Wetland Economics: Background and Policy Issues

With water scarcity problems rising at an alarming rate, concerns for sustainable management of water resources and wetland ecosystems have been increasing worldwide. In the Lower Mekong Basin, where the livelihoods of over 50 million people directly depends upon wetlands based activities, sustainable management of wetlands is even more important.

Despite the importance of wetland ecosystems in the Mekong basin, it is still not clear what institutional arrangements and policy instruments provide adequate incentives (and self-enforcing inducements) to all stakeholders, for the promotion of sustainable use of wetland resources in the region. Results from traditional "command and control" approaches to regulation, and direct government intervention and control, are ambiguous. Effective management of a de-facto open access wetland is one of the critical problems in conservation and sustainable use of the wetlands in the lower Mekong region. In addition, policy-makers are not yet sure what governments, the private sector, or local communities can do to preserve an optimum and adequate level of wetland resources, not is it clear what incentives (inducements) can persuade local communities and other agencies to sustainably use wetlands.

This fact sheet highlights economic and institutional policy issues in relation to wetland management that are relevant to the economics component of the MWBP and its activities.

Economic Benefits from Wetlands

Wetlands are important to society, not only for their direct uses of products and services, but also for their indirect uses to society in general. Some of the major benefits of wetland resources are:

- Wetland products: fishes, aquatic products, foods, drinking water, irrigation, and other crops, etc.
- Wetland services: ecosystems protection, water treatment, pollution retention, etc.
- Wetland indirect uses: flood control, storm protection, groundwater recharge, etc.

The value provided by direct uses of wetlands is usually accrued to the households or community residing close to the wetlands area (on site value), thus providing private value. The indirect uses of wetlands are mostly of public good, but they are in fact more valuable to the society in totality than that of direct uses of wetlands. This is because the values of indirect wetland uses vary from households located on site to a wider section of society including downstream, sometimes several hundred kilometers. In reality, the value of indirect use of wetlands (or public good benefits) are over four to five times higher than that of the direct use values from a typical wetland. Hence, management of the indirect uses of wetland (public good benefits) is in fact more critical in achieving long term wetland conservation goals, and sustainable use of the wetland resources. The difference in value between direct and indirect wetland uses makes it very difficult to place a value on wetlands, affecting the long term management of wetlands.

Economic Policy and Wetland Management

Failure to properly understand economic aspects of wetland resources, and reflect the social and livelihood options, and benefits of wetland resources in the market arena, are some of the major reasons for the present crisis regarding wetland management. Therefore, it is essential to understand the economic implications of using wetland resources and to identify the economic benefits (and costs) provided by wetlands, and incentives and disincentives involved in wise use of wetlands.

Due to the large extent of wetland values being related to indirect uses unregulated market mechanisms and unregulated trade may not adequately reflect the full range of scarcity regarding the overall value of wetland products and services. This means that effective public policies are required for equitable management and long term conservation of wetlands.

Wetland biodiversity conservation policies are also closely linked with the development policies of a nation. Wetland programmes involve a significant portion of state lands e.g. reserves, protected areas, or unharvested wild forestlands and/or wetland areas, which are of restricted and regulated use. This imposes significant opportunity costs, in terms of forgone activities, upon the surrounding local communities and the national economy.

In addition, within a nation, the losers and gainers of wetland activities versus development activities are different groups. This creates a further conflict of interest even within a community, or society, in regard to managing a wetland conservation programme. This problem is fundamentally a problem of distribution and access, e.g. those who bear the direct or opportunity costs of conservation do not reap all the benefits (and vice versa). Many benefits of conserving wetlands are not "captured" from the gainers as tangible values to be shared/redistributed to the resource providers, which is also a typical problem of managing a public good service.

Some of the major economic policy issues for sustainable use of wetland resources in relation to the MWBP activities are:

i.) Proper valuation of goods and services provided from wetlands and incorporating them, including indirect values, in decision making process.
ii.) Identifying and promoting a range of economic incentives (tangible benefits) for wetland management that are consistent with poverty alleviation and livelihood improvement objectives of the local communities on site.
iii.) Need to demonstrate wetland conservation with livelihood improvement and poverty reduction activities by identifying best practices within the Mekong basin.
iv.) Improved understanding of socio-economic drivers for wetland conversion process, this includes both positive and negative drivers affecting wetlands.
v.) Identifying all the opportunity costs of conservation and exploring means to compensate these costs to the local communities managing the wetlands.
vi.) Analysing socio-economic drivers for wetland conversion to other uses, this includes for agriculture uses as well as for other urban uses of wetland areas.
vii.) Analysing public good nature of biodiversity resources, particularly in avoiding open access problem in wetland management, and analysing the optimum level of roles and functions of community versus state agencies.
viii.) Identifying innovative financing sources for conserving wetlands.
ix.) Identifying appropriate mix of economics and regulatory incentives in protection of critical ecosystem habitats (e.g. deep pool in Mekong River).
x.) Identifying and crafting institutions embodying the local community involvement and protection of their rights to access and with suitable incentives (tangible benefits) for the sustainable use of wetlands.