The Sida Marine and Coastal Zone Initiative

Policy and Geographical Aspects of Development, Resource Utilisation and Environmental Protection in Marine and Coastal Areas

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Concept-paper on Policy and Geographical Aspects of Development, Resource Utilisation and Environmental Protection in Marine and Coastal Areas

The Sida Marine and Coastal Initiative

Foreword

This concept-paper on Policy and Geographical Aspects of Development, Resource Utilisation and Environmental Protection in Marine and Coastal Areas has been elaborated on request by the working team for the preparation of Sida's Marine and Coastal Zone Initiative, an intended policy programme with plans of action for development of tropical and sub-tropical marine and coastal areas.

The views presented are those of the author, Dr Magnus Torell (ICLARM, Manila) and are not necessarily shared by Sida.

The working team in Stockholm, September 1997

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1. Executive Summary

Seas and coastal areas have been of central importance for the development of humankind. Fisheries and shipping has age old traditions and the control of the seas was one major factor in developing strong nations. Major urban centres are located along the coasts at the same time as you find small and often poor communities along the shores. Communities that often find themselves outside the "path of development" whether it concerns fisheries, trade or something else.

Modern technologies make it possible to harvest large quantities of the resources that are available in the seas and on and beneath the bottom of the seas. Resources varying from fish to minerals and hydrocarbons. Presently the seas, and that what is beneath it, are drawing considerable interest from virtually all sectors of human activities - be it bio-technology or shipping.

However, most activities present in and around the seas will in one way or another act as constraint(s) on, or the possible means for, other activities in a given area. The level of impacts of certain activities on other possible uses, positive or negative, shows large variations between different types of activities.

Marine and coastal resources are today threatened from over-exploitation, environmental degradation, use conflicts within and between sectors as well as from rapidly increasing populations.

Integration in planning and policy making is needed at the same time as increasing demands are put forward for co-ordinated management of resources utilization.

The present Swedish programmes are in many cases well suited to become further developed to accommodate for necessary awareness, training, capacity building, etc. needed to build up frameworks for sustainable development in marine and coastal areas.

The complexity and multitude of issues that needs to be addressed is an indication of the need to give increased priority to co-ordination between programmes, projects and donor agencies.

2. Introduction

The purpose with this paper is to give a general and summarized description of possibilities and problems related to sustainable development and management of natural resources in marine and coastal areas from a policy related and (mainly human and economic) geographical perspective.

First part will give a very short reference to the resource types or sectors and the multi-sectorial uses of the seas and coastal areas together some notes on the long economic and strategic importance of the seas. The second part will high-light some experiences made related to the development in marine an coastal areas. Finally some suggestions for continued or future support will be given.

3. The importance of the seas

All through the history of mankind the uses of the seas and other water bodies (such as lakes and rivers) has been a major factor for human development. Communities developed along the shores of different water bodies where fish and other marine (aquatic) products made up important elements for subsistence and local trade (economies). Trade in marine products such as salted and dried fish has for a long time been of major importance.

Up until the last century the by far dominating uses of the seas and its resources was that of fishing and transportation and communication. Large cities grew up throughout the world in coastal and riverine locations having access to harbour facilities. With the emergence of state like entities and other forms of power centres the importance and control of the seas (and trade) became increasingly evident.

The seas and other water bodies has traditionally been of major importance for reasons, such as:

- fisheries
- transportation and communication
- coral extraction (traditionally mainly for building)
- mangrove exploitation (for house-hold purposes)
- power source
- part in everyday common activity (drinking water, washing, irrigation, salt extraction, etc.)

- to discard wastes in
- and a major "factor" in local and global strategic thinking

In addition to these early uses there are several "new entrants" establishing themselves in marine and coastal areas with the help of new technologies and pushed by increasing demand. Activities of these new "stakeholders" includes:

- oil and gas exploration,
- tin mining (dredging) and sand dredging
- extraction of other minerals available in marine and coastal areas (e.g. titanium, iron, coal, monazite, zircon, and diamonds)
- deep sea exploration (outside EEZ boundaries)
- tourism
- coastal aquaculture

In the above mentioned "traditional" sectors there has been virtual technical revolutions that added possibilities that would seem "utopic" only a century ago (e.g. supertankers, submarines, tidal power-plants, desalination plants, etc.).

