

CHALLENGES TO SUSTAINABLE COASTAL DEVELOPMENT IN EAST ASIA

CHUA THIA-ENG

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)

The term “sustainable development” is a commonly accepted principle for economic development and environmental management. While the people recognize the need for economic development to improve the standard of living, they must also learn to live in harmony with nature as their needs are inextricably linked with the ecosystem functions and the corresponding goods and services that they provide such as food supply, livelihoods, recreation, health and many others. Sustainable development can thus be considered the net socioeconomic benefits of the interactions between the environment and human activities.

While the principle and concept of sustainable development are widely appreciated, making it work in a practical sense remains a challenge. Achieving sustainable development in the coastal areas is even a greater challenge because of the complexity of coastal systems. The key challenge lies on managing the economic activities and regulating human interventions that will not jeopardize the functional integrity of the natural systems rather than on the ecosystems and the goods and services that they generate. Several obstacles or barriers to sustainable coastal development have to be surmounted.

Rapid environmental degradation

The rate of degradation of environmental quality, habitat destruction and contamination of rivers and coastal waters in developing countries of the region are alarming. Management measures by concerned governing agencies were either not adequate or ineffective to arrest or reduce the current rate of environmental quality degradation.

While sector management efforts to contain pollution, reduce habitat degradation and prevent overfishing were undertaken, these single sector approaches were rendered ineffective due to population and economic pressures. The adverse impacts cut across sectors and affect the sustainable growth of many of these sectors.

Poverty exacerbate unsustainable development,

Despite economic progress during the last few decades, poverty remains a major threat to sustainable development. Poverty is a result of institutional inefficiency caused by the accumulative effect of policy, market and information failures. The socioeconomic impacts of these failures are significant considering the loss of use and non-use values and the intrinsic value of ecosystems. Unless serious measures are taken, poverty remains a major obstacle to any management efforts towards sustainable development. It is thus imperative that poverty must be reduced, if not eliminated. Poverty reduction strategies need to be accompanied by policies and actions that enhance the quality and productivity of the environment and natural resources. Such strategies are inherently enshrined in integrated coastal management.

Adverse environmental impacts of globalization and regionalization of economy

The changes in consumption and use patterns brought about by economic globalization in both the developed and developing economies often exert greater pressure on the extraction of natural resources and consequently, degrade the environment. Changing use patterns in both developed and developing worlds increase consumption of goods and services, many of which are derived from the coasts and oceans.

Economic regionalization such as that of the East Asian economy builds combined market for their own products. Economic alignments also take place at sub-regional level, forming economic growth areas, by taking advantage of the geographical proximity, close socioeconomic and cultural linkages of the countries. Many of these regional and sub-regional groupings are obviously driven by economic interests. The adverse impacts of these economic activities on the environment of the region or sub-regions are often left out of their agenda. While development projects within each sub-region are to be regulated supposedly by environmental regulations of the country concerned, the transboundary environmental impacts are often ignored.

The interconnectivity of socioeconomic, cultural, political and ecological attributes

The socioeconomic, cultural, political and ecological interconnectivity can be traced at the local, national, regional and even global level. This inter-relation is evidently stronger at the local level. The socioeconomic interconnectivity between economic sectors as well as between social and natural systems makes it essential to advance a paradigm shift in management. This entails a change from the conventional single sector management approach to that of multiple sector management; from looking at management issues from cause-effect standpoint to a more sophisticated system management approach through better understanding and analysis of interrelationships and factors influencing the processes of change.

The difficulties of managing complexity

The well being of the coastal area is not only influenced by human activities along the coastline and the water beyond it but is also inextricably linked with human activities in the upstream and the associated watershed. Coastal managers are therefore challenged with a host of management issues ranging from optimizing resource use to ensuring the functional integrity of the ecosystems. There are many difficulties in achieving these goals. These include:

- 1) Too many people going after too few natural resources, thus creating strong competition between economic interest groups, often resulting in severe resource use conflicts.
- 2) Uncertainties related to the carrying capacity of the ecosystems in the coastal area.
- 3) Failure of existing governance on natural resources exploitation and use of the coastal areas in keeping up with the rapid economic and population changes of the present world and regional economy.
- 4) Government bureaucracy has not made much improvement despite efforts to promote good governance.

- 5) Lack of a common institutional “ home-base” for integrated coastal management. There are no agencies looking after the transboundary issues, nor given the full responsibility of integrated planning and management of the coastal areas. As a result, cross-boundary, cross- sector management issues are not adequately and effectively addressed.
- 6) Inadequate knowledge on the value of ecological resources.

Managing complexity to achieve sustainable coastal development is a challenging task. It requires a shift of the mindset from seeing parts to seeing whole, from reacting to present problems individually to looking at the future collectively, and from seeing people as reactors to involving their participation in shaping their future. It requires a holistic, integrated planning and management approach for addressing multiple use conflicts and efforts to build vision among the stakeholders on the use of their natural resources.

Inadequacies in policy and institutional arrangements

There is no overarching institutional framework within which complex management issues related to the coasts and oceans could be addressed effectively. National policies, legislation and institutional arrangements for natural resources and environmental management on land are far more advanced than that for the coasts and oceans.

Policy direction to take advantage of the land and sea interaction is not available. For years, the land and sea are managed separately. The interrelationship between sectors, between different ecosystems, between watersheds and the coasts, between line agencies, etc, are not well recognized and are seldom factored into planning and management considerations. There is no national policy to promote a more holistic and integrated management approach. Such policy barrier adds to the difficulty in the functional integration of line agencies, especially at the implementation level.

Law enforcement is a major challenge. There are many reasons for poor law enforcement. Corruption, lack of facilities, inadequate capacity at the local level, policy and legislative conflicts, poor understanding of the law among the law enforcers, etc, are some of the commonly cited constraints. The ineffectiveness of law enforcement certainly minimizes many of the international and national efforts for environmental improvement.

Inadequate local capacity

Most countries do not have the necessary technical and management expertise and skills for developing and implementing integrated coastal management programs. Such skills are even more deficient at the local level, rendering management of complex issues at the local level even more challenging. Unless local capacity is strengthened, implementation of national policy and action programs on the environment and resources will be difficult particularly in terms of achieving goals and efficiency.

Resistance to change

The following elements contributing to resistance to change must be overcome in order to undertake appropriate and efficient policy and management interventions: perception and attitude of policy makers and stakeholders, turf, local politics, system of governance, financial constraints as well as inadequate public knowledge on natural systems.