Conserving wetlands through microfinance programs, India

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Key Message: Using ecotourism as a means of poverty alleviation and sustainable environment development through community partnership in peri-urban wetlands of East Kolkata.

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Picture 1: Preparing food during a trail run at Natar Bheri under catering training program
Courtesy: SAFE

Picture 2: Biorights projects attracts foriegn students at East Kolkata Wetlands
Courtesy: SAFE

What is the problem?

East Kolkata Wetlands, a threatened Ramsar site in Eastern India spread across 136 sq. Km, is renowned as model of multiple use wetland which has a natural resource recovery system developed and maintained by the local commune supporting 104 wetland species that includes endemic marsh mongoose and mud turtle. Water flows through wetlands' mosaic of fishponds, lakes, swamps and canals that cover 4000 ha and acts as solar reactors to treat 880 million

liters sewerage each day. These waste water fishponds not only recycle the sewerages but also sustain the livelihood of 90,000 odd fishermen, surviving below the poverty level.

East Kolkata Wetlands, EKW, is mostly considered as a sewerage dumping ground with no awareness about its environmental importance amongst the stakeholders. That it is an international Ramsar site and is directly linked to the sustainability and protection of the city of Kolkata was hardly known to the policy makers, administrators, and community stakeholders as well. It is obvious that resource generation for conservation efforts becomes the biggest challenge. Further, in such an ecosystem which is directly linked with anthropogenic economic activities, the conservation paradigm has to be necessarily community based. Under such cirmcumstances, it was thought that a conservation effort which invites community participation would be sustainable. After a sociometric survey analysis which revealed that more than 90 percent of the local stakeholders reside below the poverty line in these wetlands, the issue of compensating the opportunity cost incurred to the community towards conservation efforts was envisaged. Thus the idea of a Biorights Model that transforms nature services into a financial tool was concieved and implemented.

Biorights is a concept that tries to protect areas of global biological importance by compensating poor people that live near the areas and who are dependent of these areas for cash generating activities. The hypothesis is that in this way a sustainable rural development is possible as the negative link between poverty and nature degradation will gradually reduce.

Successful projects on Biorights have already been installed in Central Kalimantan of Indonesia, Chinkogurana Village of Uganda, and Philippines. SAFE has successfully initiated the first Pilot Project on Biorights in India under the innovative challenge fund of 'Kolkata Urban Services for the Poor' (KUSP) programme funded by DFID (UK) through Municipal Affairs Department, Government of West Bengal.

What approach was taken?

In the initial phase of the project the primary focus involved efforts to restore the fast shrinking wetlands and prevent habitat loss, a conservation partnership has been successfully developed through this project based on community-ecosystem approach in the area. The dwellers have been involved through a participatory partnership in the project, as it has an integrated community-ecosystem approach. The whole community shares the responsibility of validating and evaluating the scheme, thus they are a part of the decision-making system in an adaptive project management. In sociometric studies, impact assessments and feedback processes are continued which reflect that the community involvement is obvious and altruistic.

It's an exemplary PPP (partnership model) alongwith community partcipation. The formation of Self Help Groups that SAFE could establish with the supports from NABARD has further strengthened this project. The fisherwomen have been exposed to training and visit programme, young men has been trained with marketing skills. This capacity building has brought confidence. TATA-AIG group has designed a microinsurance scheme for the people so that the little contribution remains an investment and the premium money is returned with bonus on completion of the tenure of the insurance incase even there is no claim for accidental benefits. Pricewatercooperhouse (PwC), Cognizant have carried out huge plantation programs at the Biorights project site in partnership with SAFE.

Currently, Hindustan Unilever is interested in scaling up the project under corporate social responsiblity with South Asian Forum for Environment, SAFE. In wetland fishermen

cooperatives the plan has been implemented and members are trying to design similar mechanism of alternate earning. NABARD has supported the second agro-development project in East Kolkata Wetlands on Conservation of Endemic Fishes which also has BIORIGHTS component. Nearly 523 families (2615 persons) from the fishermen's community of East Kolkata Wetlands, working in these two cooperatives are the direct beneficiaries. All are below poverty level people having a monthly income of INR 850 per family.

What ecosystem services were considered and how?

The more unimaganinable is the areas palpable natural beauty, which is the largest natural sewage treatment plant in the world. For more than 150 years, communities living here have been purifying millions litres of waste through a natural recycle system. As this area is near to the metropolis like Kolkata, large section of urban class preffered a day recreation near to water bodies. The feasibility study as carried before the commencement of the project by SAFE projected that; the urban middleclass is not aware of the existence and importance of East Kolkata Wetlands,(EKW) Ramsar site, but if given an opportunity they would be happy to explore and pay for the day recreation directly to the community.

The ecosystem services considered were:

1. The exquisite landscape of the project site is a major attraction with pristine water bodies that surrounds the area.
2. Many unique species of aquatic life including mud turtle, marsh mangoose, water birds such as white breated kingfisher, darters, cormorants etc live in alongside of the wetlands.
3. One can appriciate the verdant beauty of East Kolkata Wetlands, as you float by a boat. Its a world of serinity and wonderment.
4. The fishermen folk living alongside the wetlands have unique relationship with the eco-system.
5. The fish caught from water, boats they build and use to transport them are all the integral part in their traditional way of life.
6. Wetland ecosystem is rich in biodiversity harbouring and hosting 52 endemic species of fish, 40 avain species, 20 mammals, and a number of flora. It is the habitat for red listed marsh mangoose and mud turtle as well.

What input was required to do so?

<u>The inputs required to do so are hereunder:</u>

1. Baseline sociometric survey
2. Baseline ecological survey for habitat evaluation
3. Environmental Impact Assessment report
4. Six point attitude scaling of the local stakeholders
5. Market potential assessment for tourism

What was the policy uptake, and what were the conditions for this effort to actually influence public management?

The revenue collected from ecotourism would be an alternative economic opportunity for sustenance. A portion of the excess revenue would go for premium of group micro-health

insurance coverage for the wetlanders who struggle in stinking sewerage waters for their livelihood and produce fish for the metropolis. The innovation is that here environmental awareness would explicitly act as a marketing tool for the revenue generation system and Biorights acted as an incentive for conservation. This would therefore endorse the BIORIGHTS component and that was the policy uptake.

The main objective of the project was to initiate an effective partnership for conservation amongst the stakeholders, the strategy for influencing public management aspect was in developing a win-win situation by assuring revenue returns from nature services. Though unfortunate, but its a fact that environmental services in developing nations of global south gains priority through conservation only when it widens the economic opprtunity within a short term cycle. Direct payments of ecotourism have direct impacts in policy implications and public management.

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Picture 3: Tourists enjoying picnic at Natar Bheri, Eco-tourism project site of SAFE
Courtesy: SAFE

Picture 4: Locally catched fish served for lunch
Courtesy: SAFE