



The March of the Mega-city: Governance in West Bengal and the Wetlands to the East of Kolkata

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The deltaic wetlands to the east of the city of Kolkata (in West Bengal, India) – a unique ecosystem crucial to environmental sustainability not merely of West Bengal but of the entire sub-continental watershed – is fast disappearing as the city of Kolkata rapidly expands eastwards into these wetlands. Despite apparent governmental concern in West Bengal since the late 1980s to preserve the wetlands, the rate of eastward urban expansion has indeed fiercely accelerated since the 1990s, decimating this vital ecosystem.

The failure on the part of the West Bengal government to stop this decimation of the wetlands may appear to derive from bureaucratic short-sightedness. After all, there is an important critique that governance in India addresses environmental issues symbolically, rather than from a holistic, comprehensive and informed commitment to conservation; and the case of West Bengal's governance of the wetlands may appear to be explainable in terms of this governmental attitude. It is undeniable that in the case of the concerned wetlands, the bureaucracy in West Bengal has resorted to myopic, short-term, problem management exercises, hardly including environmental scientists in the relevant committees formed by the state. However, this paper raises a fundamental question: whether such governance is not itself structured by relationships of power and power-laden ideologies, specific to the context.

The environmental governance of the wetlands to the east of Kolkata, we argue, should be ultimately contextualised in the political economy of mega-urbanisation that the Government West Bengal has come to strongly imbibe and mindlessly apply – often at the cost of biodiversity and sustainability of the environment – in the trail of economic liberalisation in India in the early 1990s and primarily in the interest real estate and infrastructure developers and other private investors. The



area to the east of Kolkata, thanks to its proximity to all urban amenities, the airport and the recently constructed highway called the Eastern Metropolitan Bypass (henceforth EM Bypass), emerged as a potential site for a mega-urban agglomeration commensurate with the West Bengal Government's newfangled keenness to court big business and FDI. Consequently, the government's over-all insensitivity of 1980s towards the environment gave way since the 1990s to a more studied relegation of environmental considerations to the background whenever the latter contradicted the prospect of a market-led agenda of urban development. This is matched by a studied governmental inaction regarding the development of such instruments as would have empowered the fishermen and peasants of the wetlands vis-à-vis the real estate developers and other private stake-holders in mega-urbanisation, even though the environmental sustainability of the region demands that the peasants' and fishermen's occupancy right in the wetlands be protected.

1. A Unique Ecosystem: Why it Needs to be Conserved

The wetlands to the east (north-east, east and south-east) of Kolkata, named the 'Salt Water Lakes' by the British, struck the European traders, ship-captains and the servants of the East India Company in the 18th century as a sprawling marshy area – a veritable chain of salt water marshes and swamps – stretching eastwards for more than seventy square miles from within 3 miles of the then Calcutta (Chattopadhyay 1990). Though the expanse of this wetlands ecosystem has progressively dwindled since the late colonial period with successive waves of eastward expansion of the city, it was still a vast area which stretched eastwards towards Basanti-Gosaba-Canning (the threshold of the Sundarbans as they now stand) from areas which since the late 19th or early 20th centuries became integral parts of the city of Kolkata (Calcutta then) like Beliaghata, Entally and Ballygunge. Even after the massive immigration from East Pakistan in the early 1950s to the early 1960s claimed many areas on the then eastern periphery of the city from the wetlands, the eastern parts of areas like Dum Dum, Tangra, Topsia, Tiljala, Kasba, Garfa, Dhakuria and Jadavpur, even though contiguous to the eastern extremity of the city (as it then existed), still retained its wetlands topographical and ecological character. And even as late as the 1980s the large areas of what are presently reckoned as South Dum



Dum, Bidhannagar and Rajarhat municipalities were entirely wetlands in terms of their natural environment. Even the easternmost wards of the Kolkata's municipal jurisdiction today were in the early 1980s parts of same wetlands ecosystem, along with several rural panchayats in the police station of Haroa, and practically all of the rural panchayats in the present-day police stations of Rajarhat, South Bidhannagar, Bhangar, Kolkata Leather Complex and Sonarpur.

The distinctiveness of this ecological zone derives from its essential character as a low-lying spill basin shaped by the tidal activity of the Bidyadhari-Piali-Matla river system and embedded in the wider ecosystem of the Ganga-Brahmaputra delta, within which this ecosystem is held in a biological and geomorphic continuum with the estuarine Sundarbans to its south and east. Since approximately the 16th century – when an eastern subsidence in the Ganga-Brahmaputra delta delinked the Bidyadhari from the Ganga and made it a tidal river – the concerned wetlands had come to be constituted as a low-lying spill basin of a tidal Bidyadhari. Along with its tributary the Piali, Bidyadhari, aided by its numerous creeks, channels and canals, constitutes the main conduit whereby saline tide from the Bay of Bengal, finding an easy passage inland through the numerous estuaries of the Sundarbans and carried northwards by the river Matla (which Bidyadhari joins from the North) used to spill up to the early 20th century over the vast area of the Salt Water Lakes.

Thus it is generally the Bidyadhari-Piali-Matla system, and particularly the Bidyadhari that has largely determined the environmental fundamentals of this vast marshy region between the active part of the delta i.e., the Sundarbans estuary and the mature delta i.e., the Basirhat-Barasat region. By spilling the tide brought by the Matla upstream from the bay over this vast stretch of lowlands, it is the Bidyadhari that has created the marshes and swamps there and largely determined the biological characteristics of this tidal ecosystem, even though the ecosystem has transformed over time with land reclamation and the silting up of Bidyadhari. Again, it is the Bidyadhari that has made the hydrological regime of the area saline – a salinity that has, however, gradually transformed into brackishness. Finally if this wetlands terrain is inextricably tied to the Sundarbans in an intimate biogeochemical relationship it is because of the riparian connectivity that Bidyadhari ensured. Henceforth in this paper, therefore, we shall refer to this wetlands terrain to the east of Kolkata as the Bidyadhari wetlands.



The environmental reasons against the rapid disappearance of the Bidyadhari wetlands under the expanding urban concrete of Kolkata are compelling, especially in the face of global warming climate change. These wetlands constitute the deltaic outlet for the entire sub-continental watershed and any attempt to stultify it under concrete and metal structures can only be pernicious. The Ganga delta (which includes the Bidyadhari spill basin) being aggrading in nature, the silt of tidal rivers like Bidyadhari needed to move, as much as it was still possible for it to move despite the increasing sluggishness of the Bidyadhari. The Bidyadhari wetlands could, thus, ill-afford to have a rapidly expanding urbanisation thwarting the movement of silt and upsetting the equilibrium of the entire Ganga-Brahmaputra delta and subverting the environmental sustainability of eastern India and Bangladesh. Again, the Rajarhat area in the wetlands has aquifers crucial for the water recharge in the delta and for the hydrological equilibrium of sub-continental watershed. Furthermore, this terrain is a site of immensely rich biodiversity that urbanisation only threatens to destroy at the peril of the planet as a whole.

