

**Performance Audit Report on the
Construction of the Ambalangoda
Fisheries Harbour and the
Improvement of the Living
Conditions of the Fishermen
through the Supply of Basic
Facilities of the Harbour**



2014

Performance and Environmental Audit Unit

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Auditor General' s Department



01. Executive Summary

The responsibility for the formulation and implementation of Government Policy on the socioeconomic development of the fisheries community by providing equal opportunities to all is vested in the Ministry of Fisheries and Aquatic Resources Development. The Ceylon Fisheries Harbours Corporation under the purview of the Ministry is the institution responsible for the construction and maintenance of fisheries harbours in Sri Lanka. The construction of Fisheries Harbours at Ambalangoda, Hambantota and Chillaw under the aid from the Asian Development Bank had been a basic function of the Coastal Resources Management Project.

In view of the limitations of the resources including the staff and time available, the aim of this performance audit was to examine the construction of the Ambalangoda Fisheries Harbour and whether the objectives of the construction had been effectively achieved. The Ambalangoda Fisheries Harbour had been constructed at a cost of Rs.477 million financed from the loan obtained from the Asian Development Bank by the Ceylon Fisheries Harbours Corporation. Certain objectives expected from the construction of the fisheries Harbour had not been achieved and the main observations on the lack of adequate development of the facilities required for the supply of the expected services to the vessels through the development of the infrastructure facilities are given below.

- i. The services supplied by this Fisheries Harbour as compared with the services supplied to the fishermen by the other Fisheries Harbours in Sri Lanka, had not been adequate.
- ii. This Fisheries Harbour had not been economically effective due to operating inefficiencies while the gap between the expected income and the actual income of the Harbour had increased adversely.
- iii. The living conditions of the fishermen had not improved due to the lack of improvement of fish production as expected, the resultant non-enhancement of the income of the fishermen as expected and the common facilities and service provided by the Fisheries Harbour not being at a satisfactory level.
- iv. The pleasant sea coast had been spoilt due to the construction of a Fisheries Harbour not complete in every respect while different environment problems had been created.

In addition to the above matters, the defects in the major construction works such as the jetty and breakwater of the Harbour which cannot be rectified, which should have been considered in the construction of the Harbour was a noticeable observation in audit. Action needs to be taken to carry out repair maintenance of the Harbour Basin to minimize the effects of such defects, increase the length of the jetty to enable the supply of facilities and services to a larger number of multiday fisheries craft and the creation of the basic facilities such as slipway facilities for the achievement of the expected of this project.

2. Introduction

2.1 Background

(a) Fisheries Industry

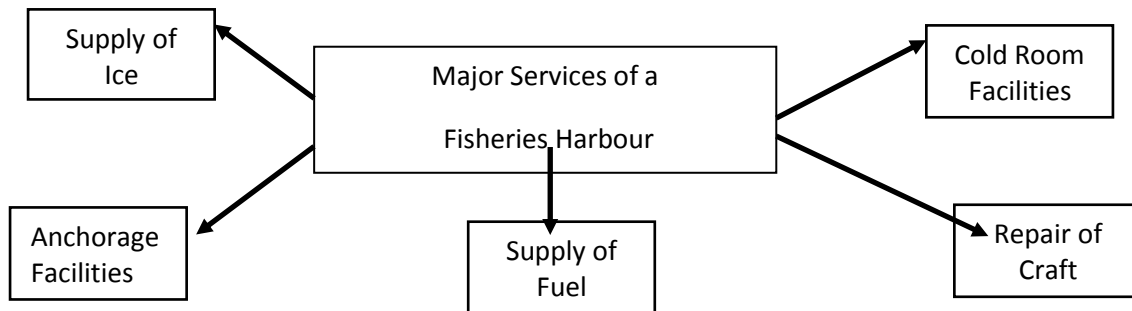
Fish can be introduced as one of the major sources of animal protein in Sri Lanka and provides 65 per cent the animal protein requirements of Sri Lanka. Out of the fish production of Sri Lanka in the year 2009, the quantity utilized for domestic consumption had been 68 per cent. Therefore, in consideration of the significant contribution made by the fisheries industry to the economy of the country, providing Fisheries Harbour facilities for the enhancement of the fish production is a basic requirement.

