

**CHANGES IN STRATEGY FROM DEVELOPMENT TO MANAGEMENT
IN SOUTHERN SRI LANKA: A CASE STUDY
OF NORAD DEVELOPMENT APPROACHES**

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ABSTRACT

In Hambantota District, Galle Province, Norway has been funding an integrated rural development programme (HIRDEP) since 1979. It includes a Fisheries Project Management Unit which has been operating since 1981. After a number of surveys to establish the state and requirements of the fishing community, four fisheries service centres were constructed at main fish landings and their management and maintenance was entrusted to Fisheries Cooperative Societies. Through these and other cooperative societies funds have been made available for loans to local people for such things as purchase of bicycles or motor cycles (enabling them to market fish in inland areas), fish processing, repairs to or purchase of boats and engines, purchase of fishing gear, and a wide variety of other purposes. A district ice plant has been constructed, piped water supply installed to a number of fishing villages, underwater obstacles removed from fish landings and a field training programme set up at which more than a thousand fishermen have so far been trained in such things as engine maintenance, fisheries regulations and fish handling.

As a result of this aid, fish production in the district has increased, the quality of fish landed and marketed has improved and local incomes have increased. The credit programme, implemented through the cooperative societies, has released many from the bondage of middlemen charging extortionate rates of interest and thus allowed them to improve their general standard of living, through the purchase of better housing and facilities.

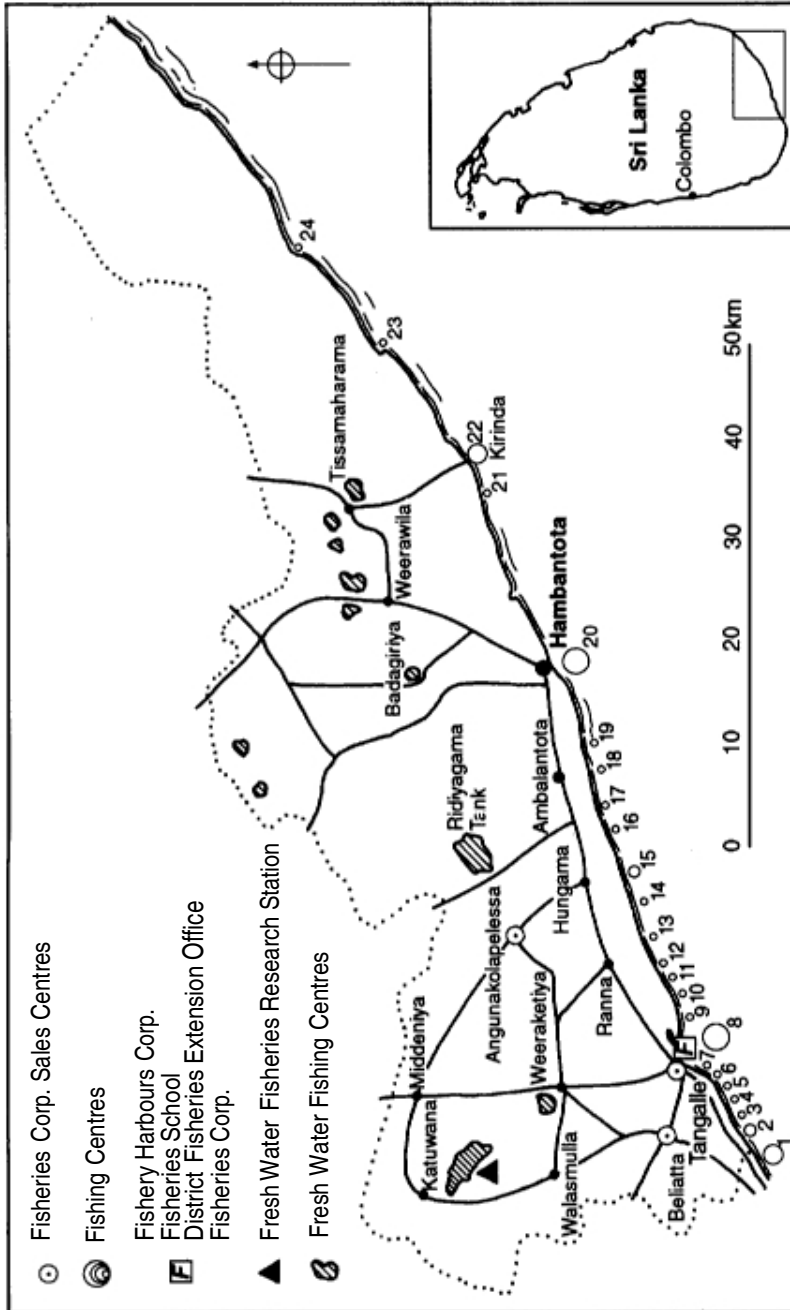
The whole programme has been carefully monitored and evaluated at every stage and, although HIRDEP is coming to the end of its assured funding by NORAD, the Fisheries Management Unit will continue its activities and the Fisheries Training Institute at Tangalle is to be improved. There are many ways in which this whole programme could be sustained and extended.