Last but not the least, the sustainability of the fragile ecosystem of the Sundarbans depends on the environmental conservation of the Bidyadhari wetlands, and vice versa. These wetlands not only act as a crucial ecological buffer zone between the Sundarbans and the pollution-ridden, expansive urbanity of Kolkata, but themselves retain considerable biogeochemical affinity with the latter (De 1994: 21) – an affinity that testifies to this terrain's past inclusion in the Sundarbans. The fauna, particularly the avian and reptile population of the wetlands and the Sundarbans proper are very similar. The history of flora is a significant pointer to the integral relationship with the Sundarbans. During the time of Lord Clive the swamps to the east of Calcutta were covered with Sundarbans jungle, infested with alligators, wild boars and tigers (Chatopadhyay 1990: 7). Thus the wetlands were very much a part of the Sundarbans as late as the second half of the 18th century. This is confirmed by the fact that in devising land settlement, the British excluded almost the entire wetlands from the purview of the Permanent Settlement (devised for the rest of Bengal); another settlement was applied alike to the reclaimed areas of the Sundarbans proper and the reclaimed areas of Bidyadhari wetlands – the patitabadi taluk lease system (Pargiter 1934: 16). It is worth recollecting that the East India Company, on getting the zamindari of the 24 Parganas in 1757, found the Bidyadhari wetlands not only depopulated (presumably as a consequence of raids



by Arakanese-Portuguese pirates) but also under low but dense forest cover (O'Malley 1998: 44, 50). More than a century later in a map of the Presidency Division appended to W.W. Hunter's Statistical Account of Bengal – when Sundarbans had receded from the immediate vicinity of the then Calcutta – much of Haroa, Rajarhat, Bhangar, Sonarpur and, of course, Canning were still shown under forest cover (Hunter 1875).

2. An Environmental Cause Governmentalised: The Rhetoric and the Reality

With these compelling reasons for the conservation of the Bidyadhari wetlands in mind, it is important to make an estimate of what the Government of West Bengal has done towards conservation. Governance in West Bengal, as elsewhere in India, had to quickly imbibe an environment-sensitive rhetoric since 1976 with the amendment of the Indian Constitution to include environmental protection among the principles of state policy. The promulgation of the Environmental Protection Act of 1986 further reinforced the trend. West Bengal government, too, had to fall in line and the Department of Environment was established in 1982. And, apparently it seems that in recent years the state government has taken some significant strides towards the conservation of these wetlands. The wetlands area is protected by a 1992 verdict of the Calcutta High Court, which prohibits any change in the pre-existing land use. Filling up of water bodies in this area is prohibited under the West Bengal Town and Country (Planning and Development) Act, 1979 as well as under the West Bengal Inland Fisheries Act, 1984 (with 1993 amendment). Moreover, the East Kolkata Wetlands (henceforth EKW) – the waste-recycling zone within the wetlands – is a Ramsar site, protected under the Ramsar Convention, to which India became a signatory in 1981.

It is necessary to pause here and make certain observations about the EKW as this entity will constantly come up in our discussion. The geographical expanse of the EKW and the developments that led to its official naming and delineation are important for our discussion. In the last quarter of the 19th century the British administration in Bengal decided to direct the flow of the city's sewage eastwards into the wetlands. By the 1920s the Bidyadhari had started progressively silting mainly because of the sewage influx and consequently failed to bring sufficient



saline tide into the wetlands. This resulted in a marked decline in the fish production in the wetlands, where the fishermen had so long produced huge quantities of salt-water fish. However, the fishermen soon experimented their way out of this crisis; by the 1930s they switched over to brackish and sweet-water fish production, using the lock-gates of the new outfall system (recently instituted by the engineer B.N. Dey) to fill their bheris (vast but shallow water-bodies dedicated to fish-farming) with the wastewater from the city and cultivating fish in it. Remarkably, the fishermen acted upon their discovery that the phytoplankton in the bheris naturally recycled the waste-water, saving the fish population from contamination. It is the local fishermen's 'wise use' of a 'natural technology' towards human sustenance that earned the waste recycling region of the wetlands the status of a Ramsar site. And Dhrubajyoti Ghosh, the bureaucrat who had urged the West Bengal Government to apply for this recognition, had named this waste-recycling region the East Kolkata Wetlands. Thus the EKW does not represent the whole of the Bidyadhari wetlands but just a fraction it – that fraction where wastewater is recycled through the mediation of phytoplankton and used for pisciculture.

Coming back to the question of governmental commitment to conservation, the actual situation in the wetlands to the east of Kolkata clearly demonstrates that these commitments have remained only on paper; the governmental praxis on the ground is strikingly different from the rhetoric. Massive urbanisation at the behest of infrastructure developers, on the one hand, and national and transnational majors in real estate, health services, hospitality, and retail, on the other, has already alarmingly reduced the expanse of the wetlands, particularly that stretch which is outside the boundaries of the Ramsar site. These changes in land use threaten not only the wetlands ecology, but also ultimately the Sundarbans multi-functional ecosystem. Since the 1990s, environmentalists, NGOs, academics and social observers have frantically drawn attention to this development. The government – under the same political combine (the Left Front) from 1977 to 2011 – and currently under the Trinamul Congress has not adopted the pro-active role needed to stop this rampant and ecologically disastrous encroachment.

While some of its agencies do propagate conservation strategies, others promote environment-insensitive urbanisation so vigorously that the policy statements of the former become virtually ineffective. More importantly vital conservation strategies have never been broached.



The mapping of the concerned wetlands is a case in point. Litigations regarding encroachment on the wetlands has repeatedly brought to the fore the urgent need for accurate maps as an instrument for settling whether a given place is within/outside the wetlands. And yet, the Department of Environment has not cared to come up with a map of the entire wetlands that can be regarded as adequately accurate and detailed (Dembowski 2001: 83-85).¹ The 'waste recycling region' is defined by a map prepared in 1985 by the State Planning Board, West Bengal. This definition, however, is ambiguous, as the map is inadequate in scale and exists in several discordant versions and there is lack of precision regarding the boundaries of this region (Ibid.: 86-87).

