Coastal zone management in developing countries with Kenya as a particular example

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Executive summary

Integrated coastal zone management (ICZM) is a modern environmentalist discourse. As such ICZM should be understood as a social and political struggle over crucial coastal resources and a struggle over the symbolic power to define how and by whom "coastal problems" should be understood and resolved.

ICZM is part of a trend of increasing globalisation and institutionalisation of environmental concerns, which took on after the end of the 1960s. One of the striking characteristics of this trend is the inequalities in terms of political power to decide how environmental problems are defined and resolved. In the case of ICZM, developing countries are put under great pressure to change their coastal management policies and practices - either bilaterally by national donors and NGOs or through international organisations like the UN or the World Bank.

The ICZM literature represents an international orthodoxy about ICZM principles, dimensions, and steps in the cycle of program development, including the following principles:

- Vertical and horizontal integration among agencies of governance
- Projects should proceed according to certain phases/steps (e.g. issue identification and assessment; plan preparation; adoption; implementation; evaluation)
- Public participation in decision-making and management
- In-built capacity building (e.g. adaptive learning-based coastal management)

In practice, these principles are seldom realised due to a combination of inadequate financial commitment, insufficient time and spatial scales of ICZM projects, and unclear governance relations and power struggles. Most ICZM projects and programs are concentrated on *either* bio-physical *or* governance aspects of ICZM, which are rarely properly integrated. Likewise, the scientific articles that analyse these projects tend to focus on *either* bio-physical *or* governance aspects of ICZM. This means that projects are mostly described and evaluated from a single disciplinary perspective.

ICZM experiences in Kenya resemble those from other developing countries. A major step forwards came with the Environmental Management and Co-ordination Act (EMCA) of 1999, which provides the necessary legislative background for establishing a progressive ICZM. While achievements have occurred in a few local sites near Mombasa, the current situation is that ICZM is hindered by: inconsistencies and contradictions between different Acts; lack of detailed guidelines under the EMCA; lack of horizontal and vertical integration in Government institutions; unresolved land tenure and land rights statuses and disputes; lack of knowledge and planning capacity in Government institutions; limited public participation in ICZM.

While the new institutions established under the EMCA such as the District Environmental Committees (DECs) hold great potential in terms of public participation and horizontal and vertical integration of coastal management, the study of one DEC in Malindi District showed that there is no communication between different DECs, nor is there collaboration between this DEC and the Provincial Environmental Committee in Coast Province. Mostly, the DEC deals with environmental impact assessments and very little coastal planning and data collection is done. Still, with better data and planning tools available the active Malindi DEC could be realise its potential.

1. The project: background and implementation

1.1 The KenSea Atlas

In 2006, a team comprised of Kenyan and Danish researchers developed an Environmental Sensitivity Atlas for Coastal Area of Kenya (Tychsen, J. 2006). The "KenSea Atlas" and its GIS database are elements in Kenya's National Marine Oil Spill Contingency Plan as they provide an environmental data dictionary to be utilized by relevant authorities for purposes of risk assessment, clean up prioritization and selection of appropriate methods and tools of response in cases of oil spill. In the Atlas, the coastal environment is described and mapped in easily accessible form with an emphasis on data about climate, hydrology, geology, geomorphology, oceanography, and coastal ecosystems. The human uses of coastal resources are outlined with particular reference to the economic importance of the coast in terms of fisheries, mineral production, and tourism. These sets of data are combined in a series of maps that show the level of sensitivity to oil spill in different geographical locations.

Despite the inclusion of data that show the human use of Kenya's coastal resources the KenSea Atlas is thematically and methodically concentrated on the biophysical features of the coast. This facet of the KenSea Atlas is characteristic of most other coastal resource and management studies where the focus tends to be *either* on bio-physical *or* social dimensions of coastal areas while a more comprehensive interdisciplinary perspective is rarely accomplished.

The Copenhagen GeoCenter Post doc. project about coastal zone management in Africa was motivated by a wish to supplement the KenSea material with a more in-depth understanding of the social and cultural dynamics of coastal management in Kenya. Moreover, the project was commissioned to develop a holistic geo-science approach to coastal zone management in developing countries more generally. With such broadly formulated aspirations it was important to specify and prioritise from the outset of the one-year project how to proceed with the work.

1.2 The Post Doc project: How it was carried out.

The first step of the work process was to review the literature on integrated coastal zone management (ICZM) in developing countries. The main purposes of the literature review were to establish an overview of how coastal zone management was defined and carried out in different developing countries and to identify the most important lessons learned from the available cases in these countries (see sections 2 and 3).

ICZM experiences in Kenya and Eastern Africa were studied in greater detail than experiences from elsewhere (see sections 4 and 5). For Kenya additional historical, political and ethnographical literature was included in the review in order to understand the country's ICZM experience in its historical and socio-political context (see Appendix 2).

The second step of the work process was a two-week long study trip to Kenya. The purposes of that trip were to study the views and experiences of different people and institutions in regard to coastal zone management and, based upon this study, to plan the remaining part of the Post doc. project period with a view to improve the KenSea Atlas - and Kenyan ICZM more generally. During the study-trip, representatives from a range of research institutions, Government institutions involved with ICZM, and business and Non-Government organizations (NGOs) were interviewed (listed in Appendix 1). As to be expected the interviewees found that ICZM in Kenya is hindered by numerous constraints and problems (see section 5). However, the most noticeable finding emerging

from the interviews was that civil servants, NGO representatives and researchers all agreed that the technical aspects of ICZM were not especially problematic for ICZM institutions to handle. Rather, they concurred, ICZM is hindered by the fact that the Government institutions involved with ICZM are not "integrated" within themselves, let alone between themselves. Based on these findings from the study trip it was decided that issues of governance rather than technical capacity and knowledge should be given priority in the remaining part of the project period.

The third step of the work process was to define how best to focus on the governance aspect of ICZM in Kenya. It was decided to attend to the relatively new Environment Management and Coordination Act (EMCA, of 1999) and some of the institutions of coastal (and environmental) governance which are designed as implementing agents of this law (see sections 4 and 5). In particular, it was decided to study the National Environment Management Authority (NEMA), which is organized at national, provincial, and district scales, as well as the so-called District Environment Committees which comprise stakeholders with different and often conflicting interests in coastal zone management. Emphasis should be on the communication and collaboration within and between these institutions and their members (section 6).

At the time when the focus on governance issues of ICZM in Kenya was chosen it was evident that the time limit of the Post doc. project was insufficient to fully realise the original aspirations of the project. Anticipating that the Copenhagen GeoCenter would be unable to contribute funds to prolong the project period it was decided to invest a fairly substantial amount of time in writing applications for funds from alternative sources. Hence, a total of five project proposals have been submitted to different funding agencies in Denmark and abroad. One additional proposal was written but not submitted due to the Department of Geography and Geology's lack of financial support options. Presently, four applications are under consideration by the funding agencies and decisions are expected by mid-2008.

The project was temporarily halted during May, June, and July 2007 due to maternity leave. It ended by 31st of December 2007.

2. ICZM: Concepts and Practices.

2.1 The concept of integrated coastal zone management

The concept of integrated coastal zone management (ICZM) belongs to a family of concepts, which counts among its members coastal zone management, integrated coastal management, coastal area management, coastal resources planning, and other similar concepts. They are all descendants of sustainable development and modern environmentalism, as are conceptual relatives like natural resource management, community-based natural resource management and many other concepts that have engaged scientists, politicians, planners, and others over the past decades.

Definitions of ICZM and its kin concepts are abundant:

> "*ICM... is a process by which rational decisions are made concerning the conservation and sustainable use of coastal resources and space. The process is designed to overcome the fragmentation inherent in single-sector management approaches (fishing operation, oil and gas development, etc.), in the splits in jurisdiction among different levels of government, and in the land-water interface*". (Cicin-Sain and Knecht 1998:1)

> "*ICM is a broad and dynamic process that... requires the active and sustained involvement of the interested public and many stakeholders with interests in how coastal resources are allocated and conflicts are mediated. The ICM process provides a means by which concerns at local, regional and national levels are discussed and future directions are negotiated*". (GESAMP 1996:66)

> "*Coastal management is a continuous and dynamic process by which decisions are made for the sustainable use, development, and protection of coastal areas and resources. Coastal management requires both understanding complex, dynamic ecological systems and creating governance systems capable of addresing issues of concern to society. Imperial, Hennesey, and Robadue (1993) observed that "this is perhaps one of the most demanding challenges in the field of environmental management". Responses to coastal issues require an understanding of the interplay between social processes and ecosystem change*". (Torell 2000:354)

These definitions, notwithstanding their individual variations, emphasise that ICZM is about balancing development and conservation at different scales ranging from very local settings to international regions in a participatory manner – that is, by integrating the interests of many different societal sectors and groups in the management of particular resources and areas. This is quite obviously an extremely demanding endeavour both scientifically, politically, and in terms of communication and information exchange.

ICZM was first conceptualised and practiced in the developed world, more particularly in the United States of America. San Francisco Bay Conservation and Development Commission of 1965

is the first example of an ICZM program. A few years later, it was recommended that the U.S. with inspiration from San Francisco should create a national coastal zone management program to bring under control the environmentally destructive uses of the sea and rivers in many states. The ensuing U.S. Coastal Zone Management Act was passed by the federal Government in 1972. In the same year, the first academic journal devoted to ICZM – the Coastal Zone Management Journal - was published.

Outside of the U.S, the United Nations Environmental Programme (UNEP) and its Regional Seas Programme were created in 1973. Strongly influenced by U.S. expertise and financial aid Costa Rica, in 1977, became the first developing nation to implement a coastal zone management program. Ecuador, Sri Lanka, and Thailand, likewise supported by U.S. assistance, followed suit in 1983. Since then, numerous developing countries including Kenya have adopted ICZM projects and policies of longer or shorter duration.

The United Nations Conference on the Environment and Development in 1992 in Rio de Janeiro, also known as the "Rio Earth Summit", embraced integrated coastal management as a central concept in the management of coastal zones and ocean areas under national jurisdiction in Chapter 17 of Agenda 21. This chapter stresses the importance of coasts and oceans in the global life-support system. Afterwards, ICZM has been adopted as the main organising framework in all the ocean and coastal international agreements emanating from the conference. These include the Framework Convention on Climate Change, the Convention on Biological Diversity, the Programme of Action for the Sustainable Development of Small Island Developing States, and the International Coral Reef Initiative. Moreover, international guidelines on ICZM have been developed by the World Bank (Post and Lundin 1996)), World Coast Conference report, the International Union for Conservation of Nature IUCN (1993), United Nations Environment Programme UNEP (1995), and in 1991 by the Organisation for Economic Co-operation and Development OECD (Cicin-Sain et al 2000:291).

Table 1: ICZM timeline[1]

Year	Significant event in the history of ICZM in the world and in Kenya (marked in italics)
1965	First coastal zone management program in the world. San Francisco Bay Conservation and Development Commission
1972	First academic journal devoted to ICZM is published: the Coastal Zone Management Journal.
	U.S. Coastal Zone Management Act is passed
1973	United Nations Environment Programme (UNEP) is established
1977	First ICZM in a developing country. Costa Rica.
1982	Law of the Seas Convention is adopted by the United Nations.
1983	United States Agency for International Development (USAID) becomes the first international development assistance institution to create an ICZM program. Pilot projects in Ecuador, Sri Lanka, and Thailand.
1985	*UNEP facilitates regional coastal zone management cooperation in East Africa, incl. Kenya. Regional Seas Action Plan*
1991	OECD issues international guidelines on ICZM
1992	United Nations Conference on the Environment and Development in

[1] Sorensen 2002 is the main source of years 1965 – 1983.

	1992 in Rio de Janeiro.
1993	*Arusha Resolution calls for sustainable development and integrated management of coastal areas for the benefit of coastal communities in East Africa*
	World Coast Conference in the Netherlands. Delegates from 90 countries, 20 international organisations, and 23 NGOs
1993	IUCN issues international guidelines on ICZM
	The World Bank issues international guidelines on ICZM
1994	*Nyali-Bamburi-Shanzu ICZM project initiated in Kenya, stretching some 12 kilometres of beach north of Mombasa*
1995	International Coral Reef Initiative. UNESCO, IUCN, World Bank.
	UNEP issues international guidelines on ICZM
1996	*Nairobi Convention on the Protection, Management, and Development of the Coastal and Marine Environment in the Eastern African Region comes into force*
	The Seychelles Meeting (follow-up to Arusha Resolution)
1997	The European Commission initiates ICZM program
1998	*Pan-Africa Conference on Sustainable Integrated Coastal Management*
	International Year of the Ocean
1999	International Year of the Reef
	Kenya's Environmental Management and Co-ordination Act (EMCA) is passed.
2000	*Diani-Chale ICZM project initiated in Kenya, covering 20 kilometres of beach south of Mombasa*
2002	*The National Environmental Management Authority (NEMA) is set up. NEMA holds the main responsibility for implementation of ICZM in Kenya.*

It follows from this impressive, yet far from comprehensive, list of international conventions, action plans, and initiatives, which have adopted ICZM as the main framework for planning and action that ICZM has been increasingly accepted and institutionalised globally over the past decades. With a word from social science vocabulary ICZM has attained "hegemonic" status. This means that ICZM constructs "a common material and meaningful framework for living through, talking about, and acting upon social orders characterized by domination" (Roseberry 1996:80). Thus, ICZM has become *the way* of talking about coastal environments and people and *the way* of planning how to manage them.

