



4TH GLOBAL CONFERENCE ON OCEANS, COASTS, AND ISLANDS

Working Group on Capacity Development



POLICY BRIEF ON CAPACITY DEVELOPMENT



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Global Forum on Oceans, Coasts, and Islands--Strategic Oceans Planning to 2016

The Global forum on Oceans, Coasts, and Islands has undertaken a strategic planning effort for the period 2006-2016 to develop policy recommendations for specific next steps needed to advance the global oceans agenda aimed at governments, UN agencies, NGOs, industry, and scientific groups. To this effect, Working Groups have been organized around 12 major topic areas related to the global oceans commitments made at the 2002 World Summit on Sustainable Development and to emerging issues facing the global oceans community.

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Global Forum on Oceans, Coasts, and Islands

Working Group on Capacity Development

Policy Brief:

**Strategic Interventions for Developing Capacity to Improve Governance of
Oceans, Coasts, and Small Island Developing States Over the Period 2008 to
2018**

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Foreword

Capacity Development in Ocean and Coastal Management

Capacity development on ecosystem-based integrated coastal and ocean management is essential to achieve sustainable development of oceans and coasts and the development of suitable responses to address climate change, preserve biodiversity and resources, provide for sustainable livelihoods from oceans and coasts, as well as respond to new and emerging challenges.

As the Policy Brief on Capacity Development developed by Working Group Chair Indumathie Hewawasam demonstrates, notwithstanding much development support from various donors, the on-the-ground results in terms of long-term and in-country and in-region institutionalized capacity development have been disappointing.

Under its GEF/MSP grant, *Fostering a Global Dialogue on Oceans, Coasts, and SIDS, and on Freshwater-Coastal-Marine Interlinkages*, in the period 2005 to 2008, the Global Forum conducted assessment in 7 different world regions to ascertain the status of capacity development efforts in ocean and coastal management and to identify gaps and needs. The assessments were carried out by regional consultants in the following regions: Pacific Islands, Caribbean, Atlantic Small Island Developing States, Indian Ocean, East Asia, Africa, and Latin America. In addition, an 8th assessment focused on the capacity development needs of the 8 nations forming part of the Community of Portuguese-Speaking Nations (Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal, Sao Tome and Principe, Timor Leste) was formulated by high-level participants from these countries at the Ocean Policy Summit organized by the Global Forum in Portugal in October 2005. In particular, the assessments addressed: 1) the presence (or absence) of university formal programs related to ocean and coastal management in countries in the region; 2) the presence (or absence) of informal programs on ocean and coastal management targeted to decision makers in countries in the region; 3) gaps in both formal and informal programs on capacity building in ocean and coastal management.

The following regional capacity assessments were carried out and are available on the Global Forum's website: <http://www.globaloceans.org>

1. Implementing the Pacific Islands Regional Oceans Policy: A Rapid Assessment on the Status of Ocean and Coastal Management in the Pacific Islands Region with recommendations for Immediate Priority Actions

Cristelle Pratt and Mary Power, Pacific Islands Applied Geoscience Commission (SOPAC), and Alf Simpson, Independent Consultant (2006)

2. Strategies for Implementing Coastal and Ocean Management in the Wider Caribbean Region

Franklin McDonald, United Nations Environment Programme, and Peter Edwards, University of Delaware (2007)

3. *Implementation Strategy for Advancing Ocean and Coastal Management in the Atlantic SIDS*

Marina Pereira Silva, Independent Consultant, Cape Verde, and Isabel Torres de Noronha, Portugal, Oceans Strategy Advisor to Community of Portuguese-Speaking Nations (2006)

4. *Atlantic, Indian Ocean, Mediterranean, and the South China Sea (AIMS) SIDS Rapid Assessment: Policy Analysis on Strategies for Implementation of Ocean and Coastal Management Priorities*

Nirmal Jivan Shah, Nature Seychelles; Peter Edwards, Jamaica; LaVerne Walker, St. Lucia; Lindsey Williams, US (2006).

5. *Assessment of East Asia's Capacity Building in Oceans and Coastal Governance*
PEMSEA, UNESCO-IOC, and the Global Forum on Oceans, Coasts, and Islands (2007)

6. *Assessment of Africa's Capacity Building Needs for the Development and Implementation of Ecosystem-based Ocean Governance*

Ali Mohammed and James Kamula, New Partnership for Africa's Development (NEPAD) Coastal and Marine Coordination Unit (COSMAR) Secretariat (2008)

7. *Capacity Assessment in Ocean and Coastal Management in Latin America*

Secretariat of Environment and Natural Resources (SEMARNAT), Mexico, and Patricia Arceo, Consejo Nacional del Agua (2008 assessment in draft)

8. *Assessment of Needs in Capacity Development for Ocean and Coastal Management in the Community of Portuguese-Speaking Nations*

Community of Portuguese-speaking Nations (CPLP) (2006)

While these assessments differ in the details of what is available and what is lacking in each region, they invariably emphasize:

--the need for long-term funding and commitment to achieve the institutionalization of capacity in ocean and coastal management, getting away from "a string of short courses which do not add up to professional accreditation in the field;"

--the need to enhance in-country and in-region capacity, getting away from overreliance on study abroad arrangements and on "twinning arrangements" with developed countries;

--study materials and curriculum geared to national needs and in the relevant national languages

Considering what type of capacity development is needed, the various assessments as well as the Policy Brief on Capacity Development discuss various forms of capacity development aimed at national, provincial and local decisionmakers; local communities; training the next generation of leaders; the private sector; the public-at-large.

Given that the Global Forum is a global entity bringing together ocean leaders from governments, international agencies, NGOs, science groups, and the private sector to advance the global oceans agenda, it seems most appropriate for the Global Forum to focus especially on the development of strategic directions to foster, on a long-term and continuous basis, the further development of current ocean leaders and to educate and train the new generation of ocean leaders.

