



Coastal Zone Management Plans

Coastal zone management plans (CZMP) are designed to help promote sustainable development within coastal zone environments. CZMP are an example of an instrument implemented under an Integrated Coastal Zone Management (ICZM) approach which addresses the synergistic relationships of coastal activities and the interdependencies between terrestrial, marine, and coastal environments. CZMP rely on the identification of coastal resources, user perspectives, and competing land-use interests to successfully integrate, and coordinate the management of coastal zones across riparian nations.

Defining Integrated Coastal Zone Management (ICZM)

The coastal zone is an essential part of a river basin. The two areas are linked by numerous physical and socio-economic processes including, water quality and quantity, sediment transport, economic development, and livelihood. ICZM identifies the important linkages between the activities in the upstream river basins and the environmental conditions in the downstream coastal zones. The concept of ICZM is therefore aligned with the IWRM approach. As in IWRM planning, ICZM formulates actions necessary to develop an effective framework of policies, legislation, and capable institutions with clearly defined roles, and a set of management instruments, fitting to the countries or regions involved. ICZM approaches express a holistic view to achieve multi-sectoral development; addressing additional issues related to the diverging, and often competing, sectoral land-uses existing within coastal zones.

The European Environmental Agency (EEA) defines Integrated Coastal Zone management (ICZM) as a "dynamic, multidisciplinary, and iterative process to promote the sustainable management of coastal zones" (EEA, 2000: 25). ICZM guides action to secure a balance between economic, societal, cultural, and ecological objectives by integrating policy areas, sectors, administration etc. related to terrestrial, marine, and freshwater environments (Tools A1). As a decision-making tool, ICZM plays a key role in facilitating dialogue (Tools C6), participation, and cooperation between stakeholders to achieve coordinated action within the coastal zone ().

A core principle of ICZM is the maintenance of ecosystem integrity (and its ability to deliver goods and services essential for human well-being). To achieve this, ICZM encourages an ecosystem-based approach to resource management, with environmental considerations at the forefront of decision-making for all sectoral activities. ICZM can be implemented in combination with other ecosystem-based practices e.g., Nature-based Solutions (NBS) (Tool C3.04), and assessment tools which monitor the state and health of ecosystems and their services (Tool C1.05). More specific environmental objectives of ICZM include reducing

marine and pollution from land-based activities, preserving and restoring fish stocks, the sustainable use of natural resources (e.g., water use), and mitigation of and adaptation to natural hazards – particularly climate change. ICZM approaches also integrate socioeconomic and cultural objectives such as promoting socio-economic development by protecting traditional uses, rights, and equitable access to resources; and resolving sectoral issues and conflicts.

What are Coastal Zone Management Plans (CZMP)?

CZMP are instruments employed under a ICZM approach, designed with the purpose of achieving sustainable development within coastal zone environments. Coastal zones are more commonly defined as dynamic interfaces, or transition areas, between the land and sea. They comprise of some of the most productive terrestrial, freshwater, and marine ecosystems on earth, and are therefore among the most complex systems to study and manage. These favourable environmental and climatic conditions provide humans with a variety of goods and services, resulting in coastal zones being home to a large majority of the world's population. The definition of a coastal zone, however, is dependent on the definition imposed by a given country and is thus highly site-specific. In some cases, coastal zones are described as a "unit of management", so depending on the context, CZMP can vary from a comprehensive management framework for a small coastal region e.g., small island state, to a large transboundary coastline (Tool C1.08). The objectives and function of CZMP can thus often be better understood in combination with "spatial plans", as the two forms of planning are closely interrelated.

Challenges Designing CZMP

When designing CZMP, several challenges may be encountered based on the following issues:

- Variety of definitions and lack of concensus on "coastal zone" boundaries;
- Geographical context: small island state vs large continental (transboundary) coastline;
- User competition and conflict over limited water resources;
- Fragmented spatial and administrative jurisdiction (including law, policies, plans)
- A dynamic system (climate change impacts, shoreline erosion, coastal pollution, protection of fragile ecosystems e.g., mangroves and coral reefs).

Steps to Formulate an CZMP

Taking into consideration these challenges, the inclusion of stakeholders within each stage of its formulation, is key when formulating CZMP (<u>Tools B3</u>). The formulation of CZMP should take place at the coastal zone level (i.e., pre-defined coastal zones of the country of interest), which can be subdivided into subcomponents based on coastal management units, and follow a 4-phase approach (adapted from <u>USAID</u>, <u>2009</u>):

- 1. Identify the range of issues (natural, cultural, socio-economic, and institutional) and links which are of priority within the coastal zone (<u>Tool B4.01</u>).
 - 1. First, identify the issues that can be addressed by non-integrated management approaches, i.e., issues that do not require accounting for upstream-downstream links, and address these within conventional IWRM frameworks.
 - 2. Second, identify the interlinked issues at all levels international, national, basin, local, etc.
- 2. Analyse these issues through an IWRM lens looking specifically at deficiencies in the Enabling Environment (A), the Institutional Framework (B), Management Instruments (C), and Financing (D). Identify objectives, prepare options for policies and actions, and identify room for flexibility and adaptability within management processes.
- 3. Design and implement strategies to further develop the deficient areas within the framework of (national) policies and legislation for ICZM; governance partnerships which support regulation, provisioning, coordination, and networking for ICZM; and required management instruments for assessing modelling, financing, and planning for ICZM.
- 4. Build robust monitoring systems to evaluate and compare the effectiveness of selected ICZM strategies (<u>Tool C2.05</u>).

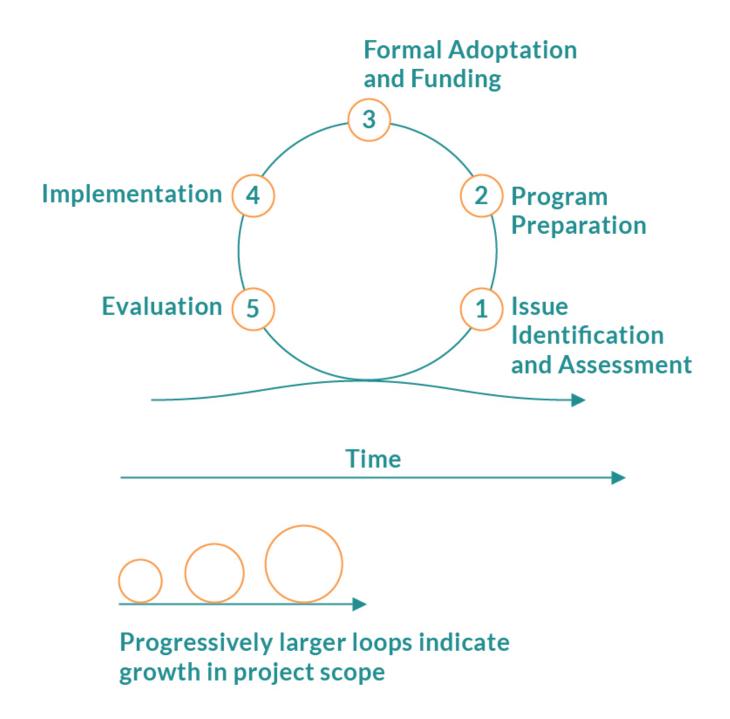


Figure 1. Process model cycle to formulating CZMP (Adapted from <u>USAID</u>, 2009).

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