Nonetheless, after some thirty years of trying out ICZM in developing countries the ICZM literature reporting on this experience contains few practical lessons on overcoming some of the significant challenges that are common to ICZM. Even studies that describe relatively successful cases tell about significant limitations in terms of conservation goals met and examples of plain failure are abundant (e.g. Baine et al. 2007; Heylings and Bravo 2007; Balgos 2005; White et al. 2005; Hale et al. 2000. See also Christie 2005; Sorensen 2000). This shows that ICZM is a highly difficult goal to attain. It also suggests that ICZM belongs as much to the realm of ideology and the normative as to the realm of realistic options in developing countries. In the next sections this ideological aspect of ICZM is discussed further by relating it to the notion of modern environmentalism before the more practical experiences with ICZM are dealt with.

2.2 Modern environmentalism

Until the 1960s, the term environmentalism was primarily a philosophical and scientific term that was applied to explanatory schemes, which held that human action is determined by the natural surroundings or habitat. This idea has a long history in European philosophy. Both Plato and Aristotle maintained that human behaviour could to a large extent be explained by climate, and this idea was accepted and developed by numerous philosophers after them. For example, Montesquieu (1689-1755) said that society's progress is particularly stimulated in regions with strong winds and great storms. As late as in 1924 it was claimed that the highest forms of religion were found in temperate zones (Ellsworth Huntington 1924, quoted in Ellen 1982:2). And until quite recently, geographical and anthropological studies of the relationship between the natural environment and people's cultural life owed much to the nineteenth-century tradition of geographical determinism, e.g. Friedrich Ratzel who related ethnographic literature to geographical causation and argued that differences in habitat were sufficient to explain cultural diversity.

After the 1960s, the term environmentalism acquired a new meaning. It is now mainly used to refer to a collective social response to environmental degradation (Hirsch 1997:1) and to a quest for a viable future (Milton 1993:2). This modern environmentalism followed the advent of environmental activism and ecological movements in the 1960s when groups like Greenpeace spoke up about the (in their view) alarming degradation of the natural environment. Environmentalism in the new sense is "a discourse" within which modern society's forms of government and production is questioned and doubted. It is a highly politicised discourse, not least because the benefits and costs of environmental changes are spread unequally geographically and socially (Bryant and Bailey 1997:33).

Box 1: The concept of discourse

The Concise Oxford Dictionary lists discourse as noun and verb. *Noun*: 1 (literary) talk, conversation, dissertation, treatise, sermon; 2 (ling.) connected series of utterances. *Verb*: talk, converse, speak or write at length on a subject. Alas, it takes more than a dictionary to prevent social scientists from using one word in many different ways, and discourse has rightly been called "one of the most popular and least defined terms" in the vocabulary of academics (Lutz and Abu-Lughod 1990:7). Still, it is a useful term once its meaning is made clear.

In this report the meaning of discourse is associated with the French philosophers Michel Foucault and Pierre Bourdieu. They have argued that talk (be it about ethnic groups, environment, or sexuality) is not merely descriptive of something. Talk is a kind of social practice which forms the objects of which it speaks instead of simply designating them (Foucault 1972:49). Language is not just "about" our experiences and the realities we live in. Language is itself productive of experience and constitutive of reality. Bourdieu contends that our categories of perception of the world and the realities produced according to these categories are produced simultaneously (Bourdieu 1991:134). This is why the struggle for "symbolic power" to define the legitimate categories for understanding the world – the power to make people see and believe - is such a crucial aspect of all social and political struggles. Discursive processes are then the processes through which specific worldviews and categories for understanding are created by people with power and accepted by others – as exemplified by the process through which ICZM has become *the way* of talking about coastal environments and people.

2.3 ICZM - a modern environmentalist discourse

ICZM is a modern environmentalist discourse. This means that ICZM should be understood as a social struggle over crucial coastal resources and, simultaneously, a struggle over the symbolic power to define how and by whom "coastal problems" should be understood and resolved. ICZM is not simply a conceptual and practical tool kit with well-tested guidelines to be used by decision-makers and managers and to which scientists in a politically neutral fashion contribute their expertise. ICZM as discourse stresses that coastal management is a site of political struggle and contended meanings produced and received within specific historical and social conditions. Science, including the KenSea Atlas project and the Post doc project reported here, is not external to but, indeed, highly involved in this discourse.

One of the striking characteristic of ICZM as discourse is its globality (cf. Section 2.1). As such, ICZM is part of a trend of increasing globalisation and institutionalisation of environmental concerns, which took on after the end of the 1960s. This is reflected in the rhetoric and policies of the World Bank, the United Nations and other major global institutions. The UN Biosphere Conference in Paris (1968) and the UN Conference on the Human Environment in Stockholm (1972) clearly defined environmental problems in global terms (Milton 1996:181). And the World Commission on Environment and Development ("The Brundtland Commission" 1987), the Rio Earth Summit (1992), and the UN Conference on Social Development in Copenhagen (1995) continued in the same vein.

Nowadays, most environmentalists – be they scientists, activists, politicians, or others - agree with the UN that many environmental problems should be perceived as global, even though they may disagree with UN's policies in regard to resolution of the problems. A fundamental disagreement is about the role of economic development. All the major UN conferences and commissions referred to above have claimed that economic development is a precondition for solving environmental problems (cf. Indira Gandhi's famous speech in Stockholm, 1972, where she stated that "poverty is the greatest polluter"). Critics have argued that development is, on the contrary, often the very cause of these problems and that environmental problems cannot be solved satisfactorily until the existing economic and political world order has changed.

A second striking characteristic of ICZM as a globalised discourse is the enormous inequalities in terms of political power to decide how environmental problems are defined and resolved. The globalisation of environmental issues means that the planet Earth is perceived as one environment, or one ecosystem (e.g. Gaia), which needs to be saved for the sake of future life. This implies that mankind is conceived as one single moral community in which all individual members have an interest in and a duty to help saving the environment from further damage. Based on this conception of mankind in the singular it makes sense for people living on one side of Earth to be concerned about environmental problems occurring on the other side of the planet. Many governments, NGOs, scientists and individuals from the West therefore regard it as their legitimate interest how rainforests are managed in countries like Malaysia, Brazil, and Costa Rica, and how coastal zones are managed in Kenya and other East African countries. Conversely, it is rare to see political leaders, environmentalist activists or scientists arrive from Africa, Latin America or Southeast Asia to a Western country to campaign against environmental degradation there[2].

[2] A notable exception to this rule was the former Malaysian Prime Minister, Dr. Mahathir Mohamad, who openly criticised Western countries for using the environment as an excuse for continuous imperialism in their former colonies. Mahathir was the driving force behind the Kuala Lumpur Declaration in 1992 which holds that forest resources are part of the national patrimony subject to sovereign rights of control - that is, not subject to Western control.

In the case of ICZM, developing countries are put under great pressure to change their coastal management policies and practices - either bilaterally by national donors and NGOs or through international organisations like the UN or the World Bank. Guidelines and organising principles used in ICZM projects in developing countries are created by ICZM experts who represent individual country donors or large, international donor organisations. And projects are invariably sponsored either completely or for the most part by the foreign donors.

2.4 ICZM as conservative and/or radical environmentalism

A third characteristic of ICZM is that a review of ICZM literature shows an international orthodoxy about ICZM principles, dimensions, and steps in the cycle of program development. Although different projects and donors use slightly different terms it is virtually impossible to find any source, which goes against the ICZM orthodoxy that ICZM should incorporate the following principles:

- Vertical and horizontal integration among agencies of governance
- Projects should proceed according to certain phases/steps (e.g. issue identification and assessment; plan preparation; adoption; implementation; evaluation)
- Public participation in decision-making and management
- In-built capacity building (e.g. adaptive learning-based coastal management)

Without dismissing the desirability of these principles it is important to stress that the international ICZM guidance principles and the individual projects based more or less on these principles imply that ICZM is essentially a model not only for sustainable natural resource management but for the establishment of a specific kind of political and administrative system as well. This facet of ICZM is interesting to contemplate by relating it to the anthropologist Kay Milton's distinction between "conservative" and "radical" forms of environmentalism (Milton 1996). Milton's concepts allude to varying degrees of demands for societal and political change among environmentalists. According to her definitions, the "conservative" standpoint is that environmental problems can be solved piecemeal within the existing economic and political order of society whereas the "radical" view is that society needs to change drastically if environmental problems are to be solved and prevented.

Looking at the ICZM orthodoxy from this perspective ICZM appears to be a somewhat dubious phenomenon. As a global discourse ICZM is clearly a form of conservative environmentalism inasmuch as it is integrated into the official rhetoric and policies of institutions such as the UN and the World Bank, which hold that the existing political and economical world order is capable of solving coastal management and other environmental problems. The radical position would be, of course, that the existing world order including the roles of the UN and the World Bank is part of the problem rather than the solution to coastal environmental degradation. This view is reflected in the geographer K. Nichols' claim that ICZM is best described as regulatory regimes which "facilitate the opening of coastal zone worldwide to aggressive state and global capital investment... [By] asserting the primacy of resource access for modern economic interests ICM may introduce more rather than less social conflict and ecological degradation" (Nichols 1999:388).

But if ICZM as a global discourse represents a conservative form of environmentalism it is obvious that in most developing countries ICZM by focusing on people's participation in coastal

management and decision-making represents a radical form of environmentalism because such participatory and democratic processes imply –in theory at least - quite drastic changes of the existing political order in these countries.
In light of this it is unsurprising that the great majority of ICZM literature based on cases from developing countries mention the lack of fit between the normative principles of ICZM and the social and political realities in which these principles are to be implemented as the main reason why good coastal management remains unachieved. In the same vein, it is unsurprising that Kenyan ICZM stakeholders in interviews argue that progress in ICZM is hindered by issues of governance and power more than by lack of knowledge or by inadequate technical mastery of coastal management (cf. Section 1.2).

3. Practical ICZM experiences/lessons learned in developing countries

The ICZM orthodoxy represented in the guidelines of the World Bank (e.g. Post and Lundin 1996 and Hatziolos 1997 (special ICZM guidelines for Africa), UNEP (1995), and GESAMP (1996) all describe ICZM as a step-by-step process of learning and institutional capacity building. These guidelines diverge in regard to terminology, length and detail, and in the way they balance between technical and governance aspects of ICZM, but the overall idea of ICZM as a sequence of learning cycles is the same. An often-quoted manual developed by Stephen Olsen et al. (1997)[3] is illustrative of the orthodoxy (table 2). Each completion of Steps 1-5 is regarded as "a generation" of an ICZM program.

Table 2: actions associated with different steps in an ICZM policy cycle

Step 1: Issue identification and assessment	• Rapidly assess existing conditions • Consult key stakeholders and identify priority issues
Step 2: Program preparation	• Select issues to be addressed and geographic focus. • Conduct sustained public education program • Define boundaries of management area • Define management objectives, strategies, and actions • Carry out early implementation actions
Step 3: Formal adoption and funding	• Adopt formal management plan and governance process • Secure adequate funding for implementation
Step 4: Implementation	• Construction/operation of infrastructure • Promote compliance to regulations and agreements • Implementation of sustainable development practices
Step 5: Evaluation	• Evaluation of governance process and outcomes • Reassess issues and strategies • Select adjustments to plan and governance process

Source: Olsen et al. (1997:161)

[3] Stephen Olsen represents the Coastal Resources Center at the University of Rhode Island in the USA, which is one of the main learning centers for ICZM in the world (established in 1971). Through consultancies, often in collaboration with the USAID, the Coastal Resources Center is participating in or facilitating the development and implementation of ICZM projects and programs in developing countries.

The question arising from this and other manuals and guidelines is, of course, how they are working in practice? What are the lessons learned after ten-fifteen years of ICZM experiences in developing countries based on guidelines such as the abovementioned.