New technologies also implies new demands on physical space and infrastructure like new harbours, safety zones (of varying sizes depending on currents, etc.) around oil rigs and areas for aquaculture development (in mangrove areas and in open waters for cages etc.).

Harbours are one of many break points between activities on the seas and activities onshore. It is, however, not only sea-bound activities that are affecting the future of the seas and its uses, but also land-based phenomena such as:

- industrial development,
- urban development,
- agriculture and forestry.
- tourism (constructions on land)
- infrastructure developments

Human settlements, trade and communication, fisheries and other forms of resource uses are also linked to a number of physical characteristics (which in turn have implications on the availability of resources). Without expanding on it some of will just be mentioned for the sake of reference, such as:

- Land and sea - and land/sea interactions
- open coasts - low wave energy coasts
- coastal features (topography, shore characteristics)
- offshore features (depth, bottom soil, archipelagic, etc.)
- estuaries and deltas
- mangroves, sea-grass beds and mangroves
- winds and currents - seasonal patterns
- tidal patterns
- climate (temperate, tropical, etc.)
- enclosed or semi-enclosed seas (further discussed below)

Shipping and communication among people

Shipping and sea based communication has been very central to human development in different ways. The movements of the Vikings, the power of the Hanseatic League, early Indonesian/Malay states like Sri Viyaja (7th to 13th century) where all based on the control over and possibility to move on water. Advances in shipping and navigation made it possible to extend the area of influence for those that could control the seas - and a long period of colonial expansion started by Spain and Portugal in the 15th century to be followed by Holland, Great Britain and France up until the beginning of this (the 20th) century.

Parallel to and preceding the European expansion there has since thousands of years been intensive trade and sea based communication in areas like East and Southeast Asia, South Asia and the Arab States and the coast of East Africa. The seasonal pattern of winds and currents (such as the monsoons) gave a certain seasonality to the trade patterns and places like Southeast Asia with a strategic location emerged as centres for trade. The region is still very much the focus international sea borne trade.

For countries with "global" or regional power ambition, control over the seas and sea-borne trade continues to be of vital strategic importance.

Shipping is the safest and cleanest way to move large amounts of cargo - but when things happen it often leads to major headlines around the world. The expansion in shipping and the risks for, intentional or unintentional, pollution has led to the formulation of several conventions. In congested areas like international straits (such as Malaccan Strait and Öresund) traffic separation schemes have been established and demands are with regards to harbours increasingly voiced on proper or improved reception facilities etc.

just to mention two mention two areas were efforts are made to improve shipping and port management.

With several developing countries emerging as "shipping nations" there are continuous need to develop capacity to handle growing fleets, manage harbours, etc. There is also an obvious need to continue aim for reduced pollution in and around harbours, in shipping lanes, international straits and elsewhere. Increasing rates of pollution will have a direct impact on other sectors of important for local livelihood and national economies, such as fisheries and tourism.

It is also import to stress the fact that at local (coastal) level boats are still a major factor for short distance communication - at a lower cost than the land based alternatives. Along the coasts and rivers in areas like East and Southeast Asia large groups of people are virtually living on their, often quite small, boats.

Fisheries

Fishing and fisheries, having a strong local and regional traditional importance together with a high sensitivity to environmental degradation, is a good basis for a review on changes (positive and negative) in marine and coastal development. Differences and trends in rural and urban coastal development respectively can also effectively be high-lighted by looking at functions and problems related to fisheries.

In general (capture) fishing is in many respects still conducted after traditional rules. Fishermen are still going out to harvest what is offered in the waters near and/or far away from their homes. The means and ways for fishermen and fisher-folk to make their living has not changed much over the last centuries - that is with the exception of some tremendous changes in boats, nets and other types of equipment as well as in the post-harvest sector

Technical advances and large investments led to huge post - war increases in catches and landings, going from almost 20 million metric tonnes in 1948 to almost 70 million in 1970. The growth continued at a slower pace (with some breaks like that of the collapse of the Peruvian Anchoveta fisheries in the early seventies) to peak at around 100 million tonnes in the early 90:s.

But, behind these figures and trends there are big regional varieties. Many major fish stocks are reported to be overfished.

