

CHAPTER
FIVE

The Conflict over the East Calcutta Wetlands

Calcutta was built on the levee of the Hoogly river, the westernmost large river of the Ganges delta. Historically, the city expanded to the north and south along the river. Only in this century did it begin to sprawl east, reclaiming low-lying swamps and wetlands for urbanization.

There are several reasons why experts do not find further expansion on the city's east advisable. Even today, this landscape consists of ponds, lakes and agricultural land, much of which is seasonally flooded. However, the development pressure is immense. Land prices tend to rise close to the metropolitan centre, especially since the Eastern Metropolitan Bypass and its connecting roads have made the area quickly and easily accessible (Kundu, 1994).

Motivated and briefed by environmentally minded bureaucrats, city-based non-governmental organizations took up the cause of wetland protection and conservation in 1991. Members of the administration actively mobilized agents of civil society when they felt that the state government was deviating from its earlier policies. This led to what many local experts consider the most important case of environmental litigation in Calcutta. In court, a sense of public

sphere was established, forcing the state government to take its own programmatic statements into account.

This was the first incidence of a movement building up with an explicitly environmental goal in the metropolitan area. Also, the High Court case *PUBLIC v State of West Bengal* led to Calcutta's first widely cited judgement on an environmental matter. It forced the state government to take public opinion into account in its urban planning, again for the first time.

Another litigation concerning the wetlands, *M.C. Mehta v Union of India*, started in the Supreme Court in 1985 and focused on industrial pollution of the Ganges. During the 1990s, the Calcutta tanneries became an issue in this case, with the Supreme Court finally ordering their relocation to an area within the wetlands, to a site many believe to be protected by the initial High Court ruling.

Development planning on Calcutta's eastern fringes was at stake in yet another public interest litigation, *Surojit Srimani v the State of West Bengal*. In this case the environmentally motivated petitioners did not achieve any of their goals.

Overall, the track record of judicial intervention is mixed. To a certain extent, it does make sure that environmental issues are respected. However, the proceedings tend to be erratic, and judges appear to be overburdened and not always adequately briefed in scientific terms. Litigation is cumbersome, time consuming and frustrating. So far, the judiciary has neither assertively forced government bodies to clean up their act nor systematically tackled urban planning, the core issue of Calcutta's environmental crisis. It appears to be simply muddling through.

The role of the state government in the wetlands issue has been ambiguous. Its statements in different legal cases do not seem to be consistent. Some of its agencies propagate and devise conservation strategies, while others tolerate or even promote urbanization. Evidently, some government servants actively supported the pro-conservation NGOs. On the other hand, the state government also proposed and promoted the conversion of wetland areas. There are strong signs that the administration as a whole is neither organized nor equipped to adequately deal with the delicate issue of urban fringes.

Informal and illegal changes of land use threaten the ecological balance of the area, as do unplanned encroachments on the fringes of the region. The struggle for wetland protection is therefore far from

over. Court intervention must be seen as a resource in the dispute, but not necessarily as its final settlement.

The ongoing struggle over Calcutta's eastern fringes and wetlands is complex and multifaceted. The future of a unique integrated system of waste recycling and nature conservation will depend on it. Several NGOs are involved, legally spearheaded by 'People United for Better Living in Calcutta (PUBLIC)'. The interaction of these NGOs and interest groups has been uneasy.

The first section of this chapter describes the history and ecology of the East Calcutta wetlands with respect to the patterns of the city's growth. The second gives an overview of the polity arena concerned and describes the beginning of a pro-conservation movement. In the third section, the first phases of the court proceedings of *PUBLIC v The State of West Bengal* are analysed. It began with the first writ petition in early 1992 and has led to repeated judgements prohibiting changes of land use in the Waste Recycling Region of the wetland area.

Section 5.4 deals with *M.C. Mehta v Union of India* as far as it concerns the East Calcutta wetlands. It will become apparent that this judgement is potentially in serious conflict with the High Court judgements. The Supreme Court has ordered that the tanneries in Calcutta must relocate to an area that may fall into the protected area. The available maps are not detailed enough to tell. So far, neither court has taken up the challenge of determining which borderlines are legally binding.

Section 5.5 again elaborates on the issue of the imprecise borders of the protected area, returning to the PUBLIC case. In 1995, this NGO had accused leading government officials of contempt of court, a criminal offence, for not having adequately safeguarded the wetlands, particularly with respect to the leather complex and several other minor encroachments. This accusation matter was of little legal consequence.

Section 5.6 examines the third public interest litigation concerning East Calcutta, *Surojit Srimani v State of West Bengal*. In this case, citizens were trying to tackle the complex issue of urban planning. They focused on those areas of the East Calcutta wetlands region not protected by the High Court. This time, however, the efforts were not fruitful.

Section 5.7 deals with several state government initiatives in favour of wetland conservation. All of them occurred after the first

judgement of the High Court. This section again shows that the attitudes displayed and programs drafted by the state government were not consistent. Finally, the last section of this chapter scrutinizes the ground reality of the area concerned five years after the first ruling. It includes a first summary assessment of the judiciary's role in shaping the future of this fragile environment.

5.1 Land Use in East Calcutta and Patterns of Urban Sprawl

The term 'East Calcutta wetlands' is not well defined. According to the internationally binding Ramsar Convention (Art. 1), wetlands are 'areas of marsh, fen, peatland or water, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters'. 'Wetlands' are thus not merely water bodies. The term also covers seasonally flooded areas as well as the surrounding stretches of land, which play an important role in their ecology.

Such wetlands are important breeding grounds for waterfowl and wildlife in general. Environmentalists the world over demand conservation of such invaluable habitats.

The East Calcutta wetlands basically comprise all areas not yet urbanized to the east and south of Calcutta. In the marshy land east of Calcutta, 248 species of birds and 22 species of mammals were observed in the 1960s (A.K. Ghosh, 1991). More recent surveys have found the number of bird species reduced by almost 85 percent (CEMSAP, 1997). According to Prakriti Samsad, an organization with many bird watching enthusiasts, eagles were last seen in East Calcutta in 1992.

However, the urgency of nature and biodiversity conservation is not the only valid argument for the protection of these particular wetlands. Much attention has been paid to what the state government's Institute of Wetland Management and Ecological Design (IWMED) calls the 'Waste Recycling Region'. This term is sometimes used interchangeably with East Calcutta wetlands, but has the advantage of having been defined by a map. The definition is ambiguous, however, as the map is of inadequate scale and exists in various versions, none of which has been officially published by the

authorities. It is the Waste Recycling Region that was protected by the High Court rulings.

The following subsection elaborates the Waste Recycling Region. Subsection 5.1.2 discusses the further general relevance of the East Calcutta wetlands within and outside the Waste Recycling Region. This concerns issues such as flood control, provision of drinking water, and traffic. Subsection 5.1.3 refers to the official government policy which, for a long time, ruled out urban expansion here. The section ends with a brief summary of the development of Salt Lake City. This township was built on the northern part of the East Calcutta wetlands.

5.1.1 *The 'Waste Recycling Region'*

In 1865, the colonial authorities bought the 'square mile' some six kilometres east of Park Street. After the introduction of a light rail system in 1867, it became Calcutta's solid waste dump. Composted organic waste from the city has ever since been used to fertilize fields. In 1868, the Calcutta corporation began to pump its drainage and sewage through canals to the Kulti Gong river, the nearest large Ganges estuary to the east (Furedy, 1987).

In the 1930s, local communities started to feed fisheries with waste water. Over the years, they improved their methods. Water from the outlets of the fish ponds was used to irrigate paddy fields. Combined, these pisci-agricultural activities gave rise to a massive informal waste recycling scheme (Furedy, 1987; D. Ghosh and Sen, 1988).

Government authorities during the colonial period and ever after independence were not much concerned with what became of Calcutta's refuse. Haraprasad Chattopadhyaya (1990: 60) traces the first official recognition of sewage-fed fisheries to the 1940s and also notes that the Fishery Department in 1944 suggested the 'formation of a syndicate with necessary statutory powers' to raise fish production. Such a statutory body was never established, however.

Systematic research began only in the 1980s on behalf of the state government. Dhrubajyoti Ghosh, a civil engineer, prepared the first report for the Department of Fisheries in 1983. He became the first director of the newly established Institute of Wetland Management and Ecological Design (IWMED) in 1986.

The Institute prepared a map of the 'Waste Recycling Region for Calcutta City', a 5500 hectare territory of farms and fisheries (IWMED, 1988, Map No. 2). The local practices were considered to be economically attractive and reasonably safe in terms of both public health and environmental sustainability (IWMED, 1988, 1995; D. Ghosh and Sen, 1987; D. Ghosh, 1993, 1996).

Calcutta's solid waste is dealt with in a way typical of many developing countries. Raggpickers collect useful items from the garbage on the streets and on the dumping site at Dhapa, east of the Metropolitan Bypass. The organic residue is composted and used as manure in agriculture.

The sewage-fed fisheries, however, deserve a more detailed description. The fish producing scheme makes use of the tropical climate, solar radiation and shallow water. The flow of water is diligently managed. First, the waste water is left stagnant in shallow ponds of roughly one metre depth so that solar radiation kills the bacteria. Then this nutrient-rich water is channelled into ponds in which algae and fish breed abundantly (IWMED, 1995; D. Ghosh, 1996).

According to most local experts, the health risks induced by the use of garbage and sewage in the Waste Recycling Region are negligible: 'Calcutta sewage contains a low concentration of heavy metals and there is no evidence that normal pond-fish from other places contain fewer pathogens than the sewage-grown-fishes in question' (D. Ghosh and Sen, 1987: 223). Similarly, the IWMED argued in 1995 (p.23): 'The villagers have been using the pond water for domestic purposes for the last 50 years with no record of epidemic or enteric diseases.' Coliform count, an indicator for faecal contamination, is reduced 100,000-fold in the pond system.

Water hyacinths accumulate much of the chemical and heavy metal residue in the waste water (Nath Sarkar, 1990). However, I was told on site that the water hyacinths are composted for application on the farms. The toxic substances thus remain in the food chain. Health risks, therefore, deserve some concern, as stated by the CEMSAP (1995: 3.29):

So far, there is no documented evidence of Calcutta's population having been affected by the consumption of fish and vegetables grown on the wastewaters, but this may just be due to lack of actual monitoring. Indeed very few studies have been carried out anywhere in which the heavy metal concentrations in blood serum have been measured let alone any trends assessed. It is however felt

that though the biological risks of such consumption could probably be reduced through proper cooking, the health risks associated with ingestion of the heavy metals and toxic organic wastes need to be considered seriously.

In spite of such doubts, the CEMSAP report (1995: 5.2) declared garbage farming and sewage fisheries to be ‘an example of best practice in the “wise use” of wetlands’. While mildly challenging this notion, in 1997, the CEMSAP still concluded that the current practices should be continued.



Photo: Fish Pond

Local experts advise against applying EU or US standards. One should rather assess the relative risk and not the absolute risk. Compared with the general hazards Indian consumers are exposed to, food contamination in the wetlands is not said to be of much concern. According to ODA consultant Michael Green, it is ‘definitely not the greatest killer’ (Green, Interview). The danger of bacterial contamination, moreover, is reduced by the fact that fish is not eaten raw in Bengal (D. Ghosh, 1993).

Calcutta’s patterns of water pollution may, however, be changing. More motor traffic, for instance, is bound to increase the lead exhaust from the tailpipes, and accordingly the lead concentration in the drainage water (Green, interview). Production changes in Calcutta’s industries are also likely to change the sewage contamination. Small-

scale industries are difficult to monitor and particularly prone to discharging toxic effluents (Malhotra, interview). Such businesses have grown over the last decades. Lead smelters are of particular concern for their heavy metal contamination (A.K. Ghosh, interview).

In spite of all this, the East Calcutta waste recycling approach has various advantages in view of India's resource scarcity. It has been estimated (D. Ghosh, 1993: 43) that an investment of 4.5 million dollars or almost 1.4 billion rupees would be needed for a new conventional sewage treatment plant designed to process Calcutta's daily output of 750 million litres of waste water. That would be an astronomic amount by Indian standards, particularly as there is no guarantee that such a plant would serve the needs of West Bengal any better.

The fishery system is comparatively reliable and cost-efficient. As sunshine abounds, energy costs do not arise. Fish ponds have longer life spans than conventional treatment schemes, the metal parts of which are particularly prone to corrosion in the humid, tropical climate of Bengal. There is no problem of missing spare parts. Continuous maintenance does not pose serious management challenges. For the people involved, fisheries are a source of revenue rather than a cost. The economic incentives of fish production radically reduce the need for supervision (D. Ghosh, 1996).



Photo: Garbage farming in the Waste Recycling Region

The appropriateness of this low-cost folk-technology for waste recycling has been internationally recognized. In December 1988, a conference in Calcutta involving among others the World Bank, the

World Food and Agriculture Organization (FAO) and the Gesellschaft für Technische Zusammenarbeit (GTZ) emphasized the need to preserve the area.

