SAMUDRA Monograph

Social Welfare and Social Security in Sri Lankan Fisheries

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Summary

Since independence in 1948, the fisheries sector of Sri Lanka has been promoted and assisted by various governments. The shift of emphasis from pure growth-oriented policies to more development- and equity-oriented policies saw a number of welfare measures being adopted to help asset-poor small-scale fishermen fight their sea and land tenure problems from the 1970s onwards. Sri Lanka's introduction of "open economy" policies in 1977, and the integration of its economy with the global economy had both positive and negative impacts. On the positive side, the rate of mechanization and modernization of craft increased; new fishing techniques were introduced; the international trade in fish and fish products increased; and fishers engaged in mechanized fishing reported increased earnings. On the negative side, the lives of artisanal and small-scale fishers appear to have been threatened by the forces of market expansion and trade; sea and land tenure problems worsened due to the entry into the fisheries sector of powerful business interests and the expansion of the tourism industry; coastal marine resources got degraded; and the need for social security measures in fisheries re-surfaced with a tremendous force.

This study attempts at understanding the various social welfare and social security measures adopted by the State to improve the welfare of fishing communities in Sri Lanka. There are certain fisheries-related non-governmental organizations and fisheries co-operatives that are also involved in providing certain welfare measures, but the populations served by them appear to be quite small. Therefore, this paper mainly deals with measures adopted by the State in the provision of social welfare and social security. An attempt has also been made to assess these measures in relation to the needs of small-scale and artisanal fishermen and their families.

Over the entire study period, from 1984 to 2003, the highest share (from 65 to 81 per cent) of expenditure on welfare has gone for the construction of houses for fisher families. In 1996-1997, a new housing policy aimed at providing fishing communities with "permanent shelter ensuring their

social stability" was introduced. A five-year housing programme was initiated in 1997 and in 1998, three new housing programmes were introduced, the *Diyawaragammana* Housing Programme, the *Diyawarapura* Housing Schemes and the *Visiri Niwasa* Programme. Some of the common problems identified with these programmes are: regional disparities in the distribution of houses (the southern region receiving the lion's share); allocation of houses to non-fishermen having links to politicians; poor quality of construction material used; and lack of attention to the provision of household amenities.

Some of the other welfare measures that received government attention dealt with the provision of sanitary facilities, especially latrines, drinking water, community centres, access roads and beacon lights. Field studies revealed that the sanitary conditions enjoyed by fishing households, as well as their access to drinking water, remain above the national average standards.

The government has long recognized the importance of investment in human capital as an important means of developing the fisheries sector. The Sri Lanka Fisheries Training Institute at Mattakkuliya and the Divisional Training Centres in Tangalle, Negombo, Jaffna and Batticaloa train youth in navigation, fish-catching technology, boat repairs, and so on. The National Institute for Fisheries and Nautical Engineering (NIFNE) provides more advanced education in fisheries and nautical engineering. However, few young people trained in regional training centres have gone into fisheries. The major setback in the training programmes is their failure to select youths with fisheries backgrounds.

The fisheries co-operative movement in Sri Lanka too has contributed positively to social welfare, because most of the State aid reached the poorest categories of fishers through the co-operative system. Yet, many of the fisheries co-operatives remain dormant today due to poor management, disinterested office bearers, lack of training of personnel in business management, poor awareness of the principles of co-operation, political interventions, short-sighted policies, and poor loan recovery rates.

If social security measures are defined, as by the ILO, to include medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit, then the Sri Lankan government involvement can only

be found in the sphere of old-age, invalidity and survivors' / family benefits. Under the Fishermen's Pension and Social Security Benefit Scheme, fishermen are covered in the event of any physical disability (invalidity benefit) or old age (old-age benefit), while upon death, the dependents are provided with compensation (survivors' / family benefit). It seems to be difficult to get fishermen involved in any scheme requiring regular payment of premium because of the irregular nature of fishing incomes. Awareness programmes through community organizations like fisheries co-operatives can educate the fishermen about such schemes.

Due to the hazardous nature of the marine environment, fishing craft and gear often get damaged or lost. The Sri Lanka Insurance Corporation and the National Insurance Corporation are the two major institutions providing insurance against fishing-related risks. However, the interest of craft owners in insurance schemes appears to be quite weak, due to delays in indemnity payments and high premiums. No insurance scheme covers personal injuries, and affected fishermen have to seek help from the community. The absence of national laws protecting crew members against risk of injury and death is the major reason for the apathy of craft owners in insuring their crew against such risks. In order to improve the work conditions of crew on board multi-day vessels, it has recently been suggested that a work agreement (contract) be signed between the owner and crew member at the time of latter's recruitment to the craft, but this has yet to be adopted.

There are also certain other measures of social security that have not yet received the government's attention. Safety at sea is one such important issue. A good majority of multi-day craft do not have even simple life-saving devices such as life jackets and distress flares. Social security for women and children is another issue that has to be addressed immediately.

Sri Lanka's Ministry of Fisheries and Aquatic Resources recently drafted a National Fisheries Policy, which has paid serious attention to a number of social security needs of fishers and their families. Unfortunately, its adoption and implementation have been delayed by the recent chaotic situation in the country caused by the Indian Ocean tsunami of 26 December 2004.

Introduction

Social Welfare and Social Security in Sri Lankan Fisheries

Oscar Amarasinghe[1]

Sri Lanka is a small island in the Indian Ocean with a total land area of 65,510 sq km and a 1,760-km long coastline. With the declaration of the exclusive economic zone (EEZ) in 1976, the Government of Sri Lanka obtained sovereign rights over an ocean area of 536,000 sq km.

The fisheries sector in Sri Lanka is basically small-scale, but is very important in terms of employment, food security and generation of foreign exchange. Sri Lanka's fisheries is divided into two major sectors: the marine and the inland. The marine sector consists of the coastal, and the offshore/deep-sea subsectors, which accounted for 89 per cent of total fish production in 2001, while the corresponding figure for the inland sector was 11 per cent. There are 1,050 fishing villages in the marine sector and 1,289 in the inland sector[2]. At present, there are about 111,335 active fishermen, of whom 98,404 are engaged in the marine sector and 12,891 in the inland sector. About 22,000 people are also indirectly involved in the provision of auxiliary services. Fishing is done with the use of about 30,000 craft, of which around 46 per cent are motorized. This includes about 1,500 multi-day boats that fish on the outer fringes of the EEZ.