1. BACKGROUND

1.1 Hambantota District – basic information

Hambantota is one of the 25 administrative districts of Sri Lanka (Fig. 1). It is located in the extreme South of the country and is bounded by Matara in the West, Ampara in the East, Rathnapura and Monaragala districts in the North and the Indian Ocean in the South. It lies between 6° and 6.5° N and between 80.6° and 81.7° E. The distance from Colombo to Hambantota town is 237 km. The district has a land area of 2,590 square kilometres and a coastal belt 137 km long from South to South-East. Climatic conditions within the district vary enormously. The annual rainfall ranges from 1,900 mm to 1,000 mm from West to East. The average annual temperature is between 26.5° and 28° C and, at Hambantota town, mean relative humidity is about 82% throughout the year. Approximately one third of the area of the district is in agriculture use, another third is covered by the Yala National Park, other sanctuaries and the forest reserves.

According to the 1981 census the population in the district was 424,344 with a growth rate of nearly 2.2%. The population density varies between 300 and 450 persons per square kilometre



The Fishing industry in Hambantota District. The numbered circles along the coast indicate the locations of fishing centres and their relative sizes: 1. Kudawella 2. Mawella 3. Seenimodera 4. Unakuruwa 5. Goyambokka 6. Rotagewatte 7. Pallikudawa 8. Tangalle 9. Medaketiya 10. Rekawa 11. Serimankudawa 12. Kammuthuge Waraya 13. Kahandamodera 14. Kalametiya 15. Kivula-Kalametiya 16. Ussangoda 17. Weipatanwila 18. Pattiyawaraya 19. Godawaya 20. Hambantota 21. Uraniya 22. Kinnda 23. Amaduwa 24. Patanangala.

in the western part and 50—200 persons per square kilometre in the central and eastern parts of the district. The potential labour force (age 10—59) of the district totals nearly 290,000 or 68% of the population.

1.2 The fisheries sector

Hambantota is one of 13 coastal districts in Sri Lanka and its coastal belt extends from Kudawella fishing village to the edge of the Yala National Park. There are 31 fish landing centres along the coastal belt two of which are the fishery harbours of Tangalle and Kirinda. The major contribution to fish production comes from the coastal fisheries. Fish is the main and preferred source of animal protein in the cereal based diet.

The total number of fishing families in the district is around 4,000 and the number of fishermen engaged in fishing activities is about 6,000. They are scattered in 113 Grama Niladhari divisions. In addition to these, it is estimated that around 1,000 other people are indirectly employed in fisheries related activities including fish vendors or traders, transporters, boat builders, boat and engine repairs and the suppliers of other services to the fishing industry. The total fishing fleet is around 2000 of which 44% has been mechanised. The total fish production in the district has gone up from 5750t in 1980 to 15,000t in 1993.

Fishing in the district is influenced by the weather, particularly the monsoons. The South-west monsoon period which is roughly from May to October is the main fishing season for the mechanised boats which fish for larger pelagics. The traditional craft are generally inactive during this period; they carry out limited fishing operations only when the weather is relatively calm. During November to April, beach seine fishing is also carried out along the coast.

There is a Regional Fisheries Training Institute at Tangalle which conducts regular residential training courses in marine fisheries for selected youths. In addition to that, the centre provides practically oriented training for active fishermen in their own fishing villages.

For fisheries administration and regulation in the district there is a District Fisheries Extension Office in Tangalle, under the Department of Fisheries and Aquatic Resources. This unit is headed by a District Fisheries Extension Officer and there are 11 Fisheries Inspectors working under him.