By “ocean leadership,” I mean the development of a broad vision and skills to be able to address the thorny issues related to oceans, coasts, small island developing States, biodiversity, and climate in an integrated manner, understanding the interrelationships among issues and the impacts of uses and activities on the marine environment and on each other. While rooted in the context, culture, and experience of a particular country, an ocean leader will have the ability to understand the complex interplay among international, national, and local policies and politics which typically molds actions in the oceans area. The ocean leader will have a deep appreciation of the meaning of ocean stewardship and of public benefit from sustainable ocean use and of his/her personal responsibility to future generations and to the global community in this regard. The ocean leader will have, as well, the capacity to think, act, and negotiate strategically to advance stewardship of oceans at national and international levels. The ocean leader will have the capacity to negotiate strategically with other countries and the private sector to insure that the ocean resources in the areas of his/her national jurisdiction are used sustainably and for the benefit of the country’s public and especially of its coastal communities. The ocean leader will have sufficient knowledge and understanding of marine science, economics, public administration, and politics, to enable him/her to formulate and implement ocean policies in an effective and efficient manner and with lasting benefits to the public and to coastal communities.

To foster the continued development of current ocean leaders, in-service training and ocean awareness workshops would be a good avenue for fostering the further development and skills needed to develop and implement appropriate policy measures to manage oceans sustainably.

Regarding educating and training the new generation of ocean leaders, specialized programs in ocean and coastal management will be needed in universities, especially at the post-graduate level, with the collaboration of training institutes in the field. There should be engagement of national authorities in the establishment and operation of these programs so that the programs can be institutionalized and play a useful role in assisting the country’s ocean development at both national and local levels, through targeted research and outreach that addresses the country’s ocean problems. A model that has been advocated by many which I also think would be most useful is the development of Regional Consortia involving university institutions in several countries where each

university would be a focal point in a particular specialty and where students could travel and take courses and get credits at the other participating institutions.

The University Consortium of Small Island States, created at the 2005 Mauritius International Meeting, represents a good model of how such Consortia might operate, since the Chancellors of the participating universities—Universities of Malta, Mauritius, South Pacific, Virgin Islands, and the West Indies, have already agreed to create curricula that serves the broader agenda of supporting the Mauritius mandate for Small Island Developing States and involves free exchanges of students with portable credits.

All of these suggestions will, of course, require funding, both domestic and external. Mobilizing to generate country buy-in and multi-donor funding will be an important priority.

In the next phase of the Global Forum’s work, we hope to have seed funding to begin moving in this dual direction—ocean leadership training for high-level leaders and education of the next generation of ocean leaders with Global Forum partners. We thus look forward to the Global Conference discussions for detailed recommendations in this regard.

Discussions on Capacity Development at the Global Oceans Conference

1. Consider the implications of the Capacity Development Policy Brief. What specific directions should be adopted?
2. Consider the question of ocean leadership awareness and training for high-level leaders. What would be the most efficient way of carrying this out in various regions? Through what modalities?
3. Consider the question of education, training, and certification of new ocean leaders using in-country universities and possibly collaborating in Regional Consortia. What form would such programs take? How could such a system be mobilized?
4. Consider the question of enhancing the ocean and coastal management curricula of universities participating in the University Consortium of Small Island States (UCSIS). What is the current situation? How can the “ocean” aspect of the UCSIS be enhanced?
5. Consider how the Working Group on Capacity Development and the Working Group on Public Education/Outreach/Media can best collaborate to produce and apply public education materials that can be used to educate broad audiences as well as be tailored to particular community settings.
6. Discuss how a multi-donor initiative in capacity development, coupled with in-country buy-in and support from regional entities, can be mobilized to support the capacity development initiatives noted above.

The Global Forum Secretariat thanks with deep appreciation all the members and leaders of the Working Group on Capacity Development who have been working together for several years to make critical advances in this crucial area. In particular, the leadership and vision of Dr. Indumathie Hewawasam who has led the capacity development group of the Global Forum since 2001, is acknowledged with sincere gratitude, as is the leadership and vision of Dr. Awni Behnam, head of the International Ocean Institute, who has contributed so much to advancing oceans governance capacity around the world.

Biliana Cicin-Sain
Global Forum on Oceans, Coasts, and
Islands

Policy Brief:

Strategic Interventions for Developing Capacity to Improve Governance of Oceans, Coasts, and Small Island Developing States Over the Period 2008 to 2018

1. What is Capacity Development?

There are a number of definitions for capacity development or capacity building. According to the recent study published by the National Research Council (NRC) of the National Academies of Science (NAS) (2008):

Capacity building describes programs designed to strengthen the knowledge, abilities, relationships and values that enable organizations, groups and individuals to reach their goals for sustainable use of ocean and coastal resources. It includes strengthening the institutions, processes, systems and rules that influence collective and individual behavior and performance in all related endeavors. Capacity building also enhances people's ability to make informed choices and fosters their willingness to play new developmental roles and adapt to new challenge.

The World Bank Institute, in a report published in 2004, defines "capacity" as "the ability to access and use knowledge to perform a task" and capacity enhancement as "focusing on performance in carrying out change" (WBI, 2004).

In the context of sustainable management of oceans, coasts and small islands, capacity development involves investment in people, institutions, and society to understand the values associated with the

resources of the ocean and coastal areas. Capacity development in institutions is to improve their processes and build technical skills to perform their mandates better. Capacity building in civil society is to empower people to understand and resolve issues associated with managing resources and to maximize the opportunities towards a better livelihood.