Fishing fleets like that of the Russian have declined while the fisheries of China has seen enormous increases (now up to 20 million tonnes). Many distant water fleets are running with heavy subsidies, etc. Conflicts over resources are obvious and it is envisaged that to increase or even maintain the supply of fish increases in aquaculture have to be made - which in turn leads to another set of issues for planning and management for marine and coastal areas.

Another general feature is that recent developments of fisheries have been very much urban based while the "rural" or small scale coastal fisheries still operates with traditional gear with limited supportive infrastructure. Being less mobile the coastal fishermen are directly suffering from declining stocks. With limited capacity among responsible authorities to enforce rules on "trawling free" zones etc. the situation leads to another set of conflicts over resources, this time between small and large scale operators - a situation where often the poorer small scale/rural fisherfolk will be the "losers".

Further difficulties are caused by a steady flow of new entrants. More fishermen are going for already declining fish stocks. As a result reduced catches per fishing effort is reported from almost "everywhere". Increased focus needs subsequently to be given to the reduction of the number of fishermen and/or boats in each given area. This situation is important to bear in mind when planning for the development of human and natural resources in marine and coastal areas.

The gap, and conflicts, between the rural/coastal small scale fisheries and the larger scale (urban based) fisheries are perhaps most obvious in Asia and especially Southeast Asia, From relatively low catch figures in the 50:s Asia is now boosting 6 out of the worlds largest fishing nations. Thailand for example went from 220 000 tonnes in 1961 up to about 2 200 000 tonnes fifteen years later (present recorded catch is over 3 million tonnes). Large export oriented fishing industries were built up and again taking Thailand as an example, Thailand is now considered as the worlds leading exporter in fisheries products. But, in this rapid development large groups of coastal communities did not take part and as stocks are becoming increasingly overfished they are feeling the impact.

Efforts are now, in some countries like Thailand, increasingly being directed towards raising the livelihoods of these

communities.

Multiple use of marine and coastal areas

To fully utilise the resources and the economic potential of the seas and coastal regions it is, as can be seen from any form of analysis, a complex matrix with several resources, physical characteristics, human needs, political and economical interests, etc. that has to be balanced. Not only at local or national level - but given the mobility of the resources, the water itself (polluted or not polluted), international sea lanes, etc. - regional and global concerns has to be included. The multilateral dimension is especially obvious in areas such as enclosed or semi-enclosed seas (and international rivers) a fact that was also acknowledged in the formulation of the UN Convention on the Law of the Sea which includes special provisions for such areas.

The ever increasing growth in human population, with relatively higher rate expected due to in-migration, etc. in coastal areas, and with subsequent increasing pressure on available resources - and space - should than be added to the "matrix" with all what that implies. Factors such as political and economic pressures, social problems, resources degradation and over-exploitation, continued urban growth are among the issues that needs to be addressed.

Each region, has its own specific set of opportunities, problems and conflicts. In the case of Southeast Asia the situation is complex to say the least and conflicting interests are both multi-sectorial and cross-boundary in nature. Large areas in the South China Sea and the Gulf of Thailand are claimed by two or more nations. The areas around the Spratley Islands are for example being claimed, in parts or as a whole, by some six different countries. The marine and coastal areas are also full of natural resources including fish, oil and gas, tin, corals and beautiful beaches. Southeast Asia is economically a highly dynamic region and the continued drive for economic growth implies an increased pressure on the resources and the environment often at the expense of small coastal communities.

Semi - enclosed seas

There are many water areas around the world that could be described as enclosed or semi-enclosed seas, such as the Baltic Sea, the Mediterranean Sea, the North Sea, the Caribbean Sea, the Caspian Sea, the South China Sea and the East China Sea. All of these areas are of central importance. Big cities are located along the shores. They are important media for communication and in general very rich in natural resources.

Added to the traditional values of fishing and communication are the more recent discoveries of real and potential sources of oil, gas and minerals of which many of the semi-enclosed seas are well provided with. The economic and strategic importance of these water areas has made semi-enclosed seas remain in the focus of international interest, with interested parties making every kind of effort to secure a share in the harvest of the sea potentials.

Some of the needs facing countries in and around semi-enclosed seas with respect to the imperative to build national development of utilisation of marine and coastal resources and environmental protection on regional co-ordination are also evident for groups of island and coastal states like in Eastern Africa and Western Indian Ocean.

