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Coastal Zones of Islands: Comparative Reflections Between Two Oceanic Island Groups From Bay of Bengal and Arabian Sea, India

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ABSTRACT

India has vast coastline of about 7500 km length which covers the west coast from the state Gujarat to Kerala and east coast from the state Tamil Nadu to West Bengal and two oceanic island groups namely the Andaman & Nicobar (A&N) and Lakshadweep Union Territories. The regulatory mechanisms to protect the country's coastal line, coastal zone and their resources have been well defined through the proper management measures that are different from place to place and regions to regions in coastal areas. Public consultation has also been made mandatory in the legal provisions for conservation and protection of coastal zones and government strategies towards their sustainable development. This article considers two oceanic island groups of India, A&N and Lakshadweep, which are geographically separate, and describes the similarities and differences in various aspects of coastal zone management being adopted and highlights the difference of perceptions of islanders/island people, their claims and rights which are relevant to island area and in particular to coastal zone and its resource use.

Key Words: India; Andaman & Nicobar; Lakshadweep; Islands; Coastal Zone.

INTRODUCTION

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janiero in 1992, which is often referred to as the 'Earth Summit', importantly addressed the issues of protection of coastal areas in its Agenda 21 Chapter 17 (Rio Declaration 1992). The Agenda covers protection of the oceans, seas, including enclosed and semi-enclosed seas and coastal areas and the protection, rational use and development of their living resources. There was a major concern for the protection of our coastal environment at the Conference. The coastal areas have been very important for the reasons that most of the world's population lives around the coast; humans are highly dependent on coastal resources; the coast is subjected to increasing development related impacts as a consequence of the combined effect of increasing population pressure together with the high dependency on coastal resources.

The coastal zone occupies only about 8% of the earth's terrestrial surface that is habitable but accommodates 37% and 44% of the world's population (as of 1994) within 100 km and 150 km of a coastline respectively (Cohen et al. 1997). In developing nations, the majority of growth in coastal zone population is among the lowest income groups (Sorensen 2002). Population growth and economic pressure in the coastal zone will continue to increase not only in the near future, but also centuries from now. Especially in the light of projected global climate change (IPCC 2007)

India has a vast coastline - about 7500 km long - which covers the west coast from the state of Gujarat to Kerala and the east coast from the state of Tamil Nadu to West Bengal and two oceanic island groups, namely the Andaman & Nicobar (A&N) and Lakshadweep Islands Union Territories. The total population living in the coastal zone of India is not known with updated information. However, as per the ENVIS database, the total population of coastal districts of India is 171 million that accounts for 14.2% population in coastal districts as per the 2014 Census of India.

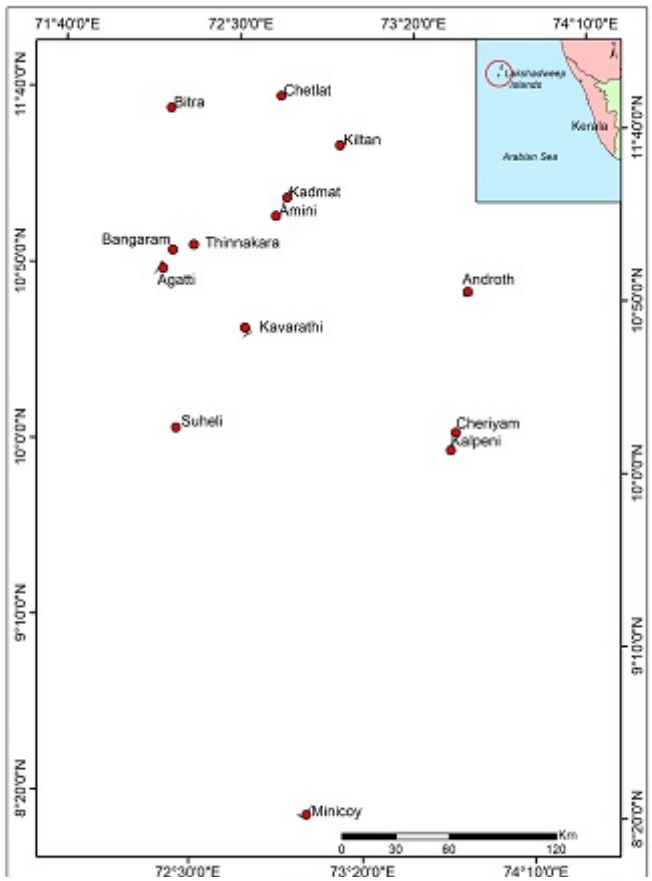
Coastal zones of India receive special attention because of high productivity of its ecosystems, population and settlements, exploitation of renewable and non-renewable natural resources, industrialization and recreational activities. At the same time, they face a lot of pollution problems such as discharge of waste effluents and municipal sewage, plastic waste, oil spill and other human-induced pollution. Coastal zones need to be continuously monitored because of their dynamic interactions between the ocean and land, erosion /accretion, inundation due to sea level rise, storm surge, shifting of shoreline caused by natural or anthropogenic forces, such as construction of artificial structure, port and harbour leads to changes in the coastal zone and its environment. The appropriate management measures are necessary for different types of problems being faced in coastal zone.

