

Case Note: The case is regarding a construction of world trade centre or a Public Exhibition Center on a wetland.

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IN THE HIGH COURT OF CALCUTTA

Matter No. 2851 of 1992

Decided On: 24.09.1992

**People United for Better Living in Calcutta-Public and another
Vs.
State of West Bengal and others**

Hon'ble Judge:
Umesh Chandra Benerjee, J.

ORDER

1. Population growth and modern technological developments by themselves pose a great threat to the very existence of living and non-living organisms -- this is not confined to a particular region, but it has crossed trans-national frontiers. In 1972 the Stockholm Conference under the auspices of the United Nations did deliberate upon the issues of protection of human environment. The Habitat Conference, Vancouver, British Columbia, 1976 and the World Water Conference at Argentina in 1977 recorded a detailed discussion as regards the water pollution. It is not out of place to mention that water pollution along with the pollution in the air and the noise pollution are in a much higher degree in the metropolitan centres than in the rural sectors and as such population influx and technological developments can be ascribed to be the two basic factors for such environmental degradation. The National Environmental Engineering Research Institute has confirmed that levels of sulphur dioxide and other particulate matters in big cities have exceeded the permissible limits as prescribed by the World Health Organisation (W.H.O.).

2. While it is true that in a developing country there shall have to be developments, but that development shall have to be in closest possible harmony with the environment, as otherwise there would be development but no environment, which would result in total devastation, though, however, may not be felt in present but at some future point of time, but then it would be too late in the day, however, to control and improve the environment. Nature will not tolerate us after a certain degree of its destruction and it will in any event, have its toll on the lives of the people : Can the present-day society afford to have such a state and allow the nature to have its toll in future - the answer shall have to be in the negative : The present day society has a responsibility towards the posterity for their proper growth and development so as to allow the posterity to breathe normally and live in a cleaner environment and have a consequent fuller development : Time has now come therefore, to check and control the degradation of the environment and since the Law Courts also have a duty towards

the society for its proper growth and further development and more so by reason of definite legislations in regard thereto as noted hereinafter, it is a plain exercise of the judicial power to see that there is no such degradation of the society and there ought not to be any hesitation in regard thereto -- but does that mean and imply stoppage of every developmental programme -- the answer is again 'no' : There shall have to be a proper balance between the development and the environment so that both can co-exist without affecting the other. On the wake of the 21st century, in my view, it is neither feasible nor practicable to have a negative approach to the development process of the country or of the society, but that does not mean, without any consideration for the environment. As noted above, there should be a proper balance between the protection of environment and the development process : The society shall have to prosper, but not at the cost of the environment and in the similar vein, the environment shall have to be protected but not at the cost of the development of the society -- there shall have to be both development and proper environment and as such, a balance has to be found out and administrative actions ought to proceed in accordance therewith and not d'hors the same.

3. Erroneously at times pollution is equalled with environment. In fact, pollution is one of the aspects of environment and the expression 'environment' has to be viewed with all its components and considered in its totality. There are indeed a wide range of physical, biological and man-made components that interact in building up an environment. This has made the subject complex and a matter for multi-disciplinary study. Environmental conditions get substantially influenced by local factors; Factors like regular recurrence of natural calamities, i.e. floods, drought, land subsidence and the like or features like intensive exploitation of natural resources, e.g., mining, deforestation or a highly effective health phenomenon in the form of predominance of an endemic disease or a typical socio-economic condition engulfing a large percentage of local population -- all exert profound influences of different nature and dimensions on the environment that revolve in a particular area. The intensity of the major factor determines the essential character of the environment under such circumstances. In-depth studies of such problem areas reveal interesting features exposing intricate linkages between environmental conditions and the pattern of human behaviour and response. Some possible solution towards meeting the challenges of nature may also be struck which, if adopted, may bring a significant change for the better.

4. Turning attention now on to the present writ petition, it appears that the entire thrust of challenge in the petition is in regard to the maintenance of wetlands in the eastern fringe of the city of Calcutta -- but what is this wetland? The Water Board of the New South Wales Government, Australia in its Secondary Poster 2 'Protecting our Wetlands' records the following:

"Wetlands, often called bogs, swamps, marshes, billabongs and a host of other names, are areas of wetland. The amount of water in them varies depending on the weather and the time of year. Sometimes they can be quite dry. Special plants, such as reeds, grow in wetland areas. Wetlands also provide a home for a host of different wildlife ranging from migratory and local birds to fish, reptiles, amphibians and insects. All these living things depend on wetlands for their existence.

Estuarine wetlands are found where rivers start to join the sea. Their water is brackish (a mixture of salt and fresh water) and it rises and falls along with the tide. Mangroves grow in estuarine wetlands.

Billabongs are old river beds that are left when the river takes a different direction. When the new river floods or there is heavy rain, the billabongs fill with water.

Marshes and swamps can be found in many places. They are shallow, low lying areas of ground, filled with reeds and wildlife".

The Secondary Poster also records :

"Each wetland functions as an ecosystem that is, a system where all the parts (land, plants, animals, water, solar energy) depend on each other. If one part of the system, the amount of sunlight for instance, is changed, all the other parts will be affected too. Often change to one element of an ecosystem results in the destruction of the whole.

Not only are the wetlands fragile ecosystems in themselves, but they form a vital part of the world's ecosystem as well,

"Wetlands rely on established water drainage pattern. Any population nearby, with its paved streets, gardens, storm water waste etc. inevitably alters water drainage patterns and affects the wetland.

We need to take steps to prevent destruction of our wetlands."

5. The Poster noted above also records the importance of wetlands as follows:--

"Even though many people never notice wetlands, they play a very important part in our lives.

Wetlands provide a haven for vast numbers of living creatures which rely on them for food, shelter and as a breeding place. While they may not live permanently in the area, huge numbers of birds, animals, reptiles, fish, amphibians and insects regularly visit and use wetlands. Disappearance of wetlands threatens their very existence.

Migratory birds, some from as far away as Siberia and Japan, travel to Australian wetlands every year to escape the cold winter. Many of these migratory birds are rare and endangered species.