The special concerns facing countries in these areas includes building up of comparable information on resources and environmental status, negotiate environmental, standards and fisheries quotas, building up national capacities to enforce common agreements, negotiate disputed sea borders and build up mutual trust between neighbouring countries. All of this assumes capacities that in general is not always present - not even in developed countries. There is also need for organized and functioning forms of co-operation and co-ordination within defined regions to establish needed common understanding. Such mechanisms exists in several places and it is important that the objectives for the Helsinki Commission, the East African Seas, the East Asian Seas Programme and others of similar nature (including Mekong River Commission and large river programmes) can meet its objectives. For this large amounts of external assistance is needed - assistance that not necessarily need to go through the secretariats of the programmes or commissions.

3. International conventions and agreements

It is obvious that to have any chance to achieve some kind of positive or sustainable development there needs to be common understanding on norms and standards for everything ranging from shipping to bio-diversity. A number of important conventions have also come into force such as the Biodiversity Convention, MARPOL, etc.

In connection with this paper attention will, however, be focused on the 1982 United Nations Conventions on the Law of the Sea (UNCLOS) because of its major "geographical" implications and rights to manage marine and coastal resources. The creation of the convention stated de facto the largest re-delimitation of physical space since the pope divided the earth between Portugal and Spain in 1494. Through UNCLOS coastal states got access to the jurisdiction of planning and management of all the resources in and below the seas out to 200 nautical miles (up from 12 nm) - a so called exclusive economic zone (EEZ).

Further in its geographical context UNCLOS gives definitions on what can be considered an "island" (to be eligible for an EEZ), defines the objectives for "semi-enclosed" seas", acknowledges special rights for "archipelagic states" and its states the rights transit passage in "international straits.

Provisions are also included for "the protection and preservation of the marine environment" and "marine scientific research" among a large number of provisions to name a few items of importance.

UNCLOS is also worth bringing forward by the fact that through the convention developing states got full jurisdiction to develop the resources under its own EEZ - something that developed countries from time to time and in different ways tries to "dilute".

4. Local systems for community based management

All communities and groups of people (large as well as small) have more or less sophisticated "systems" for management of resources and/or "rules" or commonly (among themselves) accepted practices for human interaction in resources utilization. These "codes of behaviour " are expressed and implemented in a large variety of ways.

Applied to the management of natural resources within a given community , it is the conceived need to share (or establish ownership to) existing resources among the members of the community to maintain the resource base for the community as such (and those with "access" rights) that provides the necessary basis for rules and management "systems" to emerge.

The basis for joint management of resources within a community can be/is based on different systems for pooling and/or sharing (available) natural and human resources.

Nevertheless, systems can show great variety and allow for/provide for everything from:

- equitable sharing (however that is defined within the community) distribution of resources and wealth within the community, to
- systems where major parts (all ?) of the "profits" generated from the locally available resources can be accumulated within the hands of certain members/families of the community

As societies grow it becomes imperative that there is a need to formalize the rules for "behaviour" within the community and to regulate the use of natural resources (and the access to them) and to distribute land, water and marine areas (different forms of ownership, access rights, etc). Rules, thus developed within a community, are (usually) based on "accepted" norms within the community and transferred as part of "indigenous" training - often based on different forms of oral tradition.

The importance of local/indigenous beliefs and religions.

An important factor when assessing local management systems and the compliance with "established rules" is the interrelation with local beliefs and religions. The integration with local religious beliefs, practices and rites has in many cases been a forceful element to "ensure" acceptance and the "proper implementation" of "community rules".

As certain religions/beliefs has developed and "found" followers also outside of the "community" of origin some very basic general and not area specific rules for human behaviour have been kept, and become and re-enforced, such as you shall not kill (at least

not amongst "yourselves"), steal, lie, etc . Together with such more general rules more locally specific (and maybe at the time for introduction relevant ?) rules on how to relate to natural resources such as not to eat pork, rules on how to slaughter animals in special ways, to each fish on Fridays, etc. Elements like these and others, sometimes more diffuse, will in different ways affect the availability of management options (it is for example not really advisable to try to introduce pigs as an alternative to declining fish for a muslim coastal community).