2. Why is developing capacity important for managing oceans, coasts and small island states?

The issues confronting oceans, coasts and small island states are becoming ever more serious. The trends combined with new and emerging issues are placing national, regional and global institutions at risk. Addressing them on a sustainable basis requires capacity at different levels: in government, in the private sector, in NGOs and at the community level. To mobilize external or internal financing to address issues requires capacity. Using the funds efficiently and effectively also requires capacity. To ensure sustainability of ocean and coastal programs, managing risks, monitoring, scaling up and replicating successes cannot be done in the absence of capacity. Developing policy institutions towards good governance will not happen in the absence of capacity. Ensuring equity and sharing of resources require capacity. Using or misusing information depends on capacity. Compliance with international conventions and agreements requires improved capacity. Enabling people to engage their governments on access to resources and management of

those resources effectively requires capacity. Using and managing technical assistance effectively needs capacity within government. Negotiating access agreements with the private sector will prove to be detrimental to the nation in the absence of adequate capacity. Monitoring, control and surveillance to reduce illegal activity will not happen in the absence of capacity. Managing conflicts between resource users requires capacity. Ownership of a program to manage ocean and coastal resources and space requires capacity. Effective and credible leadership is dependent on capacity.

There are many projects and programs to support capacity. Usually they are part of large investments funded by the donor community. Equally, there are a number of academic programs that play a big role in capacity development. The IOI 'Ocean-Learn' training programs are an example. However, as noted by the NRC study (NAS, 2008), these programs are typically "fragmented, lack standards for effective monitoring and evaluation and are frequently too short-term to achieve and sustain effective ocean and coastal management". Other challenges are discussed in the next section.

3. Why is the success of most capacity development programs mixed at best?

Drawing from the NAS study as well as the Regional Assessments supported by the Global Forum on Oceans, Coasts and Small Islands¹, there are a range of reasons

¹ The Global Forum on Oceans, Coasts and Islands supported 8 Regional Capacity Needs Assessments to get an understanding about the issues and constraints the different regions are facing in capacity development and the options to resolve these issues on a regional basis. These assessments have provided valuable contributions to this paper. The different papers and their authors are cited in the references.

for the mixed success of capacity development programs. They include:

- a) **Ownership: Whose project is it?** CD programs often lack ownership, being too removed from the local context. Often the programs reflect external priorities rather than the regional, national or local priorities. They are not linked to ongoing programs in the region or country. External advisers run the program from inception to closure without transferring technical know-how to the local level. The programs are designed with little input from national stakeholders, the monitoring and evaluation is done by external consultants and advisers who often refer to the program or project as being 'my program'. These programs normally die when the funding ends with a few people trained and many studies carried out. In many instances, key stakeholders in government are not even aware of the program and in some instances request another donor to support the very same program or elements of it. If sound policies are to be enacted and the institutional framework is to be strengthened to manage the ocean and coast resource wisely, government has to have ownership of the program. Externally-driven policy is either not enacted by Parliament or even if enacted will not be implemented.
- b) **Lack of Political Will.** Political will is related to the Ownership issue. The presence or absence of political will largely impact the success of the CD program. Capacity development for an Integrated Coastal Management (ICM) program at the regional and local level will not be successful if the national policymakers are not aware or supportive of the program. Zoning or gazettement of sensitive areas will not take place and efforts to control illegal or unsustainable activity will not

succeed in the absence of support from the national level. At the same time the presence of strong political will at the regional and local level can bring pressure on the national level in situations where the national policymaker may appear to be influenced by vested interests.

c) **Limited Engagement of Stakeholders.**

CD programs that are externally driven sometimes fail since they do not engage all relevant stakeholders. For example, they may focus on national level actors whereas the government is emphasizing decentralization. Regional or provincial and local level stakeholders may have little ownership or capacity to implement the policy driven by external and national actors. In the same way, a CD program in support of, for example, the establishment of a marine protected area may only focus on conservation dimensions when the government's emphasis is on poverty reduction and employment generation. Implementation will likely fail since the program designers have not built on synergies within the national policies and discussed options such as multiple-use marine management areas with core conservation zones.

d) **Short Term and Fragmented Nature of Typical Investment in CD.** CD programs to be successful typically require a long-term engagement. Unfortunately, most donors cannot commit resources for more than 5 or at most 6 years. Due to the common lag time in the start up of a program, the CD initiatives start implementation in the second year. This situation typically leaves 2-3 years to implement the CD which is unrealistic, especially where the recipients of the CD are starting at a very low level. The investments are also fragmented rather than comprehensive. They do not have

a holistic vision, with a focus on linkages between sectors and CD programs in other sectors. For instance a CD program for ICM needs to be fully integrated with the government's decentralization program to be successful and sustainable.

e) **Lack of Coordination Among Donors.**

The lack of coordination among donors supporting CD is a serious problem. Single sector focus, attention on only one level of government or only on the community level and fragmentation are all common problems. Coordination also has its challenges including the different administration and financial procedures, and funding cycles of different donors. Other difficulties include changing thematic focus of different donors. In the Africa region, all multilateral and many bilateral donors have agreed to financing the priorities governments lay out in their poverty reduction strategies. This comprises a programmatic approach to funding to allow coordination and synergy. There are, however, advantages and disadvantages with this approach too. The poverty reduction programs rarely focus on ocean and coastal sectors. The rationale is that these sectors: fisheries, tourism, oil, gas, mining, all earn revenues (as opposed to e.g., education and health). This is, however, a "catch 22" situation because the revenues earned often have to be transferred to the national treasury. CD in these sectors is therefore donor dependent. And the donors are dependent on their respective procedural requirements and thematic emphases. The ideal solution in this type of situation is for the government to play a lead role in coordinating the different donors around a set of CD objectives. In order for the government to play this lead role, they need to have sufficient

awareness and ownership of the oceans agenda. This topic is further discussed in the implementation section.

- f) **Poor attention to Context.** Many CD programs are designed with very little attention to the context. Even within one region there are a number of variations in capacity. As noted by Mohammed and Kamula, in the Africa region, management and scientific capacity and decision-making in the region vary greatly. They cite the example of South Africa and Comoros. The authors also note the differences of language, varying political and legal approaches to ocean governance, differing levels of literacy and opportunities for marginalized people to appreciate the values of the oceans and coasts.