Many kinds of fish hatch and grow to maturity in the safety of the wetland mangrove swamps. When they are adults they move into the ocean. Most of the fish we eat depend on these mangrove 'nurseries' for hatching their young and for the survival of the species.

Many species of plants survive only in the special environment of the wetlands. Loss of wetlands threatens their survival.

Wetlands play an important role in the water cycle, cleaning and purifying water as it passes through them. They can also help control flood water by stopping and releasing it slowly through the ground.

There is growing evidence that wetlands are a vital link in the food chain, 'processing' food for some species, and also play a part in nitrogen fixing, a process which alters nitrogen to a form where it can be used by living creatures.

Wetlands are also important for people, as areas where environmental scientists can learn more about our total environment, and as areas for relaxation where people can enjoy canoeing, fishing, picnics, photography, walking, bird watching and sometimes, just sitting in a quiet and beautiful place".

6. The New South Wales Water Board, as appears from relevant statistics looks after around 500 wetland areas. As part of the Special Environment Programme, scientists and wetlands specialists are working to rebuild wetlands that have been damaged and to protect wetlands in future. The Water Board is teaching people ways and means to protect the wetlands.

7. It is to be noted that the American environmentalists also in their turn are making frantic efforts so as to maintain American wetlands system. It has been calculated in the United States that one acre of wetlands is worth tens of thousands of U.S. Dollars for the services it renders. According to the American environmentalists, the following can be ascribed to be the contribution of the wetlands:--

- (i) Wetlands act as water purifier;
- (ii) They help maintain surface moisture;
- (iii) They help curb soil erosion;
- (iv) They lessen the impact of both floods as well as droughts;
- (v) They contribute pure water to wells;
- (vi) They preserve the wildlife; and
- (vii) They support the fishing industry.

8. History records that the American city of Grand Fox had extensive wetlands, but people chose to do away with them for commercially more lucrative option -- the end result being that there were 8 floods in 30 years which should have come once otherwise in 80 to 100 years. The Mayor of Grand Fox is now making an all-out effort to convince and impress upon the farmers to convert their fields into wetlands even by compensating them lucratively as it will be cheaper than tackling the repeated floods.

9. Wetlands being an unseen storehouse of nature's bounty and a gift of nature to mankind act as regulators and reservoirs for rivers. The marshes slow down the speed of the water flowing from the streams to the rivers -- this delay gives the river the much required time to adjust to the various tides : but with the removal of the

wetlands, the water from the streams will start flowing faster onto the rivers and the rivers, not being able to adjust, will flood the surrounding areas. The American environmentalists have assessed on the basis of economic data that about 13 million water fowls depend on the wetlands of the State of Alaska alone for their survival and about 5 million dollars worth of Salmond fish comes from these wetlands.

10. Kerry Turner in his article 'Economics and Wetland Management' published by the Royal Swedish Academy of Sciences stated that wetland ecosystems are among the most threatened of all environmental resources. The over-utilisation of the total wetlands stock has been the result of a combination of economic development pressure, information failure and market and intervention failure. There is an urgent need for a balance to be struck between wetland conservation, sustainable utilisation and wetland conversion -- Sustainable utilisation and the maintenance of a sustainable flow of income derived from the wetlands stock is the key issue for developing economics. Economic valuation of the multifunctional wetland resources is required, principles and methods' used in the assessment of temperate wetlands in developed countries can aid the analysis of tropical wetlands in developing countries. '

11. Turner also notes that development projects have often stimulated wetland conversion largely because of information failure. Planners just did not realise how important some wetlands were for sustainable development. Nevertheless, there is a growing awareness that most wetlands are more valuable economic resources when retained in their natural or semi-natural state. Conversion or degradation of such natural capital assets will therefore, often not represent an increase in resource-use efficiency. Social inefficiency in wetland use is connected to the fact that wetlands are multifunctional resources and that, under heavy utilisation pressure, some of the multiple uses conflict with each other. The inefficiency is not a consequence of the multiple-use conflict itself, but of the fact that not all the uses are properly evaluated and accounted for.

12. Goodland and Ledec in a published paper "Wildlands; Balancing Conversion with Conservation in World Bank Project (1989; Environment 31, 6 to 11 and 27 to 35)" have remarked that until two or three decades ago a large proportion of the world's wildlands including wetlands were protected by their remoteness, their vastness and their marginal direct usefulness for agriculture or other economic activities. The last 30 years or so, however, have witnessed rapid conversions of wetlands in all developing economics. The author pointed out that the over-utilisation of the total wetland has been the result of a combination of factors. Given the special location of the majority of wetlands, i.e. along rivers, on coasts and on level terrain, often with inherently fertile soils, multiple-use pressure is inevitable as the economic development process gathers pace. All these factors combine to make such sites attractive for a diverse range of competing economic activities. In this sense, the 'natural' use conflicts that arise can be considered to be in some sense almost inevitable. This situation need not be viewed negatively in the sense of a straightforward conservation versus development conflict. Rather, a balanced approach is required in which many wetlands will be utilised for commercial output (timber, livestock fodder, fish, etc.) under a sustainable management programme on a waterbasin wide level. It is stated that wetlands have been lost inadvertently because of policy interventions which have, been badly co-ordinated or poorly designed.

13. As earlier noted the population influx and modern technological development have been identified as the chief culprits to contribute a major share of the pollution in the cities. But the obsession with the phenomenon of pollution which is associated with urban and industrial areas make us lose sight of the environmental conditions of the rural areas where a major percentage of our population live. In that view of the matter, environment needs to be protected not only in the urban areas but also in the rural areas.

