute and miscellaneous, the study aimed to explore the emerging practice of CSR reporting in developing countries with particular reference to Bangladesh

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by examining the corporate attitudes towards social, ethical and environmental issues as represented in the text of corporate reports in the public domain. In what follows, we share selected observations and findings of the study concerning the corporate attitude towards environmental matters as reflected within their annual reports for the years 1999/2000.

Out of the 87 surveyed companies, only a meagre 18% of them disclosed on environmental issues. Even then, the disclosure was very general and superficial. Here are some examples of the environmental disclosures: "The company is always active to keep its environment pollution free. In addition to the implementation of afforestation programmes in all mill areas steps have been taken to keep the internal environment of the factory pollution free by installing modern equipment." (A private sector textile company, Annual Report, 1999-2000).

"In keeping with the national objectives, the company attaches the utmost importance to a congenial environment. We have taken adequate measures to control dust, which is generated during the process of manufacturing cement. Moreover, we have undertaken elaborate programmes within the factory premises and notable progress has already been made in this connection." (A private sector cement company, Annual Report, 1999).

The corporate attitude, as evident from the above disclosure statements, suggests a rhetorically loaded but practically cautious and unsubstantial approach. The companies are saying that they have taken environmental issues seriously but their sincerity may be questioned in the absence of the development of an appropriate long-term corporate environmental policy and quantitative indicators to measure performance against the policy. The above ad hoc disclosures can, at best, be taken as a list

of mere intentions without evidence of any appropriate action.

The environment of Bangladesh is degrading rapidly. The untreated disposal of industrial wastes, gases and fumes is considered as one of the reasons for this. In spite of this, a large majority of companies (82%) included in this study did not make any environmental disclosure.

There are specific allegations against the companies polluting the environment. For example, one recent study reports that "Residents of Hazaribagh and its adjoining areas are facing serious health hazards due to unabated release of untreated effluent from about 250 tanneries into the river Buriganga. Sources said due to release of effluents and emission of poisonous gases, various skin diseases have broken out in Katsur, Hazaribagh, and in Rayer Bazar areas. Black spots are visible on the skin of the afflicted inhabitants of the area... gold ornaments, even chains of the

wristwatches worn by the people of the area, get discoloured within a very short time due to release of gas from the tannery effluent."

A tannery company, located in the Hazaribagh area, in its 1996 annual report said, "If we are to attain sustained growth we need... more efforts in quality management and pollution control. Your company has already begun the process through investment in a new 'green' tannery". In its 2000 report however it did not make any environmental disclosure excepting four words ('Caring for the environment') on its company logo shown on the middle of cover page and then on every page of the annual report. We are not told what the position is concerning that 'green' tannery now and how it is helping to mitigate pollution. All the company says is that it cares for the environment but what it does not say is how it cares for the environment within the community of Hazaribagh