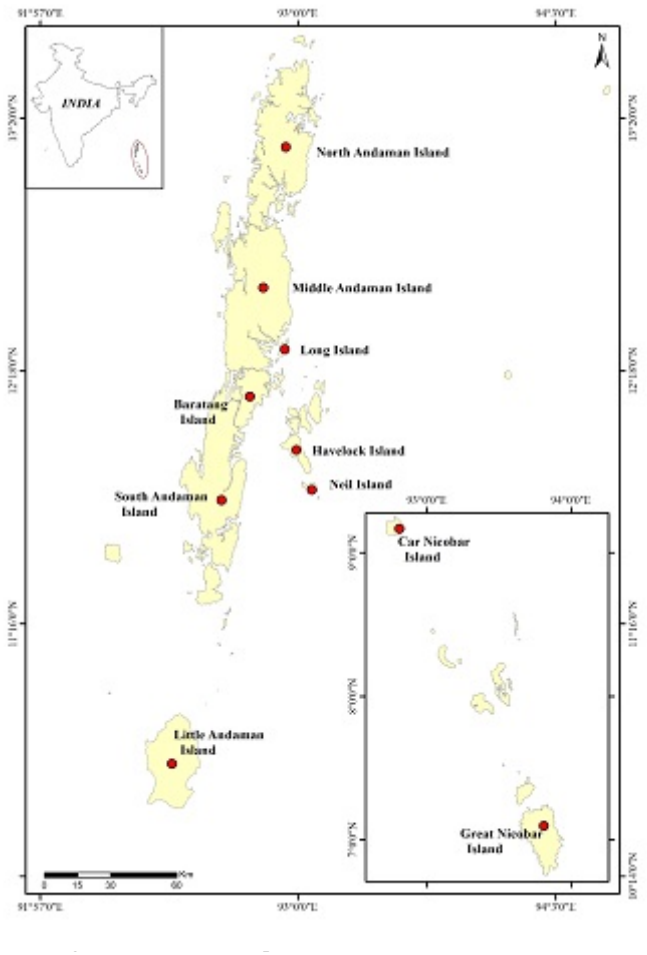
The effective protection of the coast and islands began in the early 1980s. In 1981, the coastal State and UT governments were requested by the Union Government of India to take adequate precautions while promoting development in the coastal areas. Thereafter strong regulatory provisions for coastal zone management were brought under the Environment (Protection) Act, 1986, through the specific Coastal Regulation Zone (CRZ) Notification 1991 to regulate all development activities in coastal areas. The CRZ Notification was revisited in 1991 and the new Notifications on coastal regulation zone and island protection zone were issued in 2011. These are currently being followed by the respective States/UTs.

This article considers two oceanic island groups of India, A&N (ANI) and Lakshadweep (UTL), which are geographically separated (Figures 1a,b, and 2), and describes the similarities and differences in various aspects of coastal zone management being adopted there and also highlights the difference of perceptions of islanders and island people, their demand, rights and claims which are relevant to island area and in particular to coastal zone and its resource use.

A survey of the literature indicates that there are several comparative studies and reviews on biodiversity and socio-economic aspects of two different habitats, island groups and states (Baine et al. 2007, Wafar et al. 2011, Khan et al. 2012, Venkataraman and Raghunathan 2015, Nair et al. 2017). But the comparative reviews on coastal zone management approaches of different countries, states and island nations are very few (Ramachandran 1999, MacLeod et al. 2002, Siry 2006, Panigrahi and Mohanty 2012, Sridhar et al. 2016).