Since the country's independence, the fisheries sector has been promoted and assisted by various governments. The establishment of the Department of Fisheries in 1942 marks the involvement of the "reformist State" in fisheries. Mechanization of traditional craft, and the introduction of modern mechanized craft and gear characterized the form of government involvement in fisheries in the 1950s and 1960s. However, with the shift of emphasis from pure growth-oriented policies to more development- and equity-oriented policies from the 1970s, a number of measures were adopted to help asset-poor small-scale fishermen fight their sea and land tenure problems. These included the reorganization of fisheries

co-operative s, and channelling Sate aid (subsidies and credit) through them, the construction of houses for displaced fishermen, development of infrastructural facilities in remote fishing villages, and so on. Large amounts of public funds have been channelled into the fisheries to achieve these aims, and the role of the Sri Lankan government in developing the small-scale fisheries sector has been a commendable one.

The opening up of the national economy to the global economy began in 1977, when the Sri Lankan government introduced "open economy" policies. For the fisheries sector, the integration into the world economy had both positive and negative impacts. On the positive side were the increased rates of mechanization and modernization of craft, the introduction of new fishing techniques, expansion of international trade in fish and fish products, and increased earnings by fishers engaged in mechanized fishing.[3] In fact, Sri Lanka, which remained a net importer of fish (in value terms) became a net exporter by the year 1996, earning a net revenue from fish trade of LKR4 mn (US$40,057 at current exchange rate). With the adoption of the Fish Health Certification Programme to meet requirements imposed by fish importing regions like the European Union, the United States and Japan, the work conditions of fishworkers in the fish export subsector improved. However, economic liberalisation policies have also had certain adverse impacts on the fisheries sector, including threats to the livelihoods of artisanal and small-scale fishermen, who completely depend on fisheries for their livelihood. Use of non-sustainable and harmful fishing techniques, unregulated expansion of fishing effort to profit from market expansion and trade, sea and land tenure problems due to the entry of powerful business interests into fisheries, expansion of the tourism industry, and degradation of coastal marine resources are some of the newly emerging problems confronted by fishers. Marginalization of traditional fishers and a deterioration of labour conditions in fisheries are also evident. The lives of artisanal and small-scale fishers appear to have come under serious threat, highlighting even more forcefully the need for social security measures in fisheries.

This study is an attempt to understand the various social welfare and social security measures adopted by the State in Sri Lanka. Apart from the State, individual community organizations such as fisheries co-operatives too provide certain forms of social security to their members. However, no published information on such measures could be found.

There are certain fisheries-related non-governmental organizations (NGOs) that are also involved in the provision of certain welfare measures, but they are very much area-specific in their operations and the populations served by them appear to be quite small. Therefore, this paper mainly deals with measures adopted by the State in the provision of welfare, insurance, social security and improved work conditions in the fisheries sector An attempt is also made to assess them in relation to the needs of small-scale and artisanal fishermen and their families.

Major Objectives

The major objectives of the study are as follows:

1. to identify the various social welfare and social security measures adopted by the Sri Lankan government since independence;
2. to study the changes and impact of such measures over time; and
3. to study the impact of social welfare and social security measures on the livelihood of fishworkers and to suggest means of improving them.

Methodology

Both secondary and primary data and information were obtained to attain the objectives. Secondary information included those furnished by the Department of Fisheries and Aquatic Resources. The statistical division of the Ministry of Fisheries and Aquatic Resources (MFAR) provided a host of data on various State-sponsored social security schemes. An array of documents, such as journals, annual reports, administration reports and unpublished memos of the Ministry/Department of Fisheries and Aquatic Resources also provided much valuable information for the study. Moreover, research reports and other publications of research workers were also of significant importance as secondary sources of information.

Primary data sources included informal discussions with fisheries officials of the Matara Assistant Director of Fisheries Division, Grama Niladhari of Dondra, Sisilasagama, and so on. Field studies took the form of field surveys with a structured questionnaire, carried out in Dondra and Sisilasagama, villages in the southern district of Hambantota, and focus group discussions carried out in the Kottegoda fishing village.

This paper is divided into three parts. Part I provides a short description of what is meant by social welfare and social security. State intervention in providing various social welfare measures over the entire study period — from 1983 to 2003 — and assessment of these measures are made in Part II. From 1984 onwards, adequate data is available on the issues under study. Part III provides information on State involvement in the provision of social security. An assessment of the various types of social security measures is also presented. Concluding remarks in Part IV end the paper.

PART I

Social Welfare and Social Security for Fishing Communities in Sri Lanka

The literature on growth and development distinguish welfare from growth by the fact that welfare ensures a favourable distribution of income while growth need not. Growth-oriented policies in the immediate post-War period resulted in higher outputs, but the benefits of growth were not enjoyed by all groups in Sri Lankan society. There have been sectoral and regional disparities in growth, which led to a shift of emphasis in State policy from growth to development, the latter taking account of income distribution, and various other social goals. Welfare measures can be considered as those aimed at improving the living standards of the people. Such measures are sometimes called "promotional measures"[4]. Provision of houses, public roads, drinking water, infrastructural facilities (such as community centres, sanitation and health facilities, etc.) can also be considered as measures contributing to poverty alleviation. In Sri Lanka the emergence of the "welfare State" was evident from the late 1960s and quite strongly in the 1970s.

Fishermen are generally considered as poor, and they operate in extremely harsh environments. They are settled along the coastal areas, many of which are isolated from urban and development centres. The State's investment in social capital, such as water, electricity, sanitation, health, education, transportation and communication facilities, remains quite low in such areas. When the State began to play an active role in fisheries after the country's independence, these deficiencies were well recognized and an array of measures adopted to provide the fishing communities with these facilities.