Eighteen Fisheries Harbours were in operation in Sri Lanka by October 2010 while several other Harbours were under construction. In addition 40 anchorages and 1,562 fish landing locations had contributed to the fish production.

[(b) Harbour Operations

Ceylon Fisheries Harbours Corporation had been established under the Industrial Corporations Act, No. 49 of 1957 and the Corporation executes the functions relating to construction, development and maintaining the control of the Fisheries Harbours in Sri Lanka. According to a study of the sea coast that existed prior to the construction of the Ambalangoda Fisheries Harbour carried out by the Ministry of Fisheries and Aquatic Resources Development, it had been established that the fisheries activities in the area had been done with 77 mechanized boats and 34 non-mechanized boats. The owners of the multiday craft with inboard engines in this area had been limited to about 30 persons and that their boats had taken to the Harbours in Galle and Beruwala for operations due to the lack of facilities in this area. In view of this situation, steps had been taken for the construction of a Fisheries Harbour with all facilities, with aid from the Coastal Resources Management Project. The construction work commenced in the year 2006 had been completed in the year 2009. The estimated cost for the construction of the Harbour amounted to Rs.475,517,129 and the actual expenditure amounted to Rs.477,574,256.

The major services provided by a Fisheries Harbour to the fishermen can be illustrated as follows.



The major sources of income of Fisheries Harbours can be cited as the income received from the supply of fuel, water, ice and anchorage facilities for vessels. The anchorage fees charged vary according to the length of each vessel. The supply of cold storage facilities for the storage of fish harvested until transportation to the market, supply of crane facilities for carrying out repairs to boats, supply of slipway facilities and repair facilities can be cited as the other sources of income.

2.2 Authority for the Audit

The audit was carried out under my direction in pursuance of the provisions in Article 154 of the Constitution of the Democratic Socialist Republic of Sri Lanka.

2.3 Objective of the Audit and the Reasons for the Selection of the sector

The objectives of the Performance Audit are, as follows

- * Examination whether the construction of the Harbour had been in accordance with the achievement of its objectives,
- * Examination whether the operations of the Harbour are carried out in an efficient and effective manner and
- * Examination of the impact on the environment caused by the operations of the Harbour.

2.4 Scope of Audit

In view of the limitations of staff, other resources and time available, the Ambalangoda Fisheries Harbour out of the 03 newly constructed Fisheries Harbours by the Project was limited to this Performance Audit and attention was paid to the achievement of the objectives expected from the construction.

An understanding of the extent to which in objectives of the project could be achieved to reach a conclusion based on the observations and recommendations of the Performance Audit and the operations of the Harbour and how far the facilities created by the construction of the Harbour are adequate for such operation was acquired. Through that the attention was paid to examine whether the benefits of the construction had reached to parties concerned. This Performance Audit was carried out on test basis due to the human resources and time available and the recommendations and the conclusions are based on the audit observations.

2.5 Limitations of Audit

This Performance Audit was performed subject to the following limitations.

- i. The Fisheries Harbour was constructed by the Coastal Resources Management Project under financial aid from the Asian Development Bank. The construction work had been completed by the time of commencing the Performance Audit and there were difficulties in obtaining documentary evidence in support of payments.
- ii. Accurate information was not received from the beneficiaries in the collection of ancillary evidence relating to the fish harvested, sale price, income and expenditure.
- iii. The beneficiaries were reluctant to reveal information on income and assets required for the evaluation of the improvement of living conditions of the beneficiaries and as such it was difficult to evaluate the living conditions.
- iv. As the fishermen go out to the deep sea for about one month for fishing, that factor had to be taken into consideration in the selection of the sample.
- v. The impact on the living conditions of the fisheries community could not be adequately evaluated as only a short period of 02 years only had elapsed since the commencement of operations after the construction of the harbour.