The effectiveness of the Indian Coastal Regulation Zone provisions for coastal zone management was discussed by Panigrahi and Mohanty (2012). They pointed out that while "considerable progress has been made in Indian CRZ provisions through successive amendments such as resource conservation and pollution control, implementation of Integrated Coastal Zone Management (ICZM) programme in various coastal states and greater involvement of corporate sectors in CZM, there are several constraints, ranging from improper scientific basis, guidelines, lack of baseline information and weak social basis, ambiguity in project activities, ineffective implementation and enforcement".





A comprehensive analysis of coastal zone management practice of India through a political, economic, social, technological, legal and environmental (PESTLE) approach addressed the strengths and challenges of the coastal zone management practice in India (Sridhar et al. 2016). Spatial information for the entire Indian Coastal Zone generated (SAC 2011) has become useful to the scientific community for carrying out research in the field of coastal environment and to the State environ-ment departments in implementing the CRZ notification.

Arabian Sea and Bay of Bengal: Climate

Arabian Sea is located in the northwest of the Indian Ocean, whereas the Bay of Bengal lies in the north-east of Indian Ocean. The Arabian Sea is bounded to the west by the Horn of Africa and the Arabian Peninsula, to the north by Iran and Pakistan, to the east by India, and to the south by the remainder of the Indian Ocean. The sea covers a total area of about 3,862,000 sq. km. The maximum depth of the sea, 5,803 m, occurs at Wheatley Deep. The area covered by Bay of Bengal is smaller than the Arabian Sea, occupying an area of about 2,173,000 km^2. It is bordered by Sri Lanka and India to the west, Bangla-desh to the north, and Myanmar (Burma) and the northern part of the Malay Peninsula to the east (Encyclopedia Brintannica).

The Arabian Sea and the Bay of Bengal are located in the same latitude band and receive the same amount of solar radiation from the Sun. However, the Bay of Bengal is much warmer than the Arabian Sea and many more storms brew over the Bay. The winds over the Arabian Sea are stronger because of the presence of the mountains of East Africa. These strong winds force a more vigorous oceanic circulation and the heat received at the surface is transported southward and into the deeper ocean. The winds over the Bay of Bengal, in contrast, are sluggish and the Bay is unable to remove the heat received at the surface.

The Bay receives more rainfall; it also receives more freshwater from the large rivers, especially the Ganga and the Brahmaputra, which empty into it. This freshens the surface of the Bay and stabilizes the water column, making it more difficult for the winds to mix the warm, stable surface layer with the cooler waters below. In the Arabian Sea, there is no such stabilizing effect. As a consequence, the mixing with the cooler waters below is more vigorous. Since a sea surface temperature of about 28ºC is necessary for convection to take place in the atmosphere, this condition is satisfied in the Bay of Bengal but not in much of the Arabian Sea. Thus, in spite of their geographical similarities, the two arms of the north Indian Ocean are strikingly different in their climate characteristics (www.nio.org/userfiles/file/ocean%20and%20climate.pdf).

Similarities and Differences in Ecological Profiles

The two oceanic island groups are different in their geography and ecological profiles. The A&N Island groups have larger geographical areas than the UTL. The total geographical area of A&N is 8,249 km^2 and the UTL has only 32 km^2 area. The A&N islands comprise 572 islands, islets and rocky outcrops, out of which only 37 islands are inhabited. The 320 km of Exclusive Economic Zone (EEZ) around the island group covers a sea area of 0.6 million km^2, which is about 30 % of the total EEZ of India (Singh 2003, Equations et al. 2008). The Lakshadweep group of islands comprise of 36 islands out of which only 11 are inhabited islands.

Similarly, the A&N Islands have longer coastline (1,962 km) than the UTL (132 km)

A look at the origin and history of these island groups shows that both have some unique formation having connection with the respective regional resemblance. The literature says that the ANI had a former land connection from Cape Negris in southern part of Burma to Achin Head (Cape Pedro) in Andalas (Sumatra) (Murthy 2007). The Lakshadweep group of islands form an archipelago in the northern edge of the 2,500 km long, Chagos-Maldive-Laccadive sub-marine mountain ridge. Ecologically these islands cannot be treated in isolation.