Social security has received government attention only recently. In a broad sense, social security is obtained when deprivation is removed or reduced, which then makes lives and livelihoods more secure[5]. Social security measures in developing countries could also be seen as an expression of the failure of conventional economic development processes, whose fundamental assumption was that vulnerability and deprivation would be

removed as a consequence of the general development of the economy. Incomes were supposed to rise; a demographic transition would slow population growth; and more of the workforce would move into the organized sector through processes like industrialization and modernization. The net result would be greater security. This has been referred to as the strategy for "growth-mediated security"[6]. The failure to achieve these goals, despite numerous decades of planned economic activity and market functioning, has led to greater awareness among people about their low standards of living and their fundamental rights for social protection.

Fishing is a particularly hazardous occupation, with a relatively high rate of injury and death. Fishermen and their dependents, therefore, need some form of protection in the event of injury, illness and/or death. The ILO identifies several reasons why many fishermen — perhaps most – do not have social security protection. First, the majority of fishermen resemble the majority of the world's working population: they lack social security protection. Any attempts to provide social security in this sector must, therefore, be seen in the context of the general lack of protection for most workers. Second, fishermen may be considered self-employed under national laws and regulations, and, as with many self-employed workers, they may be excluded from certain forms of protection. Third, fishermen included in contributory social security systems may face problems making their contributions due to the irregular nature of their employment and income. Finally, migrant fishermen, including those working on foreign-registered vessels, may have special problems as they are earning their living outside their country of nationality or domicile. The ILO Social Security (Minimum Standards) Convention of 1952 identifies nine principal branches of social security: medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors benefit. Most of these measures are generally clubbed as "protective measures"[7].

Apart from insecurities associated with their occupation, large numbers of artisanal and small-scale fishermen confront both sea and land tenure problems. Access to resources is constrained by the dominance of fleets of mechanized craft operated by asset-rich fishermen and non-fishing businessmen. Poor access to credit has prevented artisanal and small-scale fishermen from adopting more efficient technology. Even in the

sphere of modern fisheries, such as deep-sea fishing with multi-day craft, work conditions are declining. Loss of craft landing and beach-seining sites, due to the expansion of industries and tourism, are also evident. Many fishermen have lost their traditional fishing grounds and homes. The remoteness of the villages and the prevalence of poverty have prevented many children of fishing communities from receiving basic primary and secondary education. Poor education and powerlessness have excluded youth from the mainstream of development. Evidently, these fishers and their families need some kind of protection to enjoy sustainable livelihoods.

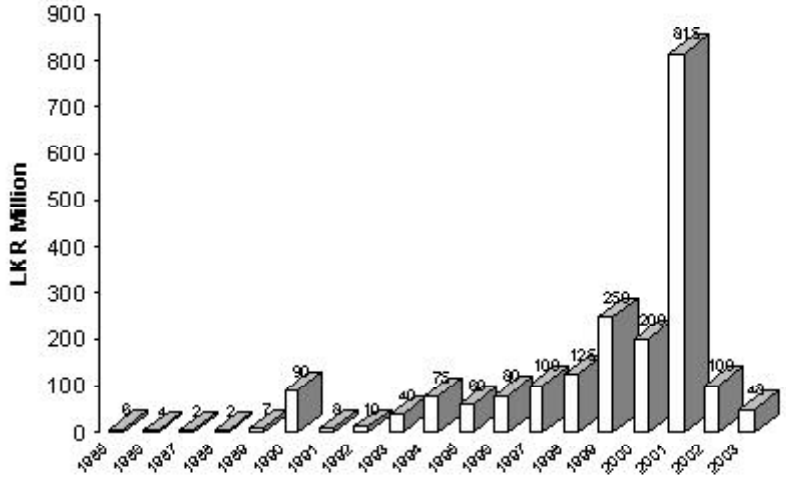
The Government of Sri Lanka does not clearly distinguish between social welfare and social security. In respect of the latter, only the pension and social security benefit scheme is under operation. All government welfare and social security schemes are operated by the Fisheries Social Development Division of the Ministry of Fisheries and Aquatic Resources.

Government Expenditure on Social Welfare

The aim of this section is to study the variation of total expenditure on social welfare measures in the fisheries sector during the period from 1984 to 2003. Information prior to 1984 was hard to obtain and scanty, and the selection of the year 1984 does not represent any significant change or turning point in the evolution of welfare measures in the country.

The 1984-2003 period can be partitioned into three clear time segments (see Figure 1), which differ by the variation of expenditure on welfare measures over time. The period from 1984 to 1993/1994 is characterized by the very low attention paid to social welfare measures, where the average annual expenditure on social welfare measures remained below LKR20 mn[8] (1 LKR = US$0.0100142 or US$1 = approx. 100 LKR as on May 2005). During this period (1984 -1994), the highest amount of money was spent in 1990, approximately LKR90 mn. In 1991 it decreased sharply to LKR10 mn. A second period between 1995 and 2001 can be identified as a phase of enhanced attention to welfare measures. 2001 recorded the highest expenditure on welfare measures, approximately LKR815 mn. The average annual expenditure during this period remained at LKR125 mn.

Figure 1. Government Expenditure on Social Welfare 1984-2003



Sources: MFAR[9], 1984-1996; MFAR[10], 1998-2003

A third period from year 2001 is seen as a phase of declining emphasis on welfare measures. Although the average annual expenditure on social welfare has remained at LKR163 mn, the total expenditure on welfare measures steadily declined, reaching LKR48 mn in 2003.

It is interesting to note that the three time segments mentioned above coincide with three political regimes. The first period falls under the United National Party (UNP) regime. The UNP government introduced open-economy policies in 1977 and incorporated Sri Lanka well into the global economy. Increased attention was paid to international trade and investment by the private sector, and most of the earlier existing controls over imports were removed during this period. However, widening regional and urban/rural disparities and lack of attention to the poorer groups were cited by many as the major shortcomings during the UNP regime. It is evident that expenditure on social welfare measures has remained low during the 1984-1994 period.

A new government – the United Front (UF) — was elected to power in 1994, and it formed a coalition with the leftist groups in the country. While open-economy policies and the promotion of private sector initiatives continued, the new government paid more attention to improving the welfare of poorer groups. Hence, funds allocated to social welfare measures started to rise sharply after 1994.