3. Detailed Findings, Recommendations and Comments of the Institution

3.1 Design and Construction of the Harbour

The observations on the non-completion of the basic requirements relating to the construction of the Harbour are as follows.

- i. According to the Feasibility Study Report providing anchorage facilities for 397 vessels had been expected. But the space available for anchorage facilities in the Harbour constructed was not adequate. In many places of the harbour basin, the depth was less than the required minimum depth of 3.5 meters.
- ii. The institution that initially presented the designs for the construction of the Harbour had presented 4 designs. In the evaluation process 3 designs had been rejected by adducing different reasons and the other design had been accepted as effective. Subsequently, another institution had presented a revised design prepared based on the designs of the institution which presented designs initially. That revised design had been further revised and submitted again by that institution. Its objective was the minimization of expenditure. Due to the minimization of expenditure, the area of the basin had been reduced. Even though the Feasibility Study Report envisaged providing anchorage facilities for 397 vessels comprising 119 multiday vessels, 40 vessels with inboard engines and 238 vessels with outboard engines, the basin constructed was not adequate for that number of vessels. It was revealed at the physical inspection that only 20 multiday vessels and 20 vessels with inboard and outboard engines only could be anchored in the basin constructed. That was confirmed from the discussion held with the fishermen.
- iii. The Harbour Mouth had been designed and constructed facing the path of sea waves. Collision of boats in the basin as well as colliding against the jetty and sand deposits in the basin had resulted due to the waves reaching the basin continuously.



Waves reaching the Harbour Basin Continuously



Waves reaching the Harbour Basin Continuously

- iv. The natural stone ridge close to the site of the Harbour Mouth had not been taken into account in designing process and it had become a great obstruction in the vessels entering the Harbour during rough weather and it is the cause for the high intensity of waves reaching the Harbour mouth.

- v. The buildings constructed for the Nets Processing Centre, Restaurant and Fish Auction Room had not been constructed in the manner suitable for those functions. Due to the exposure to the sea side and short walls constructed it is not possible to perform those activities in the buildings on rainy days as well as bright sunny days. The quality of construction of the buildings is poor and had been subjected to cracks, fissures and water seepage within a short period after the construction.

- vi. Constructions had not been done for cold rooms, slipway and platform weighing scales and the sites designed had not been allocated for those

purposes. Obtaining jetty facilities for small vessels had been a difficult task due to the unavailability of a separate jetty for those.

- vii. Difficulties had arisen due to the failure to construct a drains system for drainage of water collected during rainy season.



Harbour premises inundated with rain water during the Rainy Season



Harbour premises inundated with rain water during the Rainy Season

- viii. A parapet wall had not been constructed for the protection of the Harbour and the premises.

Indication

- i. The number of boats that can be anchored is limited due to the Harbour Basin constructed being smaller than the extent envisaged in the Feasibility Report and the accumulation of sand in most places of the Harbour Basin.
- ii. Due to the waves reaching the Harbour Basin continuously boats are damaged due to colliding against the jetty and against each other resulting in the escalation of maintenance costs as well as conflicts among the fisheries community.
- iii. Within a short period after the construction of the Harbour, several vessels had crashed against the rocky reef at the approach channel of the Harbour and

destroyed even by 31 October 2010, the date of audit. As such the possibility of loss of lives of the fishermen exist.

- iv. As the Harbour does not provide the essential services to the fishermen more time is spent and higher costs are incurred in obtaining such services from external parties.
- v. The possibility of using the Harbour premises in the nights for anti – social and illegal activities exists due to the failure to construct a protective parapet wall enclosing the Harbour and the premises.

Recommendations

- i. Introduction of a methodology for the regular removal of sand in the Harbour Basin to ensure maximum use for anchoring vessels.
- ii. Action should be taken for the prompt supply of essential services not supplied to the fishermen at present.
- iii. Construction of a drains system for the drainage of water collected in the Harbour premises and the construction of a protective parapet wall enclosing the Harbour premises.