Consequently, sewage-fed fisheries along the lines of the Calcutta model have been included in the central government's Ganga Action Plan. The results are said to be satisfying and on an average better than those of conventional treatment plants (K.K. Chakraborty, interview). Sewage-fed fisheries are clearly preferable to disposal of waste water directly into the rivers where organic matter is not broken down systematically.

Moreover, the Waste Recycling Region provides important resources for the metropolis. Estimates of the annual fish production in the East Calcutta wetlands range from 4000 tons (IWMED, 1995: 20) to 8000 tons (D. Ghosh, 1993: 43). This compares to an annual consumption of 50,000 tons in Calcutta. The annual vegetable production in the Waste Recycling Region is said to be between 55,000 tons (Nath Sarkar, 1990: 173) and 135,000 tons (D. Ghosh, 1993:43) or roughly 20 percent of city's supply (A.K. Ghosh, 1991: 73).

The inconsistency of these figures is troubling, but it is nevertheless apparent that the food production is substantial. As the area is close to the city, transport costs are low and the produce from East Calcutta is known to be among the cheapest in the urban markets.

The Waste Recycling Region not only produces affordable food for the poorer section of the urban population, but also generates employment for a large number of people. Again, the estimates vary from 17,000 people employed (Nath Sarkar, 1990: 174) to 20,000 families living in the wetlands (D. Ghosh, 1993: 43) and even up to 35,000 people working as ragpickers and sewage fishermen (IWMED, 1995: 24).

This appropriate recycling technology has been largely compatible with the goal of nature conservation. It is understood that it can be so in the future, depending on how pisciculture and agriculture are organized.

In sum, the East Calcutta wetlands are a natural habitat with a rich but eroding biodiversity. A major part of the area serves as the city's main waste disposal and sewage treatment scheme, on what local experts call a sustainable and appropriate technological basis. The area provides comparatively cheap food for the urban markets and

employment for many thousands of villagers. Possible health hazards are considered to be minor by Indian standards.

These are, however, not the only reasons why the eastern fringes of the city are not an obvious choice for further urbanization. Others deal with the geology, hydrology and traffic situation of Calcutta. In the early 1980s the State Planning Board had therefore discouraged further urban growth on the eastern and south-eastern fringes (Sinha, 1988). These considerations are dealt with next.

5.1.2 *An Area Unfit for Urban Growth*

Calcutta lies on the edge of the delta area. As is typical of such landscapes, the surface gradients are very low. The microtopography varies widely because of the changing patterns of the natural drainage network. Delta landscapes are characterized by relatively high levees along the banks of the major rivers. These levees are normally flood-safe. Further away from the river, spill basins and swamps dominate.

According to Subrata Sinha (1988), Calcutta's original growth pattern followed the flood-safe levees along the banks of the Hoogly. The expansion particularly went north, away from the delta. To a lesser, but still considerable extent, urbanization also continued to the south-west, again following the safe levees along the river. Today, the metropolitan area spans almost 70 kilometres from Uluberia in the south-west to Kalyani in the north. But it hardly stretches more than a few kilometres inland.

The pattern of simple north-south expansion was given up only in the 1930s with the reclamation of marshlands in the south and south-east. Wetlands made way for new neighbourhoods such as Ballygunge or New Alipur. Drainage of these low-lying, flood-prone areas proved to be difficult, expensive and ineffective in the rainy season. Nevertheless, they were attractive because of their relative vicinity to the city centre. The massive influx of refugees after partition in 1947 led to further urbanization in the east and south-east (S. Sinha, 1988; Chatterjee, 1977b).

The original drainage and canal system of the city became ineffective because of the newly urbanized areas. Sewers and drains were constantly overcharged (S. Sinha, 1988). This situation has improved somewhat owing to infrastructure investment in the 1980s and 1990s. However, as the monsoons of the 1990s were not heavy, it

is difficult to evaluate how effective the system is nowadays (A.K. Ghosh, interview).

Subrata Sinha's (1985) assertion remains plausible, that filling up of ponds and marshlands to obtain real estate is linked to increased problems of drainage and flooding. Ponds and marshlands provide space for run-off water. They also absorb some water sub-surface. The more spill basins are filled up, the more the costs of efficient drainage will rise. Calcutta's drainage already depends on a system of canals and pumping stations and not simply on geographical slope.

In addition to flood damages and general inconvenience, increased waterlogging leads to serious health hazards in the Calcutta area. Water-borne diseases here are among the most dangerous in India (Green, interview).

The ground water level would be affected by further extraction of water and it would also decrease owing to further loss of waterbodies and swamps.

The provision of drinking water is another particularly daunting challenge in the east and south-east of Calcutta. Subrata Sinha (1988) stresses that water from deep tubewells in the delta area is unsuitable. Here, deep aquifers are rich in iron and other dissolved solids. There is also a high risk of aquifers becoming saline.

This means that water for these potential urban areas would have to be extracted from the river Hoogly at high purification costs. Given that Calcutta's port already suffers from low water levels and given that sharing of Ganges water with Bangladesh in the delta is an issue of high diplomatic sensitivity, further extraction of the river water does not seem realistic.

Finally, expanding the agglomeration further into the delta will increase the traffic problems in the already congested urban centre. Calcutta's economic hinterland lies to the west. The major railroads go west and north-west through Bihar to Uttar Pradesh and Delhi, or south-west through Orissa to South and Central India (S. Sinha, 1988, CMCP, 1995).

For these reasons, alternatives to eastern and south-eastern urban expansion have been favoured by government experts (S. Sinha, 1988). That urban development should concentrate on the northern end of the metropolitan area had been envisioned by the Basic Development Plan as early as 1966 and, in principle, has since been the official policy of the state government.

5.1.3 *Government Policy Statements*

In its proclaimed policies, the Government of West Bengal is in favour of wetlands conservation. Legislation for the protection of wetlands is included in the West Bengal Town and Country (Planning) Act of 1987. The conservationist line of reasoning was also reflected in two major documents, which were mentioned in chapter 4, section 4.4.2. These papers are the CMDA's 'Plan for Metropolitan Development 1990-2015' and the State Planning Board's draft of a 'Perspective Plan for Calcutta: 2011). With regard to East Calcutta, the CMDA paper stated in 1990 (p. 8.5f):

With the widening of Diamond Harbour Road and Raja Subhodh Mallick Road as well as construction of Eastern Metropolitan Bypass along with its connectors, the accessibility of eastern and southern areas has improved to a very great extent. This has generated a spurt of private land transaction and development activity in these areas. As a result, indiscriminate encroachment on green areas, wetland and water bodies is taking place. This tendency should be ... properly controlled and guided. ... The direction of development should be reoriented to restore it to the north and west.

The CMDA paper also explicitly mentioned waste recycling activities. It suggested improvements in sorting techniques to reduce occupational health hazards for ragpickers and garbage farmers. The report stressed that sewerage, drainage and solid waste management had to be improved.

In November 1990, the State Planning Board presented its draft of a 'Perspective Plan for Calcutta: 2011'. It made explicit reference to the East Calcutta wetlands (p.204): 'Functional importance of wetlands towards flood control, regulation of water quality, treatment of waste water, recharging ground water, pollution abatement, and a strong pisciculture is recognized.'

The relevance of the wetlands for waste recycling and as natural habitat was pointed out. The State Planning Board suggested that these wetlands should be kept for pisciculture and nature conservation. It also warned that 'both in urban and rural areas, water bodies, parks, playgrounds and other open spaces are being filled up and being used for building' (p. 200). Both papers were in favour of Calcutta's further expansion going north. This strategy is, however, politically difficult (S. Sinha, 1988). It would involve the modernization of old townships and revitalization of areas occupied

by sick or abandoned industries, thus touching on longstanding, vested interests.

Salt Lake City, also called Bidhan Nagar, is an early example of how different government programmes can be in conflict and nevertheless be in force simultaneously over long periods of time.

5.1.4 *The Example of Salt Lake City*

Salt Lake City is a new township built on a large part of the original wetland area to the north-east of Calcutta (Chatterjea, 1990; Chattopadhyaya, 1990). It was the brainchild of West Bengal's post-independence Congress Chief Minister Bidhan C. Roy.

Salt Lake City's reclamation had already been well under way when the Basic Development Plan of 1966 generally suggested northward expansion of the metropolitan area. The Salt Lake City project did not fit into this plan, but was nevertheless continued over the decades to come. Nitai Kundu (1994) cites this as one example of the incrementalism of Calcutta's growth pattern, which prevailed in spite of planning efforts.

Salt Lake City is located only 7.5 kilometres from the city centre and, with 23 percent of its space reserved for roads, is not nearly as congested as the Calcutta corporation, with only 6 percent road space. Salt Lake City's first private house was built in 1970. By 1990, the newly urbanized area was home to some 175,000 inhabitants (Chatterjea, 1990). Several agencies of both the state and the central government operate from large-scale office complexes. The township has shopping facilities, sport fields and playgrounds. It houses the largest football stadium in India.

Salt Lake City has become a fancy neighbourhood even though it was initially intended to provide housing for middle income groups. Deb Prashad Chatterjea (1990: 178) conceded that 'through various subterfuges, the leaseholds of these cheap and attractive properties are passing into the hands of speculators and the very rich'. Given Calcutta's congested reality, this part of the metropolitan area appears extraordinarily attractive: 'More such developments are urgently needed to ease the relentless pressure on Calcutta's housing and business space—and the only practicable locations within striking distance of the inner city are to the east' (Chatterjea, 1990: 180).

Nonetheless, Haraprasad Chattopadhyaya (1990) is sceptical about whether to consider this project a success. The provision of

drinking water, according to him, was already very difficult in 1990 with ground water levels dwindling rapidly. He also mentioned the disturbed ecology on either side of the Eastern Metropolitan Bypass and bemoaned the reduced fish supply in Calcutta's markets. For such reasons, Chattopadhyaya argues that it would be impossible to solve Calcutta's shortage of housing space with such townships. With only a third of its planned population, Salt Lake City had already reached its natural limits of urban growth by 1990.

Finally, Salt Lake City's history is ridden with social problems. Some 30,000 people were dislocated because of the construction of this township. A field survey among 600 of them revealed that 'the majority of the respondents (79.33 percent) became economically worse off' (Kundu, 1994: 102). Employment and housing schemes initially promised by the government never materialized.

All summed up, experts present many reasons not to let urbanization spread further to the east. These include the protection of biodiversity, the recycling of waste water and garbage, food production, employment, flood control, the sustenance of ground water levels, and avoidance of traffic problems.

Nevertheless, there is also a considerable urbanization pressure in this area. Relatively close to Calcutta's congested centre, there would be a tremendous potential demand for housing as well as for commercial space. The Eastern Metropolitan Bypass has made the area accessible and Salt Lake City apparently provides additional basic infrastructure. Potential profits of real estate speculation seem enormous. The protection of the East Calcutta wetlands is thus a test case for the ability of the polity to control and channel such forces.

5.2 The Pre-Litigation Pro-Wetlands Campaign

In the 1990s, wetland conservation was turned into an issue of intense public debate in Calcutta. This was not done by those living in the area and thus personally affected by potential urbanization. The individuals initially involved were government servants, at the central and the state level, who had reasons to doubt that the government would consistently adhere to its proclaimed policies. These bureaucrats had contacts with people living in the wetlands and with urban, environmental, middle class pressure groups.

The people living and working in the wetlands could not be expected to start such a campaign as their area was traditionally torn by conflict. Fishery owners face constant labour unrest. Landlords are in dispute with agricultural workers. Migrants from other states are only seasonally employed, which adds to the conflict potential (Kundu, 1994).

In the late 1960s, land grabbing was widespread in this area. Many open questions of land ownership have not been permanently settled since. On top of that, there has traditionally been a conflict over land use between farms and fisheries (D. Ghosh and Sen, 1987; IW MED, 1995).

In the 1980s, a real estate mafia entered the old conflict between the farm mafia and fishery mafia (Sharma et al., 1995). These mafias are said to have political connections, both with the Congress and the CPM. Disputes in the area tend to be resolved by muscle if not by gun. Formal interest groups and institutions of liberal democracy such as village panchayats blend into a situation of near anarchy in the wetlands proper.

Under these circumstances, bureaucrats with some grassroots contacts mobilized an awareness movement that caught the attention of the urban public. The following subsection looks within the govt and bureaucracy. When pro-conservationists felt they were losing the struggle, they began mobilizing the NGOs, as is discussed in the second subsection. The NGOs later turned to the High Court, frustrated with the meagre results of their campaigns.

5.2.1 The Pro-Conservation Network in the Bureaucracy

There is a general consensus in the West Bengal Government and administration that the wetlands should be protected and the Waste Recycling Region kept operational. But as Kalyan Biswas, secretary of the Environment Department till the summer of 1997, expressed in an interview for this project, disputes tended to arise about how much and exactly what territory is necessary for this purpose. There would also be disagreement about the exact meaning of wetlands conservation. This is exacerbated by the fact that advice from scientific experts is not necessarily consistent.

One senior official claims the IMWED map of the Waste Recycling Region covers the minimum area required. Others believe a smaller area might do. The hard-line conservationists oppose any

encroachment on Calcutta's east for reasons of biodiversity protection and geohydrology.