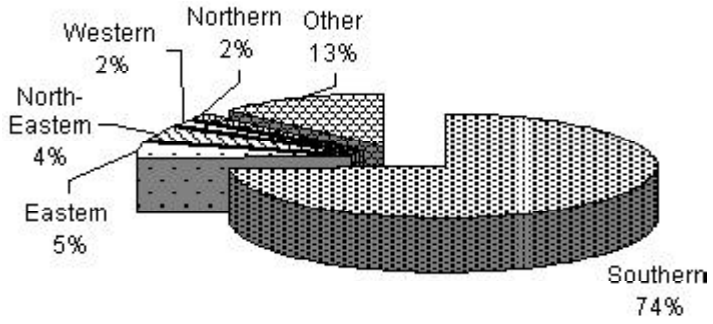
The third period starts with the fall of the UF regime in 2001. The UNP formed a coalition with a number of minor political parties to form the United National Front, which continued until the end of the study period (2003). Apparently, expenditure on social welfare measures started to decline since then.

The total annual expenditure during the period of 1984 to 1994 was approximately LKR23 mn, compared to LKR254 mn allocated during 1995-2001.The amount of funds allocated to welfare during the 2002-2003 was LKR74 mn. It appears that State attention to social welfare measures in fisheries is closely related to the political ideology of diverse governments. Naturally, fisher people, who are supposed to fall in the category of the "poor" in the country have benefited most when their interests were represented in the government. This often happened when there were leftists in the government.

Expenditure on Social Welfare by Province (1984 to 2003)

The aim of this subsection is to study the pattern of allocation of funds for social welfare measures among provinces over the whole time period.

Figure 2. Welfare Expenditure Among Different Provinces (1984-2003)



Information provided in Figure 2 indicates a high disparity in the expenditure on social welfare among various provinces. The lion's share of funds went to the southern province. The northern and eastern provinces, have received only 2 per cent (north) and 4 per cent (east) of the total expenditure on welfare during the 1984-2003 period. Of course, such ill-treatment would have fuelled the ethnic problems in the country, adding to the already escalating civil disturbances.

Expenditure on Social Welfare by Type of Measure

As mentioned earlier, on account of limitations of data availability, analysis was confined to the 20-year period from 1984 to 2003. The government has focused its attention on a number of social welfare measures, such as provision of houses, development of infrastructure facilities (drinking water, pre-schools, community centres), provision of sanitary and educational facilities, and so on. It will be interesting to study the pattern of expenditure on various social welfare measures during the three time segments that were noted earlier.

Table 1: Expenditure on Welfare Measures: Infrastructure, and Housing and Sanitation

Time Period	Infrastructure Facilities (LKR mn)	Housing Schemes (LKR mn)	Sanitary Facilities (LKR mn)
1984-1994	23.67 *(2.15)*[1]	252 *(22.9)*	39.19 *(3.56)*
	(6.1%)[2]	(64.5%)	(10.0%)
1995-2001	303.2 *(43.31)*	1630 *(232.9)*	4.5 *(0.64)*
	(15.1%)	(81%)	(0.2%)
2002-2003	55.7 *(27.9)*	147.8 *(73.9)*	1.3 *(0.65)*
	(26.1%)	(69.3%)	(0.43%)

[1]*average annual allocation of funds are given in italics*

[2]*given in parentheses are percentages (percentage from the total government expenditure on social welfare and social security)*

Source : MFAR[11]

Over the entire study period, the highest share of expenditure on welfare (from 65 to 81 per cent) has gone for the construction of houses for fisher families. A fair proportion of the expenditure has gone for the development of fisheries infrastructure.

With respect to the three reference periods identified earlier, a variation in expenditure on welfare measures is well evident. The average annual expenditure on housing and infrastructure has remained at a very high level during the regime of the United Front. It is also noteworthy that the very high expenditure on the construction of houses during this period (LKR232 mn per year) approximates the total expenditure on housing development during the entire 1984-1994 period.

PART II

An Assessment of Social Welfare Measures

A. Housing and Habitat

Extent of Land Allocated to the Fisheries Sector and Expenditure on Housing Schemes

All governments were involved in allocating land to the fisheries sector, to be utilized for the construction of fisheries community centres, fisheries harbours, auction sheds, pre-schools and houses. Of the total land allocated for such facilities, land allocation for houses was of significant importance, both in terms of the extent of land allocated and the urgent need that it met.

Housing is becoming an important need of fishers settled along the coastal belt of Sri Lanka, for a number of reasons. It is well known that foreigners are now buying land along the coast (especially in the western and southern provinces of Sri Lanka) by paying very high prices. (The present government, which came to power in 2004, has imposed a tax on foreigners, equal to twice the price of land purchased.) The local prices of coastal land in the country remained quite low in the past (compared to land in the interior areas) because of the poor infrastructural facilities available. However, due to the scenic beauty of the surroundings, an increasing demand for coastal land in the western and southern coastal belts has resulted in the concentration in the hands of foreigners of a considerable extent of land bordering the beach. Even the local elite class too shows an interest in purchasing land in the coastal area. Such a process is likely to cause several negative externalities, as indicated below.

- Foreigners are likely to use such land to construct beach resorts or holiday homes, which could lead to coastal pollution, as has been noticed elsewhere.
- The local population has already lost several access roads to the beach, after the new owners have fenced off their properties. This is already causing severe hardships to the fishermen who have been denied their traditional access routes to the beach.

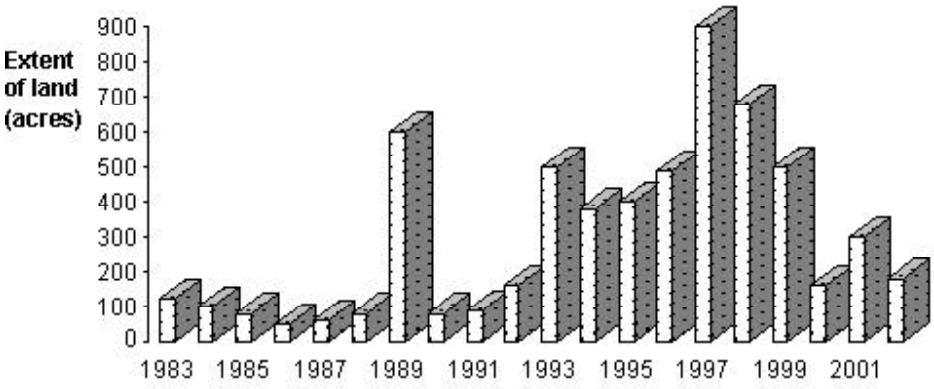
- Along with the concentration of land in the hands of foreigners, hoteliers, and so on, the fishermen are gradually being disposed of their traditional dwelling places, while beach-seining sites and craft landing sites are simultaneously being lost.
- As the new owners belong to a privileged class with links to top-level 7 government officials and politicians in Colombo, there are instances where they have built cabanas and resorts without obtaining proper permission.