Other problems cited by the NAS committee and regional assessments include: (i) corruption - "...new policies and reforms will only be as effective as the government responsible for implementation and enforcement. There is little incentive for stakeholders to develop the capacity for better ecosystem and resource management if their efforts are likely to be undermined by a corrupt or weak national government" (NAS, 2008); (ii) issues of scale: "successfully addressing coastal environmental problems requires recognition of the problem, mobilization of resources to develop solutions, and leadership to drive change (Agardy, 2005) ; (iii) ineffective governance structures and (iv) conflicting priorities.

4. Strategic Framework for developing and enhancing capacity for ocean and coastal governance

In a resource-constrained environment, often the question arises where should

investments in CD in ocean and coastal management be? It is obviously a difficult question and it will be a great challenge to make all stakeholders happy with a single framework or response.

In order to attract support from multilateral, bilateral, NGO, and private sector partners the framework for CD needs to be linked to the global priorities of this donor community. This is sometimes a moving target since the priorities of the donors also change according to global phenomena, political priorities of the donor nations, and economic realities. Most importantly, the CD agenda needs to be closely linked to national priorities in order to mobilize political leadership and interest in the program, which will in turn enable budgetary and human resource allocations in support for the program.

There are many ways to prioritize the CD agenda. The following is one such, taking into consideration donor priorities and emphases as well as client priorities as outlined in the 8 regional needs assessments and the current and emerging issues in the ocean and coastal environment.

A. Sound Governance of Oceans and Coasts and Small Islands

The NAS study (2008) defines governance as encompassing the values, policies, laws and institutions by which a set of issues is addressed. The study draws on the findings of Juda and Hennessey (2001) to express the processes of governance as being: markets, governments and the institutions and arrangements of civil society.

Governance is a priority theme for most donors including multilateral and bi-lateral as well as NGOs and the private sector. Sound policies, effective legislation and institutions are a pre-condition for managing the oceans and coasts and small islands. The compliance with national and international agreements requires both

political will and human resources to implement the obligations. De-limitation of EEZs need both political leadership and collaboration with neighboring governments. The shift from ‘open access’ situations to ‘managed ‘access’ requires both political will to develop appropriate policy and to commit resources for implementation of the policies through effective institutions. Regional cooperation for managing transboundary resources also requires political will to put in place sound policy, harmonized legislation and effective institutions. At a different level, a seaweed farming association needs the support of a credible legal and institutional framework that enables access to credit, markets, information and technology for increased productivity. In the same way, a coastal tourism operator relies on a transparent legal and institutional framework to ensure that his business can be run profitably as well as sustainably. Civil society as a whole has a stake in the sustainable and equitable exploitation and management of revenues of marine resources, whether fish or diamonds, oil or gas. Establishment of an enabling and transparent framework for private enterprise development is the role and responsibility of government. Non-transparent governance regimes are often associated with market failure, where information regarding the resource and contract details is shared only with the privileged.

Many of the priorities identified in the 8 regional needs assessments can be captured within this overall agenda. They include:

- maritime boundary and continental shelf demarcation;
- application of the ecosystem management approach to coastal and oceanic fisheries through implementation of adaptive management frameworks;

- getting high level political endorsement and ministerial commitment;
- improved inter-agency coordination and collaboration;
- high-level capacity building to enhance political support for ocean governance;
- contingency plans for preventing or mitigating marine pollution;
- increase national capacities for sustainable development of marine resources;
- shifting from sectoral approaches to cross-sectoral approaches;
- close coordination and communication among member states for maritime surveillance of EEZs;
- development of coastal management plans;
- establishing and strengthening national regulatory enforcement authorities;
- strengthening of management structures, processes and procedures within and between institutions and public, private partnerships; and
- policy, legal and regulatory reform at all levels and in all sectors to enhance their capacities.

To provide some added flavor, promoting good governance includes monitoring, control and surveillance (MCS) of the nearshore and offshore marine environment, fiscal management including improved and transparent management of fisheries licenses, taxes and levies, and improved management of the revenues including equitable sharing of benefits. Similarly, improved legislative and institutional structures for marine protected areas, better definition of these areas using improved science, development of improved management plans and sound enforcement of

management plans and processes, all require capacity development.

Developing public/private partnerships is very important to ensure sound exploitation of resources, whether they are fisheries, oil and gas, tourism. This will be further elaborated in a subsequent section. The role of the government is paramount in establishing the parameters for ensuring environmentally sustainable exploitation of the resources, compliance with national, regional and global conventions and agreements and equitable benefit sharing. Engaging the private sector in sustainable tourism, seaweed harvesting, aquaculture, managing marine parks, exploitation of fisheries and other natural resources requires transparent legislation, institutions and procedures. An informed public is also a great asset in monitoring the activities to ensure both environmental sustainability and social inclusiveness. The development of strategic environmental assessments, environmental impact assessments, stock assessments, environmental and social baselines, monitoring, value chain analyses, and assessment of markets and access to credit all require sound capacity.

B. The Scientific Agenda

Investment in science is a prerequisite for the development of sound policy for ocean governance. Investment in CD to promote the scientific agenda becomes even more significant in light of the emerging issues related to climate change, the volatility of social systems, economic upheavals. Developing sustainable solutions to current and emerging issues requires sound scientific understanding. Developing ecosystem approaches and adaptive management frameworks for managing resources requires sound science. Nearshore or offshore fisheries management is based on fish stock assessments, trends assessments, satellite data assessment, the assessment of the health of spawning grounds. The same is true for mariculture and aquaculture where

disease control is a serious issue. Science is a large part of environmental impact assessments and strategic environmental assessments. Minimizing environmental impact in the exploitation of marine resources is dependent on sound science. The assessment for Atlantic SIDS, for example, expressed a priority for developing contingency plans for preventing and mitigating marine pollution. Sound science is the base of such plans. Harnessing wind or wave energy, improving de-salinization, and improved carbon sequestration from mangroves all is dependent on science. At the local level, value addition of marine products as well as coastal products towards accessing higher prices and better markets could be the result of investment of science. Transboundary assessment of ocean pollution or migratory fish stocks requires scientific capability. Decision-support tools, such as GIS, are helpful in spatial planning, zoning and integrated coastal management.