The pro-conservation bureaucrats themselves do not adhere to a single school of thought. One group of experts categorically opposes any further development on Calcutta's east. The others, contrarily, suggest that environmental needs be reconciled with the pressures of urbanization through strictly controlled and implemented planning (Kundu, 1994).

It is not within the scope of my study to take sides in this dispute. It is, however, worth considering Kundu's (1994: 84) admonition that 'urbanization initiated by any authority invariably leads to sporadic and speculative growth in neighbouring areas leading to a high degree of densification'. In East Calcutta, urbanization has already begun, indeed spawning 'sporadic and speculative growth'. And stringent enforcement of rational planning has never been typical of Calcutta's growth.

Opposing these two kinds of conservationism, a third school of thought in government and administration is apparently convinced that the issue of wetlands protection should not be exaggerated and that the city should be allowed to expand. From what veteran bureaucrats say, it appears that the rift between conservationists and developers is apparent even within the State Cabinet. The current home minister and former urban development minister, Buddhadev Bhattacharya, is said to be pro-conservation. On the other hand, the chief minister and chairman of CMDA, Joyti Basu, is said to be in favour of large-scale development schemes.

In the 1980s, the IW MED made various attempts to draft and finance a large management and development scheme to improve the efficiency of the Waste Recycling Region. However, this institute, despite its ambitious name of 'Wetland Management and Ecological Design', was never given the powers that would have turned it into a true wetland authority. The institute did not get beyond research projects and educational efforts.

Indeed, the IW MED had ample opportunity to scrutinize the almost impenetrable maze of government bodies involved in wetland issues. In the late 1980s, it listed seven state government departments along with the Wasteland Development Board and four institutions of the central government as having some jurisdiction over the wetlands (IW MED, 1988: 9). The East Calcutta wetlands cover areas in the Corporation of Calcutta and two neighbouring districts. Up to early

1997, the territory was not totally included in the Metropolitan Area. Large parts fell under the jurisdiction of the CMDA, while others did not. The institute (1995) complained that there was no overall authority concerned with this ecologically fragile landscape.

In short, West Bengal's bureaucracy is not adequately organized to deal with the delicate needs of these environmentally fragile and economically relevant urban fringes and adjoining areas. Apparently powerful government branches are impotent in this respect and tend to block one another. The infighting is not transparent and is likely to frustrate all parties involved.

With the benefit of hindsight, it is clear that neither the developer nor the conservationist faction in this bureaucratic conflict had its way. Indeed, from an administrative perspective one might look at the entire dispute including the episodes of public interest litigation as just an extension of the struggle raging inside the bureaucracy and the government. The conservationist government servants mobilized the NGOs and indirectly the court as a resource in their favour.

5.2.2 *Bureaucrats Mobilize Pressure Groups*

The conservationists had (and apparently still have) considerable influence in the labyrinth of governmental competences. However, their views were also always contested. Ashis K. Ghosh, at the time with the Zoological Survey of India, recalls as a particularly important episode the publication of an article in the *Telegraph*. On 31 August 1988, this newspaper reported a plan to expand Salt Lake City that would have affected the northern rim of the Waste Recycling Region. The project was to be approved by the state cabinet and was expected to proceed soon.

The plan never materialized. Instead, it immediately alerted the conservationist network. As will be elaborated, the High Court ruled out most of the plan in its wetlands verdict of 1992. The state government officially shelved the plan in 1994 (*Telegraph*, 30.3.1994).

It is clear that some bureaucrats, who apparently felt more commitment to the proclaimed goals of their office than to formal rules of conduct, contacted NGOs that they felt were serious about ecological affairs. The personal accounts of people involved vary. It is obvious, however, that the NGOs were briefed on the relevance of the

wetlands and motivated to act as pressure groups launching a pro-conservation campaign.

The NGOs first intervened in August 1991. Fishery owners had told bureaucrats they were afraid of the impending land-grabbing movements. They had themselves been warned by CPM activists. The immediate threat was that the land would be occupied and then declared to be redistributed among the rural poor. From past experience, however, it was assumed that such a takeover would lead to the reclamation of the pond and, eventually, its sale as profitable real estate.

The NGOs were informed of these likely events. Their immediate reaction was to write to State Environment Minister Ambarish Mukherjee, asking him to intervene and to speak out for the protection of the wetlands. The letter was signed by representatives of Concern for Calcutta, PUBLIC, the Indian National Trust for Art and Cultural Heritage (INTACH), Prakriti Samsad and the World Wide Fund for Nature–India (WWF). On 4 August 1991, these NGOs (with Swastho Paribesh stepping in for INTACH) published newspaper ads along similar lines.

Nevertheless, on that day some 2,000 men occupied several fisheries in the wetlands, claiming them to be illegally held (benami) land that should in future benefit the rural poor. The local police did not intervene to protect the pond owners. Some men in the crowd were armed (*Statesman*, 15.8.1991).

The NGOs stated in a letter dated 19 August 1991 to members of the state assembly ‘that this dastardly act was the first step towards eventual conversion and sale of the land as commercial property’. The letter urged the legislators to prevent further encroachments, reiterating some of the standard reasons for conserving the wetlands:

- (a) They are the drainage spill basin of Calcutta;
- (b) they are the last of the sinks to absorb pollutants;
- (c) they are the core of the biological filtration of the city’s sewage;
- (d) they are the source of fresh fish and vegetables for Calcutta’s markets;
- (e) they act as rechargers for the aquifers; and
- (f) they are the key to microclimate control for all of us. But most of all they provide the means for livelihood and survival for thousands of poor in the backyard of Calcutta.

The pro-conservation bureaucrats maintained a low profile in the campaign, with the NGOs presenting their arguments in public. The

NGOs, continuously in contact with their informants in the bureaucracy, stepped up their efforts to raise awareness. Particularly the *Statesman* (10.9.1991, 6.10.1991, 4.12.1991) took up the issue, after some apparent initial hesitation.

Signatures were collected for an open letter to the chief minister. The goal was to get 100,000 people to sign, but the final figure, stated in the writ petition, was around 8,000. This and similar attempts to gain the general public's attention had a strong bias towards the upper income, educated elites of the city. The NGOs were obviously able to mobilize people of their own social stratum.

By the end of the year, it became apparent that these mobilization efforts had little bearing on the state government's plans. Rather, the number of news stories about new development schemes in the area was becoming ever more impressive. On 28 August, the *Statesman* reported plans to set up a permanent trade fair ground proposed by the state government in the assembly. On 11 November, the *Statesman* carried an article about land acquisition for apartment housing. On 8 December, the *Economic Times* covered plans to build a World Trade Centre. There also had been repeated advertisements by real estate promoters who wanted to sell land east of the Metropolitan Bypass.

Eventually, the conservationists decided to go to court. PUBLIC, a group of roughly a dozen urban professionals, volunteered to take up the cause. It was led by Bonani Kakkar, an independent public health consultant, and her husband Pradip. According to Pradip Kakkar, the organization was started in the 1980s out of frustration with Calcutta's environmental situation and the wish to get the government 'to finally do its job'. The gap between official duties and actual performance was (and is) perceived to be disturbingly large by many members of Calcutta's middle classes. To a considerable extent, government publications agree that this frustration is legitimate (CMDA, 1990; A.K. Ghosh, 1991).

The efforts to raise public attention for the wetlands case continued during the litigation period. Media attention, however, was more focused on the events in court than on rallies and other campaign efforts. In this sense, the court proved to be a better forum for agitation than the streets had been for the educated middle class NGOs, with the particular advantage that this forum had the power to pass legally binding judgements and to make government officials answer during the proceedings.

Bureaucrats had initially been essential to the conservation campaign, they carried their internal conflict into the public sphere. The environmentalists in the administration mobilized allies from outside when they felt they were losing the struggle within the government apparatus. However, the attempt to mobilize a mass campaign failed, although it caught the attention of the educated middle classes.

5.3 PUBLIC v the State of West Bengal

The litigation known as *People United for Better Living in Calcutta (PUBLIC) and another versus the State of West Bengal and others* (Matter No. 2851 of 1992) is an example of public interest litigation checking government unaccountability. The first phase of the case is also special in the sense that the proceedings went on quickly and led to a consistent, apparently easily implementable judgement. In the beginning, Justice Umesh Chandra Banerjee had delved deep into the matter, trying to understand all aspects of it. Over the longer run, however, it turned out that the map outlining the protected area was of inadequate scale. Since 1995, proceedings of contempt of court based on the first High Court ruling have been going on particularly slowly.

The case will be dealt with chronologically. This section elaborates on the initial writ petition (5.3.1), the proceedings in court (5.3.2) and the first judgement (5.3.3), assessing these events in subsection 5.3.4. The last subsection then deals with appeals to the High Court to permit the construction of a World Trade Centre in the wetlands bordering on Salt Lake City. Such a complex had been permitted in principle in the first judgement, but ruled out for the time being on the grounds that there had so far been no convincing planning.

The World Trade Centre had become the core matter of debate in the first phase of the litigation and has since been dealt with in further judgements in November 1994 and July 1995. The dispute was, nevertheless, still pending in early 1999. At that point, the core facility of the centre was being built outside the protected area, with the investors hoping to eventually expand into a few acres of the litigated territory once the court gave permission.

The third phase of the litigation was more important. It started with accusations of contempt of court filed against leading

bureaucrats in 1995. PUBLIC sued them for not protecting the wetlands as had been ordered by the High Court. This petition no longer dealt with the World Trade Centre but rather with other encroachments within the Waste Recycling Region, including the planned Calcutta Leather Complex. We return to this phase in section 5.5 after an assessment of the tanneries case in the Supreme Court (section 5.4).

5.3.1 *The Initial Writ Petition*

On 8 January 1992, a writ petition filed by PUBLIC was accepted in the Calcutta High Court. Listed as respondents were the State of West Bengal through the secretaries of the Departments of Local Government and Urban Development, Development and Planning, Land and Land Revenue, and Metropolitan Development, along with the chief executive of the CMDA. The petition also named the Union of India through the secretary of the Ministry of Environment and Forests among the respondents.

The petition saw the State of West Bengal and its officers legally bound to protect the wetlands in accordance with the West Bengal Town and Country Planning Act, 1979, section 46(1). Also, it demanded that earlier government propaganda, such as the introduction of a state-wide 'Save the Wetlands Day' in 1988, should be followed up by action.

PUBLIC then referred to the constitution. Article 51A lists the protection of the environment among the duties of the citizens of India. The legal argument was that this includes the protection of lakes and must also bind the government and its personnel. PUBLIC also interpreted Article 21 of the constitution, the fundamental right to life, as implying the right to live in 'environmentally safe and pollution-free conditions'.

The petition asked for several writs to protect the wetlands. The state authorities should be directed to maintain the wetlands' character in its present form, to stop all development plans and to prevent any further encroachments. They should also be ordered to prohibit any further reclamation as well as any change of land use from agricultural to residential and/or commercial.

According to the petition, the State of West Bengal was to be directed to appoint a special officer or an expert body to report on conservation and protection options. The High Court was also asked

to make sure that a special officer would be appointed and entitled with the symbolic ownership of the wetlands. PUBLIC, in other words, wanted the administration to be streamlined so that it might manage the task of wetland conservation efficiently. Declaring the issue as too important to be left to the state government alone, the petition additionally asked for a writ directing the central government to constitute an expert body to report on conservation options for the East Calcutta wetlands.

The petition estimated that only half of the original East Calcutta wetlands remained. It defined the remaining area according to the IW MED's map of the Waste Recycling Region. This document was 'annexure C' of the petition.

The petition summarized the usual arguments for the conservation of the wetlands. Further encroachments might tip the delicate ecological balance of the area and endanger the future of Calcutta. The results would include, among others,

- more flooding in Calcutta,
- a lower ground water level,
- a sharp reduction of cheap fish and vegetable supplies,
- unemployment and displacement,
- the loss of biodiversity of flora and fauna, and
- a change of the city's microclimate.

The petition also cited the relevance of the wetlands for garbage and waste water disposal.

To substantiate its reasoning, the petition referred to several of the above-mentioned newspaper articles, the State Planning Board's Draft Perspective Plan (1990), a booklet by WWF-India (1991), a 1988 publication by A.K. Ghosh, and a chapter on Calcutta from the *Directory of Asian Wetlands*. The last-mentioned document was produced by the Asian Wetland Bureau, an NGO based in Kuala Lumpur. Excerpts of some of the documents were annexed to the petition.

With a polemical pitch against the city authorities, the petition emphasized that the Calcutta Corporation concerned itself only with transport (and not comprehensive management) of garbage. Even this was not considered to be 'handled efficiently and properly'. On the other hand, the informal non-governmental waste recycling scheme in the wetlands served as a model case in the Ganga Action Plan and had gained international attention.

Finally, the petition argued that the planned projects in the wetlands were neither necessary nor beneficial for society as a whole: 'Going by the experience of other states, particularly of Maharashtra, the World Trade Centre at Cuffe Parade, Coloba, Bombay, is nothing but a shopping complex'. The petition also pointed out that the planned extension of Salt Lake City would not solve the housing crisis in the Calcutta metropolitan area.

