

The purpose of these *Key Sheets* is to provide decision-makers with an easy and up-to-date point of reference on issues relating to the provision of support for sustainable livelihoods.

The sheets are designed for those who are managing change and who are concerned to make well-informed implementation decisions. They aim to distil theoretical debate and field experience so that it becomes easily accessible and useful across a range of situations. Their purpose is to assist in the process of decision-making rather than to provide definitive answers.

The sheets address three broad sets of issues:

- Service Delivery
- Resource Management
- Policy Planning and Implementation

A list of contact details for organisations is provided for each sub-series.

Overview of the debate

Over the past 5 years, the debate about integrated coastal management (ICM) has focused on:

- The nature of effective coastal management, and the specific characteristics of coastal areas which imply the need for innovative approaches.
- How to facilitate resource use patterns which improve and protect the livelihoods of coastal resource users and dwellers by conserving environmental processes and ecosystem functions.
- How to build political and public support for ICM.

Key issues in decision-making

Coastal areas and their resources are critically important to the development and future of coastal people and nations. Almost half the world's population lives in coastal areas and depends directly on coastal resources for both agriculture and seafood. People also depend critically but indirectly on the services provided by coastal ecosystems, such as protection against climate change-induced sea level rise, storm damage and nutrient regulation. Sound management of coastal systems is therefore vital for the enhancement of the livelihoods of coastal people (including those involved in artisanal and commercial fisheries, boat building, trade, tourism, agriculture and coastal city dwellers). It will also protect economic investments in coastal areas, encouraging a positive contribution to local livelihood development while minimising adverse environmental impacts.

Because they represent the point of interaction between diverse ecosystems and multiple resource systems, coastal areas are inherently dynamic and complex. ICM responds to these characteristics through holistic management approaches which aim to:

- improve and diversify the livelihoods of coastal resource users and dwellers;
- improve the efficiency of investment in coastal areas through the conservation of underlying environmental processes and ecosystem functions (e.g. through set-back lines to protect against coastal erosion, and the conservation of groundwater levels to protect against subsidence);
- respond to the impacts of climate change (e.g. sea level rise, unpredictable weather patterns); and
- resolve conflicts between various user groups (including local and remote users, poorer and more wealthy groups).

ICM is essentially a process or framework which builds upon and incorporates a wide range of resource management initiatives (e.g. sustainable agriculture, tourism) using a variety of tools depending upon the problem to be addressed (e.g. demonstration projects, zoning for multiple use and marine protected areas). As long as the participation and contribution of interested and affected parties are secured from the earliest stages of planning, ICM approaches can be applied across various physical scales and institutional forms. They are most likely to succeed when they start in areas where real progress can be made. In such areas:

- there is genuine public and political support to finding a solution;
- issues are resolvable with available human and financial resources;
- solutions result in probable net gains to most parties; and
- opportunities exist to mitigate the effects on parties that do not benefit.

More difficult or far reaching problems which do not share these characteristics may be best left until a record of success has been established (though it is important to begin promoting the wider structural benefits of ICM even while attention is focused on immediate poverty reduction concerns).

Since ICM is problem-driven, appropriate management boundaries should be defined for any given issue. For example, watershed boundaries may be best suited to addressing sedimentation and flooding issues while administrative boundaries may be more appropriate for treating urban pollution problems. A starting point for addressing all problems is to understand current use patterns and indigenous management systems. Subsequent questions include:

- Does the scope of definition incorporate core physical interactions and provide the basis for the resolution of conflicts between major user groups?
- Which groups/institutions should be involved? Do weaker groups require support or external representation in order for their voices to be heard?
- Do existing management systems provide the basis for effective resource management? (ICM is strengthened by building on existing systems, where these are still appropriate.)
- What type of facilitation/mediation/negotiation process is appropriate (e.g. should a neutral facilitator be engaged)?

Policy, legislative and regulatory frameworks also play an important role in promoting sustainable development in coastal areas. It is important that they:

- project a vision of coastal area use which is consistent with the capacity of underlying natural processes



DFID experience

- Various under the Land-Water Interface Research Programme (Univ. of Newcastle & Univ. of Durham)
- South Africa: Coastal Management Policy Project (start 1996)
- Support to OECS/NRMU and the eastern Caribbean Coastal Resources Initiative (start 1997)
- Research: Participatory mechanisms for sustainable development of coastal ecosystems (start 1997)

The Netherlands' experience

- Coastal zone issues in south east Asia (Vietnam, PNG and the Philippines)
- Netherlands Climate Study Programme for developing countries: Integrated coastal zone policies

