through which interactive effects of the hazards are predicted in OHA parameter in addition to separate effects of each parameter. Coastal areas are graded in different categories, from low level to high level of hazard intensity.The described method is employed for the Iranian coastlines in the north and south of the country and the results are presented as hazard assessment maps; where an example is presented in Figure 1.

Table 1 Coastal area hazard and relevant intensity

Kind of hazard		Scale	Range	
Geology hazard	seismic	ground acceleration	Low	
			Moderately Low	
			Moderately High	
			High	
	Land slide	Number of Land slide	0-5	
			5-10	
			10-15	
			>15	
	liquefaction	qualitative data	no history of Liquefactivity	
			Low Liquefactivity	
			Moderate Liquefactivity	
			High Liquefactivity	
Climate hazards	Extreme storms	Number of stormy days	Caspian sea	8-13
				13-16
				16-18
				18-21
			Oman sea, Persian golf and Strait of Hormoz	35-67
				67-98
				98-119
				119-130

Kind of hazard		Scale	Range	
Marine phenomena hazards	Hazard waves	Wave height meter Tsunami wave height meter	Caspian sea	<3
				3-5
				5-6
				6-7
			Oman sea, Persian golf and Strait of Hormoz	<2
				2-3
				3-4
				>4
	Tsunami	Tsunami wave height meter	0-0.5	
			0.5-1	
			1-2	
			2-2.7	
Geomorphology h hazards	Change of shoreline	qualitative	Low erosion rate	
			moderate erosion rate	
			high erosion rate	
			Very high erosion rate	

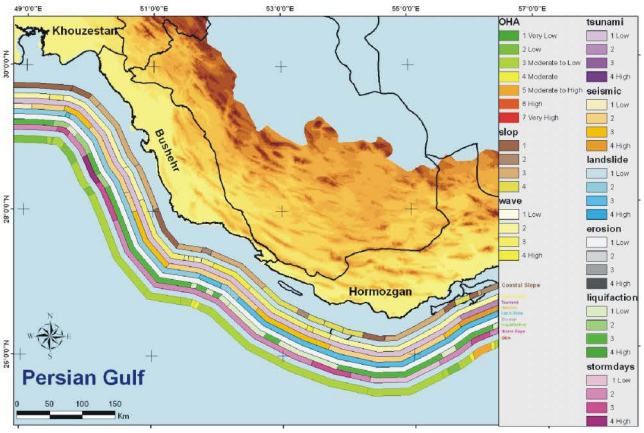

Figure. 1 Sample of hazard assessment map for Iranian coastlines over the Persia Gulf

Integrated coastal zone management in Cambodia: the case encompasses institutional and human resources development at national, provincial and community levels

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The natural resources and environment in Cambodia' s coastal zone experience increased pressure from an expanding population and economic activities. Issues of concern include degradation of habitats, including coral reefs, sea grasses and mangroves from unsustainable exploitation and management practices, extended poverty, conflicts in land and resources usage, insufficient legal and enforcement framework, cases of conflicting mandates and management functions and lack of information to support management decisions. The country is severely constrained in terms of institutional capacity and limited human resources.

Since 1997, the Government of Cambodia with support from Danida has been engaged in building up a system for integrated coastal zone management. The approach taken has been to establish inter-ministerial and inter-departmental coordinating platforms and involve these in identifying and addressing coastal development issues in a partnership with other stakeholders including NGOs and local communities. Various management tools have been introduced and training provided in their use. The comprehensive training has been given in learning by doing approach resulting in a number of outputs within important management dimensions.

A substantial capacity development has taken place during last 5 years. The Coastal Coordination Unit in Ministry of Environment is now working as a well functioning unit for coordination between the National Coastal Steering Committee to the provincial departments and commune councils. At the provincial level departments have developed capacity by participating in focused training sessions in environmental assessment, public participation, monitoring of environment, natural resources and socio-economic indicators. This capacity has been further developed by using these capacities in actual work in the coastal area. Additionally, this substantial capacity development has also taken place in the coastal communes and communities where more than 800 villagers have been trained in integrated farming systems, veterinarian assistants, community based natural resources management, and different vocational training such as engine and electronic repair. All the capacity development at the commune and community level where further supported by tangible input such as livestock, fruit trees, and provision of tool boxes. On the other hand, a comprehensive program was also targeting environmental awareness in 20 schools in the coastal area and providing small demonstration projects to the schools.
An important lesson learned regarding capacity development project is to maintain focus throughout the whole capacity development effort, establish local ownership and that it is a long-term effort. As the capacity at the national, provincial and commune level is very weak the support should not be too complex not to lose local understanding/ownership and it can be difficult to counterpart staff to adapt to donor induced changes without a loss in motivation or understanding. As capacity development is a long-term effort it is important that the counterpart staff involved have the basic education level relevant for their positions and have an age so that when the capacity development effort are finalized they will still be working within the fields strengthened through the capacity development effort, and that the involved institutions agree to a career opportunity plan for the involved staff.

Changing River Basins in monsoon Asia-Pacific: implications to social, economic and environmental vulnerability of the major deltas

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Approximately one third of the mankind lives within the sphere of influence of the large rivers of the Monsoon Asia-Pacific. These rivers include Indus, Ganges, Brahmaputra, Meghna, Ayeryarwady (Irrawaddy), Salween, Mekong, Song Hong (Red River), Pearl River, Changjiang (Yangtze) and Huanghe (Yellow river). Whereas the concentration of people within the basins of these rivers is remarkable, even more striking is the agglomeration of poverty, malnutrition and urbanization; it is estimated that around the half of the world's total in these matters occurs within these basins. At the same time a remarkable and growing share of the world's economic growth takes place in the basins.
Most of these rivers and their basins have been massively modified over the years, centuries and millennia. It is important to recognize that the contemporary pace of change is extremely speedy, many-sided, and unforeseen in history, and it is expected to keep accelerating in few decades to come.
The deltas of these rivers are of particular interest in this study. An assessment of major driving forces, pressures for change and vulnerability of the deltas of the large rivers of the Monsoon Asia-Pacific was performed. The analysis was done using various geospatial databases of the river basins including data on nature and environment (such as climate, hydrology, land cover, land use etc.), demography, as well as social and macroeconomic development. A vulnerability profile of the deltas was produced.

Conversion of finfish and shellfish wastes into pharmaceutical products an alternative employment for fisherfolk of Tamilnadu

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The Tamilnadu coast (S. India) is known for its diversified fisheries resources viz., finfish and shellfish such as shrimps, crabs, lobsters and cuttle fish. The annual catch amounts to 0.4 million tonnes. While the high value finfish are processed and exported, low value fishes such as sardines, lesser sardines, silverbellies and white baits are mainly used as an ingredient in live stock and poultry feeds. The meal of these fishes is rich