5.3.2. *The Court Proceedings*

The beginning and end of the dispute in court are documented by the original petition and the judgements. These have been made available for examination by the attorneys of PUBLIC. However, I have no exact documentation of the court proceedings. This section therefore draws on the newspaper coverage in the *Statesman* and the *Telegraph* as well as on personal memories of people involved.

The matter was first heard in court on 14 January 1992 by Justice Umesh Banerjee, who, as reported in the *Statesman* of the next day, instantly passed an interim order prohibiting any change of land use. In the proceedings that followed, the high environmental significance of the wetlands was never in dispute.

Rather, the state government claimed to be the first and pre-eminent agent of wetlands conservation (*Statesman* 3.3.1992, 5.5.1992, 14.5.1992). It blamed PUBLIC for not taking the government's protection efforts into account. The government repeatedly suggested that PUBLIC did not care about the environment but rather wanted to prevent a World Trade Centre (*Statesman*, 15.1.1992) and stall the development of the area, meaning all of Calcutta and West Bengal (*Statesman*, 3.3.1992).

According to the state government, the extension of Salt Lake City was no issue at all as the government was itself in favour of maintaining the ecological balance. This, however, did not concern the fish ponds in dispute. Rather, the issue at stake here was whether private promoters and individuals would profit from urbanization (*Statesman*, 10.6.1992). Members of PUBLIC recall being accused by government personnel of acting on behalf of 'the foreign hand'. Connections were also alleged with the Bombay business community, which might have had an immediate interest in keeping Calcutta's economic profile low.

The government's line was that the expansion of Salt Lake City in its so-called Sectors IV and V had been planned early on. It would not affect the viability of the waste recycling activities needed to dispose of Calcutta's garbage and sewage (*Statesman*, 5.5.1992, 28.5.1992). The government also intended to excavate other fisheries to compensate for the loss accruing through Salt Lake City's expansion (*Statesman*, 15.1.1992).

PUBLIC maintained that the state government's approach was 'piecemeal' and 'haphazard' (*Statesman*, 15.1.1992), as environmental impacts had not been assessed. At the very least, more research was deemed necessary to identify, demarcate and protect the core wetlands area.

Justice Banerjee, in turn, was particularly keen on obtaining exact data relating to the geography of wetlands and the projects planned therein. The *Statesman* reported that the judge complained about 'sketchy and incorrect maps' (7.4.1992), demanded to be informed how much of a particular area was 'used for cultivation and how much for fishing' (26.4.1992), and asked to see 'the original plan and programme of the West Bengal Government for the reclamation of Salt Lake' (5.5.1992). He went on to demand a 'definite statement of the West Bengal government's reclamation programme' (*Statesman*, 14.5.1992).

Unable or unwilling to provide detailed maps and construction plans, the state government kept reducing the area it wanted to reclaim. Initially it had demanded some 780 acres (*Statesman*, 15.1.1992), later it reduced to scope to 224 acres (*Statesman*, 5.5.1992) and then to 187 acres (*Statesman*, 12.5.1992) for the immediate construction of a World Trade Centre and a trade fair ground.

It soon emerged that the CMDA had no outline development plan for the area and had not even been ordered to prepare one (*Statesman*, 15.1.1992). PUBLIC pressed the case that the government was legally bound to provide such an overall plan (*Statesman*, 13.3.1992). The NGO referred to court rulings from other Indian states obliging the respective governments to provide such plans (*Statesman*, 13.5.1992).

The CMDA, moreover, had an internal guideline of not filling in ponds larger than 2,000 square metres (*Statesman*, 13.5.1992). This was emphasized by the government as proof of its own sense of responsibility concerning wetlands protection. The state government claimed to have no power over the land use in the wetlands outside

the Metropolitan Area as these were not covered by the Town and Country Planning Act (*Statesman*, 3.3.1992). However, it soon began promising legislation to include these areas in this particular regulation.

The judge was not satisfied with the quality of maps provided (*Statesman*, 13.3.1992, *Telegraph*, 13.3.1992). On invitation by the state government, he agreed to visit the wetlands personally. On the first occasion, due to a misunderstanding (*Telegraph*, 7.4.1992; *Statesman*, 20.3.1992) the representatives of the state government did not show up. Justice Banerjee and a group of journalists went to the wetlands on their own.

According to the *Statesman* (20.3.1992), villagers complained to Justice Banerjee about their feelings of insecurity because of law and order problems in the area. Justice Banerjee confronted the state representatives with this issue in the next court session (*Telegraph*, 7.4.1992). This aspect, however, was of no relevance in the judgements. All parties went on a second court excursion into the wetlands. This time, the physical state of single fishery ponds was assessed in detail (*Telegraph*, 26.4.1992).

During the proceedings, the views of the central government were also heard. It maintained a diplomatic stance, submitting that the East Calcutta wetlands were of great ecological relevance. Any project within the area should be taken up only after an environmental impact assessment (*Statesman*, 13.5.1992, 30.7.1992). It stated that wetlands should generally be conserved.

During the court proceedings, the state government began making haste. Allegedly, an investment of four billion rupees was involved (*Statesman*, 3.3.1992). Later, the figure rose to five billion rupees. The project was urgent as it would improve Calcutta's overall economic standing by boosting exports, industrial investment and employment. If it didn't proceed soon, the investing company Development Consultants Ltd. might opt for a location in Andhra Pradesh (*Statesman*, 14.5.1992).

In sum, the need of environmental protection was not contested in court. The specific characteristics of the wetlands as described in the petition were hardly debated. The state government professed its intentions to safeguard the ecosystem, particularly in the Waste Recycling Region. But it also argued that a small portion of the wetlands should give way to urbanization. PUBLIC viewed this as an irresponsible, overall threat to the environment.

The newspaper coverage shows that one of Justice Banerjee's central interests was to obtain exact data. He thus touched upon the state government's core difficulty in dealing with environmental matters—its often-bemoaned failure to stringently implement rational urban planning. The judge's first ruling made this evident.

5.3.3 *The Judgement of 24 September 1992*

Justice Banerjee delivered his first major verdict on 24 September 1992. The proceedings had been speedy, taking nine months to deal with a fairly complex matter. The verdict was reported in the *All India Reporter* (AIR) and in the *Calcutta Law Journal* (1993, Vol. 1, January to June). This book draws upon the latter, less popular publication and will therefore not only refer to the pages but also to the paragraphs of quoted passages.

For PUBLIC, this first ruling turned out to be an almost total success. Except for the establishment of expert bodies to review conservation strategies for the wetlands and the appointment of a symbolic administrative 'owner', all the basic goals of the original petition were attained. Paragraph 41 (p. 128) reads:

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 whatsoever for the purpose of changing the use of land from agricultural to residential or commercial in the area as indicated in the map annexed to the petition and marked with letter 'C' (Waste Recycling Region, H.D.). 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 provision in regard thereto.

The state government did not lose its case completely. It was given limited scope to plan a World Trade Centre and permanent fair ground (Paragraph 42, p. 128):

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 future 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 utilized for any other purpose than a World Trade Centre or a Public Exhibition Centre if so authorized 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.

The verdict elaborated at length the ecological necessities in general and the relevance of wetlands in particular. The judge did not derive his conclusions from India's environmental legislation. Rather, he referred to the fundamentals of the environmental debate and to international standards.

By extensively justifying his verdict, Justice Banerjee revealed that he felt he was entering uncharted territory. He expressed his hesitation to rule against the state government (Par. 30, p.123). 'This court is not trying to denounce the State activities in any way whatsoever. The state is equally conscious of the ecological problem.'

On the other hand, Justice Banerjee, pointed out that courts have a 'duty towards the society for its proper growth and further development' (Par. 2, p. 107). Similarly, 'on the wake of 21st century when there is a total global awareness in regard to maintenance of ecological balance', responsible judges could not afford to keep 'their eyes shut in regard to this concept of ecological imbalance' (Par. 28, p.122).

The first paragraphs of the judgement deal with a general concern for ecological balance: 'There shall have to be a proper balance between the development and the environment so that both can co-exist without affecting the other' (Par.2, p. 107). Particularly in a poor country such as India, economic development was seen as necessary.

Quoting international conferences (United Nations, 1972, Stockholm, Sweden; Habitat, 1976, Vancouver, Canada; World Water Conference, 1977, Mar del Plata, Argentina), the ruling emphasized the global awareness of potential ecological disaster. Justice Banerjee did not use the term 'sustainable development'. But he reformulated the concept in his own words without particular reference to the United Nations Conference on Environment and Development in Rio de Janeiro earlier that year (Par. 2, p. 107):

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. . . . The present day society has a responsibility towards the posterity for their proper growth and development.

Justice Banerjee also dealt extensively with the relevance of wetlands in general. He quoted sources from Australia, the United States, Sweden and the World Bank to prove his case. Not all of his sources were brought up by the petitioning party. He obviously did research on his own initiative.

While the Indian legislation referred to in the petition was not mentioned per se in the verdict, the document does state that India is a contracting party of the Ramsar Convention and has thus made a commitment to wetlands conservation (Par. 24). In accordance with this document, the ruling made it clear that wetlands do not consist only of permanent water bodies. Swamps, marshes and seasonally flooded areas were included in the court's definition.

The judgement also elaborated the specific characteristics of the local wetlands. It concluded that 'there cannot be any manner of doubt that the Calcutta wetlands present a unique eco-system' (Par. 19, p. 115). This reasoning followed the general lines of the petition and drew on the sources it listed. Justice Banerjee, however, quoted additional publications.

Justice Banerjee stated that the East Calcutta wetlands 'recycle waste water for efficient nutrient recovery, provide fresh fish to the market of Calcutta and employ thousands of rural people' (Par. 19, p. 116). The wetlands were seen as 'vital for maintaining microclimatic conditions; absorbing pollution from air receptacle to rain water and sewage; waste recycling; pisciculture; habitat for aquatic flora and fauna; proven high biomass density' (Par. 15, p.113). Their relevance as spill basins was also mentioned in this context.

The state government's argument concerning proposed development schemes were also considered. The expansion of Salt Lake City from 3000 to 3784 acres, it was stated, would not tip the ecological balance of the wetlands. This alone, however, did not imply it would be permissible.

Justice Banerjee also referred to CMDA's Metropolitan Development Plan 1990-2015, a document not listed in the petition. As has been emphasized above (subsection 5.1.3), the CMDA had made a clear choice against eastern expansion. Justice Banerjee concluded that the wetland area 'is not included in the future development of the CMDA's plan' (Par. 31, p.124) and rhetorically asked whether the

High Court could ‘proceed on any other basis’ than the document of the official planning authority (Par. 32, p.124). In a later case (discussed in section 5.6), the same judge, now acting as senior member of India’s first environmental bench, no longer considered this paper legally binding.

In September 1992, Justice Banerjee (Par. 17, p.113) defined as his task to decide ‘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 society’. The ruling distinguished between general urbanization for personal benefits in terms of housing or business space and ‘development projects’ that benefit society as a whole. Only for the sake of the latter would it be justified to sacrifice a portion of the East Calcutta wetlands. In a globalizing economy, on the other hand, a World Trade Centre would benefit the whole country by promoting international trade, thus creating welfare and ensuring prosperity. The Eastern Metropolitan Bypass and other infrastructure (such as readily available power supply) made the disputed fish ponds an attractive location.

Satellite townships were seen as a phenomenon of all major urban centres and generally approved of. But that did not ‘imply that the gift of nature to humanity shall have to be destroyed’ (Par. 20, p.116). Rather Justice Banerjee stated (Par. 39, p. 127) that wetlands have ‘a significant role to play in the proper development of the society—be it from environmental or from economic perspective’, and continued:

Pollutionwise 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? ...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 society at large and wetland assists mankind to live in a cleaner and purer environment.

Justice Banerjee considered the proposed World Trade Centre and the public exhibition centre as ‘development projects’ worthy of some sacrifice in order to strike the desired balance between environment and development. Such projects should not be embargoed by the judiciary (Par. 37, p. 126). Thus the area for potential extension of Salt Lake City was reduced from 784 to 187.44 acres—the space the state government demanded for these complexes.

Justice Banerjee, however, did not simply permit these two ‘development projects’. No detailed plans had been presented in court. The proposal had ‘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’ (Par. 36, 126). The ruling pointed out that the World Trade Centre in Calcutta did not even figure on the central government’s list of such future projects.

Given the limits of the public purse, Justice Banerjee also doubted the economic viability of the suggested projects. The paragraphs relating to the quality of governmental planning clearly expressed the judge’s frustration (Par. 37, 38, p. 126f).

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. .. 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 thereof—none of these details have been furnished to this court.

Justice Banerjee ruled out general encroachments on the precious wetlands ecosystem. Striking a ‘balance of environment and development’, he was prepared to reconsider any serious proposal for the World Trade Centre and a public exhibition centre on the condition that the government first present reliable planning data.

5.3.4 *A Summary Assessment for First Phase of Proceedings*

Several aspects of this case so far are worth emphasizing. The state government had wanted to limit the debate to an area of almost 800 acres. The court did not agree to this limit. Its judgement instead covered 5500 hectares of wetlands, protecting the entire Waste Recycling Region with the possible future exception of almost 190 acres. The definition of ‘wetlands’ was consistent with that of the writ petition. Other wetlands in East Calcutta, however cherished by conservationists, were not included in this ruling.