Preparation and adaptation for climate change requires significant investment in developing capacity. Capacity needs to be developed in areas such as: the establishment and monitoring of early warning systems; understanding meteorological data, issues related to ocean acidification, impacts of higher levels of Carbon Dioxide and sea surface temperatures; and adaptation for storm surge, sea-level rise, nearshore fisheries, coral reef and MPA management.

Developing capacity should not be limited to the natural sciences. Investment in capacity in the social sciences has often been found to be at a much lower level than investments in the natural sciences. In many instances policy failure is associated with the lack of appropriate input from local stakeholders whose lives the policy is intending to improve. According to the NAS study (2008):

Knowledge that is relevant to good stewardship comes from many sources, including elders, cultural practices, communities, local resource users, nongovernmental organizations, private sector, governmental agencies and academia.....capacity building involves the exchange of information and expertise – between the builders and the local people who seek assistance.

An important point to note is that in the absence of capacity and political will, the findings of scientific findings will not be incorporated into policy. Policymakers therefore need capacity or awareness of the importance of science and thus support the investment in, and the development of scientific research. Chua (2006) refers to the experience in Xiamen, where scientific advice has been mainstreamed through a Marine Experts Group, which is an integral element of existing institutional arrangements. This Expert Group has in turn been able to mobilize technical assistance and expertise from different research and academic institutions to provide technical backstopping to local government. This type of mainstreaming of scientific finding is essential to ensure that the output from research is incorporated into government policy and processes.

C. Poverty, Local Empowerment and Sustainable Livelihoods

No CD program for sound management of oceans and coasts in the developing world will be complete without attention to poverty among coastal communities and their dependence on ocean and coastal resources. Much has been written about the linkages between poverty and environmental degradation. One cannot attempt to address the one without addressing the other. CD to improve the

governance of oceans and coasts can play a significant role to promote empowerment of these communities to manage their resources better and to adopt more sustainable livelihoods. There are many examples around the world where community managed marine areas or locally managed marine areas are helping in the recovery of degraded marine resources. The NAS study (2008) discusses how CD helped achieve sustainable exploitation of fisheries and ecosystems in Chile. Initiated with a small investment of US\$5.5 million the CD program had targeted 300 small scale fishers. The initiative has been the basis for expansion to more than 500 management and exploitation areas for benthic resources (MEABRs) including more than 15,000 fishers along the Chilean coast. The program has resulted in “increased fishing income, retained and enhanced community and cultural identity and served as basis for community empowerment” (NAS, 2008, Box 3.2).

The World Resources Institute (2005) reports on the successful recovery of coastal fisheries in Fiji through the establishment of locally managed marine areas (LMMAs). The study emphasizes the blend of the traditional conservation practices and the modern methods of monitoring for improved incomes and better management of the resource and ecosystem. The Fiji LMMA network has been successful in establishing 71 sites at an approximate cost of \$400,000 in external funding, which had mainly been for consultative workshops of CD. The innovation in this project is the income generating component in the management plans and the partnership with the private sector. According to WRI, in Verata, a bioprospecting arrangement had been set up with a pharmaceutical company in which the community was paid licensing fees for samples of medicinal plants and marine invertebrates collected in their district. The \$30,000 generated had been

put into a trust fund to support the sound management of fisheries activities (WRI, 2005, p.144-148).

CD is required to ensure that the governance regime that controls access to land, the marine areas, credit, markets, information and technology are equitable. As many of the marine and coastal products are developed for the international market, information on world prices, whether of fish, sea-weed or oysters can assist the harvesters in negotiating the price with middlemen or directly with the buyers. Capacity is also required to promote the formation of associations, whether for fishing, mariculture, eco-tourism or other enterprise. Donor (or government) assistance can be channeled more easily to a community association than to individuals. The provision of technical as well as project management skills can also be organized in a more efficient manner.

Partnerships to be discussed later in the paper, are very important to ensure the sustainability of community initiatives. They are particularly important in the provision of assistance for value addition, credit and access to markets. In Tanzania, public/private partnerships are helping seaweed farming associations to get assistance to add value to their product, to access credit and inputs and markets.

5. Implementing the Strategy

Once the need for CD is established, from a donor perspective, the first priority would be to find out where and what strategic areas the resources would be spent. The next priority would be to learn who or which institutions would assist in delivering the CD. Third, the donors would be keen to know the strategies for ensuring sustainability of the investment. All of the following elements of a strategy are focused on ensuring sustainability.

A. Political Will and Leadership.

Implementing a broad strategy such as CD for ocean and coastal governance would firstly require political will and strong leadership. Generating political will and enabling leadership also requires CD. Chua (2006) discusses the efforts of PEMSEA where large numbers of mid-level government officials in the region trained in management as well as technical skills in rapid appraisal, risk assessment, environmental monitoring, economic valuation and governance. These officials have become the leaders of ICM in their respective countries.

In order for a CD strategy to address this problem effectively, a multi-pronged strategy is needed that addresses: awareness raising and influencing the political leadership; enlightening and empowering the civil society which comprises voters; and the strengthening of institutions to place greater emphasis on public-private partnerships and participatory mechanisms in the governance of coastal and marine resources..

B. CD is Required at All Levels of Government and for Civil Society Organizations.

As mentioned above, capacity is needed to be developed at all levels of government and in civil society organizations for a program to be successful in achieving sound governance of oceans, coasts and small island states. Mobilizing political will requires awareness raising at the national level; ensuring the enactment of sound policy requires capacity at the national as well as provincial and local level. The media and journalists also need training and awareness raising to disseminate the right messages. Parliamentarians also need awareness raising seminars. In Tanzania, all these levels were focused on, in order to get a key piece of legislation, the Deep Sea Fishing Authority (DSFA) Act of 1989 amended and passed by Parliament. The

Amendment aimed at establishing a common and sound governance regime and incorporated an equitable revenue sharing agreement between the mainland Tanzania and Zanzibar. The concerted effort, a key element of the World Bank and GEF supported Tanzania Marine and Coastal Environmental Management Project led to the unanimous passage of the DSFA Act Amendment in early 2005.