Unlike Lakshadweep, the ANI were assumed to be home of aboriginal tribes from pre-historic times. The vulnerable tribal groups identified in the Andaman group of islands are the Great Andamanese, Onges, Jarawas, and Sentinalese, all of Negrito origin, while the tribes in the Nicobar group are the Nicobarese and Shompens, both of Mongloid origin. The Chinese knew of A&N Islands over a thousand years ago and called it the 'Yeng-t-omag' in the First Millennium" and they also find a place in the first map of the world drawn by Ptolemy, the renowned Roman geographer during the second century AD. The world's primitive tribes are still living in few islands of A&N that are being protected by prohibiting the entry of outsiders by the Government. Archaeo-logical evidence supports the existence of human settlements in the Lakshadweep around 1500 BC. After independence from the British Government in 1947, both these island groups were made as Union Territories of India and are administered under the control of Union Home Ministry.

There is a vast difference in the marine and terrestrial ecosystems between these island groups. Most of the land areas of the A&N islands are occupied with dense forests along with hills and mountains and they are included in the WWF Global 200 List of global priority biodiversity hotspots. It covers the Indian subcontinent's richest rainforest and houses indigenous tribes of Negroid and Mongoloid origins. The Lakshadweep islands have no declared forest and 80 % of its land mass is covered by the green vegetation, mainly with coconut trees. On the other hand, the coastal and marine areas of A&N islands are bestowed with luxurious mangroves and coral reefs formations contributing enormous fishery resources. A&N islands are included in the UNESCO-designated Biosphere Reserve/Zone (Indo-Malayan Biogeographic Zone). Lakshadweep is mostly with lagoon ecosystems with the interaction of coral reefs, lagoons and the sea. These ecosystems harbour varieties of fauna and flora. The presence of coral reefs makes them ecologically very important.

Similarities and Differences in Legal Provisions

The overall environmental management for both A&N and Lakshadweep islands is to be ensured meeting the objectives of the relevant Rules/Acts which are applicable to them in various sectors of environment such as air, water, waste, noise, environmental impact, nature conservation and industry operations. However, for the management of the coastal zone of these islands, a broad approach has been defined in the present Island Protection Zone (IPZ) Notification, 2011 notified under the Environment (Protection) Act, 1986.

For the first time, in order to exclusively protect the coastal environment of the A&N and Lakshadweep group of Islands, a separate Island Protection Zone (IPZ) Notification, was issued by the MoEF on 6 January 2011 under the Environment (Protection) Act, 1986. This notification reconciles three objectives: (i) livelihood security to the fishing communities, tribals and other local communities living in the coastal areas, (ii) conservation and protection of coastal stretches, and (iii) promotion of development in a sustainable manner based on scientific principles, taking into account the dangers of natural hazards in the coastal areas and sea level rise due to global warming. The salient features of regulatory mechanism for coastal zone of islands of A&N and Lakshadweep are given below:

Jurisdiction of Island Protection Zone (IPZ)

The IPZ applies to A & N and the Lakshadweep Islands including the water area up to territorial water limits as IPZ. For the 10 Islands in ANI namely, North Andaman, Middle Andaman, South Andaman, Little Andaman, Havelock, Neil, Long, Baratang, Car Nicobar and Great Nicobar, the Notification applies to areas within 500 m from the High Tide Line (HTL) along the seafront, while for all other islands of A & N and Lakshadweep, the entire geographical area of islands, including the water area up to 12 nautical miles, falls within the purview of the Notification.

Island Coastal Regulation Zone (ICRZ) and Integrated Island Management (IIM) Plans

The IPZ Notification, 2011 prescribes that the environmental management for the Islands of A& N and Lakshadweep shall be based on the IIM Plans whereas, in view of the large geographical areas, the islands of North Andaman, Middle Andaman, South Andaman, Little

Andaman, Havelock, Neil, Long, Baratang, Car Nicobar and Great Nicobar shall be managed based on the ICRZ Plan. The respective UTs are required to prepare such plans for which suitable guidelines have been laid down in the Notification.

Jurisdiction of ICRZ

The jurisdiction of ICRZ covers the land area from HTL to 500 m on the landward side along the sea front; the land area between HTL to 100 m or width of the creek whichever is less on the landward side along the tidal influenced water bodies; the intertidal zone [land area between HTL and Low Tide Line (LTL)]; the water and the bed area between the LTL to the territorial water limit (12 nautical miles) in case of sea and the water and the bed area between LTL at the bank to the LTL on the opposite side of the bank, of tidal influenced water bodies.

