MIGRATION AND DEMOGRAPHIC CHANGE IN THE CONTEXT OF COMMONS MANAGEMENT IN BANGLADESH

Dr. Aminur Rahman
School of Business
Independent University, Bangladesh

Abstract

Migration both internal and external has created imbalances in the management of natural resources in general and common pool resources in particular in many parts of the world including Bangladesh. Migration has always been a historical phenomenon. However, the recent speed of globalization has given new dimension to it. It has affected the participation rate at the rural level in the context of common pool resources management.

The entire process has unleashed a whole spectrum of interactions among the local people, migrant and common pool resources. Since the management of these types of resources usually comes spontaneously and principally from the young who are at the same time the potential migrants, the scope for negligence to these is also quite high in case of migration. In this paper attempt has been made to look into the following issues taking into account the management of a wetland in Bangladesh. The study centers on the impact of religion, demographic change and valuation on a wetland resources (common property resource) in North Eastern Bangladesh. Indigenous people specially the fisherman who belong to minority community (Hindu community) are usually the principle agent in maintaining the wetland resources in a sustainable manner (as fish is one of the most valuable renewable resource in this wetland). However, the infiltration of Muslim community through internal migration is systematically wiping out the indigenous people. The indigenous people also become reluctant and frustrated to take care of the resource properly as their stake is threatened and chances of migration to neighboring India or other countries become feasible and vibrant. Those who moved to the area slowly grasped the resource with no intention of maintaining it thereby destabilizing the prevalent common management practice. The paper uses survey population of 350 fishermen families to explore the actual situation. It looks into the loss of fish crop due to negligence by using Dose Response

Function, contemporaneous and intergenerational externalities. Ultimately the paper suggests some solutions in conflict resolution and awareness creation in creating more value to the resource and its proper management.

Introduction

The magnitude of Globalization has brought unprecedented changes in the demographic pattern and common pool resource management in many developing countries including Bangladesh. People who never moved out of their homes took now a days venture stretching around the globe. This new behaviour has affected the community feelings, natural resource utilization and. overall demographic pattern. It is well known that natives know their surroundings better than others and their allegiance to nature and her abundance get fair treatment by the natives only. However, this traditional treatment is now being threatened due to penetration of different groups of people as well as migration of young natives to urban center and abroad. These trends have created imbalances, which in turn is threatening the natural resource management and common pool resource management in many parts of the country. A proper analysis becomes pertinent for finding out some clues for it's solution. Since it is not possible to figure out the trend of the whole country an effort can be made by conducting some survey on the spot of natural resource importance to infer some idea about it. The present paper endeavored on that direction.

Migration and Common Pool Resources (CPR)

Demographic change and Common Pool Resources (CPR) management are inter- linked. Common Pool Resource refers to a natural or man made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use (Ostrom.1990). However, the mere definition also presupposes the understanding of the connotations of stock flow concepts in terms of resource system and resource unit for organizing and governing the CPR. Resource systems are regarded as stock and resource use as depletion of stock. In case of fish or other renewable resources this is quite important as depletion rate influences the stock. As long as the average rate of withdrawal (catch in case of fish) does not exceed the average rate of replenishment, a renewable resource like fish is sustained overtime. Access to a CRP can be limited to a single individual or firm or to multiple individuals or team of individuals who use the resource system at the same time.

In the traditional impoverished poor society the rural urban migration is a common phenomena. The prospected migrants who are usually at the age of 18-34 leave their ancestral homes for the uncertain metropolis for expected higher wage from expected urban job. Although high urban unemployment scenario is always prevalent in the expected areas where the internal migrants ultimately land. Besides, external migration also plays dominant role in some respect. The dual interactions of rural-urban and external (international) migration help get stripped mostly of young men from the local community leaving it in a distress limbo. Migration mostly affects the local institutions like CPR, as these are usually managed, handed and used differently in different areas having indigenous people living at that particular place.

Because of this conflict of interest the indigenous fishermen have become absolutely frustrated and the care for the fish spices have disappeared. Ironically these are people who were most careful and were completely aware of the proper catch of the fish. They were careful about the extinction of this resource. By using Dose Response Function we saw that fish crops were much more than the present one and the income lost by them due to apathy and unrestricted catch of non-fishermen is enormous. Here dose was apathy and response was less fish. By multiplying the lost fish at the present market value we got the substantial revenue loss of the original fishermen folk.

Methodology

The paper conducted some survey on the fishermen community at Hail haor. It has calculated different values of wetland resources based on Benefit Transfer Method.

Wetland Survey

A survey was conducted in the NorthWest Bangladesh at a beel (beel, a waterbody is perennial in nature or it contains water almost throughout the whole year. It is a closed waterbody) located at Hail Haor (Haor consists of many beels) among 350 fishermen population. These fishermen were traditionally maintaining this beel as common pool resource as this was an open access one before. The respondents were asked through some structured questionnaires and it was found that

the fisheries stock has dwindled to a large extent as the tradition fishermen lost their control over the village and the able bodied young fishermen migrated to neighboring India. As a result of that the resource is now maintained at an unsustainable rate and production level of fishes has fallen drastically.

More elaborately now a days the Muslim community dominates the fishing of the haor who are basically the outsiders or recently migrated rich person having less or no idea about the common pool resource management of fishing in that area. These Muslims are not traditional fishermen and are considered as outsiders by the traditional fishermen residing there. The original fishermen of this village also migrated a century ago. But these people were engaged with the same occupation and belonged to the similar culture as they have it now. The Muslim outsiders use tools that give them easy access to fishing and manipulate local people with money and political power. They use current net (use is forbidden by law in Bangladesh) light and boats to fish at night, which are comfortable gears for fishing for the so- called Muslim fishermen.