Constraints to Community Based Management

All types of interactions and contacts between the community and the "outside world" (or the other way around) implies changes for the community. Changes that also affect the community in the management of "its" resources. The changes can have different implications. They can be facilitating or discriminating, they can be negligible or dramatic, etc.

The rate, type and frequence of exposure to and/or contacts with other communities, other users of (related) natural resources and local, provincial and national authorities (and other interest groups) gives further implications on how possibilities for communities to manage their (local ?) resources will develop.

Present development of world patterns for communication, trade, mobility of large groups of people (voluntarily as well as forced), "establishment" of states and nations, rapidly increasing populations, depletion and over-utilization of natural resources, pollution and conflicting uses of resources and physical space has led to major concerns over the future sustainability of livelihoods in both rural and urban areas. These trends is not only of global concern, but also directly affecting the local communities and the availability and their access to natural resources - and subsequently the very basis for community based management and co-management.

Responses to a growing problem:

- Demands are increasingly being expressed on better planning and management of efforts and projects to develop and utilize resources (natural and human)
- Conventions are drafted and agreed upon (hopefully) to be implemented,

- Regional agreements are being made on pollution control,
- Quotas and other systems for the regulation and management of the utilization of natural resources are introduced (and sometimes agreed upon),
- National legislation is drafted for the development of nations, and among other things, with the aim to provide a framework for how to regulate the behaviour of the people and the (their) use of financial and natural resources.

(Wherever available) the application and implementation of (nationally developed) planning and legal mechanisms gives the broader framework (whether in support of or restricting) within which communities (and others) have to seek ways to manage available resources. To become effective there needs to be a balance between the needs and incentives of the local users and the community on one hand and the roles and incentives that is expected from the "authorities".

Following the (frequently) conflicting interests and practices in various parts of a country and/or in a region there is an obvious need to harmonize rules and restrictions for resources management and levels of utilization between local, provincial, national and regional levels.

There is a need to secure local rights while at the same time adhere to international conventions and respect regional and bi-lateral agreements.

Restrictions on possible ways and means for communities to manage (local) natural resources are obviously abundant. Restrictions can be administrative and legal as well as based on natural conditions and/or constraints caused by the availability of the natural resource(s) in question.

Furthermore degradation of the environment is together with conflicting uses of space and resources, causing further constraints to successfully develop programmes for co-management and/or community based natural resources management.

Specifics for marine and coastal areas

The development, possibilities and constraints described in general terms above is equally (or more) relevant for communities in coastal areas. Land and "commons" is distributed and managed as in inland areas based on a multitude of (traditional and historical) practices. Coastal lagoons and lakes can similarly be managed and/or organized according to a wide variety of systems in terms of access rights, resources utilization, etc.

The "migratory" nature of a large part of the resources available to coastal communities is a special factor for concern to these communities when seeking to sustain their livelihoods. In addition to this, resources and environment in marine and coastal areas are facing risks from a wider range of external sources (and magnitudes) as well as higher rate of exploitation by "outsiders" than inland areas.

The mobility, vulnerability and special features of marine and coastal resources is best exemplified by fish, living aquatic resources and fisheries. Fish move in and out of man-made designated "zones" set up for the purpose of administration, management, national boundaries, etc. This mobility together with the vulnerability of aquatic resources to pollutants and environmental degradation implies special difficulties to effectively, in a sustainable way, manage the resources within the designated area. The "system" is dependant on proper planning and action not only within the local area but also in neighbouring areas to mitigate pollution, sustain stocks, etc.

The clear link between external and internal factors leads to some obvious implications as to the need for integrated planning, regulations and systems for the selection and implementation of management options together with some kind of (governmental) guarantee to those having the rights of access and management - whether community based or individually based.

Note: if there is no real incentive from the side of the "government" or the "community" respectively to maintain the chosen management system and the resource base itself the system will be difficult to sustain. It will probably fade away through mismanagement, "sold out" to other stakeholders or in some other way.

5. Constraints and potentials for sustainable development of marine and coastal areas

There are potentials for sustainable development of marine and coastal areas - or it could be said that there have to be potentials. It is a fact that due to in-migration the population in coastal areas is growing quicker than in other places. This trend is likely to continue and it is an imperative to solve problems on how to accommodate for all these people - including the plans to accommodate for higher population growth in coastal areas.