Classification of ICRZ

To regulate developmental activities, the ICZR zone has been divided into ICRZ-I(a) (Ecologically Sensitive Areas) and ICRZ-I(b) (Area between LTL and HTL), ICRZ-II (areas that have been developed up to or close to the shoreline), ICRZ-III (areas that are relatively undisturbed and those do not belong to either Category ICRZ I(a) and I(b), and ICRZ-IV (water area from LTL to 12 nautical miles).

As the islands of A&N and Lakshadweep are prone to natural disasters including earthquake, tsunamis, cyclones, etc, the IIMP is required to be prepared considering all natural disasters and other environmental issues.

The IPZ Notification, 2011 describes the permissible and prohibited activities falling under the IPZ of A&N and Lakshadweep Islands.

The similarities & differences in the preparation of management plans for islands of A&N and Laksha-dweep, that are mandatory as per the IPZ Notifications, can be seen through the IIM and ICRZ Plans. The list of potential islands, as decided by the UT Administration, chosen for IIM and ICRZ Plans, are given in Table 1.The present legal framework for coastal zone management in India is robust with its proper implementation of CRZ and IPZ Notifications, 2011 and the sustainable develop-ment of the coastal areas and their resources is well recognized (Sridhar et al. 2016).

Table 1. List of potential islands, as decided by the UT Administration, chosen for IIM and ICRZ Plans.

Islands	IIM Plan	ICRZ Plan
Andaman Group		
Aves Island	+	-
Curlew Island	+	-
East Island	+	-
Interview Island	+	-
North Passage Island	+	-
Narcondum Island	+	-
Spike Island	+	-
Smith Island	+	-
Stewart Island	+	-
Strait Island	+	-
Cinque Island	+	-
Flat Bay Island	+	-
John Lawrence Island	+	-
Rutland Island	+	-
Viper Island	+	-
North Sentinel Island	+	-
Baratang Island	-	+
Long Island	-	+
Middle Andaman Island	-	+
North Andaman Island	-	+
Havelock Island	-	+
Little Andaman Island	-	+
Neil Island	-	+
South Andaman Island	-	+
Nicobar Group		
Bampooka Island	-	-
Chowra Island	+	-
Kamorta Island	+	-
Kondul Island	+	-
Nancowrie Island	+	-
Teressa Island	+	-
Trinket Island	+	-
Katchal Island	+	-
Little Nicobar Island	+	-
Pilowmillow Island	+	-
Tillang Chong Island	+	-
Car Nicobar Island	-	+
Great Nicobar Island	-	+
Lakshadweep Islands		
Agatti	+	-
Amini	+	-
Andrott	+	-
Bitra	+	-
Chetlat	+	-
Kadmat	+	-
Kalpeni	+	-
Kavaratti	+	-
Kiltan	+	-
Minicoy	+	-
Bangaram	+	-
Thinnakara	+	-
Cheriyam	+	-
Suheli	+	-

'+' Applicable: '-' Not Applicable

Similarities and Differences in Social and Economic Profiles

A short comparison of some aspects of demography is given in Table 2. The total population of ANI is about 3.8 lakhs which is six times higher than the total population of UTL (64,429) (Census 2011). The major industry for economic development is fishing industry and secondly, the agriculture which is also a revenue-earning source for the farmers of islands. The hilly and plain agricultural lands of ANI are important source of income for the rural people of those areas. Seasonal vegetables, oilseeds, pulses, pepper, nutmeg, cinnamon are some of the special crops cultivated in ANI. The economy of ANI is also contributed from handicrafts industry, minerals and energy resources. Red oil, rubber, palm and cashew nut that are grown marginally in ANI, also contribute to island economy to some extent. Local economy of Lakshadweep consists of fisheries, agriculture (mainly coconut) and animal husbandry. The traditional livelihoods revolve around tuna fishing, coir, vinegar, and copra making. Tourism is another major industry for both these island groups.

Table 2. A short comparison on demography.

