

Training Workshop on Ecosystem Approaches to Marine Management

LEOPARD BEACH RESORT & SPA

MOMBASA

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SUSTAINABLE FINANCING

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OUTLINE

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Introduction

- Running programs to mitigate or halt degradation of marine ecosystem is costly. In one estimate, a total of US \$6.5 billions is spent annually globally on protected area management. Another estimate put the cost of operating global network of marine protected areas between US \$7 billion to US \$19 billion annually.
- Perhaps because of this costs, large implementation gaps have been observed.
- In any case, even where funding has not yet been a problem, there is a need to seek sustainable means of financing these programs, to avoid a danger of reduction in the expenditure in the future.
- It must also be noted that in developing countries, the fact that external financing has played a significant role in meeting the costs of managing marine ecosystem, the costs of these programs may have failed to reflect the actual local cost.

Introduction-Continue

There are several reasons that makes financing marine ecosystem program a challenge;

- (a) The costs of managing these ecosystems tend to emanate from either their externality nature or their public good characteristics.
- (b) Sometimes, ignorance of benefits, or impatient with the realization of benefits may discourage finding marine ecosystem programs
- (b) Some time the coastal and marine problems are not seen as being of national broad-based nature as other problems that are of public good-nature (e.g. national defense)
- (c) In the case of transboundary ecosystems, there is less incentive for a government to put up money for ecosystem program unless there is some form of international coordination.

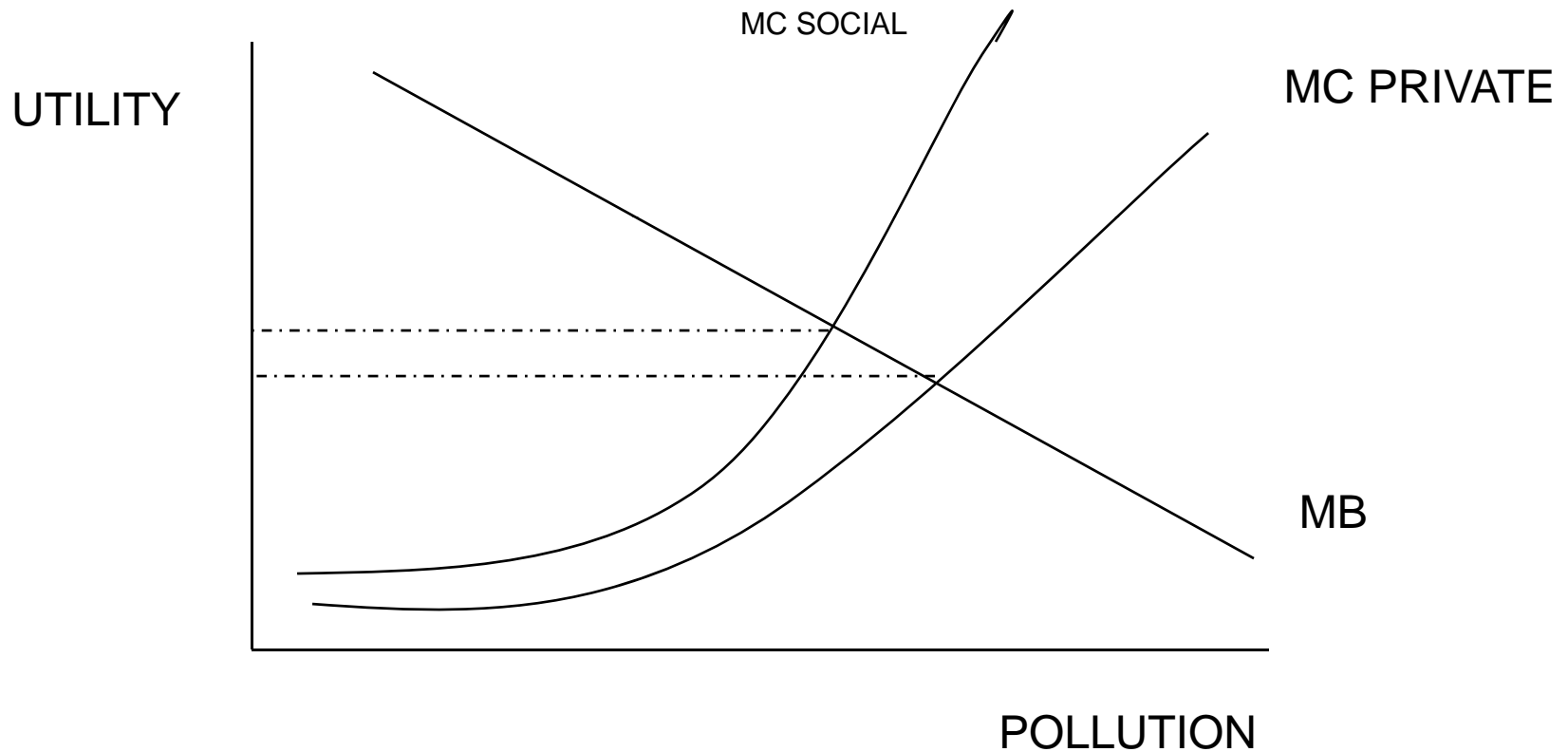
Possible Sources of Financing and Challenges