The district has 54 village level Fisheries Cooperative Societies and one umbrella organisation called the District Fisheries Union. Their total membership is around 7,000 (both males and females) and the share capital was Rs. 999,360 at the end of July 1994. Total savings of the members at this date were a little over Rs. 4 million. These societies are engaged in production, marketing, provision of welfare and credit facilities and other related activities.

There are around 16 sizeable lagoons scattered along the coastline, ranging in size from 31 to 570 ha, with a total surface area of approximately 2800 ha. Some lagoons are connected to the sea throughout the year, whilst others are completely isolated. In addition there are currently 21 tanks which may be classed as perennial, covering, at full storage capacity, a total surface area estimated to be 7836 ha.

1.3 Fish resources

The only systematic and scientific investigation of the fishery resources of the area is the The Survey of the Coastal Fish Resources of Sri Lanka conducted jointly by the Institute of Marine Research, Bergen and the Fisheries Research Section of the Ministry of Fisheries and Aquatic Resources using the research vessel Dr.Fridjof Nansen. Three resources surveys conducted in 1978, 1979 and 1980 which investigated the continental shelf around the island. These surveys identified the Hambantota Bank, which is a well-defined area with a relatively broad shelf limited by the Little Basses Reef to the East and the narrow shelf off Dondra Head to the West. During the second survey (April to June 1979), the total biomass was estimated to be 35,000 tons; 30,000 tons of demersal fish and 5000 tons of pelagic fish. The third cruise (January and February 1980) revealed that the total biomass of the continental shelf of Hambantota Banks was 110,000 tons comprising 55,000 tons of demersal and semi-demersal fish, 40,000 tons of small pelagic and 15,000 tons of large pelagic fish.

1.4 HIRDEP funded by NORAD

The programme of integrated rural development commenced in Sri Lanka in the late 1970s in order to channel resources into the less developed districts in the country. Hambantota District Integrated Rural Development Programme (HIRDEP) was started in 1979 and is one of the six originally targeted districts. The agreement between the Government of the Kingdom of Norway and the Government of the Democratic Socialist Republic of Sri Lanka was signed on the 30th October, 1979.

In addition to the general objectives of the I.R.D.Programme in Sri Lanka, the specific objectives of HIRDEP are as follows:

“The programme aims at achieving an increase in income, employment and production as well as improvements of social conditions and living standards of the men, women and children of the Hambantota District with special emphasis on the poorest groups.

The objectives are to be realised by means of;

- an integrated approach, whereby efforts within various fields are sought related to each other,
- a method of recurrent planning whereby information from ongoing activities are continuously fed into a revolving planning procedure,
- a method of concerned participation of the population of both sexes in a decentralised planning and implementation process.”

From the inception of the HIRDEP one of its main strategies for the achievement of its specific objectives has been maximum utilisation of the existing administrative and organisational structure in the district.

1.5 Fisheries Project Management Unit

The Fisheries Project Management Unit was set up under HIRDEP in 1981 in order to coordinate, plan, implement, monitor and evaluate the development activities which come under the fisheries sector in the district. This special unit consists of one Fisheries Project Manager and an Assistant Fisheries Project Manager. They are provided with transport and office facilities in the HIRDEP office. This unit has to date successfully completed a number of development projects which benefited the coastal and inland fisherfolk of the district.

2. PAST DEVELOPMENT GOALS

The basic thrust of the strategies pursued by HIRDEP to achieve its broad development goals has had the following characteristics:

- the development of key productive sectors, such as agriculture, fisheries and livestock;
- the development of basic infrastructure to support productive sectors;
- emphasis on strategies to integrate production, marketing and access to services;
- strategies to expand the social infrastructure base;
- strategies to reach target groups, through the promotion of local level and participatory planning;
- strategies to upgrade the human resource base of the district, and building the capacity of institutions charged with the responsibility of resource management.

Based on these strategies, a joint NORAD and Ministry of Fisheries team produced a report in 1979 which was to be the basis of the fisheries component in the programme for several years. The agreement of the first fisheries sector projects was signed on the 21st July 1981. As a result of this, a number of studies were conducted to assess the prevailing situation in the district with the expert assistance of the Norwegian Government.