Particulars	A&N Islands	Lakshadweep Islands
Area, sq.km	8249	32
No. of Islands	572 islands, islets & rocks	36 (12 atolls, 3 reefs 6 submerged sand banks)
Coastline length, km	1962	132
EEZ, million sq.km	0.60	0.4
Population (2011)	3,79,944	64,429
Male	2,02,330	33,106
Female	1,77,614	31,323
Population density, km^{-2}	46	2,013
Decadal population growth (2001-2011), %	7	6.23

Similarities and Differences in Tourism

National Council of Applied Economic Research (2014), using the data from International Passenger Survey 2010–2011, observed that monuments, forts, palaces, museums, hill stations, and beaches are some of the motivational factors that influence the decision of potential tourists visiting India. As far these island groups are concerned, there is a huge potential for tourism development which can be a great source of revenue. Remote islands, clean beaches, under-water creatures, thick forest areas, water sports, marine parks and biosphere reserves are among the major attractions for tourism of these islands.

The Union Territories have developed a policy for ecotourism development. The A&N Administration has the "vision to develop the islands as an upmarket island destination for ecotourism through environmentally sustainable development of infrastructure without disturbing the natural ecosystem with the objective of creating more employment opportunities and synergize socio-economic development of the islands".

The constraints in developing tourism in both the island groups are: (i) the availability of land in and around the island (lagoon),(ii) proximity of Ecologically Sensitive Areas, (iii) travel distance among islands, (iv) concentration of tourism sites/location in particular island/region, and (v) infrastructure facilities. More than 95% of island areas are occupied by the forest in the ANI and in case of Lakshadweep, the available land itself is very minimal from sea side. As per the existing policy, the tourism operation in the restricted areas, such as marine parks, biosphere reserves, turtle nesting sites, coral and seagrass ecosystems, is not allowed.

The protection of culture and traditions of the insular inhabitants was raised as the main concern by the islanders of Lakshadweep. The Expert Committee constituted by the Hon'ble Supreme Court (SC), in its report, has not recommended the practice of 'Home Stays' which is a type of tourist's accommodation being operated in islands of Lakshadweep and was believed against their culture and tradition by the islanders. Considering the culture of tradition of the local people, the SC committee recommended that "tourism in Lakshadweep can be promoted by accommodating tourists in authorised Resorts or Tourist Homes in the uninhabited islands and uninhabited/sparsely occupied portions of the inhabited islands". While studying the geographical analysis of tourism sites in Andaman Archipelago, it was understood that the tourism sites in Andaman exhibit a cluster distribution pattern. The sites are concentrated in Port Blair area than in Mayabunder and Diglipur areas. It was suggested that the A & N Administration needs to promote and expand tourism activities in other potential areas of Andaman through the establishment of necessary infrastructure and awareness creation (Sridhar et al. 2014). The other demands from the Nicobar were setting up a trans-

shipment Port at Campbell Bay, setting up separate Shipping Corporation for A&N Islands, visa on arrival facility for tourists, opening more islands for tourism, development of tourism circuits, construction of bridges, Inner Line Permit to check the population influx and undersea fibre optic cable (The New Indian Express 2017).

The importance of protecting the culture and tradition was very much seen in the expectation of islanders of Lakshadweep rather than promoting the tourism development. Similar feelings are also seen among the people of Nicobar in the case of ANI. The Tribal Passes are mandatory to the visitors of the Nicobar Islands. Expansion of tourism along with creation of requisite facilities can be considered in Andaman which should be of a high value, low intensity, environment-friendly ecotourism.

Similarities and Differences in No Development Zone

The developmental activities in the coastal zone of islands are required to be planned by addressing several issues including vulnerability to human life and property based on elevation, geomorphology, sea level trends and horizontal line displacement; suitability of areas that are safe for locating dwelling units and other infrastructure; prescribing appropriate safeguard measures to protect the life and property of the local communities, infrastructure from natural hazards (IPZ Notification, 2011). Towards this, one of the provisions for regulating developmental activities kept in the Notification is demarcation of No Development Zone (NDZ) in the coastal zone.

The people of Lakshadweep islands have agreed to the 20 m zone from the HTL all along the coastline as NDZ (SC Expert Committee Report 2014). Here, the availability of land is a major issue for island people. In case of the ANI, the land availability is not seen as a major issue apart from forest and protected areas. The rural areas of selected islands (ICRZ category islands) in ANI, do have their NDZ up to 200 m from HTL on the landward side in case of seafront and 100 m along tidal influenced water bodies. However, for the purpose of development of eco-tourism activities, the distance of NDZ is up to 50 mr from HTL for promoting the eco-tourism. For all other small islands in ANI, the NDZ is required to be fixed through public consultation. NDZ in the range of 50-60 m from HTL has been proposed for few islands namely Smith, Aves and Flat Bay (A&N Administration).