14. Turning attention on to the Calcutta wetlands we find that there are 40 species of algae and 2 species of fern, 7 species of monocots and 21 species of dicots. Latest data suggest presence of about 155 species of summer birds of which 64 species are resident birds and 91 are migratory. There are 90 species of winter birds of which 44 are residents and 46 are migratory. These migratory birds are mainly from Siberia and East Europe and they arrive at the city through Trans-Asia Migration Route. Admittedly, Calcutta has had around 20,000 acres approximately of wetland area, of which 10,000 acres have already been reclaimed and the sprawling metropolis under the name of Salt Lake City being a satellite township area of Calcutta exists, and the East Calcutta wetlands now therefore comprises of around 9,000 and odd hundred acres approximately on the eastern fringe of the city with a natural slope from the west to the east. The entire area comprises of low lands characterised by marshes and ponds etc. As regards the soil, there is no manner of doubt that it has very high moisture content of a mixed clay and alluvium type. On the issue of hydrology, the entire waste and drainage (sewer) water of Calcutta runs through a system of main and ancillary channels going through the wetlands; these flows are channelised into the sewage-fed fisheries for pisciculture and the wetlands purify the entire waste water through a natural process of oxidation, radiation, biological breakdown of organic wastes and pisciculture. As regards surface utilisation, wetlands are used for pisciculture, agriculture, garbage, dumping for solid waste, horticulture on garbage dump. The climate and micro climate as of 1983 appears to be 10 centigrades to 40 centigrades with a rainfall of average 1605 mm.

15. On the issue of the characteristics and importance of wetlands and the impact of wetlands on ecosystem, it has been stated that in this region, 1 square metre of surface water can produce 23.75 gm. of oxygen per minute after meeting the requirement of aquatic animals. Average individual human being needs 2.1 gm. oxygen per minute and per day, therefore, it is 3024 gms and any loss of wetland, therefore, will have tremendous impact on to the living organisms as also human being on the surface. It has been argued that the role and importance of wetlands in relation to its surrounding cannot in any way be undermined. It is vital for maintaining micro climatic condition; absorbing pollution from air receptacle for rain water and sewage; waste recycling; pisciculture : habitat for aquatic flora and fauna : proven high biomass density : gainful occupation to large population supplying low cost fish and vegetation. It was further contended that within urban limits, water bodies act as detention centres and outside the core area, they provide the spill basin and any change may lead to floods. It has been suggested that in the United States of America, detention centres are created to control the passage of stormwater and sewage.

16. In continuation of his submission in regard to the beneficial role of the Calcutta wetlands, Mr. Sarkar, appearing in support of the application, stressed that efficient management of the sewage outfall channels with periodic dredging will ensure

adequate waters to save the wetlands. Tidal flows from the mouth of Bidyadhari river do not reach the backwaters due to siltation. It was further suggested that pisciculture, horticulture, agriculture form a chain in the recycling of resources and generate essential nutrients for human consumption. Mr. Sarkar laid stress that acquiring the wetlands for industrial activity will disrupt the fragile ecosystem and Calcutta will die through permanent damage to natural sewerage system : loss of cheap nutrients: loss of habitat for flora and fauna : threat to their survival : loss of unique system of natural waste disposal forcing costlier and environmentally hazardous options : damage Calcutta's micro climate involving rainfall, humidity, temperature control, oxygen generation : displace marginal families who depend on primary and secondary occupations on the wetlands.

17. It is on this factual backdrop that the instant matter shall have to be decided by the Court as to whether further encroachment of 784 acres of Calcutta's wetlands will lead to such a degradation of environmental conditions so as to have its toll on the society. Admittedly, as appears from records, Calcutta's wetlands comprised of fishing ponds popularly known in Bengali parlance as 'bheris' and pisciculture admittedly to a substantial extent, takes place in that wetland area through which a good number of people earn their livelihood and it is, therefore, seen that these wetlands remain not only for the purpose of environment but for the purpose of economic purpose as well.

18. It is at this juncture, however, the views expressed by A. K. Ghosh, Joint Director and Incharge, Environmental Monitoring Wing, Zoological Survey of India; ought to be considered. In his paper on 'Ecology and Environment of Calcutta' published by the Government of West Bengal, Shri Ghosh on the issue of 'Problems and Prospects of Calcutta's Growth' in Table 9 recorded the following: --

SI. No.	Parameter	East and Southeastern growth	Northwards Growth
1.	Environmental consideration	Loss of wetlands; increases air pollution; destroys ecosystem and waste treatment facility.	The wetland ecosystem remains intact.
2.	Drainage; flood cushioning and health	Reclamation and urban constructions cause major loss of drainage outfall basins. Less facilities for disposal of rainfall excesses; increasing health hazards.	Wetland facilities in the eastern metropolitan fringe can be utilized healthier.
3.	Water supplies	Increasing mineralization and hardness of water; unpredictable salinity in ground water. Consequent need to tap and treat water.	Prolific ground water supplies major basin; lesser pumping costs and mineralization problems (only iron removal called for); safe and potable for human beings.

4. Sewage/ treatment and solid waste disposal.	Natural Dhapa system being lost by reclamation. Calls for very costly treatment plants. Gradual loss of garbage disposal sited as well.	Natural facilities retained. Additional system can be designed in eastern melro fringe wetlands.
5. Economic Products	Rich fish haul as primary source of protein rapidly dwindling. Vegetable growing areas also likely to be usurped for urban construction ultimately.	Fisheries development can be further strengthened with State/Panchayat control; more of vegetable mixed farming products,
6. Hinterland and Communication	Away from the city's hinterland increased freightage and communication/traffic problems in core Calcutta.	Nearness to hinterland easier disposal of trans-Hugli facilities Shall need strengthening of North communication corridors.
7. Social Factors	Loss of primary sector livelihood (fisheries, farming, etc.). Increasing tertiary sector problems. Control by land speculators to take over reclaimed land parcels at the cost of middle and lower economic classes.	Distance from core will discourage such speculators. Cleaner urban development, better health due to lesser drainage congestion and lesser preventive health costs, etc. Greater land/water based employment in primary sector.
8. Hugli Conservancy	Larger extraction of water for urban supplies with consequent flow reduction and increased pollution and salinity; in turn, escalating cost of treatment.	Trapping Hugli avoidable. Northwards reach of river less polluted with lesser tidal salinity.
9. Land	Only by reclamation at high cost and degradation of system.	Good lands available in Kalyani-Haringhata zone. Dairy to be shifted to east Calcutta reclaimed zone.