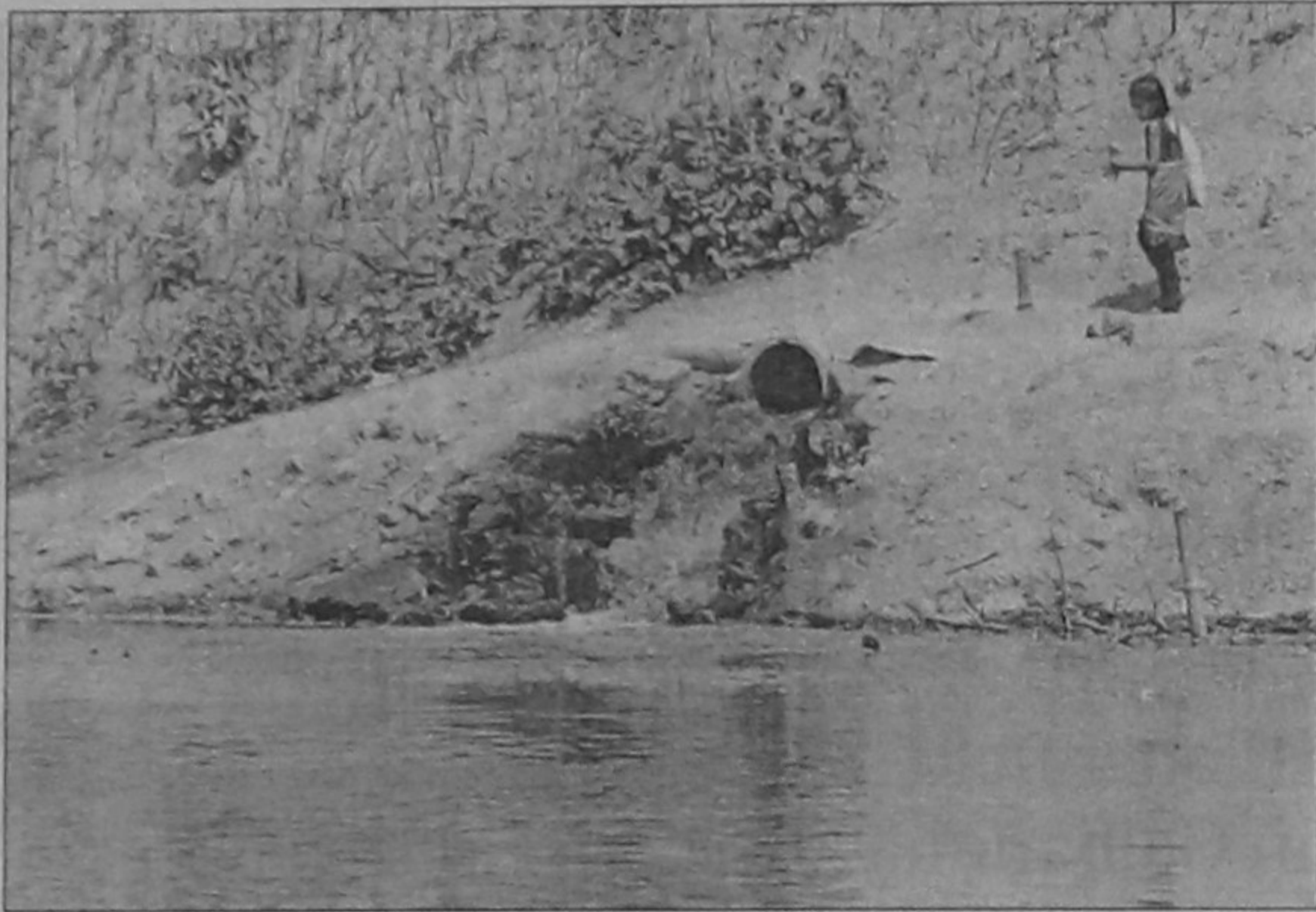
are suffering from serious fatal diseases due to the pollution created by the tannery companies.

The Karnaphully Paper Mills (KPM) is another public sector company seriously polluting the river Karnaphully. A newspaper article noted, "The chemical wastage of the KPM ..... is polluting water of the river Karnaphully and its surrounding environment at an alarming level. Effluents of the mills have been polluting the surrounding environment on the one hand and on the other hand, bad smell spreading from wastage is seriously affecting normal life of the people living near the mills" [The Financial Express, 21 July 2001]. In spite of such adverse impact on the surrounding environment, like other non-disclosers, the company remained silent on the issue and preferred not to make any disclosure in this regard.

In sum, the majority of studied companies have adopted a rhetorically bold but practically obscure approach to the wider issues of environment and society. The corporate attitude towards environmental issues appears to be of interim in nature as evidenced by the lack of long-term commitment. The overall findings of this study also allude to a very low and superficial level of disclosure. Further, the quality of disclosures is poor as is evident from the reluctance of corporations to provide precise quantified information.

There is a growing consensus amongst both the academics and development activists regarding the crucial significance and topicality of rendering business organisations to act in a more socially and environmentally responsive manner. As voluntary reporting initiatives often fail to generate the required responses amongst the companies, one cogent view is to argue in favour of mandatory reporting of social, ethical and environmental information as the way forward. Research and practical demonstration on the possible ways and means of ensuring more effective social and environmental disclosures remain generally limited in Bangladesh. This interesting area of study deserves immediate attention from our policy planners, academics, business executives, and development practitioners.

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Industrial effluent being discharged in waterbody.



River water polluted by industrial waste.

# Primary infrastructure : The proposed Padma bridge

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"INFRASTRUCTURE is the cathedral of modern civilization," Dr. Wayne Klotz, President of the American Society of Civil Engineers recently uttered these words pointing to 590,753 deteriorated and decayed road bridges above 20ft. span of his country. More than four billion vehicles cross these bridges every day. He tried to draw the attention of the US government for replacement and rehabilitation of about one quarter of these bridges in no time to avoid disaster like Bridge No. 1-35W in Minnesota in 2007 that collapsed and fell into the Mississippi river killing 112 people and 35 vehicles damaging. Infrastructure is also part of our built environment.