A benefit-cost survey of fishing vessels and fishing methods was conducted for a period of one year to determine the most suitable craft for the district. The data were collected daily from 115 selected fishing craft of five different types scattered at eight main fish landing centres along the coastal belt. The data were processed and analysed with the help of computers in Norway. This report was published in October 1984.

In the meantime, another survey called Demersal Fish Exploitation Project off Hambantota was conducted to determine the fishing grounds and the catch effort of the same. This survey was also conducted for a period of nearly one year deploying three fishing vessels which belonged to the Fisheries Training Institute at Tangalle. This report was published in November 1984.

Four fisheries service centres were constructed in 1982 at four main fish landing centres in order to provide more facilities to the fishing communities and also to make available the required

input for the fishing industry close to hand. The *office* of the Fisheries Inspector was also located in the fisheries service centre so that he would be able to provide a better extension service and gather first hand and reliable information especially about the fish landings. The management and maintenance of these centres has been entrusted to the Fisheries Cooperative Societies.

A five-ton capacity block-ice plant was constructed in the heart of Hambantota town in 1982 in order to increase the quality of fish transported into the interior parts of the district. This also helped to increase the income level of the fishermen. The management and the maintenance of this plant has been entrusted to the Ceylon Fisheries Corporation.

The agreement for the provision of piped water to the fishing villages was signed on the 12th January 1983. Six water supply schemes were implemented in the fishing villages to provide quality drinking water to fishing communities therefore reducing the work load of the housewife. This helped to improve the health of the community. A total household survey conducted by the Fisheries Project Management Unit in November 1993, revealed that 69.7% of the fishing families in the district now have access to quality drinking water within 400 m.

Removal of underwater obstacles at the fish landing centres is another component implemented under HIRDEP. Underwater rocks which were hindering the movement of fishing craft and the operations of beach seines were removed at six fish landing centres. It was very difficult to implement this programme because there were difficulties in finding people capable of underwater rock blasting, difficulties in obtaining explosives for this purpose due to the security situation, difficulties in sorting out the disagreements between the contractor and the fishermen and in carrying out such work throughout the year. It had to be done within a period of less than five months in the year when the sea is relatively calm.

Another programme was implemented to provide funds as a grant to the seven Fisheries Cooperative Societies in the district, so that they could commence sales of fuel, fishing gear and engine spare parts to members as well as non-members. This component has been named as Provision of Seed Money to the Cooperative Societies.

A Field Training Programme for Fishermen is being implemented under HIRDEP with the assistance of the technical staff of the Fisheries Training Institute at Tangalle. The duration of the course is 15 days. Training programmes are conducted at their own fishing villages and so far, 1,180 fishermen have been trained. The course contents are

- seamanship,
- navigation,
- fishing methods,
- repair and maintenance of inboard and outboard engines,
- rigging, mending and care of fishing gear,

- fibreglassing techniques,
- fish handling,
- Fisheries Ordinance and Regulations,
- savings.

In addition twenty two selected members of Fisheries Cooperative Societies in the district were trained for a period of four months in two batches as mechanics to repair marine engines. They were issued with tool kits as a loan after completing the training.

At two fishing centres very old wooden orus (traditional crafts) were fibreglass coated to prolong their lifetime. At four fish landing centres where electricity was not available, solar beacons were installed on an experimental basis. The ten-ton capacity block-ice plant at Tangalle which belongs to the Ceylon Fisheries Harbours Corporation and had not been working for a long time, was renovated for a total cost of Rs.2.1 million.

The fish breeding and rearing station at Muruthawela was provided with the following facilities: one double-cab pick-up vehicle for the staff to distribute fingerlings and for the extension work, four motor cycles for the Fisheries Inspectors to collect statistics and for the extension services, one hand tractor with a trailer to transport fuel and manure to the station and two filter units to provide quality water for the ponds and for drinking.

At two fishing villages settlement schemes were implemented in which 110 families were settled. Loan facilities were provided through the National Housing Development Authority for the construction of houses. Five residential quarters were also constructed in the district for the benefit of the District Fisheries Extension Officer, three Fisheries Inspectors and the Principal of the Fisheries Training Institute at Tangalle.

Transport facilities were provided to the field officers of the District Fisheries Extension Office at Tangalle. They were provided with one double-cab pick-up vehicle and five motor cycles for extension services.