It is public knowledge that certain polluting industries like marble-processing are flocking to set up shop on the eastern side of the EM Bypass. The immediate eastern side of the Bypass was, even in the beginning of the 1990s, evidently a part of the wetlands ecosystem. Today, with urbanisation having forced the western boundary of the wetlands at many points almost two kilometres eastwards away from the Bypass, an intermediate stretch of about two kilometres has developed between the Bypass and the receding marshy terrain; this is effectively a buffer zone where no such industry should be located that is pernicious for the fragile wetlands ecosystem. After all, the 2004 study of biodiversity, conducted by the government's IW MED itself has categorically demonstrated a decline in the biodiversity profile of the region (Bandyopadhaya 2004: 23, 29). It is therefore striking that between 2004 and 2008, marble processing companies, initially proliferating on the western side of the Bypass, have come to proliferate on the eastern side, in the buffer zone. Interestingly, it was in the early 1990s itself that environmentalists had moved law courts about polluting industries entering the EKW (Dembowski 2001: 102-135).

3. An Environmental Issue Governmentalised: Erased Biogeomorphic History and Commensurate Cartography

Had bureaucratic short-sightedness or ineptitude been the real explanation for the governmental inaction in wetlands conservation, then wetlands governance would have been marked by inconsistency. But, as we shall demonstrate in this section, a thread of consistency, rather than its opposite, has clearly come to inhere in administrative attitude to the



region since the late 1990s. This consistency manifests in the conscious production of an official representation of the wetlands for public consumption; this representation cartographically truncates the expanse of the wetlands and silence the natural history and geomorphology of the Bidyadhari spill basin. This representation has been systematically deployed by the government in relation to these wetlands particularly since the turn of the 20th century.

Maybe because a reference to the genesis of these wetlands would not only highlight the exact geomorphic character of the ecosystem but also draw attention to its vast geographical expanse, the governmental discourse on the wetlands to the east of Kolkata maintains a studied silence about the way in which the nature and the expanse of this ecosystem historically derive from the tidal activity of the Bidyadhari-Matla-Piali river system. Instead, the governmental discourse since the turn of the 20th century represents the wetlands to the east of Kolkata as a 'peri-urban fringe' (Bandyopadhaya 2004: 6). Consistent with this representation, the KMDA, the public nodal agency administering the Mega City Programme, has felt justified in extending Kolkata eastwards into the wetlands, ignoring the pre-existing perspective plans that had warned against any eastward expansion of the city of Kolkata into the low-lying wetlands. The deployment of the epithet of 'peri-urban' and the careful elision of the generative role of the Bidyadhari-Piali-Matla in the history of the wetlands consistently tie up with another elision in the government's representation; the official literature that is so eager to prioritise the supposed peri-urbanity of wetlands, significantly takes care to be silent on the kindred ecological relationship between the Bidyadhari wetlands and the Sundarbans ecosystem.² Recognition and nurture of this integral relationship between the two kindred ecosystems is urgently needed for the conservation of both. But then reminding the public of this organic ecological relationship would be inimical to the eastward mega-urban expansion of Kolkata!

The deployment of the epithet 'peri-urban' in relation to the wetlands helps the government effectively shorten the ecological history of wetlands and generate the impression that the terrain became an ecosystem only after the sewage of Kolkata came to be directed towards them, making it possible for the waste recycling zone to emerge as an ecosystem. Thus, from the turn of the 20th century the West Bengal Government has been systematically representing the concerned wetlands as a peripheral marshy fringe that not only receives Kolkata's



sewage and saves the city from choking under its own waste but also recycles the waste into manure for vegetables and decontaminant for a fish population that feed the city. The relative inexpensiveness of such natural sewage disposal is also emphasised for the government as financially convenient for Kolkata's municipal governance. The government's choice of nomenclature for these wetlands – East Kolkata Wetlands – conveniently ties up with the 'peri-urbanity' officially ascribed to them; as if the wetlands derive their fundamental identity from being 'peripheral' to Kolkata!

The term 'peri-urban' itself is a debatable category, while definitions of 'peri-urban interface' are thin and inconsistent. The simplest definitions of 'peri-urban' are spatial, defining it as a zone around the built up area of a city where city and country land uses overlap. But in recent years there has been a shift from the mere spatial definitions to the ones in which the element of time is introduced into the spatial in the form of social processes and other dynamics which supposedly create the 'peri-urban' by extending the town into the rural through a process of dispersion (Adell 1999: 1). Now, whichever sense of 'peri-urban' the government might claim to invoke in relation to the wetlands to the east of Kolkata, the application needs to be critically probed for the discourse of power implicit in it. The government is liable to serious criticism even if it claims to use the term in the simpler sense of describing a historical process of dispersion of land use and livelihoods, as we shall demonstrate below. But we shall go on to argue that the deployment is actually deeply ideological and is subtly aimed at making out a case for the vigorous urbanisation of the wetlands, as if such urbanisation were a natural corollary of the 'peri-urban' nature of the wetlands.

Casually observed, the wetlands may appear as a zone into which the city of Kolkata is extending through a process of dispersion in terms of land use and livelihoods. Thus the signification of 'peri-urban' in a processual sense may seem to apply to the concerned wetlands. But looked at closely, the total terrain of tidal wetlands of the Bidyadhari stretches from within the Salt Lake Township, the eastern extremities of municipal areas of Kolkata, the whole of the Rajpur-Sonarpur municipality to the south-east of Kolkata right up to the western extremities of Basanti and Canning on the threshold of the Sundarbans proper. Thus the Bidyadhari wetlands traverse the urban, the so-called 'peri-urban' and the purely rural. Indeed, the entire eastern part of the Bidyadhari spill basin, particularly in the panchayat areas in the police stations of



Haroa, Bhangar, and Sonarpur, were quite rural and not experiencing any initiation of urban land use or livelihoods as late as the end of the end of 1990s when the West Bengal Government started applying the term 'peri-urban fringe' to the wetlands.