The review of ICZM literature suggests that this question is best answered by focusing on three things:

1. Problems and challenges in the implementation of ICZM manuals and guidelines.
2. The issues of quality of scholarship and project evaluation. Illustrated with selected "typical" examples of ICZM articles.
3. Experiences and achievements from the Philippines.

3.1 Problems and challenges in the implementation of ICZM manuals and guidelines

It is noticeable that ICZM manuals and guidelines dismiss or diminish the discursive aspects of ICZM by presenting coastal management as being a matter of following more or less detailed tool-kits, or action plans, for decision-makers and scientists and other stakeholders. At the same time, authors of the guidelines and manuals (e.g. Olsen and Christie 2000) do acknowledge that required actions listed in the step-by-step action plans are difficult to implement for a number of reasons:

Inadequate financial commitment

The global investment pattern in ICZM is that individual developing countries place ICZM low on their list of financial priorities while international donor agencies have increased their sponsorship of ICZM considerably over the past few decades. In developing countries one indicator of the magnitude of investment in ICZM is the size of the coastal management portfolios of the development banks. The portfolios of the World Bank, Asian Development, and the Inter-American Development Bank have all increased dramatically since the Rio Earth Summit in 1992 just as UN agencies have increased their sponsorship of ICZM projects and programs (Olsen and Christie 2000:6). But even though the funds available have multiplied the investments provided by individual developing countries remain limited. The rare exception to this trend is Sri Lanka where the Government in 1999 (that is, before the 2005 Tsunami and the ensuing turbo injection of international aid) provided $ 1.6 million per year to the ICZM program administered by the Coast Development Department with an additional $ 0.4 million granted by foreign donors (ibid.). In comparison, in the Philippines, a developing country with comprehensive and long-standing ICZM programs, the national and local governments in 1999 contributed just 16 percent of the total costs of running these programs (ibid.).

The dependence on external financial assistance creates the potential for unsustainable institutions and policies as projects are terminated and support staff and funding withdrawn (see McFadden 2007). Besides, the limited financial and (by implication) political commitment to ICZM in many developing countries is linked with other factors that reduce the chances of successful coastal management.

Insufficient time scales

ICZM in high-income countries is usually organized as long-term programs and policies. For example, the programs born of the 1972 federal Coastal Zone Management Act in the U.S. have budgets with a twenty-year time frame. In developing countries the time scale of ICZM projects and budget is much shorter than that. "One of the problems of contemporary coastal management is that

the completion of a full generation, even at the scale of a demonstration project, usually requires more time than the four-to-five-year lifespan of a typical project" (Olsen and Christie 2000:11). Considering that the initial steps of issue identification, preparation and adoption of management plans may easily last for years before a project reaches its implementation phase the insufficient time scale of most ICZM programs and projects in developing countries mean that they hardly get going before it is time to end all activities and evaluate their effects.

In other words, unlike in developed countries where ICZM tends to evolve from an initial project cycle into second and third project generations and then matures into formalized governance practice, the ICZM process in many developing countries rarely matures beyond the first project cycle and under such conditions sustainable coastal management is unachievable.

Spatial scale limitation

Christie and White (2000:119) have observed two trends in tropical coastal management. The first is that ICZM is replacing the emphasis on sectoral development and narrowly defined habitat management of past projects and thereby stressing the need for integration and collaboration. The other trend is that local government units and communities are assuming more responsibility for and allocating resources to managing coastal resources in comparison to the past dependence on national governments. While the decentralization of coastal management combined with a higher degree of collaboration between local stakeholders is advantageous in many ways there are great difficulties of linking small-scale community-based initiatives to coherent programs that can address coastal management problems on a larger geographical scale (e.g. Agbayani et al. 2000: Katon et al. 2000; Nickerson-Tietze 2000: Hale et al. 2000; Sandersen and Koester 2000). Unclear governance relations and power struggles within the political-administrative systems are major hindrances to up-scaling of ICZM.

Unclear governance relations and power struggles

In an article published three years after the printing of his ICZM manual Stephen Olsen (with Patrick Christie) notes that "initiating coastal management raises difficult issues in the distribution of authority, responsibility, and power within a nation" (Olsen and Christie 2000:9). That is to say the least. The reason why ICZM gives rise to such difficult issues is, of course, that ICZM in most developing countries implies a radical challenge to the existing political and administrative order. Behind simply formulated guidelines such as "Step 1: Consult key stakeholders and identify priority issues" lies questions, which are usually highly complicated to answer, namely where and on what basis decisions on the allocation and use of coastal areas and resources are made.

In most developing countries, management authority and responsibility is vested in government agencies and private enterprises rather than in local institutions. Still, initiatives by these agencies are often quite ineffective. Robadue (1995) based on experiences from Ecuador has discussed how new laws and regulations over mangrove cutting, blast fishing and waste disposal have very little impact, and there are many other examples of top-down legislation and management planning without traceable effects. At the same time, as mentioned above, coastal management based on bottom-up community level governance is also of limited effect unless it can be scaled-up and integrated into management processes at larger spatial scales.

Hence, guidelines such as "Step 3: Adopt formal management plan and governance process" and "Step 4: Promote compliance to regulations and agreements" are only possible to implement if the formal and informal governance relations are well-known and well-integrated into the ICZM

process. This is hardly ever the case, though, because power struggles between national and local institutions of authority prevent integration of governance processes. Likewise, clashes of interest between different parts of the government sector, for example, between the ministry for environment which promotes conservation and the ministries for agriculture, fisheries, and forestry, which promote income generating resource extraction, tend to impede the process.

It is notable that the ICZM literature reveals few if any cases of successful handling of these problems, which are inevitably associated with the implementation of ICZM guidelines. The ICZM benchmark and certification system developed in the Philippines is the most inspirational attempt to overcome the problems and it therefore deserves special attention (section 2.5.3).

3.2 Issues of the quality of scholarship and project evaluation

If the most significant finding emerging from a review of the ICZM literature is the difficulty in finding successful cases to learn from, another set of issues emerged as well:

- In practice, most ICZM projects and programs are concentrated on *either* bio-physical *or* governance aspects of ICZM. It is rare to find examples of projects where these two aspects are properly integrated. For this reason alone many projects fail completely (see Box 2).

- In line with the ICZM projects themselves, the scientific articles that analyse these projects tend to be focused on *either* bio-physical *or* governance aspects of ICZM. This means that projects are mostly described and evaluated from a single disciplinary perspective (Box 5).

- The majority of articles do not systematically question and evaluate the ICZM orthodoxy from a critical social scientific perspective (but see Box 4). The orthodoxy consists of a great deal of conventional wisdom and is aptly characterized by Sorensen (2002) as "based on our experience, we believe our paradigm is right, it usually works, and we do not know of any other paradigm that would be more effective or efficient" (Box 3 and 5).

- Many articles are characterized by a discrepancy between positive conclusions about the potential of ICZM and the analytical basis for these conclusions which are laid forward in the articles (see Box 3).

Box 2. Case study: Guanabara Bay basin, Rio de Janeiro, Brazil.

Bidone and Lacerda analyse the impact on water quality of industrialisation and urbanization, the two main socio-economic drivers in the Guanabara Bay area in Brazil.

Findings: After 8 years and more than 600 million $ spent the water quality of the bay is not significantly improved. A UNDP report concludes that the reason is the inaction on the part of the Brazilian Government, which has not invested in the necessary infrastructure although sewage facilities have been built as part of the project.

Source: Bidone, E. D. and Lacerda, L. D. 2004

Box 3. Decentralized Coastal Zone Management in Malaysia and Indonesia.

Hendra compares the governance situation of Malaysia and Indonesia. Malaysia follows a centralized approach, although DANCED has helped set-up a completely ICZM system consisting of new national policies for ICZM and three State components in ICZM in Penang, Sabah, and Sarawak. In Indonesia a process of decentralization has conferred coastal management powers to local communities and to Provinces.

Findings: Neither country has been successful due to inter-agency rivalry; coastal management focus on exploitation and revenue potential rather than conservation; and lack of planning and monitoring capacity. It is concluded that co-management and community-based management approaches have "potential for creating sustainability of coastal resources". Yet, there is no analytical basis for that conclusion in the paper.

Source: Hendra Yusran Siry 2006

Box 4. Five East African adaptive learning-based coastal management initiatives

Torell reviews five East African projects with respect to three dimensions of adaptive learning-based coastal management: 1) the adjustment of actions and project strategies as new information is obtained; 2) the learning by doing and experimentation; 3) the active participation by relevant stakeholders.

Findings: periodic monitoring and self-assessments are providing constructive platforms from which to learn and make adjustments to project activities and strategies; early implementation experiments appear to be working well to quicken the pace of progress; and the participatory focus has enhanced problems solving, increased a sense of local ownership in the solutions, reduced conflicts, and built trust and credibility.

However, although monitoring and self-assessment is part of all projects, it is difficult to see whether this is a reflection of true learning activities or a response to the requirements from supporting donors. Also difficult to determine exactly what are the underlying logic and hypotheses in cases where adjustments are made.

No conclusion is possible. Maybe the adaptive learning-based coastal management initiatives have been successful. And maybe not. Torell calls for a debate about the criteria for good demonstration activities but her article also shows how easily project evaluations may misinterpret and distort what is going on in particular places.

Source: Elin Torell 2000.

Box 5. Catalyzing Coastal Management in Kenya and Zanzibar

Hale et al. describe a two-year (1994-96) project to demonstrate how to formulate and implement effective, participatory, and sustainable strategies for addressing coastal management issues in eastern Africa and the Island States.

Main problems to be addressed in Zanzibar: incorporating a rapidly expanding international tourism industry within an area comprising traditional villages in a manner that maintains the environment and benefits the local people. In Kenya: inadequate infrastructure and public services, insufficient and poor water quality (ground water and coastal waters), decline in reef fishery, degraded marine habitats and loss of biodiversity, and coastal erosion.

The project relied on inter-agency working teams and adopted the ICZM guidelines by GESAMP as a road map. Furthermore, capacity-building strategies were integrated into every aspect of project implementation.

Findings: The team members gained valuable planning, management, and organisational skills thanks to the training and their commitment to the five-step process (issue identification and assessment; plan preparation; adoption; implementation; evaluation). Despite political turmoil in both countries these processes continued, although with slow strategy implementation (also due to lack of funding). In Kenya mooring buoys were installed in the Mombasa Marine Park and Reserve and a process with small projects to improve the only public beach access were initiated.

It is concluded that:

> "*The implementation strategies applied to launching ICM programs in Kenya and Zanzibar show promise for wider application in locations where ICM capacity is relatively weak but problems are urgent. By utilizing interagency working teams composed of technical staff of key agencies to accomplish project work, adopting GESAMP's ICM policy process and essential actions as a project 'road map', and integrating capacity building strategies into every aspect of project implementation, rapid progress can be made both in addressing critical coastal issues and in building essential indigenous capacity*".

In short, the article claims that better coastal area and resource governance was achieved and that the process adopted could be applied in other locations, too. However, it is striking that the paper mentions very little about the status of the coastal resources to be managed. Presumably, no environmental assessment was made to support the findings. As such the article's argument and findings are best characterised as postulates. In any case, the achievements reported appear disproportionate to the main problems mentioned in the two sites.

Source: Lynne Zeitlin Hale, Mark Amarall, Abdulrahman S. Issa, and B. A. J. Mwandotto 2000

The findings reported in this section raise serious questions about the quality of ICZM scholarship. The single-disciplinary approach of many scientists means that ICZM projects and processes tend to be analysed and evaluated from a single-disciplinary perspective as well. One may speculate if the reluctance of many scientists to work inter-disciplinarily is in itself a major constraining factor for the integration of coastal zone management.

3.3 Lessons learned in the Philippines

Among developing countries, the Philippines has one of the longest and richest experiences of ICZM, starting in the late 1970s and proceeding during the 1980s with many experiments with community-based coastal resource management and the establishment of a number of marine protected areas. During the 1990s, these pilot projects of relatively limited spatial and time scales evolved into larger scaled coastal zone management programmes nested in local governments and backed up by national authorities and legislation.

In spite of the steady progress in the implementation of ICZM in the Philippines the process is by no means flawless. Up to this day, the ICZM activities are largely donor financed and given that four out of ten people are living under the poverty line and that a large segment of the population depend on coastal resources for their protein needs and livelihoods (White et al. 2006:288) this is not likely to change within the foreseeable future. Moreover, the coastal environments are being gradually degraded due to overexploitation of fish and forest resources, pollution, and illegal or improper shoreline development. Still, there are lessons to be learned from the Philippines experience, which warrant attention. Above all, the historical process of building up ICZM highlights that support for development of ICZM is rooted in the tangible benefits that are accruing to local stakeholder communities and local governments alike such as enhanced fisheries, revenues from user fees and improved coastal environmental quality.