CD for sound governance of oceans and coasts also needs to support the decentralization efforts of government. As power over natural resources is gradually decentralized, the regional and local levels of government need the capacity to manage these resources in a sustainable and equitable manner. In the GEF-supported Namibia Coastal Management Project (NACOMA), the project supports the decentralization efforts of the government towards empowering regional and local governments and community organizations in the development and implementation of an integrated coastal management policy for the Namibian coast. We discussed the need for empowerment and developing capacity for community organizations under the section on Poverty.

C. Partnerships

Implementation of CD also requires many partnerships in government, in the non-government agencies; in the private sector and with regional organizations; in academia and in research institutions. The challenge sometimes is for governments to recognize that they are ill equipped to handle a large CD program by themselves. They are also suspicious of consultants, and sometimes with reason, since outputs have not always been what the terms of reference called for, or what the government needed. The recommendation from the PEMSEA assessment (2007) is therefore of interest. As mentioned earlier, it calls for the creation of a network of ICM trainers and practitioners to facilitate

a discussion of existing efforts, training courses, current and emergent issues in the region, towards strengthening the quality, efficiency of delivery and innovation in CD programs.

There is growing recognition however, that regional organizations are well equipped to foster a culture of information sharing and communication. Many regional organizations already have mechanisms through which they disseminate scientific and policy information in the region. They use scientific symposia, newsletters to promote scientific and policy understanding in the region. The NAS study (2008) recommends: “regional centers for ocean and coastal stewardship should be established as “primary nodes” for networks that will coalesce efforts to fulfill actions plans. These centers will require a contingent of experience-based professionals and infrastructure to serve as a resource of the entire network.” The idea is that these organizations, being from the region and comprised of practitioners from the region would be better able to serve the needs of their national and local counterparts.

Involving the private sector in these CD initiatives can ensure the sustainability of the program. Public -private partnerships have proven to be useful in continuing to develop capacity in the community even after the external financing has been fully utilized. Adding value to a marine product (example seaweed), training people to be more efficient and productive, ensuring that they are empowered to obtain credit and inputs are of interest and benefit to the private partner. It is in the interest of the private partner if the product is of sufficient quantity and quality. This type of partnership is a way of minimizing risk and vulnerability to both the community and to the private partner. In the same way, a tourism entrepreneur is interested in ensuring that the beach is clean and there

is no dynamiting of fisheries that destroys the reefs and the fish. The tourism entrepreneur is therefore interested in working with the fisheries department and the municipality and community groups in monitoring and controlling the illegal fishing activities. Both types of public private partnerships are being implemented in Tanzania with support from the Tanzania Marine and Coastal Environmental Management Project on a small scale. If successful, they can be replicated widely.

Transparency in legal and institutional processes, investment in science, and sound level of skills in the community are all of interest to the private sector. The private sector can play a very effective role in promoting co-management of MPAs, promoting sound levels of exploitation, eco-labeling and branding, promoting access to markets, investing in adaptation and minimizing risk.

D. Information Sharing and Communication

Power and information are closely linked. Information regarding the resource, rules pertaining to access, other rules that govern exploitation, information regarding the market, financing and other key pieces of information may only be available to some and not others in certain regimes. The sharing of this information 'levels the playing field'. Sustainable exploitation of ocean and coastal resources is dependent on information sharing, communication and networking. An example of such an information sharing network is the Atlantic Coastal Zone Information Steering Committee (ACZISC) – (<http://aczisc.dal.ca/>). The ACZISC was established in 1992 to promote regional cooperation in Atlantic Canada with regard to Integrated Coastal and Ocean Management, coastal mapping and geomatics. The ACZISC is multi-disciplinary and multi-sectoral with representation from ten Canadian federal

departments, four Atlantic provincial governments, community organizations, academia and the private sector

Sustainability of the investment in CD can be ensured only through sharing, dissemination, replication and communication. Often, governments are not well equipped to promote this, nor are officials in government who receive training. In a 'business as usual' scenario, the information gathered in CD programs may well sit on a shelf. In many government systems there is no official mechanism to share the information a trainee has received.

In the IOI training programs, course participants are required to disseminate knowledge gained from the training program by means of presentations to their own and/or related agencies. Each participant holds a seminar/ workshop for colleagues in their home country, to share the knowledge and information acquired. Colleagues have access to best practices and information that may be unavailable in their own country. The seminars promote institutional capacity-building and encourage networking among oceans-related decision makers.

One problem with regard to resource management at the government level is that there is also a great degree of confidentiality regarding information related to resource data and revenues from ocean sectors whether fisheries management, MPA management, oil or gas exploitation. Sharing this type of information is traditionally not allowed. Transparency with regard to these issues is critical to inform the citizenry about the benefits from resource exploitation and the sharing of these benefits.

Data on licenses or revenue from EEZs and revenue from oil exploitation from offshore or gas exploitation may be difficult to obtain. The details of access

agreements and revenue sharing arrangements are often considered confidential. Regional programs such as the LME programs have the facility to promote the sharing of resource use agreements towards improvement of sustainability and equity in benefit sharing.

As many regional needs assessments identified, sharing of experience between and among countries can be very beneficial. South-South cooperation can help maximize comparative advantages. In the Wider Caribbean region, the need for improved inter-agency coordination and collaboration was emphasized. The strengthening and formalization of linkages among the GEF supported Caribbean International Waters project, the LME Ecosystem and White Water to Blue Water Initiative and Meso-American Barrier Reef Program were specifically mentioned. South-South cooperation, particularly among SIDS with regard to drawing, sharing and application of lessons learned was emphasized (Edwards et al, 2007). Similarly, the Community of Portuguese Speaking Nations (CPLP) emphasized the need for strengthening or creating coordinating mechanisms at the national level to make information and data available both nationally and with other CPLP members through a network of focal points for ocean issues (Torres de Noronha, 2006).