However, the intention of the government in using the concept 'peri-urban' is not descriptive of a process of dispersion. Rather, by erasing the history of the wetlands prior to the emergence of a waste recycling zone and by effectively delinking the wetlands ecosystem from its biogeomorphic interconnectedness with the Sundarbans, the official discourse seeks to represent the wetlands as generically 'peri-urban'. The conceptual counterpoint would be that if the term 'peri-wetlands' is never deployed in characterising Kolkata, then the wetlands have no reason to be reckoned as 'peri-urban', except by the debatable logic that the urban is a higher form on which the rural is somehow destined to ultimately converge. But to interrogate this intentional dehistoricisation in terms of the historic specificity of the Bidyadhari wetlands, we would argue that eco-systemically the Bidyadhari wetlands were never fundamentally constituted by their proximity to the city of Kolkata; these wetlands were biogeochemically constituted by the tidal action of the Bidyadhari, that too in close affiliation with the Sundarbans ecosystem. This use of the term 'peri-urban' to effectively erase the role of the Bidyadhari river system in the longue duree ecological history of the Bidyadhari wetlands and to silence of the kindred relationship of the wetlands with the Sundarbans may well be instrumental in making this terrain appear as already so much in the shadow of Kolkata that its ultimate mega-urbanisation may be represented as inevitable!

The politics of the 'peri-urban' become all the more evident in the way in which the official discourse claims the 'peri-urban fringe' to be also an ecosystem; evidently the wetlands as a 'peri-urban fringe' is thus equated with the EKW, as in the official literature in recent years it is the EKW which is invariably shown as the self-contained and autonomous ecosystem to the east of Kolkata. The description of the 'peri-urban ecosystem' as entirely man-made, non-saline and sewage-fed confirms that it is the EKW that is being represented as the wetlands. As the official discourse does not refer to the tidal influx of the Bidyadhari as having any surviving signature on this peri-urban ecosystem, the total expanse of the wetlands to the east of Kolkata effectively shrinks down to the 12,500 hectares of the EKW in this representation. The state is thus committed to protecting only these 12,500 hectares as eastern



wetlands, whereas the Bidyadhari wetlands as an ecosystem are a much bigger expanse. And because the official version manages to minimise the wetlands to a mere 12,500 hectares, it has no hesitation in labelling the wetlands as a mere 'fringe'! The government is not bothered about the rest of the wetlands that goes unprotected from the advance of the mega-city, now that the explicit commitment for protection is exclusively enjoyed by only a fragment of the wetlands – the EKW.

As it is the city of Kolkata in its mega-urban avatar that is appropriating the wetlands, the erasure of the history prior to 1880s conveniently serves the dominant reason of development by urbanisation, if only by persuading the public to view the wetlands through a Kolkata-centric lens. The exclusive official attention to the EKW, in tandem with the invention of the nomenclature East Kolkata Wetlands for it, gives the impression that the wetlands to the east of the city somehow would not have existed had it not been for the sewage from the city of Kolkata, whereas the history is otherwise. Long before the region now reckoned as Kolkata ever experienced urbanisation, the Bidyadhari spill basin was already an ecosystem in its own right. Whereas the channelling of the city's sewage into the wetlands occurred as late as the last quarter of the 19th century, the region as an agglomeration of saltwater lakes – the 'Great Salt Lake(s)' as the officials of the British East India Company named it – dates back to the approximately the 16th century and had come to be constituted as a low-lying spill basin of a tidal river system. In order to comprehensively understand the complexity of the ecosystem of the Bidyadhari wetlands, we need to situate the environmental signature of the Bidyadhari-Piali-Matla system within context of the gamut of pre-existing biogeochemical signatures on a terrain that still bears the palaeographic, stratigraphic and hydrological signatures of developments from at least the Quaternary period to the Recent (Sahu 2006).

It is true that as the Bidyadhari progressively silted up under the weight of sewage and failed to bring in as much saltwater as before, the salinity of the bheris (the big ponds dedicated to fish-farming) declined from the beginning of the 20th century, even while non-saline wastewater had started flowing into the Bidyadhari spill basin from the city of Kolkata since the 1880s. With the fisheries becoming sewage-fed from the 1930s, the nature of the fish population in the bheris also changed, even while the world of flora, too, transformed in this segment of the Bidyadhari wetlands. But question is whether this transformation has made the sewage-fed zone an independent and autonomous ecosys-



tem obliterating the eco-systemic integrity of the wider Bidyadhari spill basin, as the official literature implies. Our fieldwork suggests that the sewage-fed area has transformed, no doubt, but the transformation is from a saline to a brackish water system. The fish population has transformed but not the entire world of avian, aquatic and amphibian species which have retained a remarkable continuity and identity with the pre-existing system and the wider Bidyadhari wetlands. As the soil of the entire Bidyadhari wetlands still retains considerable salinity, the flora still displays remarkable streaks of continuity as is patently evident in the massive proliferation of brackish-water-fed bull-rush, elephant grass and other salt-fed reeds all over the Bidyadhari wetlands, whether outside the sewage-fed zone or inside. Thus the sewage-fed zone is a distinctive part even within what holistically remains an ecosystem – the Bidyadhari wetlands, which in its turn is an integral part of the “great chain of brackish marshes stretching from the vicinity of Calcutta to Barishal in Bangladesh” (De 1994:13).

The government engagement with the wetlands question since the 1990s also consistently elides the integral relation between this terrain and the Sundarbans; there is no mention anywhere in the official literature that for a long time before the emergence of Kolkata as a city the Bidyadhari wetlands were very closely integrated with the Sundarbans. The government’s silence about this region being crucially interlocked with the Sundarbans is pernicious for both the wetlands and the Sundarbans. But then the conservation of the Sundarbans has come to acquire a status of urgency in the public consciousness in West Bengal. So any official pronouncement that the wetlands to the east of Kolkata are a fundamentally interlocked natural annexe of the Sundarbans would immediately delegitimise in the public eye Kolkata’s expansion eastwards in the name of ‘development by urbanisation’. It may be suggested that for the consumption of the Kolkata-centric educated middle class, the urban expansion eastwards can be made to look inevitable and, therefore, normal, only if it is systematically suppressed that the wetlands are patently ‘peri-Sundarbans’ rather than ‘peri-urban’.

In tandem with the official genealogy dating the wetlands ecosystem from the initiation of wastewater recycling, the West Bengal Government’s cartographical configuration of the wetlands, as published in the middle of the 1990s (Ghosh 1999: 6), is rigidly coterminous with the EKW, and not with the wider expanse of the Bidyadhari spill-basin. This leaves us wondering whether this map was not deliberately chosen to



facilitate the urban drive into the wetlands especially in the Rajarhat region and in the segments of the wetlands contiguous/close to the EM Bypass on either side. After all, conveniently for agenda of eastward mega-urbanisation, the map of EKW excludes from its purview most of the wetlands in Rajarhat as well as the wetland areas within two kilometres of the EM Bypass!