It is also relevant to stress that during the proceedings the scope of the government’s development scheme had been constantly narrowed down. The writ petition had challenged a planned extension of Salt Lake City. According to the submissions of the state government, in the end, only a World Trade Centre and a permanent exhibition hall

were at stake. The further dispute over the World Trade Centre is discussed in the next subsection, but it did not substantially change the stance of the first ruling. Therefore, other important traits of the proceedings up to this point will be assessed first.

The court ruled on behalf of 'society at large'. Issues of personal interest such as ownership of ponds, access to housing or business space had to yield to concerns of both the economic and the environmental well-being of the Metropolitan Area as a whole. The judge thus expressed concern for the public good. Both the Waste Recycling Region's actual and the World Trade Centre's potential role for the rest of Calcutta metropolitan area and the state of West Bengal were taken into account to strike the balance.

Justice Banerjee based his understanding of the public interest not so much on the Indian constitution, as he could have, but on the growing international awareness of environmental risks to public welfare. His ruling drew on sources from Asia, Australia, America and Europe. In this sense, the judgement was more in tune with the international debate than with Indian society or—least of all—the social reality of the East Calcutta wetlands.

Contrary to an acknowledged need to take into account socio-economic conditions, the judgement avoided dealing with the social conditions of the Waste Recycling Region. Government programmes were taken at face value in so far as they had been explicitly formulated. Issues of law and order and the incidents of land occupation by force were not recognized in the judgement, even though Justice Banerjee had expressed his concern during the court session (*Telegraph*, 7.4.1992).

The socio-economic needs and worries of the wetlands poor were not taken into account. From a sociological point of view, however, it is doubtful whether any conservation strategy would succeed without tackling those needs. The judge did not seem to be aware of this challenge and accordingly did not direct the state government to take any measures about it.

It also seemed doubtful that Justice Banerjee would have been as diligent if the state government's development plans had been just a little more advanced at the time. In other cases, late and poorly drafted urban planning documents were accepted as legally valid by the Green Bench presided over by the same judge.

5.3.5 *The Dispute over the World Trade Centre Continues*

In the autumn of 1996, construction work for the World Trade Centre was under way. Litigation had delayed the project by almost five years and had radically reduced the space available. In early 1997, the *Statesman* (12.1.1997) reported about it under the headline ‘The Shape of Trade to Come’. The core facility was being set up on four acres bordering on the Waste Recycling Region. The private company Development Consultant Ltd. (DCL) was prepared to expand the project into the Waste Recycling Region’s Chinta Singh Bhery should the court finally grant permission.

The matter was still pending, and many of the buildings that were initially meant to go along with the centre were now being planned at other locations (for instance the five star hotel or the convention and exhibition centre called ‘Science City’). They had become issues of another public interest litigation, which are dealt with later in section 5.6.

At stake in this subsection is the High Court’s general permission to build the World Trade Centre. It is relevant because many people in Calcutta believe that the court reversed its first judgement, eventually ruling against PUBLIC. This perception is wrong. Rather, Justice Banerjee’s second ruling of 30 November 1994 was consistent with the first one. Because the second judgement did not set a precedent, it was not reported in the law journals.

The state government had not appealed in the time defined by the first ruling for permission to build the World Trade Centre. However, in the last week of the period granted, DCL had done so. This company had been reported to be the relevant investor when the *Economic Times* first covered the topic (8.12.1991). Proceedings consequently led to Justice Banerjee’s second judgement.

As this judgement stated, DCL had asked for permission to set up a World Trade Centre on 73 acres of the premises of the Chinta Singh Bhery. The Court permitted it, with the explicit admonition that there was to be no further encroachment in the future. Justice Banerjee repeated his formula of the wetlands being a ‘gift of nature’ and the necessity of striking a ‘balance between ecology and development’, again with a particular emphasis on economic growth in poor countries.

The company had obtained a memorandum of understanding signed by the assistant secretary of the Urban Development

Department. The memorandum suggested the construction of the centre (if so permitted by the High Court). Justice Banerjee accepted this as a legitimate basis for DCL's appeal (p. 21).

In court, DCL now presented the information demanded in the first ruling. It predicted future employment for 8,000 to 10,000 World Trade Centre staff, investment costs of 500 to 600 million rupees and a construction period of five to six years. The company promised to come up with the capital and to manage the centre. A full-fledged World Trade Centre, according to DCL, should have

- a business centre with computer, telephone and fax facilities,
- information and trade research services covering the world market,
- information services on trade-related government regulations on an international basis,
- conference rooms of different sizes,
- an exhibition hall, and
- office space for export companies, financial institutions, customs authorities and trade promotion and shipping services.

Additionally, DCL wanted to construct a hotel complex and space for restaurants, travel agents, airline offices and sports facilities. There were also ideas of establishing an 'international school' in order to encourage business people from abroad to move to Calcutta.

Justice Banerjee's second judgement referred to DCL's statement that it was already successfully running a pilot project on Park Street, complete with video conference facilities and a satellite link to the New York World Trade Centre head office. The company had obtained regular membership in the international World Trade Centre Association. Over 160 million rupees had already been invested in data processing facilities alone.

The second judgement also repeated DCL's assertion that World Trade Centres in Taipei and Seoul had significantly contributed to the well-known export successes of Taiwan and South Korea. Such centres were stated to be in a position to provide necessary infrastructure particularly for smaller companies interested in access to the world market.

Justice Banerjee expressed his doubts about the employment possibility of up to 10,000 people, given that much of the activities were to be computerized. Nevertheless, he concluded that the World Trade Centre would 'benefit to the society at large' and must be called

a ‘developmental project’ (p. 16). It was expected to improve the industrial climate of West Bengal and to attract potential investors. The court therefore granted 12 acres to be allotted for the project.

The ruling pointed out that half of the original wetlands area had already been lost. The 73 acres currently at stake did not even amount to one percent of the remaining area. The project was not likely to cause any major harm to the wetlands ecosystem as a whole. Nonetheless, the ruling went that 12 acres would be enough for the World Trade Centre.

Justice Banerjee did not grant permission for a new hotel complex. No health centre, international school, or recreational facilities were to encroach on the wetlands. Such services were already available in Calcutta and investments to expand capacities could take place elsewhere.

The first court order was thus modified, permitting the construction of the World Trade Centre plus access roads and parking space: ‘No other encroachment, however, can be permitted so far as the future expansion is concerned’ (p. 22). This also applied to parts of the contested area that according to DCL’s plans would be reserved for a lake and adjoining landscaping. No encroachment for other than the listed purposes was to be allowed and particularly no commercial activities.

There had been no proposal for a permanent exhibition site within the initial twelve months granted for application. Without further debate, this project was therefore ruled out for good with respect to the Chinta Singh location.

The PUBLIC case was still not disposed of after Justice Banerjee’s second ruling. Rather, DCL was obliged to file an affidavit with the exact project details after the Christmas break. All parties were given liberty to appeal to the court in case of implementation problems.

The next affidavit of DCL immediately triggered another appeal by PUBLIC. The NGO stated that the details were not necessarily in accordance with the second ruling’s definition of the World Trade Centre. For our purpose it is irrelevant to delve into the minutia of this piecemeal process. It mostly resulted in further restrictions of the territory allotted to the World Trade Centre.

An interesting sidelight is that the second judgement complained that the central government had still not come up with an environmental impact assessment. This goes to show that the judge

was not familiar with the regulation for such assessments. Indeed, the central government had submitted, in the first phase of the litigation, that such a project required a profound assessment. However, it is not the central government's duty to make the assessments.

The permission for a deviation from the CMDA's Metropolitan Development Plan 1990-2015 is also worth a critical remark. Justice Banerjee gave two reasons for the deviation. The first was that the Chinta Singh Bhery was a highly suitable location for the project. In view of the 'balance' the judge wanted to strike between environment and development, this makes sense. Infrastructure would be readily available, and the traffic situation was favourable at Chinta Singh.

The second reason, however, appears to be problematic. This was that some of the reclamation damage had already been done and that the fishery had already gone dry. It amounts to a serious breach of the principles of rational urban planning to retroactively legalize inadequately planned development. In principle, it would mean that any government and its contractors could get away with breaking the laws if it was later found that their action had made sense or, for that matter, their intentions had been good. Such decisions may indeed undermine the principle of rule-bound government.

The last relevant consideration concerning the World Trade Centre episode is the following: It is remarkable that a relatively tiny small area (less than one percent) of the Waste Recycling Region got so much attention over such a long time span.¹

5.4 M.C. Mehta v the Union of India

This section deals with the judgement of the Supreme Court concerning Calcutta's tanning industries. The judgement was highly relevant for East Calcutta. In late 1996, the Supreme Court ordered the tanneries to relocate in an area that may well be part of (or at least overlap with) the protected Waste Recycling Region. Up to early 1999, neither of the judicial tiers involved had cleared the decisive

¹ It is futile to speculate about why the issue received such attention. One reason may be that PUBLIC labeled DCL as a 'multinational' and argued against a private, profit-driven company operating in favour of development. Moreover, DCL, being a corporation, depended on the legal permission. Unlike a government agency, it could not risk losing invested capital should the High Court eventually rule against the project.

legal question, whether or not this place was covered by the protective High Court ruling of 1992.

The litigation in the Supreme Court focused on the question of industrial pollution, an issue that was neglected by the High Court litigation. The Supreme Court, on the other hand, did not deal with aspects of urban planning or the idiosyncrasies of East Calcutta. Different angles of environmental reasoning thus lead to apparently different and probably conflicting judgements.

This goes to show that the judiciary as a whole is not applying comprehensive environmental legislation that would take into account all relevant aspects. Rather, the approach is haphazard and erratic.

Whereas the proceedings of *PUBLIC v the State of West Bengal* were heard in the High Court, *M.C. Mehta v the Union of India* (also known as the *Ganga Matter*) was heard in the Supreme Court. Originally it had concerned the tanneries in Kanpur. The Supreme Court had ruled that these tanneries could no longer be permitted to pollute the Ganges. The tanneries of Kanpur had been ordered to either provide effluent treatment or close.

In the early 1990s, the scope of the case was extended to cover all industries along the Ganges. This affected the Calcutta Metropolitan Area in many ways, not only the local tanneries. For instance, Howrah Station was eventually forced to set up a treatment plant (*Statesman*, 24.1.1997), and proceedings concerned with the Howrah foundries were still dragging on in 1999, as local activist Subhas Dutta complained. This section will deal neither with the *Ganga Matter* as a whole nor with its overall impact on Calcutta. The discussion here is restricted to the aspects relevant to the East Calcutta wetlands.

The vast socio-economic intricacies of relocating these traditional industries will not be dealt with here either. They are daunting indeed. Owned by minorities of ethnic Chinese and non-Bengali Muslims, the industries employ some 10,000 to 15,000 workers of the lowest social strata (IW MED, 1995; CEMSAP, 1995). At least 100,000 jobs in Calcutta's leather trades depend on them. For the purpose of this study, it must suffice to state that both tannery owners and their workforce were reluctant to move.

There was, consequently, little local enthusiasm for conservation. Calcutta's environmentalists, in turn, seemed more concerned with protecting the wetlands as ruled by the High Court. They were generally not in favour of relocation and viewed M.C. Mehta as an

outsider imposing his ideas and interfering in an issue he did not understand.

On 12 December 1996, Justices Kuldip Singh and S. Saghir Ahmad of the Supreme Court delivered a final and summary judgement (reported 1996(9) SCALE: 397-415) concerning the Calcutta tanneries. By then, they had been dealing with this particular issue for almost four years. In the end, they ordered over 500 businesses to either relocate or close by 30 September 1997. Stating that the Supreme Court no longer needed to with this issue, the judges referred further monitoring to the Green Bench of the Calcutta High Court, which had been established in 1996.

By early 1999, the construction of the leather complex was well under way. The first handful of businesses had actually shifted to Karaidanga, a location east of Bantala. Bantala is the village in the centre of Waste Recycling Region. However, the vast majority of tanneries were still operating in the Tangra, Tapsia and Tiljala neighbourhoods of Calcutta, defying the Supreme Court decision for the time being.

My assessment of this case is based on published Supreme Court rulings, newspaper clippings, the 1995 CEMSAP report and personal statements of M.C. Mehta and people generally involved in the wetlands issue. There was no access to internal data of the West Bengal government. It is therefore impossible to reconstruct what went on within the administration. It will become clear, however, that the state government's stance in this case was not necessarily consistent with its elaborations in the PUBLIC case.

The following subsection deals with the location of the tanneries and the environmental problems involved. The second subsection discusses the proceedings in the Supreme Court. The final subsection elaborates on the conflicting nature of Supreme Court and High Court rulings.

5.4.1 Suggestions for a Calcutta Leather Complex

In December 1991, the Supreme Court (reported 1993 Supp (1) SCC 434) had ordered industries along the Ganges to report their efforts to stop pollution according to the Water Act. In early 1993, the Supreme Court began to deal explicitly with the Calcutta tanneries. At this point, the state government immediately submitted that these polluting industries were to be relocated.