Roads, Highways and Railways fall in the category of primary infrastructure which helps to transport man and material from one corner to another of a country. People need bridges to cross rivers or gorges and also the rough terrain. According to Structural Engineering researcher, Kym Wilkinson of USA steel bridges last around 100 years, prestressed concrete bridges 75 years and reinforced concrete bridges 50 years provided they are designed properly and constructed as per codes and standards. As roads, highways and railways fall in the category of Key Point Installation (KPI) they are designed to last at least 75 years. Hence, most of the highway bridges in the USA are made of steel or prestressed concrete. Cost of a steel bridge much exceeds the cost of a prestressed concrete one, span and other factors remaining the same.

There are different types of bridge structures, Girder, Truss, Arch, Suspension, Cable-Stayed etc. Concrete girder bridges are very common in the highways of Bangladesh where the structures are almost invisible for the road users; under the road surface, the supporting girders are of reinforced or prestressed concrete. The Hardinge Bridge is an example of steel truss bridge; Sydney Harbour Bridge in Australia is a steel arch bridge. Golden Gate Bridge in San Francisco, California is a suspension

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bridge whereas the Bidyagar Bridge of Kolkata is a cable-stayed bridge. These different types of bridges have their specific purpose and utility and hence different design and construction process.

Proper selection of the type of bridge for the specific purpose is a very important factor for the sake of aesthetics, economy and durability. In China, small span concrete arch bridges are usually made to replace the old brick arch bridges; to maintain the harmony, they are made of the same shape of the existing ones. This is a great advantage that concrete structures can be cast in any shape as desired. However, for a large span, roads and highway authorities all over the world go for steel or prestressed concrete bridges obviously for the sake of durability and railway men go for steel bridges only. This is mainly for two reasons: (1) Motor vehicles on roads and

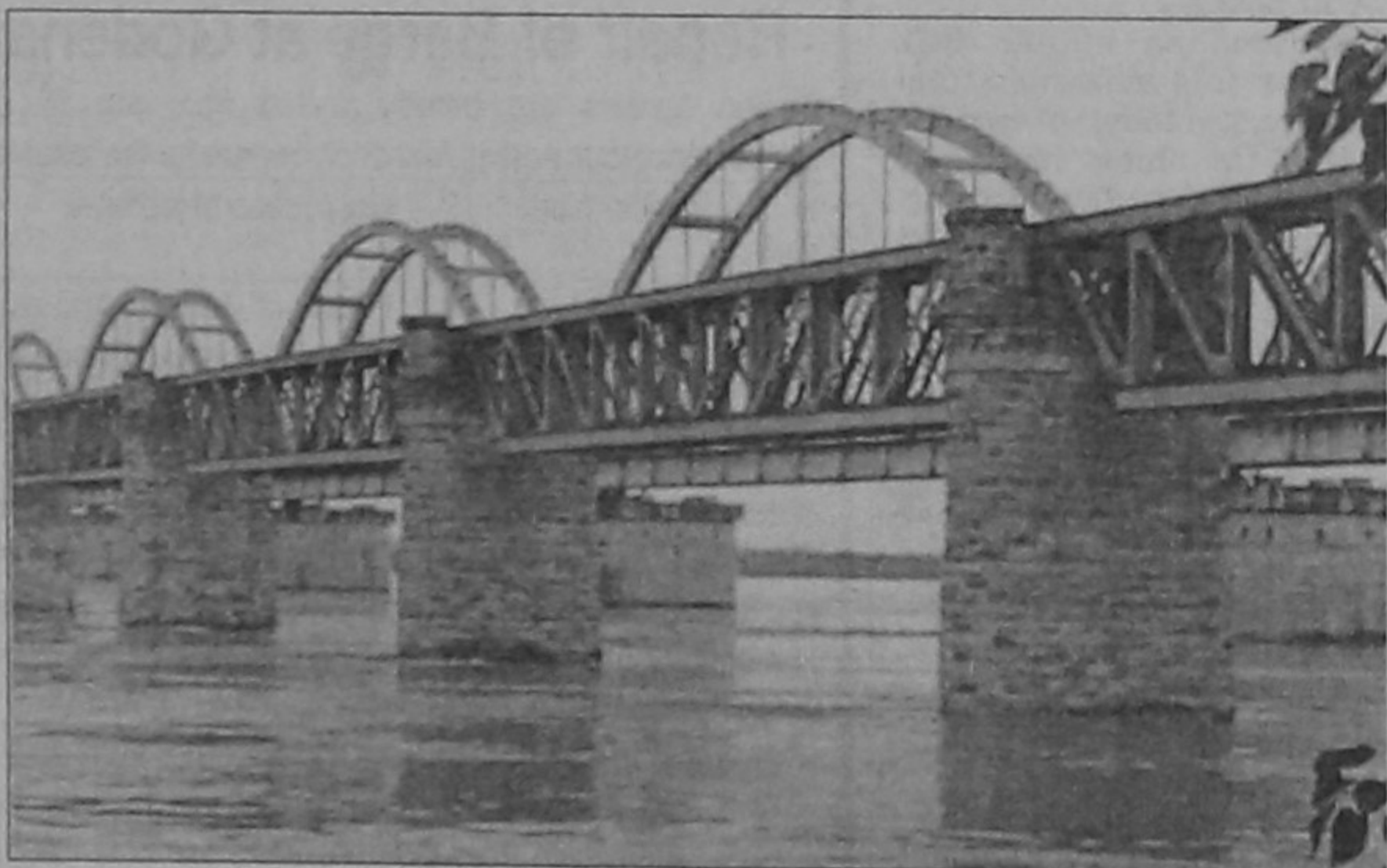
highways are lighter in weight than railway trains. (2) The railway locomotive and the train are not only heavier than the road traffic but the train also exerts a high impact load due to vibration that frequently causes to loosen the applied prestress. This curtails the longevity of the bridge itself. Hence, steel girder, steel arch and steel truss bridges are very common for railways and suspension and cable-stayed bridges are exclusive for roads and highways.