Interestingly, our fieldwork in the areas thus excluded from the official map of the wetlands has helped retrieve a local subaltern discourse. The long-settled inhabitants of these areas, with their intimate every-day knowledge of the terrain and an age-old relationship between their livelihoods and the local environment, characterise their area as 'jalajami anchal' or 'bada anchal' (wetlands region). They relate how this entire region even to the west of what currently runs as the EM Bypass, was the char (spill basin) of a river; some categorically name it as Bidyadhari. They tell us that the doba (bogs or small swamps) and the paddy fields in the neighbourhood are being rampantly acquired by the 'promoters' on the ground that they are not bheris and therefore not wetlands. But these bogs and paddy fields, they argue, are actually veritable parts of the jalajami (wetlands). Even if the bogs and small ponds that dot the region are not bheris – bheris being usually more than five cottahs in size) – they, too, sustain pisciculture, albeit of the poor man; after all, during the period from August to October the region remains largely water-logged for months together. The rice cultivation takes place in this marshy terrain only in winter. The local people categorically emphasise that the bheris, bils (ponds), dobas (bogs or swamps) the paddy fields, the intervening beds of vegetable cultivation and the numerous canals that criss-cross the entire region cumulatively sustain the varied world of badar prani (fauna of the wetlands), which they lament are fast disappearing since the inauguration of the EM Bypass.

The locals also keenly feel a seamless relation between the Sundarbans and the Bidyadhari wetlands, many claiming that the wetlands are, indeed, a part of the Sundarbans. It is very significant that Utpalendu Mondal, a bureaucrat and author hailing from the Sundarbans, describes the entire stretch of Bidyadhari "flowing through Deganga, Haroa, Rajarhat, Bhangar and Sonarpur to meet the Matla in Canning" as "a river of the Sundarbans" (Mondal 2006: 67-69).



4. 'We can Manage the Environment!'

It may appear to be paradoxical that with the West Bengal Government creating the East Kolkata Wetlands Management Authority (EKWMA) in 2004, the decimation of the wetlands has further accelerated. In an age of corporate capitalism, managerialism in governance is being projected, after all, as a more cost-conscious, efficient and effective paradigm of rendering public service; it supposedly also ensures greater democracy, impartiality and public accountability in governance. It is, therefore, necessary to explore why the managerial orientation of the EKWMA or for that matter the state-funded Institute of Wetlands Management and Ecological Design (IWMED) has failed the cause of wetlands conservation.

The formation of the EKWMA reflects the post-liberalisation change (since the 1990s) in governance from administration to management, in which the ethos of ad-hoc management has come to take the front seat; whatever concern for long-term planning the government may have had in the past has been relegated to the background. The spirit of managerialism is starkly evident in not only the names of EKWMA and IWMED, but also in the literature produced by them on the concerned ecosystem, e.g., the IWMED-authored report entitled "Management of Urban and Peri-Urban Wetlands: A Rapid Appraisal Programme for Fragile Areas". Reflective of a management-centric ethos, the authorities are keen to represent the wetlands in terms of such short-term and recent features as would make the wetlands ecosystem look conveniently simple and neatly manageable. This imagined manageability probably enables the state to sustain an official propaganda that though the ecosystem is fragile and development by urbanisation somehow inevitable, the committees, authorities and boards instituted by the state can 'manage' the 'fragility'. This paper will subsequently demonstrate that this oversimplification along with the cartographic contraction of the wetlands expanse is only facilitating massive encroachment particularly on the wetlands area outside the waste recycling zone and the public unconcern about it.

From this managerial perspective – that everything including anthropogenic imbalances in natural systems can be technologically fixed – the scientists' in-depth knowledge of the complex dynamics of an ecosystem is not deemed necessary, as is evident from the bureaucratic nature of the management committee of the EKWMA. The executive body of the management authority has no environmental scientist of



national or international eminence as a member, and the expert committees are given a purely advisory status in the EKWMA constitution. Evidently, analysis and planning have been effectively marginalised from the domain of priority. Treating the wetlands less as a complex ecosystem to be holistically understood and nurtured, and more as an immediate problem to be 'managed', has come to characterise West Bengal's environmental governance, especially since the turn of the 20th century. But in whose interest it is being 'managed' is a question that will be taken up later in this essay.

'Managing' the contradiction between the protection of an ecosystem and its submergence under urban structures and infrastructure is a tall claim, though. As the latter has been deemed more urgent by the West Bengal Government's policy of urban development since the 1990s, the irreconcilability of the two agendas has been 'managed' in two ways. One is a discursive simplification of the wetlands picture in ecological and cartographic terms. Silencing the great complexity of the Bidyadhari wetlands ecosystem and its location within the wider ecosystem of the Ganga-Brahmaputra delta, the West Bengal Government now chooses to represent the natural history of the wetlands in terms of the recent history of sewage recycling, as we have already noted. This only helps to make the wetlands ecosystem look small, simple, neat and manageable. This helps sustain an impression that the state can indeed 'manage' the wetlands problem, even though the ground reality is that this oversimplification and cartographical truncation of the wetlands picture is only facilitating massive urban encroachment in the Bidyadhari wetlands, especially outside the EKW.

The other related strategy has been to ignore the pre-existing perspective plans that had advised against any urbanisation of the wetlands. It is significant that the Calcutta Metropolitan Planning Organisation's Basic Development Plan of 1966 had prescribed that the city should not grow eastwards. West Bengal Town and Country Planning Act of 1979, too, advocated the protection of the entire wetlands and had insisted on a buffer zone between the wetlands and the city (Dem-bowski 2001: 91). It is true that in the beginning of the 1960s the then chief minister of West Bengal, Bidhan Chandra Roy, had founded satellite township of Salt Lake (later named Bidhan Nagar after Roy) as a satellite township using up almost 16 square kilometres of the then existing stretch of the wetlands. However, at that time protection of the environment had not emerged as a governmental responsibility. More-



over, Roy built the township not out of any zest for mega-urbanisation but to solve the urgent problem of rehabilitating the people displaced by Partition of India. In the new millennium, with environmental conservation a recognised imperative in governance, one would have expected a strict implementation of the caveat on urban encroachment on wetlands ecosystem to the east. Instead, however, urbanisation towards the east and south-east has been tremendously reinforced with polluting industries, retail giants, private hospitals, super-luxury hotels and housing complexes profusely erupting in the wetlands, immediately adjacent to the EKW, without caring to maintain a buffer zone necessary for saving fragile ecosystem from a typically urban biosphere, atmosphere and groundwater depletion.