In the 1980s the coastal management projects were mostly based in *barangays* (= the smallest political unit in the Philippines, equivalent to "village community") and focused on establishing small-scale marine protected areas. The strength of these projects has been a relative success in protecting and enhancing near-shore habitats and fisheries for the benefit of coastal communities. Marine tourism has also been attracted to these sites and has contributed to the local economies through employment in management and tourism activities, user fees, and visitor spending (White and Rosales 2003). In order to ensure that local communities do benefit from their protection of coastal resources they have been given legal and institutional support from authorities at municipal, city, province and national levels.

The fairly unique situation in the Philippines in comparison with other developing countries is that a national ICZM framework has emerged from the experience of the different small-scale projects in more than one hundred coastal municipalities and cities that cover about one-sixth of the 18,000 km shoreline in the country (White et al. 2006). This framework is represented by a simple benchmark system for local governments in their planning and implementation of ICZM. The benchmarks represent the basic ingredients to a sustainable ICZM program and they have later evolved into a certification system with three levels – beginning ICZM; intermediate ICZM; and advanced ICZM (Table 3).

The accomplishments of particular local governments are reviewed at province level to begin with and the Department of Environment and Natural Resources in collaboration with a multi-agency and multi-sector body awards the ultimate certification to the local government. This certification award gives a seal of approval and recognition on their work. In several cases ICZM certified local governments have received financial assistance to implement programs because of the commitment shown on their part to implement an ICZM program under their own resources (White et al. 2006:295).

Table 3. ICZM benchmark and certification system in the Philippines

Level 1: Beginning ICZM *Acceptance of ICZM as a basic service of municipal/city government with planning and field interventions initiated (1 to 2 years)*	**Level 2: Intermediate ICZM** *Implementation of ICZM plans underway with effective integration to local governance (2 to 5 years)*	**Level 3: Advanced ICZM** *Sustained long-term implementation of ICZM with monitoring, measured results, and positive returns (5 years or more)*
Baseline assessment conducted Multi-year coastal management plan drafted Coastal management related organisations formed and active Annual budget allocated for ICZM Shoreline/foreshore management measures planned and initiated At least two ICZM "best practices" planned and initiated. For example: • municipal water delineation • coastal zoning • fisheries management • marine protected areas • mangrove management • solid waste management • upland/watershed management • coastal law enforcement • environmentally friendly enterprises.	Multi-year ICZM plan finalized and adopted. Monitoring plan developed for assessing socio-environmental conditions ICZM related organisations active and effective Financial and human resources assigned permanently to ICZM activities Shoreline/foreshore management plan adopted with implementing guidelines At least four best practices implemented with measured success	Multi-year ICZM plan implemented, reviewed, and revised as necessary. Socio-environmental conditions assessed in accordance with monitoring plan. ICZM related organizations effective and supported financially through municipality/city budget or revenue generating mechanisms. Annual programming and budget sufficient to implement the plan. Shoreline/foreshore management effective with regular monitoring and enforcement guidelines. At least six best practices implemented wit measured results and positive returns. Illegal activities and destructive practices minimized or stopped. Biophysical improvement measured. Socioeconomic benefits accrue to coastal residents. Positive perceptions of ICZM interventions among stakeholders.

Source: White et al. 2006:292

There is little doubt that much remains to be done to ensure the sustainability of ICZM in the Philippines. Among the key challenges facing political and administrative leaders are development of national legislation and policies, which will take care of aligning future government programs and policies with the successful ICZM system. Lowry et al. (2005) argue that it is also necessary to improve compliance with the existing coastal management policies and laws through education and effective law enforcement. The laws and plans to support ICZM are adequate enough but the Achilles' heel is weak and inconsistent enforcement. Moreover, the incentive and certification system needs to be enhanced through more support of those local governments which practice ICZM. Another essential prerequisite for moving towards more sustainable ICZM is according to DeLeon (2003) that a simple but functional information and database system for ICZM should be established, emanating from local governments up through the provincial, regional, and national levels.

While these shortcomings should be recognised, the good news is that the benchmarks have served as incentives as well as highly useful tools for local governments in the Philippines and they have helped standardize and guide the ICZM planning and implementation all over the country. The certification system should therefore be of obvious interest to other developing countries such as Kenya where coastal zone management is under implementation.

4. ICZM in Kenya

4.1 The history of ICZM in Kenya

In Kenya, coastal resource management is characterized by problems of declining reef fishery, degraded marine habitats, loss of biodiversity, and coastal erosion. Like many other coastal areas around the world, the Kenyan coast displays important biological hot spots. At the same time, it is a social and political hotbed with poverty, landlessness and insecure land tenure, political repression, undemocratic systems of governance, and many conflicting interests connected to mining, tourism, agriculture, fishing, and conservation. A major issue is how to balance the competing needs for access to coastal areas and resources between the expanding tourism industry and the local people whose livelihoods depend to a large extent on agriculture and fishery.

The Government of Kenya has addressed coastal zone management challenges in different ways. At the international level, the country in 1985 entered into the Regional Seas Action Plan under United Nations Environmental Program (UNEP). In 1993, Kenya signed the Arusha Resolution which calls for sustainable development and integrated management of coastal areas for the primary benefit of coastal communities (up-dated in the Seychelles, 1996). In 1996, the Nairobi Convention on the Protection, Management, and Development of the Coastal and Marine Environment in the Eastern African Region came into force. And in 1998, Kenya joined the Pan-Africa Conference on Sustainable Integrated Coastal Management. In addition to this level of commitment, Kenyan Government institutions have collaborated with foreign donor agencies such as FAO, UNEP, USAID, IUCN, The Netherlands Wetland Project, and SIDA in projects to advance ICZM, most notably in Nyali-Bamburi-Shanzu since 1994 and Diani-Chale since 2000, both in the vicinity of Mombasa (see McClanahan et al. 2005: 918-9). As such, Kenya has been part of the global discourse of ICZM for several decades.

At the national level, marine national parks and marine national reserves have been established since 1968 under the management of Kenya Wildlife Service, and some coastal forests have been declared as protected areas by the National Museum of Kenya. Following the Arusha Resolution, principles of ICZM were adopted and a variety of organizations began to run resource management projects on the coast. In order to enhance coordination between these projects the Coast Development Authority, which holds the mandate to plan and coordinate development activities in the coastal area, set up an ICZM Secretariat in Mombasa in the mid-1990s. In addition to the Coast Development Authority, several Government departments hold jurisdiction over coastal resources, e.g. Forestry Department, Agricultural Department, Fisheries Department, Provincial and District Administrations, and the Tourism Department. Conflicts of mandates, interests, and scarce funding within and between these institutions have impeded efficient integrated coastal zone management, although recently some improvements are detectable (McClanahan et al. 2005:908-9).

At local scale, ICZM has been tried out in two pilot sites in the Nyali-Bamburi-Shanzu, stretching some 12 kilometers of beach north of Mombasa (started 1994), and the Diani-Chale, covering 20 kilometres of beach south of Mombasa (started 2000). Accomplishments were made in both areas but neither of the projects was entirely successful. Among achievements made in Nyali-Bamburi-Shanzu are the installation of mooring buoys in the Mombasa Marine Park and Reserve and improvement of the only public beach access (for local fishing and recreation) – both actions carried out by a multi-agency group that brought resource users together with business interests (Hale et al. 2000). In Diani-Chale mooring buoys were installed as well, public beach access,

infrastructure, and beach sanitation were improved, a community-based mangrove management and tourism project was established, fish landing sites were secured, and in general the ability of stakeholders to organize and undertake activities guided by ICZM principles was strengthened (McClanahan et al. 2005:913).

4.2 EMCA – the new legislation and its institutions

The establishment in 1999 of the Environmental Management and Co-ordination Act (EMCA) was created to strengthen coordination between different sectoral agencies for purposes of protecting the country's environment, including the coastal resources. The EMCA is part of the formal governance system in Kenya and in order to understand the role and influence of the EMCA it is important to understand how formal and informal governance relations exist side by side and to some extent intertwined in Kenya (see Appendix 2 for a presentation of governance relations in Kenya).

EMCA provides for the right of every person to a clean and healthy environment and makes it obligatory for every person to help protect and manage the country's environment. EMCA further overcomes most of the limitations on standing to sue in Kenya by explicitly stating that an aggrieved person need not show special damage or peculiar injury beyond that which is suffered by other affected people (see Kameri-Mbote 2005:4). Other important contributions of EMCA are that environmental impact assessments become compulsory before the pursuit of projects of certain dimensions and categories (specified in the Second Schedule), and that public participation is required in the review of environmental impact assessments (sections 52 and 59).

Institutions established by EMCA include:

Institution/Scale of operation	**National**	**Province**	**District**
National Environment Council = responsible for formulating policy on environmental management matters	X		
National Environmental Management Authority (NEMA) = EMCA's executing agency	X	X	X
Provincial Environment Committees		X	
District Environment Committees			X
National Environment Tribunal	X	X	X
Public Complaints Committee	X	X	X
National Environment Action Plan Committee	X		

EMCA specifies that the National Environment Council, Provincial and District Environment Committees, the Public Complaints Committee, and the National Environment Action Plan Committee are all composed of a mix of civil servants and representatives of the business community, NGOs, and community based organisations. As such, the idea of horizontal integration in environmental management is written into the Act. The principle of sustainable development is stated in the Act by emphasising that the exercise of its jurisdiction shall be guided by principles of participation in the development of policies, plans and processes (Part 2, Section 5 - a); the cultural and social principles traditionally applied by any community in Kenya for the management of the environment and natural resource in so far as the same are relevant and are not repugnant to justice

and morality or inconsistent with any written law (Part 2, Section 5-b); the principles of international co-operation, intergenerational and intra-generational equity, the polluter-pays principle, and the precautionary principle (Part 2, Section 5 c-f)

4.2.1 National Environmental Management Authority (NEMA)

NEMA's mandate is defined by the EMCA as follows: "The object and purpose for which the authority is established is to exercise general supervision and co-ordination over all matters relating to the environment and to be the principal instrument of Government in the implementation of all policies relating to the environment" (Part 3, Section 9, 1). The more specific tasks of NEMA include taking stock of the natural resources in Kenya and their utilization and conservation, reviewing land use guidelines of other ministries, examining land use patterns and determining their impact on the quality and quantity of natural resources, undertaking research, carrying out surveys, collating and disseminating information, mobilising and monitoring the use of financial and human resources for environmental management, initiating and evolving procedures for prevention of accidents, rendering advice and technical support where possible, enhancing environmental awareness (see Part 3, Section 9, 2 a-p).

NEMA is organized at national, province, and district levels. At province and district levels, NEMA is represented by respectively the Province Environment Officer (PEO) and the District Environment Officer (DEO) and their staffs.

4.2.2 Provincial Environmental Committees

Provincial Environmental Committee members are appointed by the Minister. Each Provincial Environmental Committee shall consist of: the Provincial Commissioner of the province who shall be its chairman; the Provincial Director of Environment of the province shall be its secretary; one representative of each of the Ministries; one representative of every local authority whose area of jurisdiction falls wholly or partly within the province; two representatives of farmers or pastoralists; two representatives of the business community operating within the concerned province; two representatives of NGOs involved in environmental management programmes in the province; a representative of every regional development authority whose area of jurisdiction falls wholly or partly within the province (Part 3, Section 29, 2).

Each Provincial Environmental Committee shall every five years prepare a provincial environment action plan which incorporates the elements of the relevant district environment action plans prepared by District Environmental Committees within the province. The Province action plan shall be submitted to the chairman of the National Environment Action Plan Committee for incorporation into the national environment action plan (Part 3, Section 39).

4.2.3 District Environmental Committees

District Environmental Committee members are appointed by the Minister. Each District Environmental Committee shall consist of: the District Commissioner of the district who shall be its chairman; the District Environmental Officer of the district who shall be its secretary; one representative of each of the Ministries; one representative of every local authority whose area of jurisdiction falls wholly or partly within the district; four representatives of farmers, women, youth and pastoralists within the district; two representatives of the business community in the district; two representatives of NGOs involved in environmental management programmes in the district; two representatives of the community based organisations engaged in environmental management programmes in the district (Part 3, Section 29, 3)

Every District Environmental Committee shall every five years prepare a district environment action plan and submit this to the chairman of the Provincial Environment Action Plan Committee (Part 3, Section 40).

4.2.4 National Environment Action Plans

Under EMCA, the National Environment Action Plan Committee is responsible for preparing five-year action plans which contain analyses of the natural resources of Kenya with an indication as to any pattern of change in their distribution and quantity over time; analytical profiles of the various uses and value of natural resources; recommendations of appropriate legal and fiscal incentives that may be used to encourage the business community to incorporate environmental requirements into their plans and operations; recommendations of methods for building national environmental awareness; operational guidelines for planning and management of natural resources; identification of problems affecting the environment, prioritization of areas of environmental research (Part 4, Section 38, a-l).