Generally, the fishermen are bonded to the middleman and as a result they are very poor and unable to escape from this vicious circle. To eliminate this situation, credit was provided to the village level Fisheries Cooperative Societies. Forty three such societies in the district were granted Rs. 30,000 each so that their members could obtain loans and this would function as a revolving fund in the society and to provide more credit to the members. At the very beginning the loans were issued only to 430 members of the 43 societies but by the end of July 1994 the total number of members who had obtained loans from this revolving fund had gone up to 1378. the loan recovery rate is 79.6%. This scheme is being monitored regularly and the purpose for which the loans were obtained has been analysed (Table 1).

Fifty bicycles were also granted to 11 Fisheries Co-operative Societies so that the members may commence fish marketing. The cost of a bicycle is Rs. 3000 and it was a loan to the member

from the society. Ninety five reconditioned motor cycles were also issued, for fish marketing through the Fisheries Cooperative Societies in order to provide quality fish to the inland parts of the district and to increase the ex-beach price of fish to the producer.

Forty-five outboard motors have been issued to the members of nine societies for the mechanisation of traditional crafts and 128 6 m FRP boats with outboard motors and fishing gear have been issued through the Societies to increase the fish production and the income level of the fishing families.

Hence the total expenditure incurred up to the end of August 1994 has Rs. 78 million out of which Rs. 30 million has been granted to the Fisheries Co-operative Societies.

Table 1.
Loans under NORAD assistance to members of Fisheries Co-operative Societies
from April 1990 to December 1993.

No.	Purpose	Male	Female	Total
01	Manufacture Of Maldive fish	0	20	20
02	Manufacture of dried fish	4	27	31
03	Marketing of fish	112	0	112
04	Fishing gear	381	32	413
05	Repairs-boats	32	8	40
06	Repairs - outboard motors	9	2	11
07	Tool kits	22	0	22
08	Migration for fishing	4	0	4
09	Purchasing of boats	13	1	14
10	Repairs - beach seine nets	1	0	1
11	Purchasing outboard motors	2	1	3
12	Construction of fish kraals	3	0	3
13	Poultry farming	10	23	33
14	Goat farming	1	4	5
15	Cattle farming	1	0	1
16	Manufacture of poultry food	2	7	9
17	Coconut fibre industry	9	60	69
18	Marketing COCONUT yarn	0	9	9
19	Marketing of hoppers	0	1	
20	Boutique	15	21	36
21	Tea boutique	2	10	12
22	Marketing coconut wood rafters	1	0	
23	Marketing of vegetables	5	3	8
24	Marketing of coconut	0	2	2
25	Mobile grocery	3	12	15
26	Marketing of betel	1	0	
27	Marketing of king coconut	0	2	2
28	Marketing of salt	1	1	2
29	Brick making	13	15	28
30	Bakeries	1	0	
31	Marketing of yoghurt	0	1	

No.	Purpose	Male	Female	Total
32	Farming	11	19	30
33	Marketing of garments	3	8	11
34	Manufacture of sweets	0	4	4
35	Manufacture of mosquito nets	0	1	1
36	Metal breaking	0	3	3
37	Handicrafts	1	0	1
38	Building houses	36	44	80
39	Building lavatories	3	0	3
40	Electricity	1	4	5
41	Purchasing sewing machine	0	7	7
42	Motor cycle for fish marketing	33	0	33
43	Purchasing household goods	1	0	1
44	Bicycle for fish marketing	53	0	53
45	Repairing vehicles	1	0	1
46	Get rid of high interest loans	56	36	92
47	Redeeming pawned goods	1	6	7
48	consumer needs	2	1	3
49	Medical assistance	1	2	3
50	Father's aim giving	1	0	1
51	Wife's foreign trip	1	0	1
52	Purchasing bicycles	3	1	4
53	Others	2	4	6
TOTAL		858	402	1260

3. BENEFITS AND BENEFICIARIES

The fishing communities in the district have benefited immensely as a result of the development programmes implemented under HIRDEP with NORAD assistance. Two reviews were conducted to assess the progress of the fisheries sector in 1988 and 1993 jointly by NORAD and the Department of Fisheries and Aquatic Resources.

Fish production in the district has increased from 5750 t per annum in 1981 to 15,000 t in 1993. This is a direct result of the provision of services and inputs required for the fishing industry and also due to the proper management of the fisheries sector activities in the district through the village level Fisheries Cooperative Societies.