In January 2008 the West Bengal Government declared that it would not tolerate any further encroachment on the wetlands. Yet nothing was done to revoke the recent sanction given by the Kolkata Municipal Corporation to the project of a 45-storey apartment complex (Bengal NRI Complex), now named Urbana, adjacent to the existing wetlands, indeed on what was until recently very much a part of the wetlands stretch barely a kilometre away from the western boundaries of the EKW. Significantly the developer of the apartment complex is a joint sector company with six representatives of the state government on the board of directors. The government, imbued with the present management mantra, probably expects to 'manage' the earth system – the complex interlocking of the biogeochemical cycles – by making it obey human-made, cartographic boundaries and keep carbon monoxide stalled at the boundary between the EKW and its immediate mega-urbanising neighbourhood! Again, Bhaba Atomic Research Centre has been given land in Chak Garia, itself a part of the Bidyadhari wetlands and only recently converted from swamps and paddy fields to urban housing area, to conduct underground nuclear tests pertaining to nuclear medicine!

5. Governance, Globalisation and Goons:

However, as governance is more or less implicated in its contemporary structures of social power, governance probed self-referentially cannot produce a fundamental critique. A critical study of governance in the wetlands question, thus, needs to look beneath the layer of governance to identify the power dynamic that ultimately sustains 'development by



urbanisation' in the Bidyadhari wetlands, both inside and outside the EKW. In the jurisdiction of the Rajarhat and Bhangar police stations, in the EKW and in all wetlands areas within two kilometres of the EM Bypass especially on the eastern side, land-grabbing has become an art of muscle, terror and subterfuge. And the role of governance had been to 'allow' this land-grabbing to progress unhindered. Maybe this is the way in which the neoliberal dictum, 'that government is best which governs the least' manifests itself under conditions of globalisation in the countries of the global south, particularly where corporate capital plays a predatory role in relation to land and other natural resources!

However, it is also important to register the ways in which the local bases of power – whether at the level of West Bengal as a whole or in the Bidyadhari wetlands – have come to imbricate the governmental predilection for urban neoliberalism. It is, indeed, interesting to see the wider currents of the neoliberal globalisation and liberal reforms in India interpenetrate with the local power to cumulatively devour the wetlands into a projected mega-urban space. How the will of the powers-that-be at the local level (which prominently includes the local committees of political parties, especially the party which was in power between 1977 and 2011 and established the paradigm of party-promoter nexus for its successor to readily imbibe) uses the party channel(s) to influence the administration or mobilise terror to make the rule of law inoperative so that the 'promoter'³ can silently have land/water-body alienated from the peasant and/or fishermen is an interesting study.

From the last decade of the 20th century and particularly during the first decade of the 21st the West Bengal Government started eagerly courting FDI and generally resonating to the forces of neoliberal globalisation, arguing that there was no alternative to the neoliberal paradigm of development. In this environment the recently constructed EM Bypass came to be regarded as an ideal lifeline for a projected mega-urbanisation on either side of it. This was a time when already the vast wetlands close to the Bypass had already started being eyed by a whole range of vested interests from medium and small real estate agents to suppliers of building materials to various kinds of brokers and land mafia. With the Communist Party of India (Marxist) – in power since 1977 and expecting to stay in power for much longer by virtue of an assured mass base, these vested interests warmed up to the party and generated a nexus between the party and the 'promoters' at the local level. It is in this context that we shall try to understand those



extra-governmental pulls and pressures that have come to determine the 'pro-development' governance of the wetlands. Indeed this attention to the forces of globalisation, on the one hand, and the dynamics of local power at the most micro level (where local 'promoter'-mafia-party nexus works out its own permutations and combinations) helps us see how certain 'failures' in governance are indeed, acts of commission rather than of omission.

Neoliberal globalisation has been predictably accompanied by a neoliberal agenda of urbanisation. Post-colonial configuration of urban space is going through a 'renewal' primarily oriented to the needs of big business and private investors, relegating notions of public good further towards the margins. In India the announcement of rapid economic liberalisation in July 1991 precipitated the inauguration – in 1993 – of the Mega City Programme as the first major urban policy initiative commensurate with the agenda of structural reforms (Chakravorty 1996). Further, the year 2005 witnessed the inception the Jawaharlal Nehru National Urban Renewal Mission aimed at 'globalising' India's cities in the image of Shanghai and using them as 'engines of growth'. In an eager response to these impulses, the Left Front Government in West Bengal initiated its own programme of expanding the Kolkata urban agglomeration. As a consequence, the vast expanse of an ecosystem – the Bidyadhari wetlands – came to be reckoned as the ideal commodity for the production a "gentleman's city" in the newly added areas (Roy 2009: 101).

In order to reverse the region's history of deindustrialisation and flight of capital, the West Bengal Government's New Economic Policy used this space to place its bets on urban real estate and elite consumption practices. All this has also conveniently satisfied a typical neoliberal development paradigm's insistence on cost recovery and revenue-generation capability, even while it has derived sustenance from the global real estate boom between 2000 and 2006. This space – emerging as an exclusivist 'designer' space – has thus, come to reflect a global-minded urban elite's desire for 'good life', epitomised by up-market housing complexes, luxury hotels, pent houses, shopping malls, global retail chains, super specialty hospitals, multiplexes and expensive restaurants.

Inaugurated in the 1980s as a reliever of the vehicular congestion in the heart of the city and a quick transit from the southern parts of the city to the airport, the EM Bypass, with its arterial connectivity with Kol-



kata's administrative, business and cultural hubs, came to be re-viewed in the 1990s from a neoliberal vision of a millennial megacity. The region on either side and particularly to the east of the EM Bypass – unquestionably integral to the wetlands, now appeared to the government as the best bait to woo investors and infrastructure developers with. The Bypass thus became the spur of a projected hub of market-oriented economic growth and elite consumption practices.

However, to argue that it was the Megacity Programme that inaugurated a sharp break in the ordering of space to the east of the then eastern limits of the city would be historically imprecise. One, a very effective modality for land-grabbing was already being successfully experimented with at the local level on the then eastern fringes of the city right from the middle of the 1980s; in the 1990s the Government effectively 'legitimised' it by tacitly ignoring the illegitimacy of the process and imbibing it for its own programme of vesting. Two, the West Bengal Government's courtship of corporate capital – national and transnational – had been initiated from the last years of the 1980s and its aggrandising impact was already being felt on the Bidyadhari wetlands with the Government mulling the idea of a World Trade Centre, an IT hub and a hospitality hub in the area in the late 1980.