The role of the West Bengal government in this case is ambiguous. It constantly presented plans to set up a new Calcutta Leather Complex and appeared to be actively promoting it. However, it did not seem at any time prior to the final Supreme Court judgement to be in a hurry to implement these plans. Finally, it never acknowledged that the leather complex project might contradict its other proclaimed policies of wetlands conservation.

Publicly, the Calcutta Leather Complex was first mentioned in the summer of 1992. On 26 August, the *Statesman* ran a story about plans for a new '1000-acre Leather Complex in Bantala', the village in the centre of East Calcutta wetlands. This was one month before Justice Banerjee's first ruling. The *Statesman* pointed out that the project had never been mentioned in the High Court in the *PUBLIC v the State of West Bengal* proceedings. The paper considered the news to be a severe blow for those struggling for wetlands protection.

The *Statesman's* source was the Indian Leather Industries Association. The state government was to make available the land and improve road and power infrastructure. The project proper was to be paid for by the tanning businesses. A common effluent treatment plant for the new tannery complex was expected to be funded with an amount of 1.55 million dollars by the UNDP. The paper did not mention the Supreme Court. Nevertheless, the plans seem connected to the Supreme Court's demand for reports on compliance with pollution control legislation.

In later state government documents, the Supreme Court is generally not mentioned. Plans are made to appear as the government's own initiative, but it is not apparent who exactly is behind them. Their potential inconsistency with conservation intentions in the wetlands is also neglected. Typically, the CEMSAP (1995: 7.19ff) dealt with the leather complex as if it was proven to be economically and environmentally sound:

The Government of West Bengal has identified the leather industry as a growth sector, given the global trend to shift production and processing of leather to developing countries. It considers that relocation of tanneries to a 'green field site'—Central Leather Complex (CLC)—offers the opportunity to upgrade technology and increase productivity, to introduce more efficient environmental practices and to install a cost-effective centralized effluent treatment plant.

Indeed, the traditional tannery areas of Tangra, Tapsia and Tiljala in East Calcutta gave ample reason for environmental concern: 'At

present, apart from screening to remove solids, there is no treatment of effluents discharged from the tannery clusters' (CEMSAP, 1995: 7.17). Anyone visiting the area for the first time would have been appalled by the smell, the piles of industrial waste and the brightly coloured effluents flowing through open drains. This waste water was contaminated with salts, sulphide and chromium. Owing to organic residues, the biological oxygen demand was very high. All the waste water went through the canal system into the wetlands. The Supreme Court considered tannery effluents to be ten times as polluted as domestic sewage water.

5.4.2 The Proceedings in the Supreme Court

In the Supreme Court, the West Bengal state government first mentioned the planned tannery relocation on 19 February 1993. The judges ordered appropriate steps to be taken within three months. That did not happen. The state government applied for a longer time span, which was not granted by the Supreme Court.

Nevertheless, the hearing in court dragged on with the judges on several occasions threatening to prosecute government officials for contempt of court (15.10.1993, 25.2.1994, 29.7.1994). On 9 September 1994, the court stated (SCALE, 1996 1996: 403, Par.6):

We are prima facie satisfied that there has been no effort on the part of the West Bengal Govt. to comply with the directions given by this Court. Despite our finding, we restrain ourselves and refrain from issuing contempt notice.

During the proceedings, it became apparent that the tannery owners did not want to move, particularly as they would have had to bear the cost of relocation. The proceedings dealt with the investment involved and how it was to be financed. The alternative to relocation would have been to set up a common effluent treatment plant. This was debated on several occasions, with Justice Kuldeep Singh and his colleague finally being convinced that it would not be viable because there was not enough space.

According to an affidavit on 5 October 1993, filed by the West Bengal Pollution Control Board (WBPCB), the tanneries had been 'operating for a considerable period of time with no regard to environmental pollution control'. The WBPCB had never enforced national legislation. In the words of the Supreme Court (1996: 398, Par. 1), 'the State of West Bengal and ... the West Bengal Pollution

Control Board are wholly ... re-miss in the performance of their statutory obligations to control pollution and stop environmental degradation’.

During the proceedings, both the National Environment Engineering Research Institute (NEERI) and the WBPCB repeatedly reported to the Supreme Court that it would be impossible to set up effluent treatment plants in the tannery areas of East Calcutta. Both agencies recommended that the industries should be shifted.

The Supreme Court judgement did not clarify why the relocation was stalled for so long. Apparently neither the state government nor the tannery owners were making haste. The tannery owners had initially consented to the relocation and for that reason the Supreme Court had not carried out its threat to order their closure. Later the Supreme Court found the tanneries to be ‘wholly non-cooperative’ (SCALE, 1996: 409, Par. 11).

Pressing for implementation reports, the Supreme Court came to learn in early 1995 that the land acquired by the State of West Bengal was to cost the tanneries 860 rupees per square metre. The tannery owners complained that this was not affordable.

The court dealt with the issue in the following matter: On 7 April 1995, it ordered the state government to set up and pay for the common effluent treatment plant. Financial support was to be made available from the central government’s Ganga Action Plan. As soon as the leather complex was operational, the companies concerned were to pay an effluent charge to the government. This solution meant that the price per square metre of new tannery territory could be reduced to 600 rupees.

The Supreme Court order was not obeyed. The tannery owners claimed that it was, after all, possible to treat effluents at the current locations. According to them, the state government had indicated that under these conditions the relocation would be reconsidered. A company called KROFTA Engineering Ltd. from Chandigarh had allegedly made some proposals.

On 5 September 1995, the Supreme Court again ordered NEERI to report on the feasibility of on-site effluent treatment in Tangra, Tapsia and Tiljala. On 30 September 1995 NEERI again declared such treatment to be impossible. Finally, in December 1996, the Supreme Court in its last ruling on the matter ordered the tanneries to relocate within the next eight months.

To judge by this case, the Supreme Court did not act assertively. It did not start contempt proceedings, but rather patiently tolerated time lags and lack of implementation. The role of the state government remained ambivalent. It apparently favoured relocation but did not press the issue. Moreover, the state government had generally claimed it would not let Calcutta expand eastward.

5.4.3 *A Wetlands Location for the Leather Complex*

The final Supreme Court ruling of December 1996 ordered the tanneries to relocate to a place called Karaidanga, east of Bantala. Environmentalists from Calcutta claim that this area is covered by the first wetlands judgement of the High Court. There are reasons to believe that the proposed leather complex will at least partly overlap with the protected Waste Recycling Region. Judicially, the question remains unresolved. At this point it will suffice to state that contempt of court proceedings in this matter are pending in the High Court. These are dealt with in the next section.

The issue of wetlands protection had been mentioned in the Supreme Court. In the summer of 1995, the tannery owners had brought it up as a reason for not being able to relocate. The state government contested their statement. It filed an affidavit on 14 July 1995 declaring that the planned tannery complex would not be in the wetlands. The terms used are confusing. It will be remembered that the High Court had ruled to protect the 'wetlands' as outlined by the map of the Waste Recycling Region. While all of East Calcutta is basically wetland area, the High Court did not use the term 'Waste Recycling Region' for the protected area.

It is possible that the state government deliberately further confused these terms. As will be elaborated in the next section (which deals with PUBLIC's contempt of court petition), there is a second, official map of the area with the title 'East Calcutta Wetlands (Based on Waste Recycling Region)'. It is likely that this one was submitted to the Supreme Court. According to some members of the West Bengal bureaucracy, the judges were indeed shown the wrong map.

The second map outlines an area within the Waste Recycling Region as 'wetlands'. This area is considerably smaller than the Waste Recycling Region with the omitted territory being close to Karaidanga. If used in the Supreme Court, the second map would have invited a misreading according to which the High Court would

have protected this area rather than the entire Waste Recycling Region. No map had been published along with the ruling.

Several wetlands conservation activists of East Calcutta claim to have been advising the tannery owners in this matter. The Supreme Court's attitude to the issue shows that they did not brief the tannery owners well enough. The owners were unable to convince the court. Rather, the judges accepted the state government's assertion that it was not interfering with the wetlands protected by the High Court.

The petitioning lawyer in the *Ganga Matter*, M.C. Mehta, said in an interview for this research project that he felt the argument about the wetlands was a mere pretext. According to him, local 'self-proclaimed environmentalists' were basically serving the vested interests of the tannery owners who were unwilling to shift. He said he had personally visited the place (admittedly not in the rainy season) and had found it dry.

In the interview, M.C. Mehta also emphasized that there was a waste water canal running through the area. He considered the canal to be evidence that the location was not worthy of conservation. This indicates that he was not informed about the complexities of the East Calcutta Waste Recycling Region. One might expect India's most prominent environmental lawyer to be better briefed, particularly since the case was heard in the Supreme Court. Apparently, the characteristics of the East Calcutta wetlands were never discussed in this forum.

Environmentally, the Supreme Court ruling seems to make sense at first glance to the visiting German sociologist, for two reasons. First, tannery effluents are indeed a major health hazard (particularly in food production in the waste recycling schemes), an issue overlooked in the PUBLIC case. Second, the Supreme Court had insisted that the areas vacated by the tanneries were to remain green areas. Those areas were wetlands that were long since reclaimed. Ideally, the Supreme Court ruling would involve shifting the tanneries to the east and expanding the Waste Recycling Region to the west.

However, that idea is not realistic. The old tanneries are located in an area where there are several other buildings serving commercial, industrial and residential purposes. There are also temples, churches and mosques. The area is not an isolated tannery complex.

Questions of viability are not the only points of criticism. In strictly legal terms, the approach of the ruling is also unsatisfying. A certain area had been protected by a High Court ruling. If, as appears

likely, that area was infringed upon by the Supreme Court ruling, then the High Court's authority would have been put in question. This would all the more be the case if it had happened without explicit revision of the former legally binding decisions of the High Court.

The fact that the two judgements appear to be in conflict does not merely highlight the inadequate interaction of the two judicial tiers involved. It is also an example of the difficulties of India's urban, middle class environmentalists when interacting with one another. PUBLIC and M.C. Mehta could have coordinated their legal efforts, but they did not. Rather, the parties involved harboured resentment and conspiracy theories towards one another.

5.5 PUBLIC's Pending Contempt Accusations

Whereas *PUBLIC v the State of West Bengal* was settled quickly and initially was a promising example of public interest litigation making government agencies more accountable, this assessment does not entirely hold true over the longer run. The ruling was not convincingly enforced. The Calcutta Leather Complex project was particularly disturbing. In early 1998, it still needed to be judicially clarified whether the project was in accordance with the High Court ruling and, if not, whether the High Court would modify its orders.

The clarification was all the more urgently needed as PUBLIC had taken the issue to court. On 9 August 1995, it filed an affidavit (CC No. 44 of 95, High Court of Calcutta, Special Civic Jurisdiction [Contempt]), accusing several leading officers, most of them of the state government, of having 'failed and neglected to maintain the nature and character of the wetlands in the form subsisting on the date of the order and judgement dated September 24, 1992'. This would amount to contempt of court, a criminal offence.

There had been cases of conversion and encroachment. The affidavit demanded that there should be an injunction against all such ongoing activities. The respondents should be found guilty of contempt of court and punished accordingly.

The affidavit particularly mentioned the proposal to set up the leather complex at Karaidanga at the eastern end of the protected area. It also complained about the ongoing construction of an eye hospital, sponsored by the Ballygunge Lions club, south of the road from

Bantala to Karaidanga. Other charges of specific land-use changes were not made in this affidavit.

The evidence supplied in the annexures included copies of maps that suggest (but do not prove) that the leather complex would be inside the Waste Recycling Area. Also included were photographs of the sites concerned. There was no reference to the ongoing proceedings in the Supreme Court.

On 12 December 1995, PUBLIC filed another affidavit, repeating the charges of contempt of court. This document included more details concerning the eye hospital and the leather complex. PUBLIC submitted that two state government ministers had been present during the ceremony in which the foundation stone was laid for the eye hospital on 19 March 1995. Additionally, a signboard approximately 300 yards west of the eye hospital's construction site indicated that the Lions Club was also planning to set up an old age home there.

By October 1997, both projects had been abandoned. PUBLIC's lawyers saw this as a result of the litigation. PUBLIC had understood these supposedly charitable projects to be an attempt of real estate promoters to urbanize the area. Had these complexes become operational, the promoters would have been in a position to state that the area was no longer agricultural. According to a leading officer, several other small-scale projects in the wetlands had also been stopped, for instance a cemetery for pet animals sponsored by the then Environmental Minister, Maneka Gandhi. There is little doubt that fear of the judiciary has played a role in this, and that PUBLIC's contempt petition was effective in imposing the 'threat' of judicial punishment.

Concerning the leather complex, page 11 of the second contempt accusation stated that a new map had been prepared by the Remote Sensing Application Laboratory. PUBLIC understood the map to have been 'deliberately distorted so that the leather complex is shown to be situated outside the periphery of the area protected by the said judgements and orders' (p. 12). This is the map, already mentioned above, called 'The East Calcutta Wetlands (Based on Waste Recycling Region)'. According to the map, the wetland area is basically the same as the Waste Recycling Region except for its south-eastern border. That border is indicated farther west.