The unregulated real estate expansion along the coastal belt led to an increasing demand for land and houses by the fisherfolk. Therefore, the Sri Lankan government was compelled to meet this important need by helping the fishing households to settle in alternative areas, close to the beaches.

Extent of Land Allocated for Housing Development

The total extent of land allocated for housing development also follows a trend similar to that observed in the total allocation of funds for social security during the 1984-2003 period. The extent of land allocated for housing development has been highest during the 1994-2000 period, which coincides with the UF regime. A gradual decline in the allocation of land for housing development is evident from 1998 to date (see Figure 3).

Figure 3. Extent of Land Allocated for Housing Development



Source: MFAR[12], 1984-1996; MFAR[13], 1997-2003

It is evident that the expenditure on housing development has increased over the study period, in general. From LKR8 mn spent in 1984, the total amount of expenditure has increased to LKR815 mn by 2001, recording a 800 per cent increase (see Table 2). It should be noted that the civil war in the northern and eastern parts of the country commenced in 1983, and consumed up to 20 per cent of the country's gross domestic product (GDP). This must have probably caused the drop in expenditure on housing development during the 1984-1988 period.

Table 2: Expenditure on the Construction of Houses

Year	Expenditure on House Construction (LKR)	Fisher Population	Per capita Expenditure (LKR)
1984	8000000	100728	79
1985	6000000	104263	58
1986	4000000	107799	37
1987	2000000	111335	18
1988	2000000	114871	17
1989	7000000	118407	59
1990	90000000	121942	738
1991	8000000	125478	64
1992	10000000	129014	78
1993	40000000	132550	302
1994	75000000	136086	551
1995	60000000	139621	430
1996	80000000	143157	559
1997	100000000	146693	682
1998	125000000	150229	832
1999	250000000	153765	1626
2000	200000000	157300	1271
2001	815000000	160836	5067
2002	100000000	164372	608
2003	47780000	167908	285

Source: MFAR[14], 1984-1996; MFAR[15], 1997-2003

In per capita terms, the annual on house construction has increased tremendously during the 1993-2001 period, but has declined seriously since then (from LKR 5,067 per fisher in 2001 to LKR 285 per fisher in 2003).

The Various Housing Schemes Under Operation

The Ministry of Fisheries and Aquatic Resources has been providing houses to displaced fishermen for the last six decades since independence. Along with the expansion of industries and tourist activities along the coastal belt, fishermen were increasingly facing land tenure problems. As a means of helping the displaced fishermen, the Ministry used to channel public funds to construct houses and several housing schemes were established, especially in the 1970s, a period during which the country adopted more equity-oriented development policies. However, there was no clear-cut national policy on housing for fishermen and it was only in 1996-1997 that a new housing policy was introduced aimed to provide fishing communities with "permanent shelter ensuring their social stability". This scheme also aimed to help fishermen who were displaced by the escalating fighting between the Liberation Tigers of Tamil Eelam (LTTE) and the government troops in the north and the east.

Under the above scheme, financial assistance was provided in instalments to cover the cost of raw materials, while most of the labour needs were to be secured from the village on a "mutual help" basis. To be eligible for assistance, the applicant had to show that he was engaged in marine/ inland fishing, and that he had only temporary shelter and that he possessed land that was not located in the Coastal Protection Zone (if he opts to construct his house on land other than that acquired by the Ministry for the construction of houses for fishermen). Moreover, housing assistance was not granted to applicants who had previously obtained loans for the same purpose. The list of persons requiring houses was prepared at the divisional level and the Divisional Secretariats were asked to select the beneficiaries.

As a way of solving the land tenure problems confronted by the fisherfolk, a five-year housing programme was initiated in 1997 by the MFAR to provide for 15,000 houses to fishermen, with assistance and guidance provided by the National Housing Development Authority (NHDA). Under the programme, each fisherman was provided with a loan of LKR 25,000 to build his own house, using community labour on a self-help basis. Financial assistance was provided for 3,000 housing units each year.

In 1998, three new housing programmes were introduced: the *Diyawaragammana* Housing Programme, the *Diyawarapura* Housing Schemes

and the *Visiri Niwasa* Programme. According to the MFAR, these programmes aimed to provide a total of 22,000 housing units, along with the required infrastructure facilities. The MFAR also received 3,025 housing units from the NHDA to be distributed among fishermen.

Diyawara Gammana Housing Programme

In December 1998, the MFAR initiated the *Diyawara Gammana* housing scheme with the aim of establishing 60 *diyawara gammana* (fishing villages) in 19 districts of the country. The amount of funds allocated under this scheme is given below.

Year	Amount of funds (LKR mn)
1998	150.00
1999	200.00
2000	200.00
2001	125.00
2002	21.50

Information furnished in respect of the progress of the scheme also shows that it had been successfully implemented (see Table 3).

Table 3: Progress of the *Diyawara Gammana* Housing Scheme

Progress of the scheme	**1998**	**1999**	**2000**	**2001**
Houses completed	455	1440	3808	1714
Constructed up to roof level	748	473	1144	1001
Constructed up to lintel level	293	605	874	616
Foundation only	219	1590	964	740
Laying of foundation	-	311	-	316

In fact, the actual number of fishing villages initiated under this scheme has been 73, which covered 19 districts (as planned), consisting of inland and coastal districts. The maximum number of housing schemes was targeted for the Hambantota district, which is considered to be one of the poorest districts of the country. However, due to continued violence in the north and the east of the country, only a few housing schemes have been initiated in the districts there.