Therefore, the Megacity Programme and later the JNNURM only reinforced manifold an already initiated thrust and provided it with cogent rhetoric. Thus when the government was having to defend the land acquisition and allotment for the IT and hospitality hubs in the PUBLIC (an environmental NGO) versus State of West Bengal case before the Calcutta High Court in the 1990s, the new rhetoric of 'development by urbanisation' was ready for the state to deploy; it appealed that the adjudication of the case should be expedited as an investment of four billion rupees on 'urban infrastructure development' was at stake. Indeed, this rhetoric was used by the Government to justify the 'vesting' of the wetlands with the state and then making it available to high-end real estate and infrastructure developers. The creation and extension of a 'New Town' in Rajarhat was justified with this developmental reason, silencing Rajarhat's wetlands identity and its irreplaceable role in ground water recharge and the deltaic hydrology. Again the transnational wholesale major Metro Cash and Carry was given a prime location in the vital buffer between the EKW and the EM Bypass at the cost of poor fishermen's fish-breeding bogs, expansive undergrowth of wetlands flora, richly diversified wetlands fauna, paddy fields and the



livelihood of around twenty peasant families. Even more appallingly, the West Bengal government signed a Memorandum of Understanding in 2006 with the Indonesia-based Salim-Ciputra group regarding the construction of a proposed four lane expressway (Eastern Link), 85 kilometres long and routed through Bidyadhari wetlands.

However, in the wetlands, traditionally known for its 'land wars', the impulses of liberalisation have come to interpenetrate the structures of power evolving at the very local level, i.e., at the level of the villages in the 'added areas' and panchayats in the wetlands. Most cultivators and/or fishermen do not have deeds of ownership because the land in this area, reclaimed from the deltaic mangrove forests – was settled by the English East India Company with the leaders of the original clearers as lessees. It is in this context that even up to the 1970s these zamindars (as the lessees were locally called) sought to extend their respective areas at the cost of other lessees with the help of their respective bands of retainers. There was also an old conflict especially between the farm zamindars and fishery zamindars and their respective mafia. Land-grabbing was widespread in the area in the 1960s and many open questions of land ownership have not been permanently settled since. In the early 1980s, however, the Left Front government in West Bengal (in power 1977 - 2011) 'settled' these wetlands through extra-legal processes with sharecroppers and fishery labourers. Most of the zamindars found the situation ominous and became absentees, effectively leaving sharecroppers, fishermen and persons doubling up as both to enjoy an occupancy right, albeit unrecorded.

But, with the price of land in the vicinity sky-rocketing after the inauguration of the EM Bypass, real estate agents, both home-grown and from areas outside, besieged the wetlands, with their respective mafia connections. At this juncture the Left Front government's attitude, too, changed in relation to the occupancy right of the sharecroppers and fishery labourers in the wetlands, even as an alignment between the ruling party, the 'promoter' and the mafia started emerging in the area. The party, in a quest for perennial electoral success, preferred this alignment because the promoter-mafia combine was emerging as an enduring base of power in the wetlands, while the 'promoters' realised the efficacy of being patronised by a party with an evidently burgeoning mass base and power of persuasion. In the meantime, economic liberalisation had been inaugurated and development by urbanisation had come to be vigorously pursued, creating opportunities for various



kinds 'promoters', big and small, global and local; niche markets were created for all of them in a cumulative atmosphere of rampant and rapid urbanisation.

The ironic consequence: the same party which had once empowered the sharecroppers and fisher labourers of the wetlands was now acting on behalf of the real estate agents, persuading or pressurising the peasants and/or fishermen to sell off their occupancy right in land on the ground that they had no registered position in the land. Again, the small swamps, used as commons by the local poor during monsoon for cultivating fish for subsistence⁴, now came to be treated as no-man's land by the agents of urbanisation and promptly occupied by the promoter-politician nexus. Understandably, the discourse of environmental governance in the state took care to elide the question of land ownership in the wetlands even though the environmental sustainability of the region demands that this anomalous land situation be immediately addressed. It seems to be equally clear why a land use map, so crucial for the protection of this peculiar ecosystem is yet to be prepared.

But land-grabbing in the wetlands is facilitated not simply by the absence of a land use map; the politics of wetlands cartography is, indeed, more complex. The reality is that the same interest groups that benefit from the absence of a land use map also sustain a cartographic confusion regarding the boundaries of the deltaic wetlands to the east of Kolkata. Ever since the 1990s, as massive encroachment on the wetlands began and litigations erupted, the state conveniently utilised a paradox. On the one hand, there was no available official map of the wetlands, while, on the other, the state supplied the judges of the green bench with a number of otherwise available maps, which were confusingly 'discordant', 'sketchy and incorrect'. Even in 2006, despite an official undertaking, no definitive map of the wetlands was published and the cartographic confusion remained effectively sustained. This raises questions as to whether the government, for some reason, feels compelled to sustain a nebulousness of boundaries. In his pioneering study of public interest litigations pertaining to the wetlands, Dembowski argues that the government supplied the judges with a host of confusing maps not because they were unable to supply a definitive map, but because they were unwilling to do so (Dembowski 2001: 106).

To understand the relationship between the vested interests in the area and the cartographic politics, we need to identify the areas that the 'promoters' and urban developers would like to see excluded from



the area covered by the Calcutta High Court's 1992 ban on changing the character of the land (wetlands). One is Rajarhat which was already earmarked by the government for mega-urbanisation in the early 1990s. Even in the beginning of the 1980s extensive swamps existed around Rajarhat-Bishnupur; Rajarhat-Bishnupur particularly typified the especially depressed tract between each set of two tidal rives that typically characterise deltaic Bengal, with its innumerable marshes and palaeo-channels (De 1994: 23). The other areas the 'developers' would want excluded were completed/projected townships and enclaves of apartment complexes in the wetlands on either side of the Bypass, e.g., Baishnabghata-Patuli Township, Panchasayar, Survey Park and so on, apart from the sites for completed/projected private hospitals, private educational institutions and shopping malls. Indeed, given the rising market price of land on either side of the EM Bypass, the powers that be would rather have the wetlands character of the entire stretch to the immediate east and west of the this road from north to south erased in public records. Interestingly, these areas are more or less excluded from the map of the EKW as it focuses on the 12,500 hectares of the waste-recycling zone. Bengal government has therefore carefully superseded all other maps of the Bidyadhari wetlands with the map of the EKW, as if the EKW were the 'authentic' wetlands.