Centres of expertise

- EC, ICZM Demonstration Programme
- ICLARM
- IUCN, Marine and Coastal Programmes
- Netherlands Coastal Zone Mgmt. Centre
- UNEP, Regional Seas Programme
- UNESCO, Coastal Regions and Small Islands Platform
- Univ. of Durham
- Univ. of Newcastle
- WWF, Endangered Seas Campaign

Integrated Coastal Management *continued*

(i.e. industrial use should be consistent with industries' ability to manage and minimise pollution, fisheries should be regulated to take account of stock regeneration capacity, etc.);

- stimulate a holistic and coordinated approach to planning in coastal areas;
- provide the basis for effective integration of coastal industries into local economies (e.g. encouraging local employment and procurement strategies);
- ensure that the incentives facing users of coastal resources are consistent with the objectives of the ICM programme (incentives are shaped by, for example, resource tenure and use right systems, fertiliser subsidies, pollution taxes, etc.).

External support may be required at the outset to provide a catalyst for action. In the long term, national leadership is necessary if ICM is to be scaled-up and to become a proactive rather than a reactive management strategy. ICM approaches should be both flexible and inclusive, identifying and harnessing relevant skills and resources from both the public and the private sector:

- What mechanisms and forums exist to promote effective ongoing collaboration between relevant organisations? (In particular, sectoral strategies need to be consistent with each other, and in line with the objectives of ICM.)
- Which organisation is best suited to take the initiative and provide leadership on any given issue? (Government line agencies may have more resources and influence but can be dominated by sectoral imperatives; environment agencies or NGOs may promote a more holistic approach and have greater incentives to collaborate, but can be weak or fragmented.)
- What level of decentralisation will balance the need for interconnected coastal resources to be managed on a large-scale with the need to incorporate local knowledge and a local role in decision-making?

To complement existing skills, further training may be required to help the organisations involved develop the capacity to:

- adapt existing principles and guidelines for ICM derived from international experience to the local context;
- work in a participatory and collaborative way; and
- develop simple and effective procedures for resolving problems with the support of interested and affected parties.

ICM is itself a relatively new approach. However, its development should be informed by existing knowledge in related areas of natural resource management (see other Resource Management Key Sheets). Supporting research should be strongly issue- and management-focused, concentrating on tasks such as developing sustainability indicators. Strategic research may also be necessary to develop understanding of the interactions between different coastal processes and types of resources, the links between human activities and natural processes, and the opportunities these present.

Key literature

- Chua, T.-E. & L. Fallon-Scura (eds) (1992) *Integrative Framework and Methods for Coastal Area Management*. Conference Proceedings 37. ICLARM.
- Clark, J. (1996) *Handbook for Coastal Zone Management*. New York and London: Lewis Publishers.
- GEF/UNDP/IMO (1996) *Enhancing the Success of Integrated Coastal Management: Good Practices in the Formulation, Design, and Implementation of Integrated Coastal Management Initiatives*. Manila: GEF/UNDP/IMO Regional Programme for the Prevention and Management of Marine Pollution in the East Asian Seas and the Coastal Management Center.
- Moffat, D. & M. Kyewalyanga (eds) (1998) *Local and Community Integrated Coastal Zone Management: Experiences from Eastern Africa*. Proceedings of a Regional Workshop, Zanzibar, March 4-7, 1998. Mozambique: SEACAM and Zanzibar: WIOMSA.
- Pernetta, J. & D. Elder (1993) *Cross-sectoral, Integrated Coastal Area Planning (CICAP)*. Marine and Coastal Areas Programme. Gland: IUCN.
- Sciallaba, N. (ed.) (1998) *Integrated Coastal Area Management and Agriculture, Forestry and Fisheries*. FAO Guidelines, Environment and Natural Resources Service. Rome: FAO.

Key Sheets are available on the Internet at: www.odi.org.uk/keysheets/
or through the websites of DFID and the Netherlands Ministry of Foreign Affairs

Department for International Development
Rural Livelihoods Department
Tel: +44 (0)20 7023 0022
Fax: +44 (0)20 7023 0624
Email: rl-policy@dfid.gov.uk
Website: www.dfid.gov.uk/

Environment and Development Department
Netherlands Ministry of Foreign Affairs
Tel: +31 70 348 6025
Fax: +31 70 348 4303
Email: dml@minbuza.nl
Website: www.minbuza.nl/English/



Series Editor: Diana Carney
Series Manager: Charlotte Boyd

January 1999