19. Ghosh in the self-same paper stated :--

"But what is most remarkable is that in spite of 300 years of mostly unplanned development, the city still shows signs of vibrant life in its biotic components. The city of Calcutta within its limit exhibits at least 7-10 species of mammals, 200 species of birds, 15 species of reptiles, 13 species of amphibians and 40 species of butterflies. But how long can these elements withstand the on slaught of massive changes? Comparative figures of bird species on the Salt Lake before and after reclamation show an alarming regression rate. The long-drawn battle to preserve the remaining

habitats (especially in and around the wetlands of east Calcutta and Brace Bridge) can never provide a long-term solution. The planning authority has to wake up to the need for biological conservation. Apart from aesthetics, the entire food chain and energy cycle is dependent on biological components, a large-scale disruption of which can only lead to a collapse of economic fishery and agriculture around the metropolis".

20. On the basis of the data as above, there cannot be any manner of doubt that the Calcutta wetlands presents a unique ecosystem apart from the materialistic benefit to the society at large. Within the Calcutta Metropolitan area the Calcutta wetlands can be easily identified as the most outstanding wetland cluster. As already mentioned, these wetlands bear the oldest tradition in the world of resource recovery from city's waste besides being the largest of such systems in the world. They have now become a subject of international interest. Since the beginning of this century, various forms of agriculture and pisciculture have been practised in the region. These wetlands are intertributary marshes lying between the levee of the river Hugli to the west and of the Bidyadhari to the east. The Bidyadhari can now be traced only by its aggraded bed presently under paddy cultivation. It was a tidal channel and the shallow marshes acted as spill basins. Gradually with diversion of city sewage, premature reclamation by building embankments for the then existing salt water fisheries and with silting up of the river, these marshes became stagnant and ceased to be saline (Ghosh & Sen, 1987). Since then they have become sewage receptacles for the city and with innovative enterprise of local people they have been used as waste water fisheries producing more than 10 quintals of fish per acre per year for the city. These wetlands also store run off from the adjacent areas during the rains, and are traversed by the sewage outfall channels of the city. These channels carry the wastewater eastwards to the Kulti river which eventually falls into the Raimangal which drains into the Bay of Bengal. These wetlands recycle waste water for efficient nutrient recovery; provide fresh fish to the market of Calcutta and employ thousands of rural people over an area of about 7,500 acres.

21. On the basis of the factual backdrop as noted above, it is, therefore, to be seen as to whether there is any environmental hazard or affectation of the waste recycling area so as to create problems for this huge metropolis as also for the satellite township in the eastern fringe of the city of Calcutta. While it is true that there is a tremendous influx on the urban area, but that does not mean and imply, however, that the urban area shall have to go on expanding to provide a shelter for everybody whosoever comes to the urban conglomeration. The city of Calcutta is now witnessing gigantic demon-like multi-storeyed buildings and these demons look large on every street-big or small -- posing great problem to the traffic as also the sewage. The matter, therefore, shall have to be decided having these facades of the present life of the city of Calcutta. Satellite township is a modern phenomenon in this country. Delhi has experienced few years back the same and so has Bombay and Madras. It is nothing new that this mad rush continues throughout the country for urban area. But does that mean and imply that the gift of nature to the humanity shall have to be destroyed -- does that mean and imply that this unseen store- house of nature's bounty would have to be exploited to its optimum level? In my view, the answer cannot but be in the negative. It is not Out of place to record that this concern for environment is of recent origin, but as time progresses, as the society develops, the right-thinking people of the society -- would come forward to impress upon the people that this bounty of nature ought not to be wasted any longer but that does not however mean that we will

have to continue with malutilisation of the nature's bounty. I must record here that the Government is also not lagging behind and in this State, legislations are in the offing, as has been stated by Mr. Advocate-General appearing for the State-Respondents as to prohibit any further change in the land-use map of the State. The Town and Country Planning Act has already been engrafted in the Statute Book and the experts are on their toes for the purpose of bringing in a healthy atmosphere so as to educate the common people the need for protection of the environment by preservation of the wetlands.

22. Let us now analyse, however, the defence set up by the State-Respondents. It was contended that the history of Salt Lake clearly indicates that the scheme of things now visible in Salt Lake development was conceived in the 19th century itself but could not be brought to the state of implementation due to paucity of fund. The ecological and environmental parameters were unperceived issues at that time -- keeping a portion of the area under Salt Lakes reserved for fisheries and perhaps for wetlands was also a common feature in all Salt Lake Development Plans that appeared in the scene in the form of State initiative from time to time. By the time the slogan 'Save Wetlands' was raised, it was argued, 3,000 acres of northern Salt Lake had already been developed by early 1980s and after pruning the original plan, only 784 acres more were to be essentially developed now for which little over 900 acres are to be acquired for completing the programme. The development of these 784 acres contiguous to Sectors 4 and 5 is now a fait accompli. It was further submitted that this attempt to develop additional 784 acres is only to optimise the use of infrastructure already created in Sectors 4 and 5 and is a historical reality that cannot just be written off. The Eastern Metropolitan Bypass, now almost an arterial road to the city itself, cannot be abandoned. The infrastructure created for the electronic complex that has already generated employment at the rate of 150 persons per acre, as compared to 1 to 2 persons per acre by the bheries, cannot be wasted and the 33 KVA power sub-station installed at Sector 5 with a capacity to meet potential demands of industrial units in the area cannot just be shut off. The contemplated co-operative housing complex facilities in these sectors for the middle income group of people cannot perhaps be given up in the larger social interest the above is an extract from a paper presented at a seminar on Land Development and Environmental Issues in the Calcutta Metropolitan Area held on 19th July, 1990 at the Calcutta Information Centre, Calcutta and prepared by the Institute of Local Government and Urban States; Local Government and Urban Development Department of Metropolitan Development Department, Government of West Bengal and Mr. Advocate-General laid very great emphasis thereon. Certain questions were raised in the paper itself, the same being : What is the desirable relationship between population and areas to be preserved as wetlands -- What happens to the cities that do not have wetland in their environment --in such a situation is it recommended that agricultural lands be converted into wetlands? The paper itself records further that host of questions like these are waiting for answers.