Fostering communication needs many actors: governments, national and international NGOs, regional organizations, and by specialized Communication networks such as IW:LEARN of UNDP/GEF ² and DLIST (Distance Learning and Information

² IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. IW:LEARN aims to strengthen International Waters Management by facilitating structured learning and information sharing among stakeholders. (www.iwlearn.net)

Sharing Tool) ³ promote shared learning and communication. An informed citizenry can perform an effective monitoring role and keep their governments honest through debate and participation in decision-making processes. Networks are a very effective way of promoting learning, sharing experience and information dissemination. They can also help in minimizing duplication and increasing efficiency. As noted by the NAS study (2008):

Networks are vital to advancing capacity in ocean and coastal stewardship. Networks and networking are cost-effective and efficient mechanisms for maintaining and building capacity. One of the major benefits of networking is bringing like-minded people together to share information, and whenever possible, resources. This avoids duplication of effort recognizes existing excellence in universities, increases information exchange, and foments regional cooperation.

The Assessment of East Asia's capacity needs, identifies the creation of a 'functional network of training institutions' which would promote debates on CD issues such as creating job demand

³ The Distance Learning and Information Sharing Tool (DLIST) is an information sharing process focusing on the transboundary coastal zone of the Northern Cape, South Africa and Namibia. DLIST Benguela aims to assist coastal planners, managers and resource users implement effective integrated coastal zone management (ICZM) solutions. By facilitating information sharing & knowledge management, DLIST seeks to promote the sustainable use, protection and development of our coasts for the benefit of all. (www.dlist.org)

(PEMSEA, 2007). According to the authors, the network could share and compile training course curricula for informal and formal training. A potential advantage would be to review all ICM and marine affairs curricula worldwide in order to identify commonality and innovative approaches.

E. Donor Collaboration

The lack of collaboration among the donors was discussed in the section on challenges for capacity development. The issue is well articulated in the NAS study (2008):

Cooperation among donors can add to capacity building initiatives. Without cooperation donors may support the same types of programs, resulting in redundancy, wasted effort, and competition for the same skilled professionals. At the same time, lack of coordination may leave some important issues unaddressed or under-funded. Joint efforts can result in greater efficiency and reduce transaction costs as well.

Most donors agree with this position and there have been many joint statements issued where donors have pledged to collaborate and cooperate and to provide funding to support the priorities of governments. Donors have also acted on this pledge and there are a number of programs where they pool their resources. Examples are in Africa where most multilateral and bilateral donors pool their resources in support of the government's poverty reduction strategy (e.g. Tanzania, Uganda, Ghana, Benin). There are other programs which are sector specific, which attract 'basket funding' or pooled resources from a variety of donors around a sectoral strategy, whether in agriculture, education, health or water supply. In Tanzania the water supply project is

supported by a number of donors including the World Bank to total more than \$500 million. In India also a number of donors supported the Emergency Tsunami Rehabilitation Program, with the World Bank and the Asian Development Bank contributing the most. There still remains the problem that these programs are not long term as in our discussions for oceans, coasts and small island states.

The LME programs have typically been long term, with different and successive phases. The Bay of Bengal LME program has been supported by donors for about 25 years.

There is experience of donors pooling their resources, but this has happened only where either a fully endorsed strategy is available (e.g. poverty reduction strategy or sector investment strategy); or a set of ecosystem goals (LMEs); or in support of critical ecosystems (the Critical Ecosystem Partnership Fund). More on the latter will be discussed in the section to follow.

F. Financial Sustainability

This is a subject that comes up repeatedly in discussions about CD for ocean and coastal governance, although there are substantial resources committed for supporting ocean governance: for example from the GEF, from the World Bank, all regional Banks, large number of bilaterals and private sector partners and NGOs. The reason why the issue continues to come up is obviously tied to the need for donor collaboration, the targeting of the funding, the need for consistency with the client's priorities and the local context, the fragmentation and the short term nature of financing discussed in the challenges section.

Apart from the large donors mentioned above, there are also a number of different sustainable financing initiatives for protecting and managing the ocean and coastal resources either underway or being

proposed. It is not the aim of this paper to do an exhaustive analysis of all funding sources for CD for managing the oceans. Just a few new initiatives are being mentioned to assess how they may or may not be what the requests are all about.

The Sustainable Seas Trust for the Western Indian Ocean nations of Africa is a financing initiative. According to Anthony Ribbink, noting the looming crises along Africa's coasts:

Organizations in eight African countries have been inspired to find a long-term solution and have made a global commitment to do their part. They have formed and are growing the first independent multi-national transborder Sustainable Seas Trust. This is a new vehicle for funding African initiatives to conserve marine genetic resources and meet the needs of coastal village communities. It is hoped that the global community will also make a commitment to support the Trust (Ribbink, 2007).

The world famous ocean explorer and Scientist Sylvia Earle's vision Defying Ocean's End has estimated the overall cost of implementing the agenda at US\$18.6 billion over ten years (www.defyingoceansend.org).

The Critical Ecosystem Partnership Fund (CEPF), the second phase is supported by the GEF, France and the MacArthur Foundation is not focused only on marine and coastal ecosystems. However, "it aims to strengthen the involvement and effectiveness of civil society in contributing to the conservation and management of globally important biodiversity. The Global Environmental Objective is to achieve sustainable

conservation and integrated ecosystem management in areas of globally important biodiversity, through consolidating conservation outcomes in existing CEPF regions and expanding funding to new critical ecosystems" (World Bank, 2007. p.4).