PUBLIC expressed the suspicion that the map was meant to confuse the Supreme Court. By designing the map and equating it with the term 'East Calcutta wetlands', the state government might

have tried to gloss over the fact that current plans were in conflict with the High Court judgement of September 1992.² The contempt affidavit of December again made no reference to the tanneries case in the Supreme Court. It did state, however, that the road from Bantala to Karaidanga was to be widened to allow more traffic. This was understood as change of land use in the Waste Recycling Region.

The matter only rarely came up for hearing. It was still pending in early 1999. The issue remained disturbingly unresolved. Basically, there were three possibilities:

1. Karaidanga might indeed be on the border of the Waste Recycling Region with the leather complex not encroaching on its territory. This was the government's line.
2. The upcoming leather complex might partly overlap with the protected area. This seemed plausible, to say the least.
3. All of Karaidanga might be covered by the High Court judgement of 1992. This is what PUBLIC and other environmentalists believed to be true.

Adding to the confusion, the place 'Karaidanga' is not mentioned on either of the two maps in official use. However, there is an IW MED document of 1988 that includes a map of the Waste Recycling Region explicitly spelling out the name Karaidanga outside this area. However, the fact that the locality named Karaidanga is shown outside the Waste Recycling Region offers no evidence that a large-scale industrial complex in this area will not overlap with the legally protected territory.

In the High Court, the second map was said to be based on satellite monitoring and therefore scientifically correct. However, according to Ashis K. Ghosh (who was not heard in court on this matter), it would be no problem to prove with soil samples that the area in dispute is seasonally flooded and therefore qualifies as wetlands.

² The genesis of this map may be completely unrelated to the leather complex project. Chances are that it was prepared in the context of governmental conservation initiatives discussed in section 4.7. There had been official suggestions to have the wetlands recognized as areas of both 'national' and 'international' importance. For these proposals the state government had to come up with yet another map. I was told that, for some trivial reasons not linked to the leather complex, the officer responsible had decided this area would be of 5000 hectares, compared to the 5500 hectares of Waste Recycling Region. Indeed, a short glance at this map will verify that the area concerned amounts to roughly 90 percent of the Waste Recycling Region.

The confusion shows that the original judgement of Justice Banerjee was insufficient. The scale of the map used was inadequate for immediate implementation. The High Court was neither decisive nor assertive in picking up this important issue. Rather, the matter remained judicially unresolved in early 1999. According to PUBLIC advocate Siddharta Mitra, the NGO approached the Supreme Court in 1997 hoping to settle the question of the maps. However, after the retirement of Justice Kuldip Singh, there seemed to be little enthusiasm in the Supreme Court about following up on his judgements. The matter was not heard.

5.6 Surojit Srimani v the State of West Bengal

This section deals with a public interest litigation that is closely related to the original wetlands case. It was based on similar arguments and drew upon the same sources of expertise. At stake were those parts of Calcutta's eastern fringes not protected by the High Court ruling. The petitioners demanded adequate urban planning and stringent implementation along the Eastern Metropolitan Bypass. These areas are highly interesting to real estate speculators. However, the case of *Surojit Srimani v the State of West Bengal* (W.P. No. 918 of 1996) must in retrospect be considered a total failure.

The only result was an order to check levels of methane in the air on the site of a former garbage dump. This measure was considered useless by technical experts. After all, methane is dispersed quickly in the air, whereas it poses a serious risk of fires and explosions if it builds up underground. Such possible phenomena remain unchecked even after the court intervention. A major convention and exhibition centre called 'Science City' has been built on this former landfill. According to the petitioners, the High Court ruling appeared technically inadequate to prevent the danger of explosions. Moreover, the petitioners had been concerned about urban planning for the entire East Calcutta area and not only about the safety of Science City.

The procedural history of the case seems haphazard. By the end of 1998, it was still pending before the Green Bench of the High Court, without having come up for months on end. There had earlier been a brief episode involving the Supreme Court and hearings of the case before another High Court bench.

In early 1995, Mohit Ray and Debaprasad Bhattacharya drafted a letter to the Chief Justice of the Supreme Court, asking him to stop several inadequately planned development projects along the Eastern Metropolitan Bypass. Mohit Ray recalls that they had been motivated by prior incidents of successful environmental litigation in the Supreme Court. They did not formally set up an NGO. The letter carried the date 2 May 1995 and was four pages long. Twenty-two friends and colleagues of Mohit Ray and Debaprasad Bhattacharya had signed it. The first signature was that of Surojit Srimani, hence the name of the case.

The letter stated that East Calcutta up to then had been mostly open space and wetlands. Seven major development projects were now under way: (1) the Science City convention centre and exhibition hall, (2) a crafts village, (3) a film training centre, (4) a satellite township called 'New Calcutta', (5) a five star hotel, (6) an industrial estate in the Kasba neighbourhood, and (7) a state transportation garage. The letter referred to the CMDA's document of 1990, which had declared this area to be unsuitable for urbanization. As the Supreme Court had under similar conditions stopped constructions in Utter Pradesh, the letter begged for such an intervention in East Calcutta.

According to Mohit Ray, an environmental engineer, it was clear that none of the above-mentioned projects infringed upon the area protected by the High Court ruling. Nevertheless, there were no publicly available planning documents and least of all the obligatory outline development plan. Rather, these projects were in conflict with metropolitan planning as elaborated in earlier documents of the CMDA (1990) and the State Planning Board (1990).

The matter was never heard in the Supreme Court. The Chief Justice's office ordered the WBPCB to report and then passed the relevant documents on to the Calcutta High Court. The High Court was directed in a letter dated 14 December 1995 to take 'appropriate action'.

In March, Mohit Ray and Debaprasad Bhattacharya wrote another letter, this time to the Chief Justice of the High Court. This three-page document was signed by fourteen persons and was dated 25 March 1996. It pleaded for the first letter to be treated as a writ petition and for litigation to be started. According to this letter, no environmental impact assessments had been carried out as demanded by law. No clearances had been given for the various development projects along

the bypass. The letter also stated that the WBPCB was corrupt and under political pressure. As Mohit Ray recalls, this had been apparent from newspapers in early 1996.

The matter was soon after heard by the single bench of Justice Bhagabati Prasad Banerjee. On the first occasion (30.4.1996), he asked for a longer, written document on the matters concerned. Mohit Ray and Debaprasad Bhattacharya filed a fourteen page report. The copy I was given does not carry a date.

Once again, this report stated that Calcutta's urban dilemmas stem from inadequate planning and unmanaged growth of the city. The second paragraph read:

The most part of this huge city-cum-semi-urban complex is outdated. Civic amenities like water supply, power supply, roadways, parks and open space, and transport system are totally inadequate in relation to the people's need.

The report referred to many of the documents already quoted in the case *PUBLIC v The State of West Bengal*, such as Ashis K. Ghosh (1991), CMDA (1990), State Planning Board (1990) and yet another journal article by Dhruvajyoti Ghosh. It also referred to a publication by M.N. Buch, the chairman of the National Centre for Human Settlement and Environment in Bhopal, stressing the relevance of urban planning. It summarized all the arguments of the first wetlands case, but did not emphasize those related to garbage disposal and sewage treatment. The Waste Recycling Region was, after all, at that time quite successfully protected by the High Court ruling.

The report stated that the suggestions of all these publications were not being followed in practice. Rather, 'in the name of quick development, unscientific and unplanned growth of human habitation and industrial/commercial complexes are being allowed to come up, violating almost all the norms of town planning'. The report made the point that the government had been 'systematically violating the norms laid down by itself'.

The report listed additional projects in the East Calcutta area, including the Ruby General Hospital and an Energy Park. It also pointed out that the CMDA had recommended other areas as urban growth centres in its 1990 paper, mostly to the north and west of the agglomeration.

As far as Science City is concerned, this document came up with a totally new reasoning. The complex was being built on a former garbage dump in Dhapa. The report stressed that such locations are

nothing but bioreactors with the slow process of biodegradation leading to the conversion of waste into methane, carbon dioxide and other gases. Without any 'post closure management strategy' of the landfill, there would be a constant risk of fire and explosions. Permanent structures should therefore be built only ten to fifteen years after the closure of the dumping site. An adequate management plan would have to include grading, landscaping and systems of gas management, leakage and drainage control.

None of these measures had been taken. Rather, the site of Science City had to be considered a 'raw garbage dump'. The paper accused the agents responsible of 'neglecting even the minimum norms for construction' on reclaimed garbage land.

As it turned out, this was the issue that caught the court's attention. After receiving the report, Justice Bhagabati Prasad Banerjee passed an interim order stopping any construction along the bypass that did not have either clearance by the CMDA or permission from the WBPCB. This did not make much sense as the main point of the argument was that the CMDA was not applying its own rules and that the government itself was thus involved in developments not in accordance with its own urbanization legislation.

Soon after, the case was transferred to the newly established Green Bench, which was to deal with the environmental matters in the High Court. The judges told Mohit Ray (who up to then had been appearing in person) to find an advocate. Mohit Ray's personal account of this episode suggests that while the formal legal performance of his party definitely benefited from the change, the technical sophistication of his argument may have suffered. Neither judges nor lawyers command the technological expertise of an engineer.

The charge of unplanned development was countered by the CMDA. It stated that its 1990 document was not legally binding. It further submitted that there was a Land Use and Development Control Plan for the Calcutta Corporation (CMDA, 1996). The plan, however, explicitly excludes the eastern fringes. Only an unpublished, draft version existed for this area (CMDA, undated a). During the litigation, the CMDA was ordered to submit the draft version, which was then apparently accepted by the court as legally binding.

The petitioners thus gained access to the draft plan. In court, they challenged its validity by stating that it had only been drafted to serve as a retroactive basis for development projects already under way.

They also demanded that the CMDA should explain why its programmatic statements of 1990 were no longer being applied. Mohit Ray made these points in his affidavits of August and December 1996, reacting to submissions of the CMDA. However, the Green Bench did not let the matter come up for hearing again in 1997.

As far as Science City was concerned, the court passed an order on 11 October 1996. It directed NEERI to measure the methane level in the air of the Science City complex every six months in order to prevent fires and explosions. The risk was considered to be minimal, as the central government's Council of Scientific and Industrial Research (CSIR) had ruled out any danger stemming from methane in a submission to the Green Bench. The court order referred to this submission stating that

- methane emissions in Science City were quite low,
- pipes in the building's basements would take out any gas from the complex, and
- the exposure to low concentration of methane did not pose any harmful effects.

To environmental experts, the order is unsatisfying for two reasons. As stated in the beginning of the section, methane is not dangerous once it is dispersed in the atmosphere. The real risk is that of gas accumulating underground and then catching fire. That risk remains unchecked. However, there still was no officially published Outline and Development Control Plan as demanded by law.



Photo: 'Science City'

By the end of 1997, Science City had been inaugurated. A new CMDA-designed neighbourhood, now called 'East Calcutta Township', the Satyajit Ray Film and Television Institute and the Ruby General Hospital were operational. Other projects were still coming up, some of them rapidly. The legally recommended outline and Development Control Plan for the eastern fringes had not been published until December 1997.

5.7 Conservation Initiatives of the State Government

Immediately after the first High Court judgement in 1992, it became apparent again that there were forces in the state government that wanted to protect the wetlands. The state assembly passed an amendment to the Fisheries Act, making it illegal to reclaim and convert any fish ponds larger than 350m².

The state government also agreed to declare a wetlands area as being 'of national importance', which would legally imply conservation. The Urban Development Department also further suggested that some wetlands should be listed as being 'of international importance' according to the International Ramsar Convention. Finally, the CEMSAP in 1997 produced a new report on the complex matter of East Calcutta. The implementation of these initiatives, however, was again ambiguous.

The West Bengal Inland Fisheries (Amendment) Bill, 1992, was published in the Calcutta Gazette on 1 December 1992. The destruction of fisheries could now be punished with up to twelve years' imprisonment and fines of 200,000 rupees.

Ashih K. Ghosh is a member of the National Committee on Wetlands, Mangroves and Coral Reefs. He remembers suggesting the East Calcutta area wetlands to be declared as being of national importance at a meeting of the committee shortly after the first judgement. This was a breach of normal proceedings. Normally, it is up to the state government to come up with proposals. To Ghosh's surprise, however, West Bengal's Environment Secretary Kalyan Biswas had no objection when the committee met next. The government's agreement with the committee's proposal was substantiated by a letter of West Bengal Development Minister Buddhadev Bhattacharya to the Government of India Environment

Minister Kamal Nath, dated 30 November 1992 (D.O. No. 272/M/92):

It will be in the fitness of things to declare these wetlands as the wetlands of national importance and subsequently pursue with the Ramsar Convention for getting listed as the wetlands of international importance for its unique wise use criterion.