23. While it is true that the perceptible mind may seek answers to the questions raised above, but it is for the environmentalists and the Government to answer these questions themselves and to ascertain whether to maintain the proper environment, there should be conversion of the agricultural lands into wetlands or not -- but the problem posed here is not whether there should be such a conversion, but whether one should try to develop and reclaim an already existing advantageous system being a

bounty of nature available to the city. In order to appreciate that, the further contention of the State-Respondents ought to be noted. It has been stated that the area in question contiguous to Sectors 4 and 5 contains three bheries, viz., Nalban Bhery consisting of 413 acres, Chinta Singh Bhery consisting of 188 acres and three Munshir Bhery consisting of 183 acres, i.e. a total area of 784 acres. The 4th one, viz., Mollar Bhery which is stated to be consisting of 121 acres is to be used for a different purpose -- it will be dug deeper and the earth thus available will be used for developing the three bheries named above and the final use of Mollar Bhery would be garbage dumping ground and land acquisition proceedings in respect of these bheries are at different stages of completion. Mr. Advocate-General laid stress on the factual score that the Government has already taken possession of Chinta Singh Bhery and Mollar Bhery and the Nalban Bhery is under the custody of the District Magistrate, South 24-Parganas and is being temporarily used by the Directorate of Fisheries, though, however, possession of Munshir Bhery has been stayed by a Court order. It has further been stated that the entire 784 acres proposed to be developed are not exclusively used for wetlands now. Chinta Singh Bherry and Mollar Bhery are now being temporarily used for raising agricultural crops and in respect of Nalban Bhery, possibility of relocation may be explored further east of its present location. The State respondents further contended that the contention of the writ petitioners in regard to the loss of employment opportunities is ill-conceived -- whereas the average employment generated by the bheries is only 1 to 2 persons per acre as compared to already achieved 150 persons per acre in the industries located in the electronic complex of the Salt Lake. According to the State Respondents, at a very liberal estimate, around 700 persons may at best be displaced from employment due to proposed development, of which 500 persons may be rehabilitated in the proposed alternative site for Nalban Bhery and the rest may be absorbed in the industries that would come up in the area after the proposed development is completed. As regards ecological and environmental parameters, it has been stated that the desirable relationship between the developed areas and the wetlands, which need different geo-hydrological considerations, has not yet been recommended by the experts and as such, a question may be asked as to whether development of 3, 784 acres of Salt Lake with existing 3000 acres and proposed 784 acres (out of the total wetlands in this area) can be termed to be a threat to environment and ecological balance. Mr. Advocate-General submitted that as a rough and ready norm, the ratio between developed land and wetland should be 7 : 3 which in any case will perhaps be maintained in the area. Mr. Advocate-General submitted that the Government is much more concerned than the writ petitioners because ecological and environmental issues are as important for the mankind as development of Calcutta itself. As regards the sewage fed fisheries, it was contended that by no stretch the entire wetland is required for the same and after the proposed development of 784 acres, the available wetland will be many times more than the requirement of such sewage fed fisheries. Therefore; this cannot be termed to be an issue in the present context. As regards the loss of large quantities of fish grown in the bheries, Mr. Advocate General strongly submitted that one cannot but to accept the necessary evil associated with urbanization. It was contended that there is hardly a city that grows or expands without encroaching upon farm lands. Here, however, the question is not as simple as the city losing a portion of its fish and vegetable supply from its backyards, but it is a question of social and economic cost benefit involving much larger and intricate issues. Incidentally, it was contended that from 20,000 acres the Calcutta's wetlands gradually shrank to 10,000 acres out of private initiative only and private initiative are

now much more stronger \ than before. The rate of conversion of wetlands into residential areas, particularly in the southern Salt Lake has attained an un-precedented high, in the wake of which, in the Salt Lake area where land filling is progress sing quite faster from west to east, conversion by individuals and promoters are evident also in the northern Salt Lake. The total area of wetlands, as it stands now, is not precisely known, but it can only be conjectured that the area is now much less than 10,000 acres.

24. Incidentally it is placed on record that after this matter was moved, to obtain a first- hand view in the matter, this Court visited these wetlands areas on two different occasions. The fishing ponds or the bheries are well-defined and identified. There are small patches of marshy lands as well and some swamps and small ponds, but the bheries are well-defined and each one of them is known by a name. As far as this Court has been able to ascertain, in the eastern fringe on the city of Calcutta, the following bheries or fishing ponds function regularly:--

Sl.No.	Name of Bheries	Area in Acres.
1.	Chinta Singh Bheri	185.59
2.	Sardar Bheri	165.06
3.	Nater Bheri	175.90
4.	Nalbagan Bheri No. I	
5.	Nalbagan Bheri No. II	
6.	Nalbagan Bheri No. III	
7.	Nalbagan Bheri No. IV	630.02
8.	Munshir Bheri	171.13
9.	Mollar Bheri	135.90
10.	Narkeltolla Bheri	187.50
11.	Patravad Bheri No. I	
12.	Patravad Bheri No. II	
13.	Patravad Bheri No. III	
14.	Patravad Bheri No. IV	328.50
15.	Sahebmarra Bheri	363.69
16.	Baro Paresh Bhen	244.37
17.	Choto Paresh Bheri	92.31
18.	Goltolla Bheri	105.58
19.	Barochaulari Bheri	67.66
20.	Chotochaulari Bheri	57.22
21.	Jhagra Sish Bheri	154.01

