## VII.A.3. Understanding Institutional Change: Reflections on Environmental Problems Facing Island Ecosystems

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This paper has through a case study of the environmental problems of two estuarine islands in the Mandovi River in Goa, discussed the role that institutions play in the political choices that determine the environmental health of a region. In Goa, there has for many centuries been a system of going ownership and management known as the Communised system. This system was most prevalent in what are termed as khazan lands, which are agro- ecosystems that have been reclaimed from marshy swamps through a system of lateriate buds that kept out the saline water. The lands have over the years become multi-purpose: fit for salt tolerant paddy cultivation, coconut cultivation, salt panning and traditional aquaculture. All this has been made possible through a system of sluice gates that have enabled the control of salinity. The outer embankments protect the khazan lands from saline water intrusion, at high tides the sluice-gates permit only the volume of water which could be stored in backwaters and other channels. At low-tide this water is made to drain out. While draining the fish can be trapped in a gill- net attached to the sluice-gate. The village communities, 'Gaunkaris' or communidades has appointed voluntary bodies called 'Bous\* for specific tasks related to khazan land protection. This simple engineering and the management practices in place have in turn been the means through which these estuarine islands became viable and as a result have become among the most densely populated regions in Goa. Today, these islands are facing an environmental problem through salinity ingress this phenomenon is linked very much to the institutional forces that have resulted in neglect of the front line defences of these islands. This paper has examined these forces and also the more distant, but none the less very important drivers - social, political and economicthat has caused these community based management systems to change. It has argued that one strong driver in all this is the state which through its attempts at promoting social justice does create conditions for the strengthening of individual over communitarian rights and in doing so paves the way for market forces to enter decisively and press for change that has environmental implications.