The quality of fish landed has also been improved by the provision of sufficient ice. The distribution of quality fish to the interior parts of the district was also increased by the provision of bicycles and motor cycles to the members of the societies for fish marketing. This helps to improve the health of the consumers and the producer is getting a higher price since the competition for fish at the fish landing centres is increased.

Most of the credit programmes implemented through the village level Fisheries Cooperative Societies upgraded the management of the societies and also helped to get members released from the bonds of middlemen. Ninety two (7.3%) members out of 1260 have obtained loans from the societies at an interest rate of 12% per annum, to settle the loans they have taken from the

middlemen at very high interest rates such as 240% per annum. One hundred and ninety eight (15.7%) have obtained loans from the societies for fish marketing and the other purposes for which loans were obtained are shown in Table 1.

The field training programmes helped to upgrade the capabilities of the fishermen to maintain and service their marine engines and to attend to minor repairs of the fibreglass boats. They were trained to handle the fishing gear very effectively and efficiently and as a result of that the catch effort has been increased. In addition, their knowledge of the Fisheries Ordinance and Regulations and the Co-operative Law was improved leading to better management of the fisheries sector in the district. Proper handling of fish to reduce post-harvest losses, resource management of the demersal fish on the continental shelf, including lobster fishing, and to save part of their daily income for future use were some of the main topics discussed in detail in these field training programmes.

Removal of obstacles at fish landing centres and the provision of seed money to commence sales of fishing gear, engine spare parts and fuel also helped to increase fish production in the district mainly because these two programmes increased the number of fishing days.

Provision of transport facilities, residential quarters and foreign training to the fisheries extension officers improved their job satisfaction and work efficiency, rendering a better service to the fishing communities of the district.

The benefits of the settlement schemes are as follows, as mentioned in the first review report of the fisheries sector under HIRDEP:

- a proper housing area has been developed with infrastructure facilities,
- they no longer have problems with stray animals or serpents and were safer,
- with the new roads they had better access to the sea,
- no longer afraid of fires, whereas previously the shed was liable to catch fire,
- health conditions had already improved because of better housing facilities and water nearby
- they were able to keep their fishing gear more safely stored,
- processing of fish is easier and can be done safely (women do Maldivian fish processing),
- the overall quality of life is better.

The target group of all these fisheries sector programmes was the very poor fishing families, the food stamp holders. Thus, the income level of the fishing family was increased and thereby the quality of life improved.

4. FUTURE CHALLENGES TO BE ADDRESSED BY HIRDEP

HIRDEP is entering into its final phase of receiving NORAD funds; the period 1995 to 2000 will be treated as a period of consolidation. The sustainability of the programmes already conducted will be scrutinised. However, the Fisheries Project Management Unit will continue the issue of beach landing craft, outboard motors, motorcycles for fish marketing and the field training programmes until the allocated funds have finished. In the meantime all the programmes implemented will be closely monitored and evaluated.

Nevertheless, if priority is given and funds are available the following activities may be implemented under HIRDEP to further improve the fishing industry in this district.

A proper resource survey has not been carried out since 1980 and it is not possible to predict the maximum sustainable yielded or the total biomass available in the continental shelf area of the Hambantota Bank. Therefore, action should be taken to harvest the available deep sea pelagic resources by introducing more multi-day boats with modern electronic equipment through the district union. Conversion of existing single day boats to multi-day boats will also be useful to reduce the operational cost and to improve the deep sea catches and thereby reduce the use-conflict in coastal waters.

Fish marketing should be further improved to give a better price to the producer and to provide more quality fish to the interior remote villages in the district. The cost of insulated vans are very high and the village level cooperative societies are not in a position to purchase and mobilise them. If funds are made available to the district union it has the capacity to commence a fish marketing programme utilising 3–5 insulated vans.

The Fisheries Training Institute at Tangalle is to be improved. A training vessel with modern electronic equipment and new buildings for the centre should be provided.

To improve the freshwater fish production, educated youths living around the perennial tanks in the district should be trained in fish breeding and rearing of fingerlings. They should be provided with mini-laboratories for this purpose.

Most of the lagoons in the district have various problems. It is not possible to develop these lagoons since the cost would be very high and the appropriate technology unavailable. Therefore, proper studies should be conducted to understand the problems and how to find solutions to them.

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