22.	Gonpotta Bheri	...	125.37
23.	Uttar Gorumera Bheri	...	142.14
24.	Durga Bhasan Bheri (now under cultivation)	...	140.82
25.	Heda Bheri (both under cultivation and fishery)	...	
26.	Chaker Bheri	...	67.45
27.	Gopeshwar Bheri	...	84.46
28.	Chachari Bheri	...	(could not be ascertained)
29.	Hena Khali Bheri (both under cultivation and fishery)	...	(Do)
30.	Har. Kara Bheri No. I	...	
31.	Har Hara Bheri No. II	...	
32.	Har Hara Bheri No. III	...	
33.	Har Hara Bheri No. IV	...	
34.	Har Hara Bheri No. V	...	54.92
35.	Eani Jheel Bheri	...	---
36.	Diller Bheri	...	42.44
37.	Danir Bheri	...	36.55
38.	Ban Bhery	...	43.67
39.	Garumara Bhery (South)	...	97.36

25. Before proceeding further, however, it is to be noted that India is a contracting party to the Ramsar Convention, an Inter Governmental Treaty on Wetlands under which she is obliged to promote the conservation of wetlands habitat in her territory. The Salt Lake Swamp is acknowledged as an important wetland by virtue of its socio-economic and ecological values. As a matter of fact, it is in the Directory of Asian Wetlands and a wetland of international importance -- it meets all accepted criteria for identification of an internationally important wetland. At this juncture, however, the observation of Dr. Dhrubajyoti Ghosh, the former Director, the Institute of Wetland Management and Ecological Design, Calcutta, in regard to the Wetland uses ought to be noted. In his paper 'Management of Urban and Peri-Urban Wetlands -- A rapid appraisal programme for fragile areas stated that the "The wetlands are always evaluated from an anthropocentric approach. Therefore, opportunities provided by the wetlands to the human being are measures for their evaluation. These opportunities may be both direct and indirect. The usefulness of a wetland can be determined from the point of view of flora and fauna it sustains, its ecosystem values, and contribution of wetlands for maintaining global air and water cycles (Mitsch and Gosselink, 1986). The populations which are benefited from or thrive on wetlands range from man, animal, waterfowl, fish, plant to a host of other micro organisms. Wetlands are used by man for a multitude of need from food to disposal to waste. One can cite a long list

of uses which man gets from wetlands both directly and indirectly. Wetland animals and birds provide food, fur, skin and other items. Plants provide food, shelter, timber, medicine and a host of other non-edible uses. Wetlands are habitat, for endangered and rare species of birds and animals. Wetland ecosystem is especially important for migratory birds and waders. They are habitats for different endemic, relict, regional varieties of subspecies of plants, insects and Other invertebrates and wildlife even in otherwise, congested industrial region (Mitsch and Gosselink, 1986).

26. When considered as an ecosystem, the wetlands are useful for a nutrient recovery and cycling, releasing excess nitrogen, inactivation of phosphates, removing toxins, chemicals, heavy metals through absorption by plants, and also in treating waste water. Removal of suspended solids from flowing water by reducing the flow also benefits the retention of water for sometime whereby biological, physical and chemical changes are made possible (Mitsch & Gosselink, 1986). Retention of sediments by wetlands also reduces siltation in the rivers. Wetlands also help in mitigating floods, recharging aquifers and in reducing surface run off and consequent erosion. Mangrove wetlands on India and Bangladesh act as buffers against devastating storms of the Bay of Bengal. Wetlands also influence microclimate of a locality. Besides these, they are also valued for their aesthetic qualities and recreational opportunities. A fresh water wetland checks underground salt water intrusion of an adjacent brackish water environment through interface pressure (US, EPA, 1985).

27. On a global scale the wetlands function significantly in maintaining air and water quality including nitrogen, sulphur, methane and carbon dioxide cycles.

28. Dr. Ghosh has further expressed a view that the low lying, identified, multifunctional wetland should not be any further interfered with. But at the same time positive support can be extended to augment the existing system of aqua culture, waste recycling, drainage easement and vegetable farming. If this is accepted, the areas can provide economic viable development of primary sector in the urban drainage. Dr. Ghosh stated that the immediate need of the day, however, is to declare the wetlands of East Calcutta, a protected area for conservation and management, before it becomes too late (ILEE: 1990 (June: Volume: 13 (No: 1))).

29. The opinion expressed by the environmentalists of this country as also of Australia and America, as noted above, is based mainly on the concept of ecological imbalance. Global maturity in recent years in regard to this concept is now a practical reality and not in the realm of consideration or mere ideas -- but what does that expression 'ecology' mean and imply: 'Ecology' in common parlance means the study of home or the household of nature to be kept in order. George I. Clarke in his 'Elements of Ecology' has stated that every living thing is surrounded by materials and forces which constitute its environment and from which it must derive its needs and contact with the environment is inescapable. In support of the concept of development, one school of thought, however, considers that industrial expansion ought not to be deterred on the concept of ecology, since ecology, it is argued, is simply a price which has to be paid for industrial development in a developing country. As a matter of fact, this school of thought firmly believes that ecological imbalance is a cost that one should be prepared to pay and not a problem at all. The issue arises on the basis of the aforesaid, however, is for consideration whether on the wake of 21st century when there is a total global awareness in regard to maintenance

of ecological balance, Law Courts should be justified in keeping their eyes shut in regard to this concept of ecological imbalance, if raised before it. Ecological imbalance undoubtedly is a social problem and in this context observations of this Court in *Calcutta Youth Front v. State of West Bengal*, 1986 (2) CLJ 26 seem to be rather apposite. In that decision, this Court held :--

"An ecological problem, in contrast, is a special type of social problem. To speak of a phenomenon as a 'social problem' is not to suggest merely, or perhaps at all, that we do not understand how it comes about; it is labelled a problem not because, like a scientific problem, it presents an obstacle to our understanding of the world but rather because -- consider alcoholism, crime, deaths on the road -- we believe that our society would be better off without it".