1. Tax: this is a compulsory payment that one must make to the government **without earmark**, and without getting **direct** return in terms of services.
2. Some form of user charges, fees: This is a payment that one may be made to make in exchange of **direct** enjoyment of benefits
3. Grants (external donors in particular)
4. Loans

Possible Sources of Financing and Challenges-TAXES

- There is a lot of ideological talks about taxes, on one hand there is a drive to cut down taxes as much as possible, on the other hand, there are those who wish to increase taxes as a re-distributive tool.
- However, we must always remember that taxes are important source of funding public goods. These are goods that are characterized by two things: none-rivalry in consumption, and are not excludable. To the extent that marine ecosystem are public goods, it is important that government use tax revenue to fund the programs.
- Further, government intervention in terms of tax may also be important for correct externalities. In theory, tax can be used to correct a mismatch between private costs and social cost on one hand, and private benefit and social benefit on the other. One such famous tax is *piguvian* tax. Now, this is easily said than done, but this point needs to be driven home as a way of encouraging government to take the responsibility of using tax revenue to fund ecosystem program seriously.

Possible Sources of Financing and Challenges-TAXES AND EXTERNALITY



Possible Sources of Financing and Challenges-TAXES AND POLITICS

- It is important to encourage the thinking that taxes need to be used to fund ecosystem management. Scientists need to make a case of the benefits that ecosystem services confer to the society, and economists need to play a role in showing the public good nature of ecosystem, and also the externalities that use of ecosystem services generate.
- There is a need to undertake valuation of the ecosystem as a way of encouraging policy makers to see the benefits, and be more willing to fund ecosystem programs.
- Unfortunately, there is only so much that can be obtained from taxes, so other sources of funds need to be explored.
- Even where some money is available, there may not be a strong constituency to press for more allocation of government funds. At the end of the day, politics play an important role in determining which program get funded.

Possible Sources of Financing and Challenges-GRANTS

- In many cases, external grant is necessary to get a project/program started. One would hope that once the program is up and running, and the benefits are seen, the government can take over.
- Problems;
 - (a) Reduced ownership (may not be subject to the same local oversight as programs funded through taxes, may not be properly mainstreamed into the government programs)
 - (b) Dependency- what if funds is withdrawn

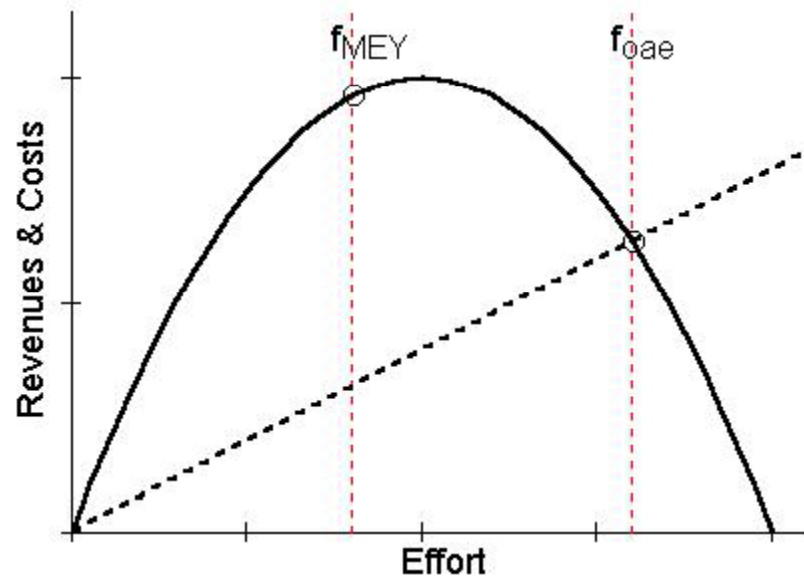
Possible Sources of Financing and Challenges-LOANS

- Loans can constitute another source of funding. Government can thus take out loan for this purpose.
- The problem here is that if the loan is taken with the expectation that the ecosystem program shall be able to generate revenue to repay the loan, one may end up with disappointment. Should this be the expectation, there would be a need to more careful assessment.