Comments of the Institutions

A drain system is in place at present for the drainage of water collected in the Harbour premises and a greater attention is paid for the settlement of the ownership problem of the Harbour premises for the construction of protective parapet wall enclosing the Harbour.

3.2 Supply of Facilities expected from the construction of the Harbour

Even though the supply facilities to 238 outboard vessels had been envisaged according to the Feasibility Study Report, fuel tanks and pipelines for distribution of kerosene used as fuel for such vessels had not been constructed.

Indication

As the fuel required for the outboard vessels is not supplied, such vessels calling at the Harbour had decreased. As such, it had not been possible to collect the expected income from sources such as water, electricity, anchorage charges and registration fees.

Recommendation

Action should be taken for the installation of fuel tanks (kerosene) and construction of the distribution unit for the supply of fuel to the outboard vessels.

Comments of the Institution

Action will be taken to establish fuel tanks and distribution units for the supply of kerosene to the outboard vessels.

3.2.1 Supply of Anchorage Facilities

According to the Feasibility Study Report on the construction of the Harbour, plans had been made for anchoring 397 vessels in the Harbour Basin. Nevertheless, the anchorage facilities in the constructed Harbour is limited to 40 multiday fisheries vessels. The reduction of the estimates prepared at the initial designing of the Harbour had resulted in limiting an objectives at the commencement itself is a significant observation. In addition to the main reason for the limitation of space in the Harbour, the regular flow of sand into the Harbour had prevented the maximum use of the limited space available.



Vessels anchored in the limited space in the Harbour Basin

Indication

- i. Non-receipt of the expected anchorage income, vessels damaged due to colliding against each other and creation of conflicts among fishermen.
- ii. After unloading the fish harvested small vessels had to be taken to other places for anchoring.

Recommendation

Action should be taken to examine the reasons for accumulation of sand deposits and take remedial action. The accumulated sand deposits should be removed regularly to ensure the maximum use of the Harbour Basin.

Comments of the Institution

The Corporation carries out regular removal of sand deposits at present as a remedy for the problems created by the accumulation of sand deposits in the deposits in the Harbour Basin.

3.2.2 Supply of Harbour Jetty Facilities

The manner of construction of the Harbour jetty has a direct impact in determining the accommodation and the operations of the Harbour. The defects in the construction of the jetty is an obstruction in the achievement of the objectives expected from the Project. Several defects observed in the construction and the use of the Jetty are as follows.

- i. According to the original designs, the length of the jetty should have been 250 metres landwards from the Harbour Basin. But the length of the jetty constructed under the project is only 100 metres and about 70 metres can be used for anchoring of vessels. The balance 30 metres cannot be used for that purpose due to sand deposits near the jetty.
- ii. It was observed that loading and unloading of fish to and from lorries are done on the jetty itself despite the availability of a fish auction room.
- iii. Due to the use of the jetty for clearing of nets with small fish such as sprats and carrying out boat repairs, the jetty had been used for objectives outside its primary functions.

Indication

The adverse impacts arising from the deficiencies in the construction of the jetty and the non-use of the jetty effectively are as follows.

- i. Sites of the jetty allocated for the supply of fuel (kerosene brought from outside) and water are being used for anchorage and unloading of fish. As such there are difficulties in the supply of fuel and water to the other vessels, conflicts among fishermen as well as fish being contaminated with kerosene resulting in damage to the quality of fish.
- ii. Difficulties in unloading of fish due to the use of the jetty for carrying out repair to vessels.
- iii. The jetty has become untidy reeking foul smells due to collection of fish harvest and cleaning of nets.

Recommendations

- i. Action should be taken to reserve the sites allocated for the supply of fuel and water to the vessels for that purpose only, refrain from allowing vessels not obtaining fuel and water to anchor at such sites and unload fish and for the regular removal of sand deposits near the jetty to allow easy access to the vessels.
- ii. Increase the length of the existing jetty to enable a larger number of multiday fishing vessels to obtain facilities and construct another jetty for the other vessels.