The key is to find and enforce a balance between urban based development (industry, services, etc.) and that of the rural coastal area. It is equally important to find a balance between development in coastal areas and inland regions.

A growing percentage of people will also be living in urban centres (including the growing number and increasingly large mega cities). Planning and management have to consider this. In connection with natural resources it is also important to consider that (which has been referred to above) that the exploitation of certain natural resources in a way has become urban based in a sense that fisheries harbours, oil and gas supply centres, etc. are located in urban areas.

At the same time as the urban expansion will have to be catered for it has to be ensured that coastal communities will have their resource basis secured to facilitate rural development along the coasts. Schemes for development of the livelihood in these communities should be developed and implemented jointly with the communities themselves.

Constraints to successfully develop and implement schemes for "sustainable development" can be found in all stages and all aspects related to the utilization of natural resources and the protection of the (marine and coastal) environment, including among other things:

- weak institutional capacity at different levels
- inadequate legal and policy framework
- lack of knowledge on resources availability
- lack of knowledge on environmental conditions
- insufficient human resources development in rural/coastal and urban areas

- lack of capacity and institutional mechanisms for integrated and multi-sectorial planning at different levels
- lack of ability or willingness to co-ordinate management of different sectors
- over-exploitation and conflicting use of resources
- environmental degradation
- etc.

6. Building a framework for sustainable development

Experiences on coastal and marine resources management

There are quite a few lessons to be drawn from different programmes on coastal and marine resources management, integrated coastal area management, etc. It would bring to far here to try go through even a selected number. An adequate summary on what it is all about, and what to consider to build up a framework for planning and management came out from an ESCAP/ADB workshop, 27-29 March 1995, in Bangkok on "Coastal and Marine Environmental Management "

"Coastal and marine environmental and resource management programmes are difficult to execute for many reasons, including:

- they are multi-sectoral,
- they involve numerous constituencies,
- they involve policy and legal issues,
- there may be great uncertainty with respect to the adequacy of scientific information (geographical data),
- there may be pressure to produce useful results in a (relatively) short time,
- in developing countries the coastal and marine areas are usually those facing the greatest pressure from population and economic development.

All facets of the problem - from the legal and institutional to resource management rights, questions of access to resources, extension, training, capital investments, and data and information gathering - must be considered". (from the Proceedings of the Workshop, published by the Asian Development Bank. The workshop was supported by Sida as part of a Regional Technical Assistance for South China Sea)

"Co-management", "community based management", "coastal area management", etc. and links to the availability to of laws and regulations (or lack of)

Aspects of community based resources management, coastal area management and/or co-management has been put forward as a tool for the management of various types of natural resources (fisheries, forestry, etc.) including the management of areas to be protected from exploitation. At the same time there is another trend aiming for holistic views looking at the harmonization and integration of planning and management for the utilization and exploitation of natural resources at local, national and regional (and global) levels.

A question could be raised whether these trends are conflicting or complementary - or if each could be strengthened if adjusted to become (if found necessary) supportive of each other.

A common objective for programmes for sustainable use of natural resources (of whatever type) is to develop or find ways to ensure long term sustainability for the benefit of as many people as possible (preferable with the aim to improve living conditions for the poorer segments) within a society or set of societies.

A major problem that seemingly affects the possibilities to reach objectives of sustainable utilization of natural resources in seas/marine and coastal areas is the lack of ability (willingness, systems) to address and consider all the multifaceted and different factors that provides the limit (and possibilities) within which viable options for natural resources management has to be sought (if expected to be "optimal" or just effective) - ranging from macro to micro level conditions (based on culture, resources availability, economical viability, stakeholder vested interests, etc.).

It is important to assess the elements at local, national and regional levels which sets the boundaries and/or rules (laws traditions, etc.) that provides the actual framework for opportunities and constraints to effectively implement schemes for "co-management, "community based management" or other types of locally based (resources) management in seas/marine and coastal areas.

Matters such as legal framework, conflicting use of natural resources (and space), the role of stakeholders and interest groups needs to be properly addressed and explained together with such factors as social, religious and traditional patterns with respect to various "optional" management systems - and still keeping in mind the uniqueness of each situation.