At the community level, sustainability of the initiative is demonstrated when they are self-sufficient and no longer require external financing. Micro-credit initiatives go a long way in helping these communities in ensuring that the enterprise is viable and has the potential for growth. Micro-credit initiatives have been highly successful in many parts of the world and particularly in South Asia where the Grameen Bank model was pioneered by Mohammed Yunus. A CD initiative can focus on ensuring that the legal and regulatory regime favors the formation and maintenance of village banks, community banks, women's banks and other microfinance enterprises. The CD initiative can focus on training the community associations in project management, financial management, book-keeping and information sharing, getting access to markets and to credit. Demonstration projects are also a good way of learning and to promote adaptive management.

The needs assessment for Africa (NEPAD, COSMAR, 2007) proposes promoting sustainable financing capacities and enhancement of opportunities. The study proposes the development and maintenance of a directory of financial mechanisms that may be used at different spatial and temporal scales, within and among ecological and social systems and among the stakeholders in the region. It is proposed that regional organizations publish a directory bi-annually, to enable small and medium sized initiatives to have an opportunity to mobilize funds.

The study proposes a number of areas towards financial sustainability:

- micro-financing models and examples;
- real estate and development rights through concessions, purchase or donation to promote conservation;
- in the fishing industry, tradable fishing quotas, fish catch levies, eco-labeling and certification, access fees and fines;
- bioprospecting;
- eco-tourism accreditation;
- government revenue allocation through direct bonds and earmarks for marine conservation, tax exemption;
- grants and donations through bilateral and multilateral sources; and
- carbon credit trading and the potential to develop similar trading opportunities and off-sets by managing the oceans and their ecosystems better.

The authors propose that the implementation of these and other strategies be through a proposed African Marine Ecosystem-based Capacity Building Foundation based on the lessons learned from the Madagascar Foundation. Much more detail about the concept is provided in the report by J. Church et al (2007).

Establishing new regional institutions, foundations and trusts do have a cost in terms of resources and the expert time, not to mention the endorsement of the national governments in order to generate ownership. Broadening the mandate of an existing regional institution with a sound record may be easier in terms of the political process as well as accreditation. The areas proposed in the NEPAD, COSMAR report are indeed priorities which have not received much focus in either the national or regional programs, except perhaps in the case of fisheries. The need is undoubtedly there, but the subject requires much more discussion.

6. Conclusion – Thoughts to be further discussed

Some questions we can discuss in this section include:

- a) “who’s capacity are we striving to build?”
- b) if many groups – from politicians, senior bureaucrats, program managers, NGOs, CBOs, media – what specific strategies are required to reach them effectively.
- c) what is the level of capacity that various target groups require? - general information, short-term courses, Masters/Ph.D. levels, life-long learning?
- d) would this not depend on the needs from each region and within each region, each country. E.g. In the Africa region, South Africa would certainly not require the same level of capacity development as their neighbors in Angola.
- e) The delivery of CD necessarily needs to be within a framework that stakeholders can understand and will buy into. As we have discussed earlier, the strategic interventions need to be tailored to the needs of each region or country.
- f) Should we not also consider emerging strategies such as resilience building and those that promote self-organization.
- g) We need to remember however, that this are strategic interventions for the Global Forum to support. The interventions will need to be determined bearing in mind the resources available and the comparative advantage of potential partners to deliver the CD.
- h) Multi-Donor Conference – Should we not support a multi-donor Summit to agree on a strategy to promote greater coordination on the subject of CD? This could

bring ocean leaders, both in government, in non-governmental circles, private sector including academic institutions together with the donor community some organizing principles could be decided on.

References

- Agardi (2005). Global marine conservation policy versus site-level implementation: The mismatch of scales and its implications. *Marine Ecology Progress Series* 300: 243-248.
- Chua T-E. *The Dynamics of Integrated Coastal Management: Practical Applications in the Sustainable Coastal Development in East Asia.*, PEMSEA, 2006
- Church, J. Mohamed, A. Kamula J. “Assessment of Africa’s Capacity Building Needs for the Development and Implementation of Ecosystem-based Ocean Governance, May-August 2007. NEPAD, COSMAR
- Edwards P. McDonald F., “An Assessment of the Caribbean’s Capacity Building in Ocean and Coastal Governance” June 2007.
- Juda L. and Hennessey, T. (2001). Governance profiles and the management and use of large marine ecosystems. *Ocean Development and International Law* 32 (1): 43-69.
- Mahon, R., M. Bavinck and R. Roy. 2005. Chapter 17: Fisheries governance in action. pp 353-378. In. J. Kooiman, M. Bavinck, S. Jentoft and R. Pullin [eds]. *Fish for life: Interactive governance for fisheries*. MARE Publication Series No. 3, University of Amsterdam Press, Amsterdam.)
- National Research Council, Committee on International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts of the Ocean Studies Board (2008), *Increasing Capacity for Stewardship of Oceans and Coasts: A Priority for the 21st Century*, National Academies Press, Washington, DC
- PEMSEA, 2006. “Assessment of East Asia’s Capacity Building in Ocean and Coastal Governance”, The East Asian Seas Congress, December 2006.
- Rivera-Arriaga, E. “Global Strategy for Capacity Development in IC&OM”, Centro EPOMEX-UAC
- “Capacity Building Assessments in Small Island Developing States in the Pacific, Caribbean, Indian Ocean, the Atlantic, and the Community of Portuguese Speaking Countries”, January 2006. [AUTHORS TO BE ADDED]
- World Bank. Project Appraisal Document on a Proposed Trust Fund Grant from the Global Environmental Facility in the Amount of US\$20million to Conservation International for a Second Critical Ecosystem Partnership Fund Project, Washington, DC, November 2007.
- The World Resources Institute. *The Wealth of the Poor: Managing Ecosystems to Fight Poverty*, Washington, DC 2005.
- World Bank Institute. 2004. Capacity Enhancement for Social Development: Building on Local Context and Process. Washington, DC

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