Comments of the Institution

- i. Fuel and water are supplied continuously at present to the vessels registered with the Harbour and unloading of fish and anchoring are done at the relevant sites.
- ii. Cleaning on nets with small fish such as sprats and carrying out repairs to vessels on the jetty are being given special attention by discussing with the Board of Directors.

3.2.3 Basic Facilities supplied by the Harbour

The supply of facilities such as water, electricity, restaurants, auction room, etc. assist in the achievement of objectives of the construction of the Harbour. It was observed from the discussions on the 17 items which constitute the following facilities of a Harbour that the facilities relating to 06 items had not been supplied while the facilities supplied had not been done efficiently and effectively.

Several observations in that connection are given below.

(a) Water Facilities

- i. Eight concrete water tanks and 05 plastic water tanks had been installed in the Harbour at a height of about 06 feet from the ground level. Even though the meter for measuring the water supplied to the vessels and the water tap had been installed underground preventing easy location, it had been temporarily closed with a plank. A permanent employee delegated with the responsibility for the supply of water to the vessels had not been appointed and as and when necessary an office employee is deployed for the supply of water. A methodology for the supply of clean water to the fishermen for cleaning the fish harvest had not been introduced.
- ii. According to the Feasibility Study Report and underground water tank of 6,000 litre capacity representing 2/3 of the daily requirement of water should have been constructed to maintain a buffer stock. But it had not been so done.

Indication

- i. It was observed that in most instances dirty sea water is obtained from the Harbour Basin for washing fish. This results in damaging the quality of fish.
- ii. A long time is taken to supply water to the vessels due to the lack of a high overhead tank with adequate pressure to supply water. Information on quarrels among fishermen resulting due to this reason was revealed.
- iii. In instances of suspension of the external water supply it had not been possible to supply adequate water to the vessels.

- iv. Possibility of misuse was observed as water is supplied without the supervision of a responsible officer.

Recommendations

- i. Construction of a tall overhead tank for the supply of water to the vessels at high pressure and the construction of an underground tank for maintaining a buffer stock of water. Installation of several water meters to enable several vessels to obtain water simultaneously.
- ii. Appointment of a responsible permanent employee for the supply of water and the installation of water meters and water taps in a manner to prevent obtaining water fraudulently.

Comments of the Institution

- i. Two water tanks of 10,000 litre capacity have been established in the Harbour premises for the supply of water to the vessels. Plans have been made for the construction of a water tank for buffer stocks in the Harbour premises. Several meters have been installed to enable the supply of water simultaneously to several vessels.
- ii. The institution has appointed a separate employee for the supply of water to fisheries vessels and for the collection of cash.

(b) Electricity

Even though the electricity needed for carrying out repairs to fisheries vessels is supplied and cash collected, it was observed that the supply is not made properly and with safety measures. It was observed that electricity is obtained by inserting wires into the electrical sockets in the Harbour premises. Charge are recovered on daily basis without installing meters. Even though lamp posts are installed on the Jetty to enable fishing activities in the night, it was observed that all the electric lamps on the posts were not working. The wires laid on the Jetty had been covered with concrete, thus making it impossible to repairs the lamps.

Indication

- i. Fisheries activities in the nights had been obstructed due to the electric lights on the jetty wire not working properly.
- ii. Electricity needed for boat repairs had been supplied through temporary wiring which is unsafe and provides opportunities for fraudulent use of electricity.

Recommendations

- i. Maintenance of electric lamps of the jetty to keep them in working condition regularly and the employment of an Electrician in permanent basis to maintain them.
- ii. Introduce a systematic procedure for the supply of electricity for boat repairs through a separately installed meter and collect charges at specified rates.

Comments of the Institution

- i. An electrician is not employed at present for the maintenance of the electricity system in the Harbour premises and an employee of the institution is deployed for the work.
- ii. In the supply of electricity for the vessels, arrangement have been made for the supply to each boat through the electricity meter of the institution based on a daily charge.