In the following months there were attempts to get foreign aid in order to devise a management scheme for the Waste Recycling Region. The strategy was in principle supported by both the state and the central governments, as becomes evident in a letter from Dr. C.L. Trisal of the central Ministry of Environment and Forests (MoEF) to the deputy secretary of the central Department of Economic Affairs. It is dated 17 May 1993 (Do. NO. J-22021 (20) 93-W). This letter mentions a CMDA project with the title 'Conserving the Wetland System of Calcutta'. The National Committee of Wetlands, Mangroves and Coral Reefs was said to be in favour of the project. The MoEF now recommended the project for bilateral assistance. However, management plans with foreign financial support never materialized.

It remains relevant that, again according to Ashis K. Ghosh, the state government agreed to have 5000 hectares declared wetlands of national importance. There had apparently been no scientific assessment. Rather, the figure was uttered at the whim of a bureaucrat, as another bureaucrat recalled. The original figure was supposed to be 5500 hectares basically covering the entire Waste Recycling Region. However, the CMDA as the responsible agent never publicly presented a management plan or an official map.

Similarly, the plans to declare the East Calcutta wetlands, or at least parts of it, as wetlands of international importance according to the Ramsar Convention were never finalized. This proposal seemed to gain momentum in early 1996, according to the *Telegraph* (9.1.1996). The IWMed was said to have devised a map based on satellite surveys, probably the same map mentioned in sections 5.4 and 5.5. However, this initiative was also never followed up.

The last state government effort until 1999 to protect the wetlands was a rapid action plan, devised by the Calcutta Environment Management Strategy and Action Plan. It was an undertaking of the West Bengal Department of Environment with the support of the

British Overseas Development Administration. Ashis K. Ghosh was put in charge of the working group on canals and wetlands.

In early 1997, Ghosh seemed optimistic that this time something would come of the effort. He again involved the various NGOs and drew upon all government data available. Some new surveys were undertaken. He was particularly pleased to be treating Calcutta's canals and the wetlands together, as the wetlands are fed with canal water. However, soon after finalization of this report the momentum was lost. The CEMSAP office was dissolved in late October 1997. So far there seems to be no follow-up. Environment Secretary Kalyan Biswas had been known to take personal interest in the CEMSAP until he retired. His successor in office, Kalyan Bagchi, did not appear to do so.

5.8 The Wetlands Six Years after the First Judgement

To conclude this chapter, the current state of East Calcutta wetlands is assessed. This section examines the achievement due to litigation and then turns to troubling trends in the Waste Recycling Region and its surrounding areas. The final paragraphs then evaluate the role of the various actors and agencies involved.

By the end of 1998, the future of the East Calcutta wetlands remained threatened. However, the High Court had undoubtedly given considerable protection to the area called the Waste Recycling Region. So far, the World Trade Centre was not being built in this area. Various CMDA schemes by and large respected the ban on land-use changes. Private projects sites such as the Ballygunge Lions Club's welfare schemes had been abandoned. This was remarkable. After all, Calcutta was witnessing an unprecedented building spree along the Eastern Metropolitan Bypass.

Nevertheless, the dispute over the Calcutta Leather Complex showed that the High Court order was not sufficiently detailed. The map used to outline the Waste Recycling Region had not been of adequate scale to be practically applied. Neither the High Court nor the Supreme Court had clarified the issue of the map in a satisfying manner. This was particularly frustrating as there was a reasonably well-founded suspicion that the state government might have deliberately manipulated the map submitted to the Supreme Court.

By early 1999, the tanneries had not yet moved to Karaidanga as ordered by the Supreme Court. However, the construction of the Calcutta Leather Complex was advancing at a high pace. A handful of tanneries were already operational at the new location.

Even if the Calcutta Leather Complex might not encroach on the boundaries of the originally protected Waste Recycling Region, it must be expected that it will have some impact on the wetlands. Contrary to the perception of Calcutta's local environmentalists, the impact will not necessarily be entirely negative. If the common effluent treatment plant should turn out to operate well, water (and food) contamination would be reduced. And even if this scheme turned out to be ineffective, at least the massive agricultural and piscicultural activities in the Waste Recycling Region would no longer be affected by tannery effluents. However, the effluents would then affect the settlements further downstream.

On the other hand, the Calcutta Leather Complex will need either surface or ground water, and it will attract additional traffic. All this may well affect the core Waste Recycling Region as feared by Calcutta's environmentalists. In 1997, the widening of the road through the wetlands was already under way. There had been no systematic assessment of the complex's probable environmental impact on the wetlands, I was told by bureaucrats.

In Calcutta, there are rampant rumours about informal encroachments on and conversions of wetlands. Also, it appears to be quite popular to speculatively buy real estate property in the Waste Recycling Region. It is hard to verify such stories. One promoter told me he was convinced he would be making very good weals in a couple of years as he was now buying agricultural and piscicultural land. He was convinced he would be able to bribe the relevant panchayat people to get documents affirming that these areas were neither ponds nor fields.

In early 1998, the issue remained confusing. No detailed, reliable map of the area was available. There was no trustworthy list of fisheries.³ The existing data were not publicly available. There was

³ The CEMSAP report of 1997 compared two lists of fishery ponds. One was provided by the Government of West Bengal on 28 January 1997. The other was prepared by IW MED in 1984-85. However, the government's list does not include eighteen ponds that figured on the IW MED list and includes four ponds not listed by the IW MED. I have been told that distortions probably stem from the fact that the people surveying the area were told different names for the same ponds on different occasions. Also, there are apparently different opinions about which pond belonged to which larger complex of water bodies

reason to believe that land use was constantly changing without official notice.

Such concern is even documented in official papers, such as the status report of the CEMSAP (1995: 5.20): 'There is unplanned growth even within CMD notified areas and in the southern and eastern fringes of CMD contrary to the proposed growth areas to the north and west'. Agricultural lands were said to be converted and tanks and ponds illegally filled up as encroachment on the East Calcutta wetlands went on largely unchecked (1995: 5.15): 'Actual data on land prices in Calcutta has not been easily available. However, there are indications of a steep rise of prices, of between 25 to 40 percent in rates of residential and commercial build-up areas in Calcutta'.

After having visited most of the disputed parts in the Waste Recycling Region several times in 1996, 1997 and 1999, I do not have the impression that the situation is changing rapidly. The exception, indeed a major one, is the leather complex at Karaidanga. This assessment fits in well with observations of a leading environmental bureaucrat in early 1998. In an interview for this project, he said that a new fish pond had been dug in the Waste Recycling Region. Before, he had always complained that there had been a tendency to convert ponds to fields, which would then be sold as real estate for new construction projects.

Accordingly, it remains impossible to make an accurate assessment of how much pond area has really been converted. It is clear, however, that there has not been a single major new construction project in the Waste Recycling Region since 1992 (again with the noteworthy probable exception of the leather complex).

What makes the estimate even more difficult is the fact that the wetlands remain a socially troubled area with rampant labour unrest (*Statesman*, 13.1.1997, 3.2.1997, 18.2.1997, 11.10.1997). The fishery owners' association complained about excessive trade union demands that supposedly deprive them of their profits. The spokesman also accused the trade unions of regularly going on strike and stealing fish from the ponds at night. In interviews for this book, they claimed that this was an attempt to drive them out of business so that ponds might give way to real estate speculation.

under the same name. In any case, these government papers do not convincingly document the area.

The CPM-backed trade union (CITU) was said to be playing a dubious role in the wetlands. On the one hand, it claimed to defend the workers' interests, which is primarily to keep their jobs and make the most of them. On the other hand, the CITU was said to serve the interests of the real estate promoters. While it is impossible to verify any of this, there can be little doubt that the CPM was divided on the issue of real estate development. According to *Statesman* of 24 February 1997, district party leaders were complaining about corruption within the party ranks and a 'promoter-party-men nexus'.

In any case, the law and order situation in the wetlands was perceived to be bad. According to the *Asian Age* (4.12.1997), political parties were involved in the sometimes violent disputes: 'Almost 30 clashes were reported last year and eight people were murdered. In addition, 200 acts of vandalism were also reported.' It is remarkable that these disturbances were never made an issue of during the legal proceedings.

As a matter of fact, there were additional questions about the future viability of the Waste Recycling Region in 1997. The CEMSAP report stated that chemical pollution of the ground water in the region had increased seriously. A recent survey at Dhapa had revealed that concentration of phenolic components ranged from 0.2 to 2.6 mg/l, as compared to a permissible limit of 0.001 mg/l. Both chloride and dissolved solid concentrations went up to around twice the permissible limit, rendering the water 'unsafe for human consumption' (p. 89). This contamination was attributed to unchecked industrial pollution in the city. Such data, according to the CEMSAP team, called for a thorough investigation of the possible contamination of food production in the area. The actual accumulation of non-biodegradable chemicals had 'never been fully analysed'.

Concerning the city's sewage water, the report left little doubt that pollution from (mostly small-scale) industries had increased and was likely to affect the quality of food production in the wetlands. Particularly, chromium-rich effluents from the tanneries were mentioned. It was also pointed out that sludge at Bantala had high levels of lead and cadmium contamination.

Therefore, the foreword of the CEMSAP report (1997) summarized:

The resource recovery of East Calcutta has its limitations; the present practice of disposal of mixed solid waste and untreated domestic and industrial effluent are found to have changed soil and water characteristic, challenging the very concept of wise use. Mitigatory measures are to be enforced.

The report, nevertheless, stated that the existing practices would have to continue for the time being. The solution would, in the long run, have to be the separation of domestic and industrial waste waters with immediate effluent treatment for the latter. Indeed, it was suggested that more fish ponds be provided with sewage water as this increased their productivity.

The CEMSAP report of 1997 is bleak in another respect. A recent study had shown that the biodiversity of birds had been dramatically reduced since the early 1960s. At that time over 248 species had been counted, and now only 40 to 43 were found. All this shows that the High Court judgement was not enough to protect the wetlands. It had paid no attention to overall management and conservation strategies. Implementation problems were not taken into account, data concerning the ground reality remained inadequate and publicly unavailable. Important questions, such as that of pollution affecting food security, were not considered.

The failure to deal with the social strife in the wetlands was another serious flaw of the rulings—all the more so, as these conflicts were again linked to the lack of good maps and proper landholding records. These issues seemed to call out for legal intervention, and they are vital for the future of the wetlands. Overall, the greatest shortcoming of the High Court is the fact that it did not base its judgement on a map of adequate accuracy.

It must also be stated that by protecting the Waste Recycling Region the High Court left the adjoining areas of East Calcutta open to rapid development. That development has taken place. The judiciary has not interfered, although it was asked to do so and although the quality of urban planning for these projects remained highly dubious. As far as Calcutta's east is concerned, the judiciary has not tackled the most serious governmental shortcoming, that of neither devising nor implementing adequate urban planning.

Judicial activities were not coordinated. Proceedings appeared to be erratic. Documents considered binding in one case—such as the CMDA paper of 1990 in the PUBLIC case—were no longer considered so in later proceedings (Science City). Given its location on a former garbage dump, one would in retrospect wish Science City had gained

as much judicial attention as the World Trade Centre, which involved apparently much lower environmental risks. Expertise relevant in the PUBLIC case was not considered by the Supreme Court in the tanneries issue. Experience also showed that seemingly urgent issues might only rarely come up for hearing once the momentum of public interest litigation was lost.

Nevertheless, the High Court has played a predominantly positive role. It protected the core area of the wetlands with some success and it did stall the plans to expand Salt Lake City. The plans for the World Trade Centre, apparently a pet project of the chief minister, have been considerably reduced in scale and delayed for at least five years.

These achievements are not merely symbolical. Except for the possible infringement on its remote eastern side, the Waste Recycling Region so far has been spared Calcutta's fast expansion. It is also worth emphasizing that some 90 percent of the Waste Recycling Region would still be protected even if, eventually, the 'second map' was by judicial order defined as the legally binding one.

Similarly, the Supreme Court has highlighted the issue of tannery effluents in a general effort to have national water pollution legislation enforced. This, of course, is a valid cause in its own right that had not been paid due attention in the High Court.

All summed up, it is clear that the judiciary was muddling through. However, it had been helpful to occasionally bind the state government to its own principles. This was not enough in the sense of enforcing good governance, but it was better than no intervention at all.

The state government, in turn, was also obviously muddling through. Various agencies appeared to be pursuing sometimes competing agenda. As a whole, the government seemed disorganized. Its policy announcements were not to be trusted. Its own legislation was not necessarily implemented. Overall, the bureaucracy remained unaccountable to the public—that is, unless the judiciary happened to interfere, making certain issues public.

This was made more likely by activists from civil society. The NGOs enjoyed considerable support, particularly in the first phase of the PUBLIC case, from the media and from bureaucrats frustrated with the inadequate performance of their own administrations. All these actors shared the same social background. They were educated, upper caste, English-speaking Bengalis. The poorer sections of West

Bengal's population did not play a role in the judicial proceedings or in the public discourse accompanying the litigation.

Those NGO activists who were involved in public interest litigations had to face a daunting task, making and proving their cases, later monitoring the results and possibly returning to court with complaints of contempt of court. The sheer volume of the task served as a disincentive to become active. Nevertheless, and in spite of its unpredictable nature, public interest litigation was giving civil society some leverage over government institutions. This appears to have been particularly so whenever the NGOs enjoyed the support of the local media and of individual government officials who themselves were frustrated with the course of current events.