Number of fishing villages established under the
Diyawara Gammana Scheme

District	Number of fishing villages	District	Number of fishing villages
Hambantota	14	Batticaloa	04
Moneragala	04	Matara	03
Puttalam	09	Ampara	04
Rathnapura	04	Kegalle	02
Matale	04	Mannar	02
Anuradhapura	04	Kandy	02
Galle	04	Gampaha	03
Jaffna	01	Vaunia	02
Trincomalee	01	Polonnaruwa	02
Kurunegala	04	Total Number of villages	72

Of the 73 villages proposed to be established, 29 were declared open by end 2002. Some of the problems associated with the failure to establish the remaining 44 villages as targeted were:

- Non-release of funds earmarked for the said housing schemes by the government treasury.
- Failure of some housing schemes to complete all planned activities.
- Failure to develop proposed infrastructural facilities in planned fishing villages, again due to lack of funds.

It should be noted that the year 2001 marked a negative growth rate for the country's GDP and there were drastic cuts on capital expenditure.

Table 4 gives the number of houses that have been constructed under the above programme, along with information on their locations.

Table 4: Houses Constructed under the *Diyawara Gammana* Housing Programme

Name of the Projects	District	Divisional of Secretarial	Housing Units Completed	Total spent (LKR mn)
Lunugamwehera	Hambantota	Lunugamwehera	134	6,700
Kahademodera	Hambantota	Tangalle	91	4,550
Sitinamaluwa	Hambantota	Beliatta	122	6,100
Madamulana	Hambantota	Weeraketiya	128	6,400
Badagiriya	Hambantota	Hambantota	171	4,946
Mahagalwewa	Hambantota	Suriyawewa	185	5,425
Boralessa	Hambantota	Tissamaharamaya	86	4,300
Ruhunu Ridiyagama	Hambantota	Ambalantota	163	8,150
Kirindagama	Hambantota	Tissamaharamaya	193	4,439
Halekada	Hambantota	Agunukolapelssa	152	7,600
Tabbowa	Puttalam	Karuwalagaswewa	150	7,500
Thunkama	Rathnapura	Embilipitiya	42	2,000
Wilgamuwa	Mathale	Welgamuwa	122	6,100
Kandalama	Mathale	Dambulla	101	5,050
Lediyangala	Mathale	Welgamuwa	110	2,750
Kalawena	Anuradhapuraya	Ipalogama	125	6,250
Hambegamuwa	Monaragala	Thanamalwila	110	5,500
Karandeniya	Galle	Karandeniya	40	2,000
Akuressa	Matara	Akuressa	51	2,545
Mamaduwa	Vavniya	Vavniya-south	61	3,050
Kawdulawewa	Polonnaruwa	Medirigiriya	163	8,150
Iranawila	Puttalam	Mahawewa	109	5,433
Ulhitiya	Badulla	Mahiyanganaya	115	5,750
Kataragama	Monaragala	Kataragama	100	5,000
Pokunubadawatta	Gampaha	Negambo	40	2,000
Malwatta	Puttalam	Dankotuwa	174	8,700
Nabirithhankadawala	Kurunagala	Pannala	72	3,600

Source : MFAR, 2001[16]*; NARA, 2001*[17]

Visiri Niwasa Programme

Following the difficulty of securing land for housing schemes and to help families construct houses in locations of their choice, the *Visiri Niwasa* programme was initiated, which provided financial assistance to families directly or indirectly involved in fisheries and needing assistance to construct houses or to complete partly constructed houses. Since these

houses are not located in a particular place or a village, they are called *visiri* (dispersed) houses. Funds for this project were secured from the Japanese government and the number of houses constructed under this programme is indicated in Table 5.

Table 5: Number of Houses Constructed Under the Visiri Housing Programme

Level of Construction Activity	Number of Houses
Completed houses	2053
Constructed up to roof level	298
Foundations laid	790
Total	3641

Source: MFAR, 2003[18]

This scheme also provided assistance to fishing families displaced due to the war situation prevailing in the northern and eastern districts of the country.

Diyawara Pura Mahal Niwasa Programme

This is a special scheme for constructing storied apartments (flats) for fisher families, which was initiated in 1998. The scheme aimed at establishing four housing schemes in Moratuwa, Ambalangoda, Rathmalana and Tangalle by the Ministry of Fisheries. The number of houses proposed to be constructed under each scheme is given in Table 6.

Table 6: Number of Houses Proposed to be Constructed Under the *Diyawarapura Mahal Niwasa* Programme

Divisional secretariat division	No. of housing units
Rathmalana	132
Moratuwa	62
Tangalle	128
Ambalangoda	64
Total	397

Source: MFAR, 1999

However, only the housing scheme at Ambalangoda has been completed so far.

Undoubtedly, the three housing schemes mentioned above have been successfully implemented and a large number of housing units have been constructed under these programmes (see Table 7).

Tables 7: Total Number of Houses Constructed Under the Three Major Housing Schemes

District	*Diyawara*	*Gammana*	*Visiri Niwasa*	*Diyawarapura Mahal Niwasa*
	*	***		
Hambantota	1425	14	03	128
Puttalam	433	09	371	-
Rathnapura	42	04	-	-
Matale	333	04	-	-
Anuradhapura	125	04	236	-
Monaragala	210	04	-	-
Galle	40	04	158	64
Matara	51	03	371	-
Vavniya	61	02	-	-
Pollonnaruwa	163	02	600	-
Badulla	115	-	-	-
Gampaha	40	03	495	-
Kurunegala	72	04	-	-
Jaffna	-	01	16	-
Trincomalee	-	01	53	-
Batticaloa	-	04	481	-
Ampara	-	04	525	-
Mannar	-	02	30	-
Colombo	-	-	239	194
Kaluthara	-	-	63	-
Kandy	-	02		
Kegalle	-	02		

Source: MFAR

* Number of houses

*** Number of villages

The Self-help Housing Investment Project

This housing project commenced in March 1999, with financial assistance provided by the Japanese government. While the project provides financial assistance to meet the material costs, the beneficiaries are expected to resort to self-help type of labour. A total of 22,618 families have benefited from the scheme, which has been a tremendous success. The number of houses constructed under this programme is given in Table 8.