(c) Fish Auction Room, Restaurant and Net Processing Centre

Even though a building of 2,230 square feet of floor space had been constructed for the restaurant that had been underutilized. Even though a Net Processing Centre of 2,624 square feet of floor space had been constructed it was observed that the building is being used for repair of fisheries vessels. Even though fish auction room of 4,800 square feet of floor space had been constructed that had been used outside the objective for the net processing purposes.

Indication

- i. As the restaurant has not been commenced, the fishermen have to bring food from the outside. Food brought from outside is consumed in different places due to the

lack of a proper place for consumption of food. The Harbour premises had been littered due to throwing the left-overs here and there.

- ii. The use of the jetty for fish auctions instead of using the fish auction room causing littering and congestion of the jetty.

Recommendation

Take necessary action for the utilization of the Restaurant, Fish Auction Room and Net Processing Centre constructed for the specified purposes instead of utilizing for other purposes.

Comments of the Institution

At present the Restaurant is due to be handed over to a new lessee while the Fish Auction Room and the activities of the Message Exchange and Net Processing Centre are being done accordingly.

(d) Creation of Facilities of Ice Storage, Platform Scales, Boat Repair Yard, Slipway, Cranes and Message Centre.

These facilities which constitute the basic requirements of a Fisheries Harbour, had not been establishing in this Fisheries Harbour. Crane facilities had to be used as and when necessary for carrying out repairs to vessels and due to unavailability of slipway facilities, cranes had to be obtained from outside as the Harbour did not have a crane. Vessels had been repaired in different places of the Harbour premises due to the unavailability of a specified repair Centre.

An effective communications system should be available to maintain communications between the Harbour and the fisheries vessels. Even though a communications system with all facilities for giving instructions and forwarding messages to the fishermen had been established subsequently a continuous service could not be provided due to the inadequacy of Technical Officers and building facilities.

Indications

- i. Cranes had to be hired from outside at high costs due to the unavailability of slipway facilities or cranes for taking vessels ashore for repairs resulting in spending a long time for carrying out repairs. As the vessels needing repairs were kept idling on the jetty it had resulted in difficulties in providing jetty facilities for operating vessels. Similarly the opportunities for the Harbour to earn income by hiring slipway and cranes had been deprived of.
- ii. Accurate data on the fish production by the Harbour could not be obtained due to the non – installation of platform scales.
- iii. This Harbour could be kept open only during the normal working hours and as such 24 hour continuous service could not be provided to the fishermen.

Recommendations

- i. Establishment of a good communication network by utilizing the accommodation available in the Harbour premises.
- ii. Installation of platform scales for obtaining accurate data on fish production and introduction of a methodology for its use.
- iii. Take immediate action to provide slipway facilities carrying out repairs to vessels.

Comments of the Institution

An ice production facility, an ice store and an ice sales centre are in operation in the Harbour premises at present. Steps have been taken at present to establish a Communication Centre and installation of a platform scale for obtaining accurate data on fish production as well as providing slipway facilities with proper management.

3.3 Economic Benefits Accruing from the Services supplied by the Fisheries Harbour

The following observations are made in this connection.

(a) According to the Feasibility Study Report, the average income for the year 2010 from the construction of the Harbour had been estimated at Rs.880.6 million but it had not been able to achieve that target. The non-achievement of the expected targets in relation to 03 income sources had been 100 per cent and in respect of the other sources that ranged between 95.6 per cent and 99.7 per cent. The particulars of each source of income had been as follows.

(b)

Source of Income Generation	Expected Income	Actual Income	Difference between Expected and Actual Income
	Rs. Millions	Rs. Millions	Percentage
i. Water	20.6	0.1	(99.5)
ii. Electricity	6.7	0.02	(99.7)
iii. Fuel	816.5	-	(100)
iv. Anchorage Fees	24.9	-	(100)
v. Ice sales Income	2.9	-	(100)
vi. Supply of Water	10.6	0.46	(98.7)

(c) The following income sources from which the other Fisheries Harbours of the Corporation are earning income had not been considered.