The traditional fishermen do not posses such fishing gears and being technically knocked out. Although these gears create an unsustainable state in fishing as it leads to over-fishing. If the fishing rights were solely lied with the traditional people the catch would have been less as they are more acquainted with the fish culture, and its sustainable growth. Newly migrated people and elite classes not only use technologies to dry out water in fishing but also don't allow the indigenous fishermen to fish. These classes control the entire scenario having the lease of the beel area from the government and usually take a lot of money for day to day basis fishing. The indigenous people are thinking to change their occupations to other occupation to fishing. However, the concern is that indigenous knowledge with CPR management is slowly being wiped out bringing social problems, as co existence becomes a difficult task. At the same time these people is not acquainted with any other profession except fishing.
As the large population has already migrated over the years the remaining local people got worse in their economic benefits. The survey further revealed that it is not possible to compete with the newly migrated Muslim fishermen community because of their connection with the local elite. So the management of CPR has broken down and some sort of private leasing is operating at present.

Survey has also revealed that some of them has also migrated to Middle Eastern countries and sending their remittances to neighboring India not to their original locality as it is presumed that the remaining ones will in the long run migrate to India.

Quantification of Impacts

It is not only the fisheries resource this wetland posses it has enormous number of other valuable resources. If we calculate in terms of Direct Values and Indirect Values a total picture of the haor will come up. The calculation has been accomplished using **Benefits of Transfer Method.** Total area is 3000 hectre.

Table:1

Total Economic Values

Total Direct Use Values	**US$ 590906**
Sustainable Harvest Products:	
Fuel Wood	US$ 68,906
Fishing	US$ 472,000
Genetic Materials	US$ 2,1000 one-time Use Value
Total Indirect Use Values:	**US$ 319,258**
Ecological Function	US$ 125,258 one-time Use Value
Protection of Endangered Spices	US$ 24,000
Carbon Store	US$ 170,000
Total Option Values:	US$ 50000
Future Uses: Medical Importance	US$ 50,632
Total Existence Values:	**US$ 63,000**
Biodiversity	US$ 63,000
Total Economic Value	US$ 102,3164

Different Values have been calculated taking similar valuations of wetland resources in derived in other countries.

Protection of Endangered Species: These value reflects a compilation studies of developed nations, mostly conducted in the USA and estimated using Contingent Valuation Method (CVM). Average value per ha US$ 8 has been used. (Source: Economic Valuation of Environmental Impact ADB 1996)

Carbon Store: Values of carbon store has been adjusted from US$ 1300 to US$ 300 per ha as these Studies were done in the developed countries where income level is high and WTP is naturally higher than ours. (Source: ADB 1997)

Genetic Materials: This activity carries value from the study done in Cameroon. Calculation is based on US$ 7 per ha. (Source ADB 1997)

Education: This value refers to the value calculated in a case study in Thailand. Value for this object varies from US$ 33- US$ 77000. (Source) ABD 1997)

Human Habitat (**improved sanitation and water availability**): Values for this part has been derived from the studies done in Nigeria using CVM based on WTP. However, Values have been adjusted due to low income of our beneficiaries US$ 8 per household. (Source: ADB 1996)

Medical Importance of Wetlands: Values have been derived from Indonesian case study. Per ha US$ 16 (Source: ADB 1997)

Biodiversity: Values have been derived from case studies done in the developed countries. The adjusted value for our purpose is calculated in the following fashion: US$ 21 ha. (Sources: ADB 1996)

We see that this wetland has enormous potentials in terms of Total Economic Values. Due to non-existence of proper rules at the present situation there are big apprehension that these values will tarnish gradually and throw the poor fishermen into a nightmare.

Way Out and Policy Options

In the present scenario we need to create some sustainable campaign for the community there and at the same time impose some principle like the Designed Principle suggested by Ostrom for community management (1990). Besides, the following approaches can best help preserve the resource. However, the major thrust will be to tame the newly infiltrated community by introducing the following programmes. Since they are already exist in the game they need to absorbed with the original fishermen community people.

1. **Community Based Management**: A phased transformation of fisheries management to community based management of fish resources; this will involve an intermediate period whereby a Natural Resource Manger is involved in managing the fisheries. So it needs to appoint an Natural Resource Manger whose expenses can be borne by the local Union Parishad (council) or some NGO can take some lead in this regard. In framing this, attention should be given to the **grand fathering principle** where the original fishermen should have their rights preserved accordingly.

2. **Conservation Awareness Programme**: Aimed at increasing awareness of the economic value of wildlife and sensitising the local community to the conservation value of Hail Haor's wildlife, and the need for habitat and wildlife protection..

3. **Environment Education Programme**: Introduce the concepts of sustainability of resource use, wise and conservation value, in simple terms, using local examples, to local curricula.

4. **Creation of Legal Basis**. It is important to use both liability and property laws in the current situation.

Conclusion

Community based ideas in managing natural resource is a way out in many difficult situation, However, in a poor impoverished society the notion fails in many respect. It is more alarming in

the situation where the trend of forced migration takes place and dominant religion pressurize the minorities to leave their age long profession for the majority non professional. In our case it is not the global impact alone which is creating imbalance in common resource management but the influx of religious sentiment together with lack of legal coverage which is creating problem. So the most prudent move in our case should be to lease out the waterbodies to Samity (formed by the local fishermen) for at least 15 years with further options of renewal.

Training facilities need to be provided to the beneficiaries in order to enhance their (the Samati people) knowledge and skill.

However, of all these measures lie above the judicious management of wetland resources which are in turn the common property. The fishermen community rights need to be established discarding the vested interest of any quarter. Otherwise no community will be able to function.

References

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