Similarities and Differences in Fishing Rights

Fishing rights of the traditional fishing communities of both the island groups have been protected through the CRZ and IPZ Notifications and no restrictions are imposed on any fishing activities and allied activities of the traditional fishing communities in these islands. Since the fishing communities traditionally live in the coastal areas, they have been given primary importance in the Notifications. One of the stated objectives of the Notification is "to ensure livelihood security to the fisher communities and other local communities, living in the coastal areas and to promote development through sustainable manner based on scientific principles taking into account the dangers of natural hazards in the coastal areas, sea level rise due to global warming" (IPZ Notification, 2011).

As far as the Lakshadweep islands are concerned, the main fishery resources comprise tunas, billfishes, pelagic sharks and the other groups of food fishes, live baits and ornamental fishes inhabiting the reefs and numerous lagoons (LAPCC 2012). A wide variety of fishes such as perches, sharks, garfish and carangids are also caught from the lagoon and reef areas (Pillai et al. 2001). Fishing is the primary occupation in Lakshadweep and it plays a vital role in the economy of the islands. Pole-and-line fishery for the pelagic skipjack tuna is one of the dominant fishing. Fishing on reefs and lagoons is, by contrast, fairly artisanal, and limited to local consumption, supplying the evening meal (Arthur and Shanker 2010). In the case of the A&N waters, meckerel, lesser sardines, anchovies, carangids, seer fish, pelagic ahark, tunas, prawna, crabs and lobsters are the dominant fishery resources (Department of Fisheries, A& N).

The Supreme Court Expert Committee constituted in 2012 (by order dated 11.5.2012 made in CA No.4625-4626 of 2012) for overseeing the implementation of the Integrated Island Management (IIM) Plans of Lakshadweep, after having views of local people of Lakshadweep recommended that "Deep sea fishing (especially for tuna fishing), by providing a mother vessel with facilities to process the fish caught by smaller fleets owned by the islanders, may be developed" and "Simultaneously ornamental fisheries need to be encouraged". As the UT is vulnerable to illegal fishing by outside fishing boats of the neighbouring States, the UT Administration has the power to regulate fishing in specified areas in accordance with the Lakshadweep Marine Fishing Regulation, 2000. Instructions on fishing

areas, number of vessels, catching in specified areas and fishing gears can be given by the UT Administration to regulate the fishing the activities. Fishing including live bait fishing for tuna, collection of ornamental fishes for commercial purposes are prohibited in the specified preservation zones namely inner and outer reef, reef crest, reef slope, sea-grass beds and turtle nesting areas. Both these island groups offer a great potential for improving the income of the fisher folk as well as the entrepreneurs related to Fisheries Industries. There is considerable scope for improving the income of fisher families on environmentally sustainable basis by introducing Integrated Coastal Zone Management and Scientific fish rearing, harvesting and fish processing (Dam Roy and Grinson George 2010)

CONCLUSION

The similarities and differences in various aspects of coastal zone management of these two oceanic island groups namely the Andaman & Nicobar (A&N) and Lakshadweep Union Territories can be read through their profiles of ecology, socio-economy, applicability of legal provisions, preference on No Development Zone, fishing rights of islanders and Tourism. The economy of these island groups depends on the resources available and their approach for sustainable development. Fisheries and Agriculture are the major common occupation and contribute to the islands economy. The coastal zones of these two island groups have the major difference in the applicability of Island Protection Rules of India. The jurisdiction of Island Protection Zone (IPZ) in small islands is different from big islands and islands with large geographical areas. The approach adopted for coastal zone management for small islands is through integrated approach and the approach adopted for coastal zone management for big islands is based on the zonation of coastal zones of islands as coastal zone with Ecologically Sensitive Areas (ESAs), coastal zone with developed areas, coastal zone with rural areas and water areas of sea up to 12 nautical miles. The perception of islanders on tourism development has similarity in eco-tourism development without affecting the culture of island people. The comparative isolation of these island groups from the mainland, scattered landscape, difficult communication system, heavy reliance on government departments for supply of inputs and smaller base of local market are considered as the impediments to the growth of the islands economy.

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