- * Supply of slipway facilities
- * Supply of Cold Room facilities
- * Income from installation of platform Scales
- * Imposition of Fines on Persons breaching laws and rules in operation for Harbours (littering the Harbour)

Indication

The possibility of the Harbour being a burden on the national economy due to the inability to maintain the Harbour earning profits as expected exists.

Recommendations

- i. Action should be taken for maximizing the income from sources such as water, electricity and anchorage.
- ii. Prompt action should be taken to identify new income sources as shown below and earn income from such sources.
 - * Slipway facilities
 - * Cold Room Facilities
 - * Installation of Platform Scales
 - * Imposition of Fines on Persons breaching laws and rules (littering the Harbour)
- iii. Supply all services needed by fishermen and take action to increase the overall income by increasing the number of fisheries vessels calling at the Harbour through the supply of those services effectively and efficiently.

Comments of the Institution

- i. The special attention of the management has been paid at the present and it is expected to obtain a higher income from the income sources of the Harbour.
- ii. Take Prompt action to identify new income sources as shown below.
 - * Attention is paid for the supply of slipway facilities.
 - * At present all Harbours provide ice and cold room facilities.
 - * At present a fee is charged from persons and motor vehicles entering the Harbour premises.
 - * Installation of platform scales at 05 Harbours has been commenced and the installation at other Harbours has been suspended due to the objections raised by the fishermen. Nevertheless, action will be taken to install platform scales in the future.

- * Fines are not recovered at present and the mistaken of fishermen have been reduced through creating an awareness.
- * About 100 multiday boats have been registered permanently. Action will be taken to increase the overall income of the Harbour by providing facilities required for the registration of further vessels in the future.

3.4 Impact of the Construction of the new Fisheries Harbour on the Generation of the Expected Income.

Despite the deficiencies described in the above paragraph, the fisheries vessels of the area which had been anchored in other Fisheries Harbours had been brought to this Harbour. Since the commencement of multiday fisheries vessels operations by the Harbour, several persons of the area who were engaged in other businesses had joined the fisheries sector by deploying new multiday fisheries vessels. In addition to the multiday fisheries vessels the number of one day vessels had also increased. In considering the above matters practically, direct and indirect employment in the fisheries sector had increased substantially. Nevertheless, the small scale fisheries community explained that due to the quantitative increase of the multiday fisheries vessels, the fish harvest of the fishermen using one day fishing vessels had been reduced.

Indication

- i. Due to the increase in the number of vessels, direct employment opportunities in the fisheries sector such as vessel owners, skippers and crews had also increased. The increase of multiday fishery vessels had resulted in the increase of the annual fish production by 250,000 kilograms approximately.
- ii. The increase of the net repairers and vessel repairers, the increase of employment opportunities in industries such as dry fish, maldivian fish salted fish, etc. as well as the increase in the demand for the fisheries implements had resulted in the opening of new shops.
- iii. Due to the construction of the new Fisheries Harbour near Ambalangoda Town, the employment opportunities for engaging in transport services (three – wheelers, lorries and vans) had increased the sale of shops and groceries due to the purchase of food stuffs and other groceries required for the large number of multiday fishing vessels put to sea. Further, several new shops had been opened and this situation had indirectly improved the living condition of the trading community as well.

Recommendations

Taking steps to improvement of the Fishermen's Pension Scheme introduced to ensure a secure future for the fishermen and their families, enrolment of fishermen to the scheme and for the introduction of life and property insurance scheme for the fishermen.

Comments of the Institutions

A systematic course of action is being planned at the institutional level for the improvement of the Fishermen's Pension Scheme introduced to ensure a secure future for the fishermen and their families, enrolment of fishermen to the Scheme and for the introduction of a life and property insurance scheme for them.