Development of policies and other instruments to facilitate control and management - politically and/or through (local) participation

Basically policies and legal framework must be consistent throughout the system from local level up to the national level. Laws and regulation should be "inter-active" that is there should be links or cross-references between for example environmental laws and for such laws as for mining, fishing, industrial development, natural resources act should be linked to acts for housing and building, etc.

To become effective, or possible to implement, policy framework and laws must be consistent with local traditions and practices among users. This can only be ensured through different forms of consultations and/ or participation in the process of formulation - the forms and mode can vary and there is no given model for this, just look at the variety of "systems" that have emerged in Europe.

This variety of policy and legal traditions is in itself a problem in present day development situation. As "donors" often enter into co-operation on a sectorial basis, a number of parallel "cultures" might develop depending on the origin of the experts - this is something that in turn could be counter-productive in terms of trying to build "frameworks for sustainable development" and promote co-ordination between sectors.

Based on what has been said earlier in this part and preceding parts there are many different issues that should be considered in developing concepts and frameworks for development in a rather complex way. Below some examples are given on elements that should be considered in connection with "sustainable development of natural resources" at local and national level:

- legal framework and its historical development (at local, provincial and national level - including relevant international agreements).
- local (community), provincial and national systems for decision making - rate of decentralization or centralization,
- systems for authority to plan, decide and manage area specific development and natural resources utilization at local, provincial and national levels - rate of decentralization or centralization,
- ownership and access rights to areas (including seas, lakes, marine and wetlands) and rights to utilize natural resources (especially aquatic)
- availability of resources in lakes, rivers, wetlands, marine and coastal areas,
- identification of local traditional users, external (or other) stakeholders and (potential) conflicting interests,
- traditional systems for resource management in coastal areas and coastal (lakes etc.) communities,
- traditional or "historical" patterns for "subsistence" livelihood and present trend in search for occupational opportunities among coastal communities (including men, women and children),
- religion and local practices of importance for decision making and management, including references to "nation wide" concepts and beliefs,
- relevant international conventions being ratified and subsequent consequences (if followed "properly") to local management and natural resources management
- other external factors and developments (pollution, urbanization, harbour development, tourism) of (possible) importance for the development and management in coastal communities.

The role of the "donor" (Sida) when projects are initiated in a coastal area

Programmes and projects demands a different type of "back up" from the donor agency (and external experts) depending on the nature of the projects. Infrastructure projects, harbour rehabilitation, community development and capacity building are demanding different levels of facilitation, expertise, training, etc.

One important, or even basic, element throughout the "cycle" from pre-feasibility to post-evaluation is to ensure co-ordination

and co-operation among programmes and projects, donor organisations and (international and national) institutions (governmental and non-governmental).

When initiating project in a coastal area the role of the donor should be (in very general terms) to be:

- facilitative
- consultative
- allow for co-ordination
- constructive
- supportive
- and to ensure that enough time is given to the different stages of the process.

7. Conclusions and recommendations

Several conclusions could be drawn from the "concept notes" given above. To strengthen the point only a few conclusions will be high-lighted here and that is:

- Multi-sectorial **integration** is needed in planning for resource utilization at local, national and regional level
- Multi-sectorial **co-ordination** is needed in management and utilization of marine and coastal resources
- Increased harmonisation is needed between traditional practices and laws and policy at local, national and regional level
- Laws and regulations for different purposes (rights, environment, sectors, etc.) must be consistent and "inter-active".
- Increased co-operation between project, programmes and donors

Suggestions for priorities, etc. for Swedish support to the strengthening of capacities in developing countries to manage the coastal areas and to plan for a sustainable development in marine and coastal areas.

In general it could be said that the present "portfolio" is a good base from which to develop programmes further and in areas like Southeast Asia and East Africa there are also good potentials for to further develop co-ordination between projects, programmes and various donors.

Not to elaborate to much it could from the conceptual point be said the "Areas of Intervention" that was suggested in "Marine and Coastal Resources - Framework for SIDA support to sustainable use of Marine and Coastal Resources and to the Protection of the Marine and Coastal Environment (Annex 3) are still valid.

Added priority could, however, be given to issues related to laws, policy and institutions at local national and regional level for sustainable use of marine and coastal resources.

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