30. There is no manner of doubt that this issue of environmental degradation cannot but be termed to be a social problem and considering the growing awareness and considering the impact of this problem on the society in regard thereto, in my view, Law Courts should also rise up to the occasion to deal with the situation as it demands in the present day context: Law Courts have a social duty since it is a part of the society and as such, must always function having due regard to the present day problems which the society faces. It is now a well-settled principle of law that socio-economic condition of the country cannot be ignored by a court of law, It is now a well-settled principle of law that while dealing with the matter, the social problems shall have to be dealt with in the way and in the manner it calls for, since benefit to the society ought to be the prime consideration of the Law Courts and ecological imbalance being a social problem ought to be decided by a Court of law so that the society may thrive and prosper without any affection;

31. Be it noted here that this Court is not trying to denounce the State activities in any way whatsoever. The State is equally conscious of the ecological problem and has taken steps for checking environmental degradation and maintaining proper ecological balance. As a matter of fact, the Calcutta Metropolitan Development Authority's Plan for Metropolitan Development between 1990-2015 records that investment need has already been assessed on various environmental aspects including regulatory measures for controlling of air, water and noise pollution and waste recycling areas and resource recovery measures. It also appears from the Metropolitan Development Plan of the Calcutta Metropolitan Development Authority that due importance has also been given to drainage and sanitation for the city. The Metropolitan Development Plan for 1990-2015 expressly records that as a result of indiscriminate encroachment on the green areas, wetlands and water bodies is taking place, this tendency should be checked and the development should be properly controlled and guided. The Plan further records that to promote development in the desired direction, public intervention is essential and it is necessary to identify land suitable for expanding the future settlement in a planned and controlled manner. The plan further proceeds on to record the following:--

"On the basis of "preliminary planning studies, the following zonal areas have been identified for future action:

A: Kalyani -- Gayespur Zone;

B: Halisahar -- Deulpara -- Kanchra-para Zone;

C: Bhatpara -- North Barrackpore Zone; D: Barasat -- Nabapalli Zone;

B: Chinsurah -- Chandernagore --Bhadreshwar Zone;

F: Bally -- Dankuni Zone;

G: West Howrah Zone;

H : Sankrail -- Abada Zone;

I: Uluberia Zone;

Kalyani -- Gayespur Zone is an attractive area for development because there is necessary civic and service infrastructure. It is possible to get relatively high open land for development. The Kalyani bridge and the Barrackpore -- Kalyani Expressway have increased the accessibility of the area. There is also a welcome sign of activity in Kalyani after along lime lag.

Barrackpore Expressway and Kalyani Bridge have opened the area of two other zones, viz., Halisahar -- Deulpara --Kanchrapara Zone and Bhatpara -- North Barrackpore Zone. The land along BK Expressway should be properly developed in a planned and controlled manner"

32. It, therefore, appears that the eastern fringe of Calcutta having the Calcutta's wetlands is not included in the future development of the CMDA's plan. As a matter of fact, the CMDA Plan provides that the agricultural land as well as the wetland and large water bodies should be preserved as such and no change of use of such land shall be permitted.

33. The above-noted plan, as recorded in the Plan for Metropolitan Development 1990-2015, in no uncertain terms appreciated the need of the preservation of the wetlands and as a matter of fact, recorded that no change of use of such land shall be permitted. CMDA being in charge for prescribing an agenda for comprehensive development plan during this 15 years period, has prescribed such a prescription for an overall plan for development of the entire metropolis and the same provides a view of the future comprehensive plan. Can the Law Court, therefore, proceed on any other basis apart from what is mentioned therein? Mr. Advocate-General, however, submitted that nowhere it has been stated in the CMDA's plan the total requirement of the wetland that is actually needed for the purpose of maintaining the ecological balance or for the purpose of maintaining a proper drainage system with a natural recycling project as is now prevalent in Calcutta's wetlands. Mr. Advocate-General contended that the city of Calcutta is to be developed in the manner as is expected of any big cities and this development is not only a necessity for economic survival but also for the social need of the society. The tremendous pressure on the city itself cannot but be met by providing a satellite township so that this influx can be avoided in the city itself. In a developing country like that of ours, the nature shall have to be taken care of, but to the extent as is necessary for a healthy society and not beyond

that --- otherwise there would be a compromise with the development and the society will suffer for not progressing as is expected.

34. Mr. Advocate-General in regard to the issue of setting up of World Trade Centre, contended that the proposed World Trade Centre in Salt Lake would not only ensure benefit for the trading activities of this metropolis but will enhance the trading activities of the country as a whole. It is to promote international trade by providing all facilities under one roof. Mr. Advocate-General submitted that setting up of a World Trade Centre has become all the more necessary now with the globalization of the economy and the World Trade Centre would help push export which is a national objective -- it was contended that this itself in turn would create additional demand for goods and services leading to an increase in production and expansion of service facilities which would consequently result in generation of more employment. The Government of West Bengal is desirous of establishing a World Trade Centre because it will create employment for the people of the State and ensure their welfare.

35. While it is true that the object cannot but be termed to be a laudable one, but Mr. Debnath, appearing for the Union of India, in no uncertain terms submitted that out of the 14 World Trade Centres in the country which are awaiting approval of the Central Government, Calcutta's World Trade Centre does not find place in such list of pre-approval stage with the Government of India.

36. Mr. Sudipto Sarkar, appearing in support of the writ application, however, contended that it will be another shopping plaza or a commercial complex and for erection of a shopping plaza, the question of encroachment on the wetland does not and cannot arise. Mr. Sarkar submitted that going by the experience of the World Trade Centres in the country, it is nothing but a shopping complex. In any event, Mr. Sarkar submitted that the proposal for the purpose of establishing a World Trade Centre is not a Government proposal but a private entrepreneur's proposal for private gain and as such, the Law Courts would not be justified in granting such a proposal for private gain at the cost of the society at large. I am, however, unable to accept the contention of Mr. Sarkar that World Trade Centre cannot but be termed to be a shopping complex. Be that as it may, from the written submission of Mr. Advocate-General it appears : "The area covered by Chinta Singh Bheri is included within the project area of Northern Salt Lake City Extension Scheme and at present the State Government has undertaken to develop the said areas of 187.4 acres within the said Chinta Singh Bheri and a proposal for setting up World Trade Centre and permanent exhibition centre with the object of promoting trade and industries and augmentation of employment opportunities is under active consideration of the State Government".