Ideally, the five-year plans submitted by Province Environmental Committees and District Environmental Committees should also deal with all these matters.

In addition to the general responsibilities of District Environmental Committees in regard to environmental planning, EMCA specifies the responsibility of District Environmental Committees in identifying hilly and mountainous areas which are at risk from environmental degradation and in organising reforestation or afforestation of such areas (Part 4, Sections 45 and 46).

4.2.5 Integrated Coastal Zone Management

Protection of the coastal zone falls under the responsibility of NEMA (Part 4, Section 55)[4]. In consultation with the relevant lead agencies, NEMA is obliged to prepare a survey of the coastal zone and prepare an integrated national coastal zone management plan based on such survey (Section 55, 2). This plan is to be renewed at least every two years (Section 55, 3). The report of the survey of the coastal zone shall contain: a) an inventory of all structures, roads, excavations, harbours, outfalls, dumping sites and other works located in the coastal zone; b) an inventory of the state of the coral reefs, mangroves and marshes found within the coastal zone; c) an inventory of all areas within the coastal zone of scenic value or of value for recreational and cultural purposes; d) an inventory of all areas within the coastal zone of special value for research in respect of fisheries, erosion, littorals movement and such similar objects; e) an estimate of the quantities of sand, coral seashells and other substances being removed from the coastal zone; f) an estimate of the impact of erosion on the coastal zone; g) an estimate of the extent, nature, cause and sources of coastal pollution and degradation; h) an estimate of fresh water resources available in the coastal zone; i) any other relevant data or information that may be deemed appropriate (Section 55, 4, a-i).

It is noticeable that this section in EMCA contains no mentioning of social and cultural data and institutions in the coastal zone – unless, of course, they are subsumed under the category of "other relevant data that might be deemed appropriate".

[4] The coastal zone is defined as any area declared to be a protected coastal zone under Section 55

5. EMCA, NEMA and ICZM in practice

In regard to the legislative requirements for good ICZM as it is defined in various ICZM guidelines and manuals the EMCA is an impressive piece of legislation. It provides the necessary legal backing for horizontal and vertical integration of environmental governance which is crucial for successful implementation of ICZM everywhere. And it provides very concrete legal powers and obligations to specific government bodies. Even though Kenya has limited experience with ICZM programs – the ICZM pilot projects carried out near Mombasa barely went through a complete "project cycle", time wise and spatially they were small-scale, and although achievements were made they were hardly substantial – the country now has a law that enables the necessary up-scaling and standardization of ICZM programs.

The ICZM stakeholders interviewed for the Post doc. project expressed their views on the achievements and shortcomings following the advent of the EMCA and its institutions. Among the most promising findings emerging from the interviews is that people in Kenya are becoming aware that there is an environmental law, which is more than a piece of paper. Environmental Impact Assessments are taking ground. All developers realise the duty to carry out Environmental Impact Assessments and they respect that. Developers and investors understand the value of NEMA's inspection. And environmentalist groups such as NGOs are using the law in their struggle, even against the NEMA and other authorities. So, in this respect environmental awareness has increased greatly during the past few years thanks to EMCA and NEMA – also among local communities.

Another effect of the EMCA and its institutions counted among achievement by the interviewees is that they have become better at collaborating with each other in coastal zone management. However, they found that further development of collaborative management is a prerequisite for improving the state of the coastal resources and areas.

Hence, on the positive side the general impression is that ICZM – thanks to the EMCA and the new institutions - is improving in Kenya, albeit very slowly even though the facilities are there for a faster process. In their analysis of the problems and constraints the interviewees concur that a major problem is that bureaucratic chief executives are rarely involved personally in ICZM processes. This signals a perception of modest significance of these processes. The absence of chief executives moreover means that lessons learned from previous projects are never fully integrated in the guidelines and regulations of the respective institutions. It is the hope of many interviewees that the performance contracts recently introduced to administrative leaders may give an impetus to motivate both leaders and their staff to collaborate more consistently on ICZM issues[5].

These sentiments are largely confirmed by Godfrey Olukoye in his institutional assessment of NEMA carried out on behalf of UNEP in April 2006. While acknowledging that the creation of EMCA and NEMA have entailed many positive results, Olukoye states that "with respect to NEMA and Local Authorities (LA), there is poor information flow both with respect to decision making and activities at the field level. This more than often leads to confusion among the clientele" (Olukoye 2006:37). Olukoye's report also mentions ineffective coordination between NEMA and other Government bodies as well as lack of information sharing and capacity building in areas of networking (ibid:38).

[5] In light of this hope it is regrettable to report that none of the bureaucratic leaders interviewed for the Post doc project had performance contracts in which cooperation with other leaders and institutions was mentioned. Nor did they know of anybody whose contract contained goals of collaboration.

After these preliminary observations the following sections will give a more detailed view of the problems and constraints associated with the implementation of EMCA and ICZM in Kenya:

5.1 Inconsistencies and contradictions between various Acts

Theoretically, the harmonisation of Acts related to natural resource management should be taking place under the EMCA as it is a framework Act for the Water Act, Land Act, Forest Act, and other Acts. But the process is proceeding slowly for many reasons. One problem is that some Acts such as the Water Act and the Forest Act provide a mandate for people's participation. But they should be carried out, partially at least, by authorities under the Ministry of Regional Development such as Coastal Development Authority (CDA), which holds no legal mandate to involve people's participation. It appears that NGOs, researchers, bureaucrats and foreign donors (including Danida) are well aware of these problems and that attempts are made to rewrite the laws and reform the administration. But it is a time-consuming process.

5.2 Lack of detailed guidelines under EMCA

A major constraint for NEMA at province and district levels in the implementation of EMCA is the lack of detailed guidelines and regulations. They are developed gradually and selectively for specific areas and the process is very slow. For example, there is a need for guidelines about coastal shoreline development and activities (e.g. to better control the hotels). Private developers exploit the gaps in the law and NEMA cannot prevent them from doing so.

5.3 Lack of horizontal and vertical integration in Government institutions

The following case appears to be quite illustrative of the problems of communication and collaboration between different authorities: A private developer had put up a hotel in Kaya Chale (Kaya =sacred forest) and wished to expand his business by adding new cottages to his resort. This land was actually protected land (officially under management of the Kenya Wildlife Service). It was also a sacred forest gazetted as such by the National Museum of Kenya. And being a *kaya* it was considered by the local community as an area under communal management. Thus, in theory the area was well-protected but in practice nobody used their authority. The district NEMA was approached by the resort "owner" to make an environmental impact assessment of his proposed construction. Not knowing the protected status of the land because this was not registered by the Ministry of Land, the district NEMA gave permission. Later, when the district NEMA realised the mistake it retracted its first decision. Nonetheless, in the end the NEMA headquarters in Nairobi gave permission to the developer to enlarge his business. It is unknown who granted the permission and what made this person arrive at that decision. But the outcomes of this case amounts, at best, to inconsistency of management decisions at different administrative levels (which is characteristic of other institutions as well) or, at worst, to the NEMA headquarters breaking its own law (see also Box 6 and 7).

Box 6: The struggle about the public beach at Silversands in Malindi

After decades of beach development in the coastal town of Malindi the only beach that is still available and safe for public use is located in a place known as Silversands. A plot of land adjoining this beach was grabbed by a Kenyan man (reputedly a high ranking politician) and, later, with a land title issued by the Ministry of Lands, sold to an Italian investor/developer. In all likelihood, the Kenyan man knew that the land was officially categorised as public land whereby private construction work cannot be undertaken there. But the Italian may have been unsuspecting of this.

The Italian developer then had his construction plans approved directly by the NEMA Headquarters in Nairobi without these plans ever being passed to the District Environmental Committee in Malindi as is required according to the EMCA (Section 30 (a) and Section 9 (1) (b).

People in Malindi came to know about this when the construction work began and the developer erected concrete fences around "his property". Soon, the District Commissioner and the Municipal Council ordered the fence put down, though, in order to ensure public access to the beach.

The District Environmental Committee ordered a stop to the construction activities and a local environmentalist NGO called Malindi Green Town Movement took the case to the National Environment Tribunal, which ruled in support of the District Environmental Committee's order. The developer then took the tribunal to the High Court because he claims that the tribunal has no authority to stop something already granted by the NEMA Headquarters and also because he has the land title.

No verdict has been passed as yet.

Box 7: Illegal land titles and construction in Malindi

Before the 1960s, a piece of land adjoining the beach in Malindi Town was given by an English-born resident, Mrs Bellhouse, to the people of Malindi to be available to the public in all perpetuity. Part of this land is occupied by a Christian cemetery.

At some stage in the late 1980s or early 1990s (for obvious reasons the exact details are difficult to establish) a Kenyan person of high ranking grabbed the land. That is to say, he received from the Ministry of Lands a title to the land although this land is not available for individual ownership at all. After obtaining the illegal land title the Kenyan sold the land to a foreign developer who believed that he had acquired a piece of land with a legal title. When the investor bought the land there was a big public outcry, in 1992, but the Government ignored this.

More recently, the foreign developer has been permitted by the NEMA Headquarters in Nairobi to put new constructions on the land. However, this permission was given on the basis of en environmental impact assessment which was never presented to the District Environmental Committee in Malindi. This amounts of disrespect of the DEC and Section 30 (a) of the EMCA. The NEMA Headquarters should have followed the environmental impact assessment and environmental audit regulation of 2003, Section 9 (1) (b) but this was not done.

An additional matter is that the constructions put up by the developer are placed in locations which are not identical to the ones presented in the plans that were subjected to the environmental impact assessment. The actual constructions are located on the land between the developers "property" and the beach. This land

> has been formed over the past few decades as a result of siltation from the Sabaki River and it is under no land title. Thus, the construction is taking place on land that does not belong to the developer as it is not even included in his illegal land title.

Besides problems with the NEMA Headquarters allegedly acting in contradiction to the EMCA and thereby breaking the very law it is obliged to enforce another frequently seen problem is disputes over land status. For example, staff in the Fisheries Department, Mombasa, during a meeting with staff from the Ministry of Land learned that the latter refuse that some fishermen's landing sites are legally gazetted – even though the Fisheries Act clearly says so. The Fisheries Department wants to make a zoning and management plan for the coast but other agencies such as Ministry of Land and the country councils refuse this.

Lack of communication and clashes of authority between different ministries and institutions are regularly happening. In cases where NEMA clashes with other institutions, ideally NEMA should prevail because EMCA is a framework law which line ministries should accommodate. But in reality the outcome tends to depend on the people involved rather than the law. Put in other words, informal relations of governance count more than the formal authority given by the law.

5.4 Land tenure and land rights

Land tenure and land rights issues are essential for an understanding of coastal resource management and for the hopes of establishing a more socially sustainable ICZM. The problems of land and resource access for some groups go back to the era when the Coast was under the suzerainty of the Sultan of Zanzibar. Arab and Swahili groups were given land titles and other privileges at the cost of the original inhabitants, the nine different ethnic groups subsumed under the category of Mijikenda. The British Administration further marginalised the Mijikenda by excluding them from holding land ownership and by hiring Arabs and Swahili people as Colonial Government officials – in practice thus giving the latter groups the power to prohibit Mijikenda people from obtaining land titles through the official legal system imposed by the British. That system, similarly to current Kenyan Land Law, did not recognise inheritance of land through many generations as legitimating land claims.

The coast province is a special case concerning land rights and access to land as people in other provinces tend to have titles to the land they live on and farm. The problem on the coast gets worse in time. One interviewee described it as "a ticking bomb". Today, the Mijikenda in particular face serious problems on the coast. They occupy most of the land designated as Trust Land and elsewhere they are categorised as illegal settlers or squatters. Much of the land on the actual coastal 10-mile strip is owned by absentee landlords, some of whom are of Arab or Swahili descent and have inherited land from their forefathers. Others have gained land through political patronage after the Independence. Descendants of Kenya's first president, Jomo Kenyatta, for example, own large tracts of coastal land south of Mombasa and other influential people have likewise grabbed land for themselves or their political clients. Consecutively, quite a few have handed over their land rights to foreign tourism operators who own the hotels established on the very coastal front.