There is an integral relation between this cartographic politics and an apparently well-meaning Act passed in 2006. The East Kolkata Wetlands (Conservation and Management) Act 2006 aimed at preparation of a map showing boundaries of the EKW and formulation of an action plan consistent with the stipulations of the Ramsar Convention. Significantly, the 1992 High Court Order and even the Town and Country Planning Act of 1979 had already provided safeguards for the protection of the entire wetlands and a buffer zone between it and the city. The question is, what greater safeguards the 2006 Act came to provide? The answer is: none, especially as the Committee constituted under the Act is bureaucratic, devoid of any compulsory representation from the environmental scientist community. The real significance of the Act, however, lies elsewhere; it is through this Act that the EKW map came to be publicly upheld as the officially sanctioned map of the deltaic wetlands, silencing, for all official purposes, the existence a large segment of the same ecosystem outside the boundaries of the Ramsar site. Another implicit significance of the Act is even more disturbing; probingly read, this Act relaxes even the protection granted to the Ramsar site itself. The Act



virtually undoes the High Court ban on any change in the character or the mode of use of land within the EKW, by providing legalised space for such change subject to permission from the Collector to such change (The Kolkata Gazette 2006).⁵ It is very significant that such an Act was passed at a time when the Eastern Link Highway was being mullied!

Our experiences during our fieldwork in the police stations of Rajarhat and Bhangar in 2007 were an eye-opener. In this part of the Bidyadhari wetlands the West Bengal Housing Infrastructure Development Corporation (HIDCO) oversees the reclamation of the land sanctioned for the New Town. But newspaper reports reveal that the reclamation had surreptitiously spilled over into an extra 3,075 hectares never officially sanctioned for the New Town. In the area of 'unofficial' reclamation – to us a vast desert terrain – around the Bagjola canal to the east of the EKW, the local inhabitants told us that the huge 'desert' had been full of marshes, paddy fields and vegetable beds only a few months back, before a frenzied desertification began. Clearly this desertification was aimed at making the terrain appear very unlike the wetlands, and thus, justified in being developed as an 'international city' or an autobahn. The menacing motorcycle brigade of the mafia supervising the landfill in the surreal desertscape, simulated with the blessings of HIDCO, demanded to know why we as 'outsiders' had ventured into the area.

The role of HIDCO, by demonstrating the ways in which social power at the local level imbricates governance, helps us complete a full circle and return to the domain of governance. HIDCO, under whose aegis all traces of the wetlands topography were being erased from the sites of the intended extension of the New Town, is an instance of corporatised governance in West Bengal; such corporatisation supposedly ensures efficient governance. Critical scholars, however, argue that the very structure of corporatised governance embodies the risk of a decline in accountability to the public; the 'autonomous' corporation is not directly accountable to the electorate and often protected against the right to information, creating leeway for an undemocratic and opaque system. Not surprisingly, therefore, the Comptroller and Auditor General of India (CAG) found that HIDCO had produced neither annual plans nor proper project reports; even more seriously, CAG found no coordination between the development work projected by the body and the amount of land acquired that too without fixing a fair price. Again, despite Division Bench of the Calcutta High Court ordering (on 13th February 2007) an immediate stoppage on the filling up of a huge water body in Rajarhat,



HIDCO continued with the land-fill, with its managing director publicly justifying this non-compliance in May 2007 on the ground that he has not heard of any such order. Newspaper reportage abounded in 2007-8 about the 'Gour-Ruis Syndicate' a mafia-led supplier combine that actually controlled HIDCO's contracts with local 'promoters'. HIDCO took advantage of the secluded location of Rajarhat and Bhangar amidst a vast marshy terrain to conduct the desertification practically hidden from the urban environmentalist's gaze.

What we got to observe during our fieldwork, thus, seems to be a concerted act of subterfuge. First the notification stalling registration of sale was served in the area, mindful of the requirements of real estate majors and the expressway project.⁶ To bypass the environmentalists' criticism of the encroachment on the wetlands, the land, was 'bought' from peasants by local agents with the predictable assistance of the party-mafia nexus, and converted into a barren 'desert' even before being formally acquired, so that it would appear as already always a desert when the public would see it at a more convenient time.

Of course, one question would unavoidably follow from the foregoing critique – why such governance is passing off with very little protest from civil society, why the reasoning of urban neoliberalism is managing to be the hegemonic reasoning. We can only suggest an answer here, reserving its substantiation for another full-length essay; the crux of this hegemony lies in the attitude of the educated middle class as the major constituent of the civil society in West Bengal. It is on the consent of this class that the hegemony of the governmental reasoning largely depends. The Bidyadhari wetlands, with their long history as an ecosystem in continuum with the Sundarbans, do not feature in their own right in the consciousness of this class. The educated middle class carries the legacy of the colonial perception of the wetlands as the 'other' of the civilised, hygienic self of the urbanite, and has taken interest in it only in so far as the latter could be harnessed to the needs of the city like sewage disposal or supply of fish.

This utilitarian attitude to the wetlands has morphed in the post-liberalisation period into another way of utilising the region for the city – to provide a vast space for the unhindered production of a bourgeois city not possible in the old quarters of Kolkata. This extension of the city reflects the consumer citizen's desire for a sanitised, gentlemanly built space with gated communities and highly differentiated access to urban infrastructure (Roy 2009: 107). The hegemony of the pervasively dis-



seminated neoliberal notion of 'development' must have helped rationalise this desire by representing the rural as a stage of inadequacy and inferiority rectifiable only by urbanisation. Thus it is the active consent of this class that legitimises the deliberate 'peri-urbanisation' of the wetlands, as if by the grand design of some stage theory of growth the wetlands were destined to be urbanised!

Endnotes

- 1 Dembowski, H. 2001. *Taking the State to Court: Public Interest Litigation and the Public Sphere in Metropolitan India*, <http://www.asienhaus.de/> [retrieved 26.01.2011]
- 2 Department of Environment, Government of West Bengal 2007, *The Role of East Kolkata Wetlands as a waste Recycling Region*, http://www.wbenvironment.nic.in/html/wetland_files/wet_therolloff.htm [retrieved 26.01.2011].
- 3 The term 'promoters' is a contemporary popular usage in West Bengal that refers to a whole range of agencies from up-market real estate developers to civil contactors to small property developers to the land mafia.
- 4 Our ethnographic studies in the area have yielded this picture of dobas being used as commons.
- 5 Meena, M.L. *The Kolkata Gazette, Extraordinary*, 11.10.2006, <http://www.ekwma.com/uploads/pdfs/Forms.pdf> [retrieved 28.08.2012].
- 6 The transnational majors who have developed stakes in the area are DFL, Unitech, Keppel Magus to cite a few, while the national majors include Godrej Properties, the Merlin Group, the Shrachi Group, the Emami Group, the Keventer Group, Ambuja Housing and so on.

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