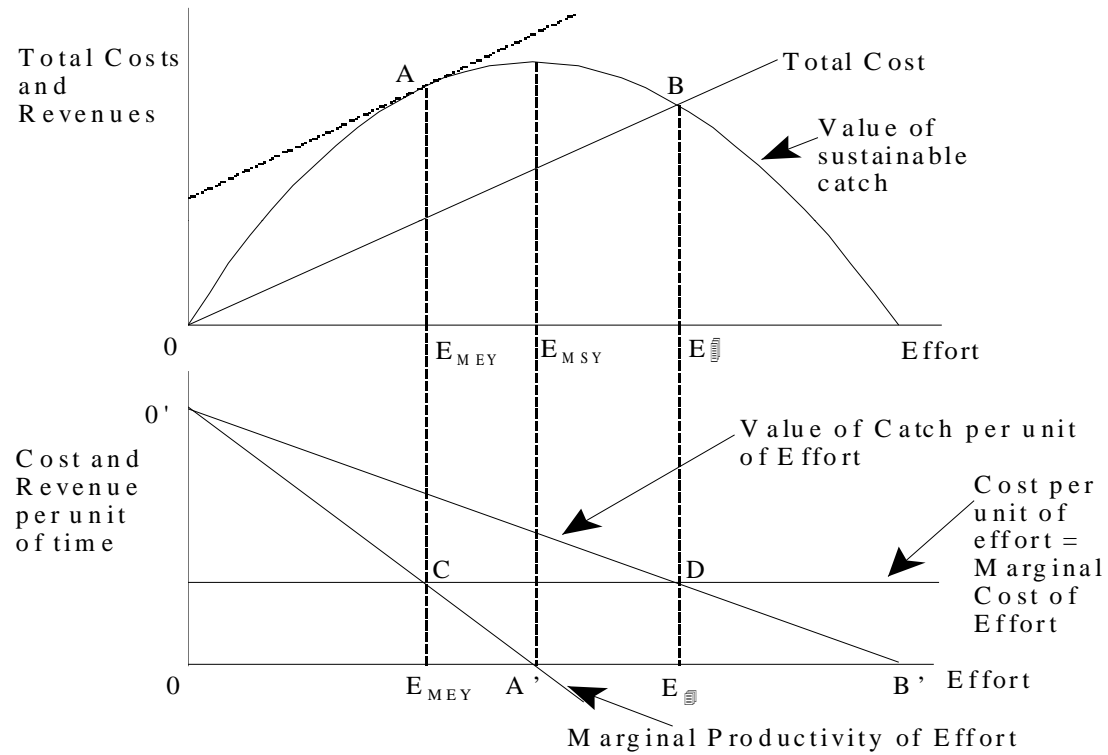
Possible Sources of Financing and Challenges-USER CHARGES

- User charges are payment one makes in exchange for enjoying the services OR consuming a commodity. Such user charges may be instituted for the use of beaches, diving, fishing, owning hotels along or near the beach and so on.
- The ideal charges need to be such that the total collection covers the cost of maintaining the system. HOWEVER, ISSUE OF EQUITY IS ALSO VERY IMPORTANT, AND THE CHALLENGE IS HOW TO INSTITUTE A CHARGE SYSTEM THAT :
 - (I) MAKES USERS PAY ACCORDING TO THEIR ABILITY
 - (II) COLLECT REASONABLE REVENUE TO COVER THE COSTS OF MAINTINING THESE SYSTEM.
 - (III) AVOID EXCLUDING THE PUBLIC FROM SERVICES THAT IS TRADITIONALLY BEEN THEIRS, EXAMPLE PUBLIC BEACHES

User Charge- Example of Fishery



USER CHARGE-FISHERY



USER CHARGE-FISHERY-Cont

- It is important however to point out that user-charge (license fees) would not be enough to restrict catch and generate revenue. **First**, it is not very easy to manage collection. **Second**, there would be a resistance if such a charge system imposes disproportional burden to the poor (those with poor fishing tools). **Finally**, the parameters for determining how much to charge are not easy to estimate, thus sometimes may be wrongly estimated.

Importance of Valuation

- Many of the parameters necessary for determining charge rates and prices of ecosystem services are not readily known.
- If natural assets such as ecosystems are viewed as natural capital, and accorded the same or even more importance than man-made capital, it would be easy for such assets to be included in the GDP estimation and thus encourage a more proactive stance by government regarding managing these resources. This calls for valuation of these resources.
- However valuation must be made in a right way, and should only be done if there is a likelihood of influencing policy. In some cases none-valuation methods (such as CVM, TCM etc) are misused and implemented in unreliable way.

CONCLUSION-KEY POINTS

- We should not rule out tax as a source of financing- it might be **one of the most sustainable source of revenue** and it engenders ownership.
- User charges/pricing should be used as much as possible as they are **more likely to be sustainable too**, but equity is important here. IF POSSIBLE, EARMARKING SHOULD BE ENCOURAGED.

Thank You!