In short, squatters on the coastal strip have no legal land rights and face eviction whenever it suits the land owner. Naturally, this means that they avoid long-term investments in the forms of tree crops or inputs to agriculture or fishing activities (boats, gear) and their economic productivity

suffers due to this[6]. Moreover, in many cases, hoteliers and other land owners have blocked local people's access to the beach, including the landings sites used by local fisher folk. Apart from causing resentment this threatens the livelihoods of the fishermen and their families. And it is hard to se how ICZM can be implemented in a sustainable manner unless these issues of land rights and tenure are dealt with. This is an extremely controversial political issue, which is obviously beyond the frame of the EMCA.

5.5 Who should represent "local people"?

An important question is – cf. the above comments on land tenure and land rights – who should represent local people or communities in ICZM. Currently, different authorities work with different local NGOs and community based organisations but these do not necessarily represent "a community" but rather one social segment within a community. Although, in theory, the authorities responsible for ICZM are thereby to some extent doing their job in a participatory manner and according to the requirements in the EMCA, the real situation in practice is not quite like that. This is because the law does not specify – and cannot specify – who is a legitimate coastal management stakeholder. This is up to NEMA and the District and Province Environment Committees to decide and it is a rather complex matter, which is not adequately resolved at present. Blow, the complexity of the matter is illustrated by three examples:

Kaya (= sacred forest) management

Kaya management is not always well-defined. Many elders claim that they are the leader and there are contravening ideas along the coast about the very definition of a *kaya* forest. People do not always agree on whether a specific forest is actually a sacred forest or not – or whether it should be or not. In some locations parts of the *kaya* forest is under private land title and those holding the title deeds may want to sell it (and therefore they argue that it is not a *kaya*) while the others wish to retain the area under communal management.

It is interesting that one civil servant in an interview mentioned that the "Dollar Syndrome" makes the question of representation more complicated than it already is. By this he meant that when certain activities such as environmental management suddenly get a lot of attention and money things get out of balance. Under normal circumstances, different resource user groups can find ways of cooperating, but donor intervention easily mess things up. According to this source of information, this is because donors and NGOs like to impose there own ideas about social organisation on the people they support – instead of finding out how things are already organised and build on that. While this is undoubtedly a good point it is vital to recognise the deeper complexity of this issue. The question for donors and planners is how to strike a balance between, on the one hand, respecting the cultural and social traditions of particular groups and, on the other hand, challenging the same traditions when they, e.g., compromise women's rights.

The "fisheries community" as a key stakeholder in ICZM.

Keeping in mind that numbers are disputed among different sources of information there are 10.000 full-time fishermen along the coast, operating a total of 3000 boats of which just 700 are motorised (Fisheries Department, Coast Province). In addition, some 3000 people work as part-time fishermen (some are young "trainees", others join the lobster season in Nov-Jan). The fishermen can be further divided into two categories of *locals* and *foreigners* (from Pemba, Tanzania). The latter group is

[6] Another critical issue regarding land tenure and land rights is that according to Kenya's Land Law and according to the traditions of different ethnic groups women are prohibited from owning land. In particular, widows face tremendous hardship when their family's assets are transferred to the diseased husband's relatives immediately after his death.

more experienced and resourceful. They have bigger boats and fish beyond 5 nautical miles. The traders know them and buy their catch which is typically much larger than local people's catch.

Some 20 percent of the local fishermen own their own boats and gear. These boat owners (*Tajiri*) are usually (but not always) middle-men and fish traders or they are former fishermen who have managed to raise sufficient capital. For boats where the crew uses an owner's boat and gear, the catch is divided into three parts. 1/3 goes "to the boat", another 1/3 "to the gear", and the remaining 1/3 is divided among the crew members. Often, the crew is only allowed to sell to the owner who decides the price. There are auctions in some landings sites, though, and here the price it divided between owner and crew. Crews are usually impermanent, fairly ad hoc composed. Often they are relatives or friends from the same village, but not always so.

The crux of the matter is that the category of fishermen covers people with varying livelihood strategies and diverging interests. Boat owners (who may double as salaried employees in Government agencies or private businesses in large towns) are not necessarily representative of crew members and their interests, and so forth. But this issue is largely ignored by Government authorities even though they are well aware of the realities. However, the recently introduced (or, more exactly, reinvented) institution of Beach Management Units under the Fisheries Department is a promising initiative which holds the potential to be democratically functioning bodies where a variety of fisheries interests are represented.

Land grabbers or dispossessed people as legitimate ICZM stakeholders
One critical question arising with the controversies surrounding issues of land tenure and ownership on the coast of Kenya is who should count as legitimate ICZM stakeholders. Obviously, if only groups with land titles are involved in such processes the historical land grabbing by politically influential people and the dispossession of land of the original coastal inhabitants will indirectly be legitimised, which would be unfortunate. And if dispossessed groups are involved it is bound to stir apprehension among the current official land owners.

5.6 Lack of knowledge and planning capacity in Government institutions

In the introduction to this report it was noted that the civil servants, NGO representatives and researchers interviewed for the Post doc. project unanimously agreed that problems about technical and knowledge aspects of ICZM were not nearly as difficult to handle as problems of governance. This view resonates with much of the ICZM literature where an abundance of project failures due to inadequate governance systems are reported.

Without belittling the relevance of this view and the worldwide evidence that supports it, it should not be ignored that lack of knowledge and planning capacity among ICZM stakeholders is after all still a very significant hindrance to the implementation of sustainable ICZM in Kenya. The most pressing issues can be summed up in the following points:

Lack of data and lack of good data: The situation in Coast Province appears to be that there are, of course, certain data available. Some are produced in special research institutions such as Kenya Marine and Fisheries Research Institute. Other data are found in local departments such as the Fisheries Department and the Forest Department. And there is independent collection of data by researchers who are mostly sponsored by foreign donor agencies. There are very limited attempts at bringing many different types of data together and systematizing these data, for example, with a view to establish coastal zone management databases where data are continuously collected and

analysed in order to provide the necessary knowledge base for management and political intervention. The KenSea Atlas is the most advanced example of such an endeavour. Nonetheless, this Atlas appears to be utilized very little by others than the researchers at Kenya Marine and Fisheries Research Institute.

In any case, the KenSea Atlas would be only one tool to be used by coastal managers. They still lack many other kinds of scientific aid and knowledge in order to do their job properly. The situation at province and district levels is that NEMA and other institutions related to ICZM are understaffed and lacking in resources to carry out systematic data collection, which would enable them to detect relevant environmental changes – deforestation, erosion, pollution, fish stocks to name but a few. Even for fisheries where the Fisheries Department does surveys, the data collected are reputedly not reliable (Tim McClanahan, personal communication).

The unfortunate situation is caused by a combination of things.

1. Scientific data collection is Kenya is nowadays almost entirely project-based data collection as opposed to a more continuous collection of baseline data. Secondly, Kenyan scientists are said to be reluctant to share their data and publications with others. And thirdly, there is a general lack of staff and equipment and other resources in local Government Departments where many environmental data are supposed to be gathered on a regular basis.

2. Limited experience with and tradition for knowledge-based management: This is due to the simple fact that data are unavailable to managers, but another reason why knowledge is not being considered important by stakeholders is their experience that powerful people make decisions without consideration of data and the law for that matter, (so why bother about data collection?). Moreover, many people - e.g. many fishermen - do not believe in the knowledge of scientists, which they consider bookish and not founded on the practical experience they themselves find more relevant and authoritative.

3. Lack of institutional sustainability in the Government sector: The rotation system for civil servants in Kenya where officers embark on lifelong pilgrimages from one office to another, as professional office nomads, means that much of the training and capacity building that is carried out with people in districts or provinces somehow 'melts into air' as the people are gradually replaced by new officers who must start from scratch when they arrive. The tradition of rotating reproduces systemic incompetence and for each officer as an individual the work experience bears resemblances to the fate of Sisyphos in Hades. At district levels, civil society is the more sedentary force and should, therefore, be actively involved in knowledge and data collection. However, many NGOs are essentially build-up around one charismatic leader who is the founder and manager of the organisation. When donors come along this leader is capable of rapidly drumming up local support and activating the 'sleeping cells' within their organisation. After donor support ends, these cells go inactive again.

5.7 ICZM experiences and public participation

The Diani Beach and the Bamburi-Nyali Beach ICZM pilot projects have left rather negative marks on the institutions and people involved. For the Kenya Wildlife Service, the Diani-Chale project was a particularly bad experience. Ever since, the Kenya Wildlife Service has been unwelcome in the area. Up to this day, staff members cannot openly go to this beach because of hostility among

the local fishermen. Other institutions are critical of the projects, too. An environmental assessment was never carried out so the impact of the projects in terms of biodiversity and fish stocks, etc. was never established. And generally, the collaboration in planning and implementation among different Government bodies is perceived as pretty disastrous. It is generally acknowledged that the Diani Beach project was far too top-down oriented and began with too much force. In the Fisheries Department, however, a more positive sense of the current situation is found. Here, staff members report that local fishermen nowadays confiscate destructive gear and bring it to the Fisheries Department. because they understand the value of protecting themselves and the marine resources against those who use this kind of gear.

One important question is whether the institutions involved (Coastal Development Authority, the Fisheries Department, Kenya Marine and Fisheries Research Institute, Kenya Wildlife Service, and NEMA) are in reality peripheral institutions with too little political clout to follow through when more powerful players enter the game and the going gets tough. Lack of participation by the Ministry of Land and key provincial authorities, which normally deal with people, arbitrate conflicts and maintain security, may undermine the chances of successful ICZM processes with lasting effects.

6. District Environment Committees (DECs)

In regard to ICZM one of the key institutions established under the EMCA is the District Environmental Committee. In an administrative set-up where focus is on decentralized coastal and environmental management this committee is designed carefully to be a guarantee for the integration part of ICZM. They are multi-sectoral inasmuch as their members come from many different Government departments as well as non-Government bodies such as environmentalist NGOs, business organizations, farmers associations, etc. This should ensure the horizontal integration of ICZM.

By linking the District Environmental Committees to Provincial Environmental Committees and through them to the NEMA Headquarters in Nairobi – not least in the processes of collecting data for regular state-of-the-environment reports and for environmental action plans produced every five years – the system intends to ensure the vertical integration of ICZM.

If the idea of the District Environmental Committee and the institutional framework in which it is embedded is very well thought out the question is how this idea is working in practice. In order to investigate this question a fieldtrip was made to Malindi District in Coast Province where a number of DEC members and other local people were interviewed. Interviews with members of the Provincial Environmental Committee were carried out in Mombasa as well. During the brief fieldtrip (three weeks in Malindi) the investigation focused on the relations of communication and collaboration within the Malindi DEC and between the Malindi DEC and the other institutions to which it is related according to the EMCA, that is to say:

1. Malindi DEC and relations with DECs in other districts
2. Malindi DEC and relations with the Provincial Environmental Committee in Coast Province
3. Malindi DEC and relations with local groups and interests in Malindi
4. Malindi DEC: Internal relations of communication among its members.

The findings from the round of interviews were as follows:

Ad 1) There is no communication or collaboration between the Malindi DEC and other DECs. To the extent that environmental resources are geographically located in more than one district which necessitates some measure of collaboration and cost-and/or-benefit sharing, the DECs are not involved. Instead, the local District Environment Officers will communicate. In Malindi, however, the main environmental "asset" where cross-district collaboration is required is the Arabuko-Sokoke forest which is under management of the Forest Department.

Ad 2) There is no direct communication between the two kinds of committees. The only linkage is that the Provincial Environmental Committee receives minutes from DEC meetings (and sometimes vice versa if some topic is particularly relevant for Malindi). In practice, the state-of-environment reports and the five-year environmental action plans are prepared by the District Environment Officer (NEMA) and the Director of Environment in Coast Province (NEMA) but with little consultation of DEC members. Data for these reports are submitted by other Government officers representing relevant departments (forestry, fishery, health, etc.) but the reports are not discussed at DEC meetings before submission to higher level authorities.

Ad 3) It appears that the Malindi DEC is mostly preoccupied with Environmental Impact Assessments, in particular when they are conducted for construction development in environmentally sensitive areas. In practice, it is mainly a matter of allowing constructions within the so-called riparian zone (defined as 50 metres from high water mark)[7]. Therefore, the DEC does occasionally meet with private construction developers and the experts who made the environmental impact assessment, but there were no other examples of communication with others apart from that.

Ad 4) Although the EMCA states that DECs should meet four times per year this is not the case in Malindi. In fact, the only meetings during 2007 were about construction development and environmental impact assessments. There was no meeting held to discuss more general environmental issues and planning of such things. Although the Malindi DEC is said to be far more active than other DECs in Coast Province, this shows that activities are quite few. To those members of the Malindi DEC who are keen and knowledgeable this is clearly a frustrating situation but lack of financial resources prevent further work to be done.

Members also regret that lack of proper data collection at district level prevents them from making knowledge based planning and management decisions such as deciding which environmental issues should be given priority over others.