Table 8: Houses Constructed Under the Self-help Housing Project

District	No. of Houses (construction completed)
Puttalam	3,761
Kurunala	378
Gampaha	779
Colombo	547
Kaluthara	137
Galle	2,456
Matara	1,794
Hambantota	10,574
Monaragala	168
Batticaloa	514
Ampara	281
Trincomalee	203
Jaffna	136
Mannar	200
Nuwara Eliya	258
Matale	213
Anuradhapura	63
Rathnapura	01
Sub total	22,463
District	**Houses under construction (No.)**
Colombo	56
Puttalm	79
Matara	20
Trincomalee	63

Source: MFAR, 2004[19]

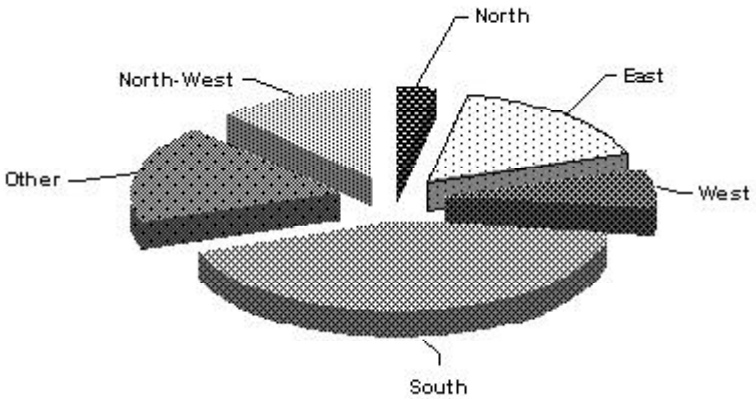
Assessment of Benefits

Regional Disparities in Fund Allocation

The southern region of the country has received the lion's share of the expenditure on housing development. Of the total expenditure on housing development during the 1994-2003 period, 43 per cent went to the southern province (Figure 4). The amount of funds channeled to the war-stricken northern province have been minimal, only 3.07 per cent of the total. The low priority given to the northern region could be due to the

inability of the government to carry out any development activity there due to the continuing war situation during the period under study.

Figure 4. Expenditure on the Aquisition of Land for House Construction (by province)



Problems Associated with Fisheries Housing Schemes

Field studies were carried out in three fishing villages in the Matara and Hambantota districts to find out the benefits of the diverse housing schemes from the perspective of fisher households. The villages selected for this survey included Dondra and Kandegodella of Matara district, and Sisilasagama of Hambantota district.

Kandegodalla

The government has distributed 18 acres of land among 360 families in the village, each family receiving 6 perches[20] to construct a house. Each family was provided with a loan of LKR 25,000 for construction of houses. However, of the 360 beneficiaries, 45 were non-fishermen. A large number of beneficiaries have used political influence to gain access to land. Many such persons have been non-fishermen, whose objective of obtaining land has been to earn a profit by re-selling them to needy fisher households.

Dondra

About 83 households in the Dondra village of Matara district have also been benefited from the diverse housing schemes operated by the Ministry of Fisheries. However, of the beneficiaries, only 83 per cent consist of

fishing households. Those who lost their dwelling places due to sea erosion have been afforded top priority in getting housing assistance. About 26 per cent of the households have had access to State housing assistance to overcome the effects of sea erosion. **A**s major shortcomings of the government housing schemes, households cite the inadequacy of the extent of land given, the low quality of materials used to construct houses, the poor road networks, lack of electricity and poor sanitary conditions.

Sisilasagama

In respect of land tenure and housing, fisher families in Sisilasagama are less privileged because of the insecurity of land tenure and their inability to obtain land under the State land distribution schemes. Many fisher families are living on crown land. Few people have settled on leased land, while the majority live on land without clear titles. Land tenure and housing problems have been seriously felt prior to 1986, but with the launching of the *Gam Udawa* (village reawakening) concept by the former president, R. Premadasa, 67 per cent of the villagers have been granted LKR10,000 to construct houses. During the 1994-2001 UF regime, 36 per cent of households were provided with housing loans of LKR 25,000 each. However, the loan repayment rate has been poor. As is very well known, highly fluctuating fishing incomes force fishermen to face the high risk of not being able to repay loans in fixed monthly installments.

A Comment on the Housing Development Activities of the Government

It appears that most of the fishing villages have benefited from some form of housing development assistance provided by the government. Such help has been extended in the form of land and grants/loans for house construction (apart from the *Diyawarapura Mahal Niwasa* Programme).

Some of the common problems identified and certain suggestions for circumventing them are indicated below.

1. In almost all villages studied, a good number of non-fishermen have also had access to the housing assistance meant for fishermen, through their links to politicians. This is a reality in almost all parts of the country and in all spheres of activity. Political intervention at all levels, politicization of the State administration and the police have occurred during all political

regimes. The politics of clientelism also works to ensure that the limited State help is channelled to those who voted the ruling political party into power.

2. Another shortcoming in the houses constructed by the government is the poor quality of construction materials used and, consequently, the low life span of the houses built. This results from the poor selection of contractors and the low level of supervision of the construction activities of subcontractors.

3. The poor attention paid to the provision of household amenities is also a grave problem in certain areas. For example, when access to pipe-borne water supply is limited, "attached latrines" (latrines situated inside the houses) are of no use. In such instances, these toilets commonly end up being used as storerooms and kitchens.

B. Other Welfare Measures

The other important facilities provided by the State as a means of improving the welfare of the fishing population in the country are as follows:

a) Provision of sanitary facilities
b) Provision of drinking water
c) Construction of community centres, pre-schools, daycare centres, playgrounds
d) Improvement of access roads
e) Provision of beacon lights

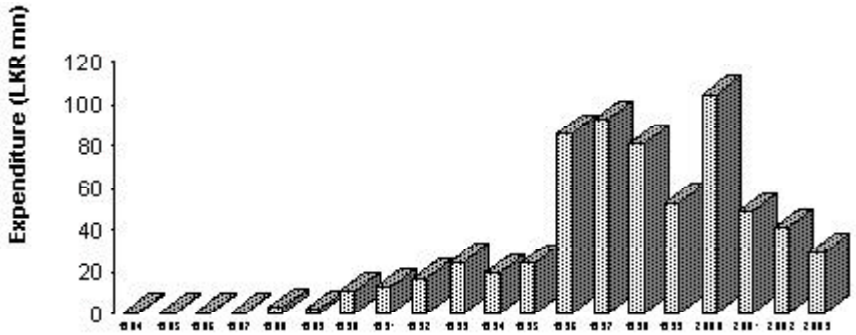
Total Expenditure on Other Welfare Facilities

The expenditure on other welfare measures was negligible during the 1984-1990 period, with the highest amount on fisheries welfare measures incurred in 1988 (LKR3.09 mn). However, 1990 marks the beginning of increased attention paid to fisheries welfare measures. The expenditure rose from LKR2.22 mn in 1989 to LKR10.76 mn in 1990 (see Figure 5).