Recently we have seen several articles on the proposed bridge on the river Padma at Maowa in newspapers including one in the daily Samakal on 26 January, 2009. Veteran journalist and prominent writer, Mr. Ajay Dasgupta wrote an interesting article namely, "Build the Padma Bridge but Save the River" with an artist's replica of the would-be cable-stayed bridge. We very

much appreciate these. Since, no railway line exists on any side of this bridge, it will be much cheaper to make a cable-stayed road bridge like the Vidyagar Bridge of Kolkata in concrete avoiding the costly steel structure. The saving thus accrued may be diverted in future for a smaller road-cum-rail bridge at Aricha connecting the already existing railway on the western approach. It is to be remembered that railway line cannot be placed on any portion of the deck of a prestressed concrete girder road bridge. Bangabandhu Bridge was designed for a road bridge but the then President wanted rail connection also and the consultants laid the rail on one side. The prestressed concrete girders developed cracks and the durability of the bridge is curtailed. This will compel to abandon the rail track on the bridge and make a separate bridge for railways only. Examples of large road-

cum-railway combined bridges are available only in China and India. The Americans have plenty of money and materials; hence, they make separate bridges for roads and railroads. Indians have made combined road-cum-rail bridges on all their big rivers thus they have the expertise and experience. The same is true for China.

Asia's largest rail-cum-road bridge on the river Godavari linking Kovvur and Rajahmundry constructed by the Hindustan Construction Company (HCC) is considered as a modern day engineering feat. It is based on 28 bow string arch girders with equal spans of 97.5 m, thus making the total length 2,730 m. The bridge is fit for 250 km/h rail services. It has a road deck over the single track rail deck below. It was commissioned by South Central Railway on 11 March, 1997.



Godavari Road-cum-Rail Bridge at Rajahmundry in Andhra Pradesh, India



Yangtze River Cable-Stayed Highway Bridge, an example of Chinese technology.

The Nanjing Yangtze River Bridge, constructed between 1960 and 1968 is considered as the longest road-cum-rail bridge by the Guinness Book of World Records. It is the first bridge in China solely designed and constructed by the Chinese. The significant double-deck construction is made of main bridge portion which spans 1,677 m. The upper deck of the bridge is for highway with a span of 4,589 m. There are sideways on either side of the highway and each measure over 2 m. in width. The lower deck holds a twin-track railway with a length of 6,772 m. and a width of 14 m. that allows two trains to run in different directions. The bridge has nine piers altogether among which the tallest one is 85 m, with base area of about 400 sq. m. There are 200 cast iron reliefs inlaid on the banisters on the two sides of the highway. Two bridge towers are located at either end of the bridge each with a height of 70 m. They have elevators which facilitate access to both decks of the bridge as well as the watch towers.

Recently constructed cable-stayed bridge in Nanjing was opened on Friday, October 7, 2005. Nearly five kilometres cross river bridge was designed and constructed to ease the traffic jam in Yangtze River delta zone. The Vidyagar Bridge of Kolkata is of the same type.