It is noteworthy that the recommendations for environmental action in Malindi District, which are listed in the recently completed five-year environmental action plan (officially approved by the DEC) are neither into the District Development Plan nor into the work plans and performance contracts of individual Government officers residing in the district. This lack of coordination is almost a guarantee that none of the recommendations will be implemented because no one is obliged to do so.

As District Environment Committees are still relatively new institutions in Kenya few studies exist that discuss their work. The only study that is relevant for this report is Barr and McGrew (2004) who studied tree management in Meru Central District and interviewed the District Environmental Committee members here. Their findings are very much in line with the findings reported here:

- DEC members hold discrepant perceptions of the rules of DECs which they themselves have negotiated and decided (2004:13);
- the rules and plans of DECs are not properly communicated to the extension workers in the district who therefore neither implement the plans nor explain the rules of (tree management) to the farmers in the district (2004:15).
- the tree management rules decided by the DEC presupposes that the extension officers know how to value trees but in practice most extension officers do not have such qualifications (ibid.);
- lack of communication and coordination between the DEC of Meru District and neighbouring DECs as well as with the Provincial Environment Committee has prevented effective control of the Kenya Tea Development Agency, which allegedly is to blame for much of the environmental damage. (ibid.

On the positive side, Barr and McGrew report that decision-makers below district level find that DECs are flexible and quick in their response to suggestions and plans (2004:58).

[7] Interestingly, this concept is widely used by DEC members as if it is a concept that relates to the EMCA, However, this concept is not found in the EMCA. It is possibly a concept which is derived from the legislation that supports the work of Kenya Wildlife Service.

7. Conclusive remarks

This report has defined integrated coastal zone management as a discourse: A social struggle over crucial coastal resources and, simultaneously, a struggle over the symbolic power to define how and by whom "coastal problems" should be understood and resolved. By defining ICZM as a discourse it is stressed that coastal management is a matter of political contest and contended meanings produced and received within specific historical and social conditions. Science, including the KenSea Atlas project and the Post doc project reported here, is part of this discourse.

This way of understanding ICZM is markedly different from the understanding found in much of the ICZM literature dealing with developing countries, including the 'guidance' literature. In that literature ICZM is essentially considered a conceptual and practical tool kit with well-tested guidelines to be used by decision-makers and managers and to which scientists contribute their expertise in a politically neutral fashion.

The first part of this report discusses two main problems emerging from the neglection of the discursive aspects of ICZM in the guidance literature as well as in parts of the academic ICZM literature:

1. While general guidelines for ICZM produced by the large donor agencies and by individual ICZM experts are undoubtedly good starting points for coastal managers in planning situations the superficial nature of these guidelines makes their practical usefulness questionable. The simplicity of language used in the guidelines (e.g. "adopt formal management plan and governance process" or "promote compliance to regulations") lends an air of political naivety to the guidelines because underlying questions of where and on what basis decisions on the allocation and use of coastal areas and resources are made are ignored. And no practical advice is given about how to deal with real-life's power struggles between national and local institutions of authority and clashes of interest between different parts of the government sector when compliance to regulations is to be promoted.

2. In the academic ICZM literature there is an unfortunate tendency to describe and analyse ICZM issues by adopting the concepts and ideology contained in the guidance literature. The analytical viewpoints of many scholars are thus is line with the viewpoints of international donor agencies that sponsor ICZM projects and programs in developing countries – as opposed to a more critical analytical perspective. One of the peculiar examples of this tendency is the articles found in scientific journals where concrete ICZM projects are described either as total failures or as being of very limited success, yet it is concluded that the guidelines and way of thinking that defined these projects in the first place should still be used as models for the future.

In light of the fact that ICZM experiences from developing countries reveal few if any cases of truly successful implementation of ICZM guidelines, this report – unlike much of the academic ICZM literature – maintains a critical stance toward ICZM both as discourse and practice. However, a critical stance is not the same as dismissing the idea of ICZM altogether and the conclusion to the long list of practical implementation problems and failures is therefore not that ICZM is a bad idea. Indeed, ICZM is a very good idea - quite like civilisation was once described by Mahatma Gandhi as a good idea. It is a good idea which for a number of social and political reasons is very hard to implement in developing countries unless the different stakeholders in ICZM processes are given

clear incentives to participate. This is not happening, though. The review of ICZM literature concerning developing countries shows that usually stakeholders are not given tangible incentives to motivate their engagement in and support of environmental management processes such as ICZM. The benchmark and certification system established in the Philippines is held out in the report as one rare and promising example of how a national Government may promote the willingness among different stakeholders to take responsibility for coastal zone management over a sufficiently long period of time.

While the first part of the report deals with ICZM in developing countries generally, the second part of the report specifically concerns Kenya. Here, the establishment of the Environmental Management and Co-ordination Act of 1999 (EMCA) has provided the necessary institutional and legislative basis for the development of integrated environmental management, including ICZM. In practice, the process of creating good ICZM is impeded by numerous factors ranging from disputes over land rights and tenure to legislative inconsistencies and clashes between different parts of the Government administration. Based on the study of the situation in Kenya, the following recommendations for further improvement are relevant:

1. The formulation of detailed guidelines regarding ICZM under the EMCA is of utmost importance. Without such guidelines the civil servants in the different institutions established under the EMCA to implement this Act are frequently prohibited from taking environmental action in concrete cases and are therefore unable to fully realise the great potential of the Act.

2. Stakeholders involved with ICZM need to be given incentives to engage them fully in these processes. It is worthwhile to contemplate a benchmark and certification system based on inspiration from the the Philippines, which would provide benefits to local authorities that actively assume responsibility for coastal management issues.

3. Since the EMCA in line with well-known ICZM literature and guidelines clearly states the importance of horizontal and vertical integration of coastal management, the involved Government authorities should be given incentives and duties to cooperate on ICZM. For example, the Environmental Management Plans agreed on by the multi-sectoral District Environmental Committees should be written into the work plans and performance contracts of all relevant district level agencies in order to ensure commitment to these plans.

4. The EMCA provides for a thorough decentralization of environmental management in Kenya, including ICZM. However, the district and province level authorities who should be in charge of ICZM lack staffs and economic and scientific resources to carry out their duties in a satisfactory way. It is important that future scientific inputs to ICZM processes will take into account the scales of operation of these institutions so that the right institutions are provided with the right kinds of data. In the current situation, district level authorities might not benefit from national scale surveys of resources if these surveys cannot be 'translated' in a meaningful way to cover district scales as well. This would require a closer collaboration between scientists and ICZM managers at all governance levels than has hitherto been the norm.

5. Another important aim of future scientific inputs to ICZM in Kenya should be to help ICZM managers at different governance levels to define their priorities in terms of which aspects of

> ICZM should be given most importance and which types of data should be systematically pursued instead of others. Currently, though they are important environmental impact assessments take up a disproportionate amount of resources from District Environment Officers and District Environmental Committees so that many serious environmental problems are given too low priority.

Finally, this report has discussed a shortcoming found in the academic ICZM literature, which is that often the chosen perspective is *either* on the governance aspects of ICZM *or* on the natural processes and resources to be managed. The result of this academic division of labour is the existence of numerous articles where concrete projects are described as highly successful from a governance perspective without providing evidence that these projects have actually led to environmental improvements. Vice versa, there are cases that document improved environmental conditions in concrete places but no information is conveyed about the social conditions for this achievement. In any case, the problem is that science is not providing the necessary holistic understanding of coastal management and the status of coastal resources.

In this regard the initiative by Copenhagen GeoCenter whereby the natural scientific expertise associated with the KenSea Atlas and database is supplemented with the social scientific perspective provided by the post doc project is a step toward the right direction, which could be further developed. While geography and geology played important roles in the early years of ICZM studies and projects in both developing and developed countries, other academic disciplines such as botany, marine biology, law, and sociology have increasingly come to dominate the field.

Anticipating that the field of ICZM will receive growing attention from political decision-makers and continue to attract donor support in the future, not least because the predicted climate changes in many developing countries will affect coastal areas quite significantly, the interdisciplinary qualities of geography and geology could provide the holistic understanding of coastal management, which the fragmented field of ICZM studies so clearly lacks at present. Hence, there is little doubt that the combined competencies found within the GeoCenter if organised in the right manner could make a very strong contribution to ICZM studies and projects in the future.

Appendix 1: People met in Kenya, February 2007.

5th of February	**Charlotte Just** First Secretary Royal Danish Embassy
	Lily Murei Monitoring & Evaluation Officer Kenya Land Alliance
6th of February	***Godfrey A. Olukoye*** Senior Lecturer, Dept. of Environmental Sciences Kenyatta University, Nairobi
	James Mwangi Eastern African Coastal Forest Programme Assistant WWF Eastern Africa, Nairobi
7th of February	**Tim McClanahan and Nyawira Muthiga** Wildlife Conservation Society (WCS), Mombasa
8th of February	**Maurice Nyunja Otieno and ???** NEMA – Coast Province, Mombasa NEMA – Mombasa District
	Zachary Peter Odhiambo Coast Development Authority, Mombasa
	Harrison Onganda KMFRI, GIS section, Mombasa
9th of February	**Stephen Ndegwa** Fisheries Department, Mombasa
	Lamukami CBO In Mwabunga Colorado, near Diani Beach
10th of February	**Nyawira Muthiga** Wildlife Conservation Society (WCS) , Mombasa
	Mohamed Omar Said Senior Scientist – Biodiversity Research and Monitoring KWS, Coastal region Headquarters, Mombasa
11th of February	**Ali Mohamed** NEMA, Nairobi (met in Mombasa)
12th of February	**The Kenya Association of Hotelkeepers and Caterers (KAHC)** Mombasa
	George Mazuri Yaa Agricultural Business Development Coordinator (Danida program) , Mombasa
13th of February	**Maxine Yalo Mutisya** Senior Fisheries Officer (Law Enforcement/Official controls), Mombasa **Charles Gatune** Fisheries Department Aquaculture development, Mombasa

	Georgina Mbugua EACF National Ecoregion Coordinator WWF, Mombasa
	Andrew Wamukota Kenya Sea Turtle Conservation Committee (KESCOM)
14th of February	**Tom O. Odhiambo** Tourist Officer Ministry of Tourism and Wildlife, Mombasa
	Nixon Otieno Action Aid, Mombasa
15th of February	**George Kombe** CDA officer, Kilifi District
	Nemuel Onchang'a Fisheries Officer, Kilifi District
	Jacob Ochiewo Head of socio-economic unit, KMFRI, Mombasa

Appendix 2. Governance in Kenya

All societies and social groups have rules – formal and informal – that define what kinds of behaviour are acceptable and unacceptable. The concept of governance refers to how these rules are enforced and managed in and by the group – that is, how power and authority are constituted and exercised.

This section briefly describes formal and informal governance in Kenya. The section is organized as follows:

1. Formal governance: State administrative structure, local authorities, and constituencies.
2. Traditional/informal governance: Councils of the elders and religious leaders.
3. How do formal and informal governance relate to each other?
4. Decentralization of state governance in Kenya.
5. The changing role of civil society.

Formal governance

The State administrative structure
Kenya is administratively divided as follows:

Administrative levels → headed by
The Republic of Kenya → President
8 Provinces (*mikowa*) → Provincial Commissioner
74 districts (*wilaya'at*) → District Commissioners
262 divisions (*taarafa*) → Division Officer
1,088 locations (*kata*) → Chief
Sub-locations (*kata ndogo*) → Asssistant Chiefs
(Below the level of sub-locations, villages are headed by headmen).

Provincial commissioners, district commissioners, division officers, chiefs, and assistant chiefs are appointed by the Minister of Internal Security in the Office of the President on the recommendation

of the Public Service Commission. They receive their budgets directly from the Treasury. In contrast, village headmen are elected by vote in each village.

Local authorities

Kenya has four classes of local authorities: *City*, *Municipal*, *Town* and *County* councils. These are all established under the Local Government Act of 1977. Local authorities are administered by a mayor and/or by councillors. The number of councillors depends on the population and area of each authority. They are elected by the public every five years.

Currently, Nairobi is the only authority with city status[8]. Municipalities and towns are other forms of urban authorities whereas county councils are essentially rural. Each district has a maximum of one county council, which basically covers the district area not taken up by urban authorities. In some districts county councils are the only kind of local authority.

Local authorities receive their budgets from different sources: the central Government, locally collected revenues, and the Local Authority Transfer Fund. The Fund, created in 1999, is allocated five percent of all income tax collected in the country. This amount is anticipated to gradually rise to 20 percent. Allocations from the Local Authority Transfer Fund function like grants with certain performance and financial conditions. To get the grant, a local authority must submit a so-called Local Authority Service Delivery Action Plan prepared through a participatory process; time-bound budgets, with at least half of the grant amount allocated to capital projects; a statement from debtors and creditors and a debt reduction plan; and a revenue enhancement plan. The Local Government Act enables the central government to take disciplinary action in cases of violation and non-compliance.