3.5 Environmental Impact arising from the Construction of the Harbour

In addition to the achievement of the expected objectives from the construction, the creation of an atmosphere conducive to the protection of the environment affects the overall performance of the project. Nevertheless, in view of the described below, a greater attention should be paid to the environmental impact created.

- i. In the past, the coastal strip associated with the Fisheries Harbour was rich in ornamental fish and coral reefs and had a well-developed tourist area associated with the diving industry. Due to the construction of the Fisheries Harbour the attractive coastal environment and the tourism industry had ceased to exist.
- ii. The increase in the mechanized vessels due to the construction of the Harbour had resulted in the pollution of the sea water mixed with residual oil and smoke emanating from vessels.
- iii. Pollution of sea water due to oil and polythene discarded by the fishermen, fiberglass and rigiform discarded in repairing vessels in the Harbour premises and released into the Harbour Basin.
- iv. The environment is polluted and bad odour emanating from the dumping of fish waste haphazardly in the Harbour premises.

- v. The Harbour Basin being polluted due to the discharge of waste from the drains system of the town direct into the Harbour Basin. As the fishermen use such water for cleaning the fish, it had become a threat to the quality of the fish harvested.



polluted Harbour Premises

Indication

The environmental impact caused by the construction for the Harbour and the impact from the operations of the Harbour had created changes in the community life and the environment.

Recommendations

- i. Installation of notice boards for the information of the fisheries community on the disposal of residual oil and other waste in the Harbour premises and providing an adequate number of containers for the collection of residual oil in terms of Section 6(2)(a) of the Prevention of Marine Pollution Act, No.59 of 1981.
- ii. Implementation of the provisions made for the protection of the health and sanitation of the persons engaged in fishing and the quality of fish as provided for in the Orders made in the Minister of Fisheries and Aquatic Resources and published in the Government Gazette No. 972/14 of 25 April 1997.
- iii. Diversion of the waste disposal drains flowing direct into the Harbour Basin.
- iv. Permit only the vessels with seaworthy certificates to operate in the Harbour.

- v. Make aware the fishermen regarding the need to maintain the cleanliness of the Harbour premises.
- vi. Installation of litter bins and containers for residual oil in the appropriate sites of the Harbour premises.

Comments of the Institution

- i. The implementation of the provisions in the Prevention of Marine Pollution Act, No. 59 of 1981 is done through the awareness notices installed in the Harbour premises.
- ii. The Harbour Manager has instructed the fisheries to comply with the relevant provisions.
- iii. The garbage in the Harbour Basin and the Harbour premises are being removed from the premises by the Urban Council on 03 days per week.
- iv. The attention of the Harbour Manager is paid for permitting only the vessels with Seaworthy Certificates to operate in the Harbour.
- v. The fishermen are regularly made aware of the need to maintain the cleanliness of the Harbour is done through notices of instructions exhibited in the Harbour premises.
- vi. A course of action is in place at present to install litter bins and containers for residual oil in the appropriate places in the Harbour premises.

4. Overall Audit Conclusion

The Feasibility Study Reports on the construction of this Harbour submitted by two companies indicated a negative value in the Internal Productivity Ratio and as such it was established that the construction of the Harbour would not be economically feasible. Even though it had been decided to construct the Harbour in view of the economic and social benefits that would accrue indirectly from the Harbour, according to the primary and the secondary data obtained during the course of the Performance Audit the Harbour had not been constructed with the facilities adequate for the achievement of the relevant economic and social benefits. The various facilities the Harbour should provide to the fishermen had not been adequately established thus resulting in the non-achievement of the expected objectives of the construction of the Harbour. Further, adequate attention should be paid to the environmental problems arising from the construction of the Harbour. The observations made in audit clearly indicate the need for the improvement and effective management of the existing facilities of the Harbour for the improvement of the living standards and social status of the people engaged directly and indirectly in the fisheries industry and to enable them to engage in the fisheries industry effectively and that the construction of the essential facilities not established at present would enable the achievement of the objectives of the construction of the Harbour at least to a certain extent.