37. Admittedly, therefore, that a proposal for setting up World Trade Centre and permanent exhibition centre is even now under active consideration of State Government. The proposal, therefore, has not reached the stage of even the State Government's approval and as such it can safely be concluded to be in a state of fluidity. Apart therefrom the Central Government's approval ought also to be obtained in the matter of setting up a World Trade Centre and without which no such Centre can ever be set up. The submission of Mr. Debnath in regard to the Calcutta's World Trade Centre is also significant. Though, however, there cannot be any manner of doubt that if the project comes up it would ensure to the benefit of the society at large, since the same would generate employment and the Law Courts ought not to put a

embargo in such generation - but on what basis Law Court will otherwise permit reclamation of a nature's gift to the Calcuttans. There must be some cogent documentary support on the basis of which the Law Court may come to the conclusion of there being a likelihood of a World Trade Centre being set up. The proposal to set up also has not been approved by the State Government itself. It is in the stage of consideration of the State Government: The formalities are not even complied-with far apart the financial implications therefor.

38. While it is true that Law Court ought not put an embargo to the development project which is in the offing and Law Courts shall have to strike a balance between the development and ecology and there should be no compromise with each other but on what basis this striking of balance shall take place -- No project report has yet been prepared, at least not produced before the Court so as to indicate who would share the burden of such a project neither any documentary evidence in support thereof has seen the light of the day even if it is a private entrepreneur's proposal there, should be some evidence before the Court on the basis of which the Court can assess the situation as to whether this balance shall have to be struck between development and ecology. This Court is completely in the dark as to the area which would be occupied by this World Trade Centre and the Public Exhibition Centre. This Court is also left at large to guess the availability of finance or who would bear the brunt of it -- this Court has also not been informed as to the potential employment opportunities -- can this Court decide an issue in vacuum.

39. The Court needs to be told the economic viability of a project: The Court needs to be told the sources of finance: The Court needs to be told the future of this project: The Court needs to be told as to who would be responsible for the maintenance of the same and what would be the financial outcome therefor -- None of these details have been furnished to this Court. The Court is thus, in a very handicapped situation to assess the actual state of affairs in regard to the setting up of the World Trade Centre or the Public Exhibition Centre. It is common knowledge that both the State and the country are passing through financial stringency -- whether the State can afford to have a World Trade Centre or a Public Exhibition Centre in the city -- that is not known to this Court. In my view, these details ought to have been filed before the Court so that the Court could have assessed the situation itself, in the absence of which it is rather difficult to strike the balance as noted above between a developmental project and the issue of environment. Development there should be along with environment, but whether in fact, the establishment of World Trade Centre can be termed to be a developmental project or not -- that will have to be assessed by the Court and not a mere submission from the Bar to that effect.

40. On the basis aforesaid, there is no manner of doubt, therefore, that wetland being a bounty of nature do have a significant role to play in the proper development of the society -- be it from environmental perspective or from economic perspective. Pollution wise this metropolitan city of Calcutta tops the list in the country -- can we in this city further endanger the environment by "reclaiming the nature's gift to mankind when in fact, such a reclamation is only for the purpose of expansion of the satellite township on the Eastern fringe of the city of Calcutta, The only developmental project spoken of is the World Trade Centre along with the Public Exhibition Centre which is already been dealt with in this order as above and apart therefrom no other developmental project has been spoken of during the course of

submission in the matter. If, however, it is said that the reclamation is not for developmental projects, then and in that event, I am of the view that question of further consideration of the matter does not and cannot arise since wetland is precious, wetland ensures to the benefit of the society at large and wetland assists mankind to live in a cleaner and purer environment -- which in my view, one cannot afford to lose neither the Court of Law can lend assistance to contra-belief or contra-action of a State Agency. Wetland acts as a benefactor to the society and there cannot be any manner of doubt in regard thereto and as such encroachment thereof would be detrimental to the society which the Law Courts cannot permit. This benefit to the society cannot be weighed on mathematical nicety so as to take note of the requirement of the society -- what is required today may not be a relevant consideration in the immediate future, therefore, it cannot really be assessed to what amount of nature's bounty is required for the proper maintenance of environmental equilibrium. It cannot be measured in terms of requirement and as such, the Court of Law cannot, in fact, decry the opinion of the environmentalist in that direction. Law Courts exists for the benefit of the society --Law Courts exists for the purpose of giving redress to the society when called for and it must rise above all levels so that justice is meted out and the society thrives there under. I do not find any justifiable reason to disagree with the opinion expressed by the environmentalists, what wetland should be preserved and no interference or reclamation should be permitted.

41. It is, however, placed on record that no issue as regards the maintainability of the writ petition or that of locus standi was raised before the Court during the entire course of hearing of the matter and as such I need not delve into the issue.

42. In that view of the matter, there shall be an order of injunction restraining the State Respondents from reclaiming any further wetland. There shall also be an order of injunction prohibiting the respondents from granting any permission to any person what so ever for the purpose of changing the use of the land from agricultural to residential or commercial in the area as indicated in the map annexed to the petition and marked with letter 'C'. The State-Respondents are further directed to maintain the nature and character of the wetlands in their present form and to stop all encroachment of the wetland area as indicated in the map annexed to the petition and marked with letter 'C'. The State- Respondents are further directed to take steps so as to stop private alienation and, if required, by extending the statutory provisions in regard thereto.

43. It is clarified, however, that in the event the State-Respondents are desirous of having a World Trade Centre or a Public Exhibition Centre in its reality, the State-Respondents, however, would be at liberty to apply before the Court within a period of twelve months for variation of this order upon proper materials for further consideration of this Court. It is, however, made clear that this further consideration would be restricted to 187.44 acres of Chinta Singh Bhery, of which a portion has already been reclaimed, but the portion already reclaimed shall not in any way be utilised for any other purpose other than a World Trade Centre or a Public Exhibition Centre if so authorised by the Court at any future point of time and till such time, however, status quo as of date shall continue. In the event, however, of failure to apply in terms of this order within the time as specified above, the writ petition shall stand disposed of without any order of costs.

44. Mr. Ukil, learned Government Pleader appearing for the respondents, prays for stay of operation of this order, but the same is refused.

45. Order accordingly.

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