Despite the new flow of resources most Kenyan local authorities are said to be overwhelmed by financial problems, overstaffed and laden with debts (Devas and Grant 2003:313).

Constituencies

Representation in the National Parliament is based on sub-units of the districts known as constituencies, which do not necessarily correspond to divisions. There are around 210 constituencies in Kenya, including 21 constituencies in Coast Province. Each constituency is further subdivided into wards.

Constituencies vary greatly in respect to size of their jurisdiction, population size, density and diversity, scope of economic activities, degree of urbanisation, and levels of education and poverty

Constituencies receive money from the central Government in the form of Constituency Development Funds, created in 2003. Since then, 2.5 % of the national budget is allocated annually to the Fund. Each of the 210 constituencies is expected to receive about Ksh25 million ($337,000) per year. Unlike other development funds that filter from the central Government through larger and more layers of administrative organs and bureaucracies, constituency development funds go directly to the local levels. There are certain rules that govern the utilization of the funds such as restrictions on the share of funds that go to a particular type of project (see Mwangi S. Kimenyi 2005). However, disbursement of funds is not as closely linked to performance or financial discipline as is the case with Local Authority Transfer Funds.

[8] Kisumu and Mombasa have recently been granted city status, but it is yet to be implemented.

Traditional/informal governance

Councils of Elders
On the Kenyan coast traditional Mijikenda society was based on gerontocratic ascent through various grades of the Council of Elders called *Kambi* with the ultimate echelon of power being the *Kambi mbere*. Members of the *Kambi mbere* were relatively wealthy men who had fulfilled all the requisite ritual expectations and ordeals and had thereby themselves become ritual experts (Orchardson-Mazrui 1998:88). Below the rank of *Kambi mbere* were other ranks ranging from levels of virtual non-power to levels of real power. Ritual status and power in Mijikenda society was acquired as men moved through these ranks. At all levels of this social hierarchy people were grouped into age-sets after circumcision rites and they remained in their respective sets until they were allowed by the elders to pay the fees to undergo initiation into a higher rank. As an individual ascended through the ranks, the fees became increasingly prohibitive and the ordeals more demanding. In this way, weaker men were effectively eliminated from advancing to the more exclusive ranks of society (Orchardson-Mazrui 1998:89).

The traditional system largely disappeared during the 1900s. Today, many people do not see the point in participating in traditional rituals and power and authority are acquired through other channels such as education, salaried employment, political patronage, trade, and business activities. Moreover, the increasing influence of Islam and Christianity on the Coast has reduced the importance of the traditional religion associated with the *Kambi* system. Nonetheless, Councils of Elders are still immensely important among the Mijikenda as well as among other groups in Kenya. The vast majority of Kenyans engage these councils for mediating and arbitrating disputes rather than seeking justice through the police and courts. The formal legal system is rejected for different reasons: people lack physical access to this system (most districts have only one magistrate in the entire district); high cost of taking cases through the courts; court cases, particularly civil matters, tend to be delayed over many years; the technical and complex court procedures intimidate many people and make it necessary to pay for legal assistance which is costly (Kalla and Cohen 2007:8-9).

This means that many day-to-day community affairs related to natural resource management matters, food and water, fishery, security as well as more general economic and social and spiritual matters are considered the responsibility of the Council of Elders. In negotiations with formal authorities such as District and Provincial civil servants, the councils usually represent their local community.

Religious leaders
In addition to Councils of Elders, religious leaders exercise considerable power and authority in Kenyan society. As moral, ethical, and spiritual guides for people, priests, imams, and other religious leaders influence society in terms of regulating and controlling human behaviour. In many cases, the symbolic power associated with these positions is combined with significant economic power thanks to donations from local people and foreign groups. The economic strength of many religious organisations permit them to play very important roles in peoples lives as deliverers of social services such as education or health care, which would otherwise be unavailable. For example, the Christian Health Association of Kenya provides an estimated 40 percent of Kenya's health services through a national network of hospitals and clinics (Kalla and Cohen 2007:8).

How do formal and informal governance relate to each other?

Every country in the world displays elements of both formal and informal governance. From a functional viewpoint it is often held that formalisation of rules and governance should go hand-in-hand with economic growth and the division and specialisation of labour as well as other aspects of development. But in reality informal institutions are usually highly persistent regardless of such changes in society. And there is no evidence that informal governance necessarily hinders successful economic and social transformations, although this has often been the case in African countries. It might indeed be a vital driving force in these transformations as seen in the Asian "tiger economies".

As pointed out by Boesen (2007), informal governance can be rule-based - that is, based on informal but effective rules for how authority can and cannot be exercised – but it is more characteristic of informal governance that it is based on trust in persons rather than trust in formal rules and contracts. This is an essential feature of what has been labelled relation-based governance which by its very nature is informal. Li et al. (2003) have compared informal relation-based governance with formal rule-based governance:

Table 1: Differences between relation-based and rule-based governance

Relation-based governance	Rule-based governance
• Relying on private and local information • Complete enforcement possible • Implicit and non-verifiable agreements • Person-specific and non-transferable contracts • High entry and exit barriers • Requiring minimum social order • Low fixed costs to set up the system • High and increasing marginal costs to maintain • Effective in small and emerging economies	• Relying on public information • Enforcing a subset of observable agreements • Explicit and third-party verifiable agreements • Public and transferable contracts • Low entry and exit barriers • Requiring well-developed legal infrastructure • High fixed costs to set up the system • Low and decreasing marginal costs to maintain • Effective in large and advanced economies

Source: Li et al. (2003:147)

The distinction between formal rule-based and informal relation-based governance is important to be aware of. This distinction suggests the existence of two sectors of society in which social relations and power proceed according to quite diverging principles. However, it should be stressed that these two sectors are obviously "inhabited" by the same people. In this regard the role of local elites at the levels of, for example, district and division is interesting because local elites often embrace both the formal and informal sectors. In his analysis of Sub-Sahara State formation the French political scientist Jean-Francois Bayart conceptualised local elite groups as *straddlers* - that

is, people who have somehow managed to obtain power both within the formal State sector and the more informal agricultural and/or fishery based village sector; people who cannot be labelled as class because their most characteristic trait is the ability to shift successfully from one sphere of society and social organisation to another; people who are innovative both on the larger political scene, within the State apparatus, within religious organisations, and in their smaller village community (Bayart 1993:63-83, 99-103, 176-179).

Another thing worth stressing is that although informal governance mechanisms may be very change-resistant they are nevertheless changeable. In countries like Kenya where labour migration is prevalent and where economic opportunities are mainly linked with non-farm and non-fishery occupations, many young people in the course of exploring these opportunities loose respect for the traditional figures of authority in their rural homesteads. Technological innovations such as television, the internet and mobile phones enable new forms of communication between people which may alter relations of authority as well. Other processes that may affect governance mechanisms are decentralisation of state power and the strengthening of civil society.

Decentralisation in Kenya

In the pursuit of more efficient, equitable, and democratic development and governance in developing countries, the idea of decentralization has been promoted by international donor agencies like the World Bank and by many Non-Government Organisations (NGOs) since the 1980s. Decentralization is hailed for its economic, social and political potentials – ranging from ensuring a more efficient allocation of resources to empowering social groups at grass roots levels. As of 2002, around 60 countries were in various stages of decentralization the management of their natural resources (Agrawal 2002). Kenya is one of them.

Broadly speaking the concept of decentralization refers to the transfer of administrative and political authority, power, resources, functions and responsibilities from a central government to subordinate units such as administrative departments and regions and semi-autonomous local authorities. In reality, however, apart from being one of the buzz-words of development jargon decentralization is an umbrella concept which covers quite a variety of meanings such as devolution, deconcentration, delegation, and privatization (see Box 1).

Box 1: Definitions of decentralization

Decentralization usually covers the following meanings:

- **Devolution** refers to the distribution or re-distribution of authority to make decisions and to take action by local governments independently of central administrative oversight. Central governments might retain overall legal control (equal protection under the laws, voting eligibility, ensuring general law and order, and regulating fraud and corruption) and the authority to alter local government powers. Within those boundaries, devolution exists if local entities have substantial authority to hire, fire, tax, contract, expend, invest, plan, set priorities, and deliver the services they choose.

- **Deconcentration** occurs when administrative authority and responsibility is transferred from central Government authorities to lower levels of government through the ministries and departments.

- **Delegation** involves the transfer of managerial responsibility for specific functions from the central government to semi-autonomous organisations such as the parastatals.

- **Privatisation** is the transfer of institutions and activities from the government to the private sector.

Sources: Definitions of devolution and deconcentration from James S Wunsch 2006. Definitions of delegation and privatisation from Kenya's National Civic Education Programme, Uraia, 2007, downloaded from www.marsgroupkenya.org

In Kenya, the government and administrative system is basically the same as it was at independence. During the 1970s, many functions and powers were removed from local authorities and centralised. And in 1983, the Government adopted the District Focus for Rural Development Strategy which today remains the key approach to planning and implementing development activities by most government institutions. This strategy emphasised the deconcentrated system of district administration at the expenses of the elected local governments.

The districts are the units to which the central government has transferred administrative powers. The district departments of the line ministries are responsible for government policies in the district. Under the District Focus Strategy a number of development committees were created, including the District Development Committees, Division Development Committees and Location Development Committees. These committees are composed by Provincial Administration officials, clerks of local authorities, heads of government departments, local leaders and representatives of the different parastatals and development agencies in a given area. It is noteworthy that the roles of the committees significantly overlap with those of the councils.

From the 1990s, donor support to Kenya's development programmes began to be increasingly linked to greater democratization and observance of human rights, greater local autonomy, and decentralized service delivery. Hence, with the support of the World Bank and the UK's Department for International Development the Kenya Local Government Reform Programme was initiated in 1996 to enhance the "capacity, power, and responsibility of locally elected councils" for the purpose of improving "service delivery, enhance economic governance and alleviate poverty" (KNCEP 2007). The programme has seen the reform of the business licensing process, easing the administrative burden on local authorities, and development of an integrated financial management system.

Nonetheless, devolution has been limited for a number of reasons[9]:

- The powers and duties of the Provincial Administration and its relationship with the local authorities are not well defined.

- Each government ministry has staff down at the district, division, and even at the location level in some cases, who report to their line ministries and are, therefore, not under the control of the local government.

[9] The following is based on KNCEP 2007

- The Local Government Act puts the local authorities under the control of the Minister in charge of local authorities in the central government. The local authorities are not able to act on their own; they lack the independence and autonomy that is characteristic of devolution. For example, the minister has to authorise all the financing and expenditure of local authorities, and also controls employment and deployment of the chief officers of local authorities.

- Though the District Development Committees were meant to harmonise plans and proposals from committees at subordinate administrative levels, these subordinate committees have not been established in many places. Divisional officers, chiefs and sub-chiefs hold development meetings infrequently, if at all.

- Many community projects are sponsored directly by senior politicians; some even carry their names. Some of these projects are abandoned or left incomplete when the sponsoring Member of Parliament loses the seat – the winners preferring instead to develop their own projects.

The changing role of civil society in Kenya

The proliferation of Non-Government Organisations in Kenya since the change of Government in 2002 and the consecutive donor support have meant that civil society is gaining strength in Kenya. Some of the NGOs pay attention to the ways in which money passes through the Government institutions and political systems for specific projects. Local Authority Transfer Funds are, for example, given on the condition that officials work with the people in their planning of how to spend the money. In a recent year, people turned up at a rally organised by the organisation Action Aid in Mombasa to protest that the projects planned for the previous year had not yet been implemented by the local authority. They wrote complaints to the central Government and proposed that the next round of Local Authority Transfer Funds should not be transferred before the old ones were used properly. The whole case was investigated and many city council members were ousted.

Several case studies of local authorities show that the upsurge in civil society interaction with these authorities have led to improvements in regard to transparency and public participation in the allocation of resources with the result that many local authorities have come to perceive NGOs and community based organisations more as partners than opponents (Devas and Grant 2003:313).

Since 2002, many NGOs have also kept an eye on the way constituency development funds are administered. In the same way as civil society has successfully addressed the bad practices of local authorities, those constituencies where civil society is well-organised and knowledgeable about the law seem to have fewer cases of mismanagement of funds (Nixon Otieno, personal communication, February 2007).

As such, despite the limitation of the Government's own efforts in the decentralization process the increasingly active role of civil society has helped alter the political culture of the country and bring more public participation into the political decision-making processes.

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