Design and construction of large span combined road-cum-rail bridge on a meandering river cutting through sandy soil is quite complicated. To deliver a good work, it warrants engineers with post-graduate education and long field experience. Only then the country will be truly benefitted. It may, perhaps, be wise to make a long cable-stayed road bridge (Chinese model) at Maowa as mentioned earlier, saving a considerable sum of money. This saving can be utilised, as said for a shorter length combined steel rail-cum-road bridge at Aricha.

(For any clarification, please consult the free Wikipedia in Internet).

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# Role of zoos in wildlife conservation

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KEEPING animals in zoo for public recreation is an age old concept. In the last few centuries many zoos have been established around the world as a refuge for the captured wild animals mainly for giving people pleasure. However, rather some new zoos are being set up with a view to promoting care of people for wild animals, reproduction of endangered species and increasing the scope of research on wild animals. Management in zoo For proper management of wildlife irrespective of captivity or in-situ condition knowledge from three distinct disciplines are very essential - population or community ecology, ethology and systematics.

Food and nutrition: Feeding habit and providing sufficient nutrition are two basic points for selecting food items. Freshness of food is especially important for herbivorous animals. Sufficient

amount of fresh water supply also has to be ensured. In zoos of developing countries the staffs of food supply units usually buy substandard food and save money for themselves.

Breeding: In zoo there should be reproductive facilities for most animals excluding only those who do not breed in artificial system. Artificial breeding capacity is one of the major sticking features of modern zoos. When there is sufficient autecological data along with its lifecycle and Ethology for a certain animal it is not impossible to manage its reproductive healthcare. Many animals, most mammals, reproduce naturally in the zoo. Natality and survival of offsprings in a zoo is good indicator of its over all management success.

Treatment: Medical treatment facility is an essential part of the zoo system. Treatment of ailing animals is of great concern for these days' zoos because incidence rate for certain diseases in captivity is usually higher than in the wild. Usually animals stay in congested

and less diverse environment in zoos. This helps develop many density inclined diseases. Experts of veterinary sciences are supposed to be engaged in this sector of zoo management.

Behavior and comfort: Not only meeting the basic needs or survival of animals is the goal of zoo management, animals also have the right to be in comfortable environment. Though some animals group directly oppose the zoo system where they are kept permanently in cages, it is not possible to demolish the system overnight. In zoos animal wellbeing can be ensured in many ways: Making more spacious rooms for them and building their dwelling space in mimicry of their natural habitats are two ways to reduce their pain in absence freedom. Protection from heat and cold, stress and distress and disease causing agents are various measures to increase comfort of animals in zoos.

Exchange: Individual animal has its own genotype. Genetic diversity within the species is very crucial for survival of

newborn babies in wild population of vertebrate animals. In the zoo the diversity at species level is very narrow because only a few individuals of a species are kept in a zoo. Animal exchange is important here. If you exchange animals of a certain species with those in other zoos it will definitely increase the genetic diversity of both animal stocks.

Objectives of zoo 'Carer' is the word that can express the role of zoos for the benefits of animals. The word can be elaborated as follows: C=Conservation, A=Animal welfare, R=Recreation, E=Education and R=Research

Conservation: For conservation of wildlife we must ensure -- Co-operation; Communication; Co-ordination. These triple Cs are required among experts from zoology, botany, chemistry and geology. Special contribution is required from taxonomists, ecologists and environmental scientists.

Animal welfare: Rights of animals in a Zoo include feeding, supply of clean

water in sufficient quantity and treatment facilities for the sick animals. Animals would be free from -- Hunger; Thirst; Malnutrition; Stress and distress; Disease and injury.

Recreation: Public recreation provided by the zoos gives them a unique scope to teach people about the importance of wild animals for ecological balance of our environment and make them conscious about the adverse impact of anthropogenic activities that promote extinction of animal species.

Education: Education is crucial for conservation. Educating people about significance of wild animals and their presence in nature by various means through their visit zoo to described widely as successful.

Research: In a zoo students of zoology, ecology and conservation biology have many things to learn. Most important field for research in a zoo is adaptation studies of wild animals in an environment different from their native habitat. Knowledge of wild animal husbandry

has increased greatly in recent years, resulting now in the need for populations of many species to be regulated by cooperative zoo efforts. Collective efforts are also required to exchange accumulated husbandry and reproduction knowledge and experience for species that do not as yet breed optimally in zoos.

Zoos are institutions that can uniquely integrate their three major conservation tasks of environmental education, research, and species and habitat conservation. Combined with the enormous public interest in zoos and the ever more intensive cooperation within the worldwide zoo network, this integrated approach provides a great potential for conservation. The World Zoo Conservation Strategy strongly emphasizes that cooperation, coordination, and interaction in all conservation efforts are the only means for success.

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