

Pakistan Coastal Development through Integrated coastal zone management (ICZM)

(Executive Summary)

1. Pakistan has an approx. 1001 Km long coastline bordering Iran in the west and India in the East. Apart from the Karachi area, our coast is virgin and largely undeveloped a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones. 'Integrated' in ICZM means integration of all relevant policy areas, sectors, and levels of administration, integration of the terrestrial and marine components in both time and space". The impact of fishing, aquaculture, pollution, rapid human population growth, poor employment opportunities in coastal communities together with other environmental concerns were the main reasons that contributed to the development of ICZM Beyond the coast, our EEZ including recently added continental shelf extends out to 350 NM and has a total area of 290,000 Sq KMs. This has the tremendous potential to contribute positively towards economic prosperity through improvements in fishing and exploitation of the natural resources including oil, gas and other hydrocarbons present in the seabed.

2. In addition to the economic output of the commercial base in Karachi, rich fishing grounds are present from which fishermen find their livelihood, and which annually contributes to national economy. Oil and gas, hard minerals, marine recreation and tourism are presently not being exploited due, for example, to inadequate exploratory surveys and lack of support facilities outside Karachi. Industrialization and functioning of factories and power plants may have significantly altered coastal geomorphology and longshore currents have contributed to the deterioration of coastal environmental quality and the loss of coastal amenities.

3. There is a requirement to attract investment from both public and private sectors to support development activities around Gawadar, a promising harbour, Pasni, a fishing port, Ormara, an educational oasis, Jiwani and other coastal towns. As part of water management in the coastal area the construction of dams on the Hingole, Dasht river and other non-perennial rivers is need of time. The requirements are as under:

a. Linking ICZM at three levels in the government: local, provincial and central government, in consonance with the laws and the rules of the governmental organizations. While the Federal government is ultimately responsible for the overall plan, including the weighted interest of the various sectors involved and in harmonizing these interests, the various sectoral departments such as science & technology, water management, economic resources (e.g. marine fisheries, forestry, agriculture, minerals and other resources) and finance, contribute to the ICZM plan by providing the informed sectoral inputs.

b. The creation of an appropriate coordination and oversight mechanism to ensure that all significant governmental and private sector actions affecting the coastal zone are consistent with the ICZM policies. The creation of a new inter-ministerial coastal council, use of an existing inter-ministerial coordination mechanism at the national planning

commission level; or the designation, by legislation, of a lead Ministry to perform these important functions.

c. To develop national-level policies, strategies, guidelines and regulations for implementing ICZM. Technical sub-committees could be set up as required.

d. In sync with MoPD&R devise and oversee large scale planning (infrastructure, patial, water resources, tourism, etc.) and development in order to ensure that they are consistent with established ICZM policies.

4. The following benefits could accrue for Pakistan if an ICZM plan is adopted:

a. Protection and sustainable development of the coastal zone and resource exploitation (Living and non living) as an important national asset for the present and future generation of Pakistanis.

b. Land use planning in coastal vicinity so as to ensure balanced used of coastal space and the environment.

c. Protection of coastal areas from natural hazards, storm surges, sea- level rise and other external influences.

5. The concept of a maritime cluster has been found to be economically, functionally and technologically viable, leading ultimately to economic prosperity. Activities as diverse as training, logistics, research, fisheries, environmental concerns, safety, marine equipment, offshore exploration, tourism and maritime services like shipping finance, marine insurance, maritime legal / arbitration services etc will certainly get a boost through proximity and skill-sharing synergies. Sea trade of major commodities being currently managed in isolation by various ministries may be overseen/ coordinated by single authority. Our merchant marine/PNSC must transform into a profit earning and growth oriented organisation. PNSC should possess sufficient oil tankers to cater for import of our entire POL requirements including LNG.

6. Apart from being competitive by adopting lean practices, ports need to create a suitable business climate for attracting investment in specialized berths, distriparks, districenters, value added logistics services, free trade zones etc.

7. With the advent of ports, comes shipping and with shipping comes need of repairs and new build ships. The potential of new shipyards at any of the suitable locations on coast at Gwadar, Sonmiani / Gadani or Port Qasim need to be explored as maritime industrial clusters. A boat building yard in Balochistan catering particularly to the construction and repairs of fibre glass fishing boats is an urgent requirement.

8. Pakistan's fish and seafood industry is estimated to be worth \$1.5 billion. However, the fish export amounts to only \$240 million per annum. Its contribution in the GDP is about one percent. Universities with maritime disciplines like Karachi University, Lasbela University Uthal, Bahria University etc, research organisations like NIO, NCMPR, SUPARCO etc, departments like Marine Fisheries Department, Hydrographic office and provincial fisheries departments may play key role to ensure sustainable marine exploitation and food security.

9. The beaches are neglected areas with respect to recreational facilities and general development. The islands and creeks/bays can be chosen for development of modern resorts and state of the art aquatic sports clubs. Concurrently the rights of foreign tourists should be included in national/provincial laws.

10. Comprehensive geological surveys should be conducted for mapping the surface and sub-surface characteristics of our continental shelf. Geo-Resource mapping of Pakistan maritime areas be given priority. Marine Scientific Research (MSR) refers to activities undertaken in accordance with Part XIII of the United Nations Convention on the Law of the Sea (UNCLOS' 82) in the ocean and coastal waters whose purpose is to expand general scientific knowledge of the marine environment.

11. National Maritime University (NMU), with various constituent Research Institutes would have a major say in all maritime disciplines conducted under the auspices of any Pakistani university or institution, public or private. NMU may function initially on the lines of NUST; taking all existing related institutes / departments under it, and later following the model of World Maritime University Malmo, Sweden.

12. Regional cooperation is the key to optimize management of our ocean resources, spur sustainable growth, resolve intractable issues and derive mutual benefits. Pakistan accordingly needs to actively participate in such regional groupings / initiatives like IOMAC (Indian Ocean Marine Affairs Cooperation) and IOR-ARC.

13. An Integrated Coastal Zone Management (ICZM) Authority as an adjunct of Planning Commission is needed for the preparation of a comprehensive plan catering to policy, capacity, environmental, zoning and administrative issues of both the terrestrial and marine components.

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