The real boost to other welfare measures came in 1996, when expenditure on social welfare measures in the fisheries sector recorded an approximately

400 per cent increase over the previous year. The 1997 allocation for the social welfare programme was LKR57 mn. This increased to about LKR93 mn under the recent project cost revision. Approximately 761 activities have been identified, of which 709 have commenced and 436 completed. The total disbursement for the period is LKR8.4 mn. The programme continued in 1999 and 2000, the latter year recording the highest expenditure on social welfare measures (LKR104 mn). The various welfare schemes operated in 1999 and 2000 are shown in Tables 9 and 10.

Table 9: Social Welfare Schemes Operated in 1999



Source: MFAR, 1999[21]

Table 10: Social Welfare Schemes Operated in 2000

Type of project	No. of schemes
Drinking water supply	32
Electricity	153
Access roads	104
Other constructions	74
Sanitary facilities	910
Supply of beacon lamps	02
Playgrounds and pre-school equipments	24
Buildings for *idiwara* banks	25

Figure 5. Expenditure on 'Other' Welfare Measures

Facilities	No. of projects completed	Expenditure incurred (LKR mn)
Drinking water	15	2.2
Electricity	68	23.6
Approach roads	69	29.5
Community centres	8	6.3
Sanitary facilities	-	2.0
Beacon lamps	02	0.2
Equipments to pre-schools	17	0.6
Buildings for *idiwara* banks	61	8.8
Others	28	15.5
Total	278	88.7

Source: MFAR, 2000[22]

A serious decline in funds allocation is evident from 2000. As in the case of other measures under consideration, it is evident that the UF government has paid the highest attention to social welfare measures in the past, compared to the other regimes.

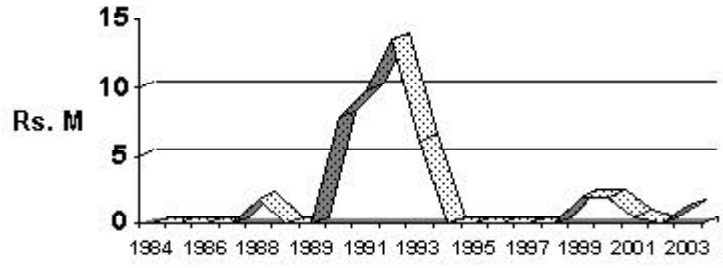
B. 1. Sanitation and Health

Total Expenditure on Sanitation and Health

As in many parts of the Third World, the costal fishing populations in Sri Lanka are generally found settled along the coastal belts, usually on crown land along the beach. Due to the general poverty and the extremes of weather prevailing in the sandy coastal areas, houses are found in ribbon-like settlements. They are mostly one- or two-compartment semi-permanent or temporary dwellings, with mud walls and thatched roofs. Most of these houses are devoid of latrines. Due to the presence of sea water nearby, the beach is used by the fishers as the open-air toilet. The women use the beach for this purpose before dawn, while it is still fairly dark, while the men do not hesitate to use it at any time of the day, although it is more common for them to use the beach in the early morning. Having traditionally used the beach as a toilet for a very long time, many of these households do not see the need to invest in proper latrines, and so they afford very low priority to latrines in their urgent construction needs.

Figure 6 shows the total expenditure on sanitary facilities and health during the 1984-2003 period. It is evident that the highest expenditure on sanitation and health has been LKR13.6 mn in 1992, which then declined gradually, showing a gradual withdrawal of government assistance. Unfortunately, available information does not allow us to make an indepth analysis of sanitary facilities provided to fishing communities.

Figure 6. Expenditure on Sanitary Facilities
1984-2003



Having recognized the poor sanitary conditions of the fisher population, the government took several steps to improve the sanitary conditions of fishing villages. Proper toilets were constructed in houses under the various housing development schemes. Public toilets were constructed in a number of fishing villages, usually in high-density areas. Apart from these measures, the government also organized maternity clinics in many fishing villages.

It would be interesting to find out the number of latrines constructed during the 1990-1994 period, when the government attention to sanitation was highest. Table 11 shows the statistics for the 1989-1994 period.

Table 11: Latrines Constructed During 1991-1994

Year	No. of latrines constructed
1991	787
1992	975
1993	1358
1994	609

The regional distribution of latrines constructed by the government (see Table 12) shows that disparities in the distribution of funds for the construction of latrines have been minimal.

Table 12: Districtwise Distribution of Latrines Constructed by the Government in 1994

DFEO Division	No. of latrines
Kalutara	33
Batticaloa	79
Ampara	97
Matara	67
Puttlam	90
Chillaw	34
Trincomalee	48
Tangalle	72
Inland Areas	89

Source: MFAR, 1994[23]

Assessment of Benefits

A study carried out in 1996 in six fishing communities in southern Sri Lanka[24] provides a host of information on the sanitary facilities available for craft-owner households (see Table 13). In all fishing villages, the households of almost all owners of large mechanized craft had access to good and hygienic latrines, which were either flush- or commode-type. The proportion of households not having such facilities increased with decreasing degree of mechanization of fishing craft. A large proportion of owners of traditional craft used pit-type latrines, which are considered to be unhygienic. It is evident from information furnished in Table 13 that the higher the degree of mechanization of fishing craft, the higher was the living standard of fishermen, in terms of sanitation.

Table 13: Sanitary Facilities in Craft-owner Housing Units
(by type of latrines)

Type of Latrine	Balapitiya	Hikkaduwa	Mirissa	Dondra	Kudawella	Kirinda	All villages
MDOC[1]							
- No toilet	-	-	-	-	-	-	1
- Pit	-	-	-	-	-	1(14.3)	1(1.1)
- Flush	5(62.5)	11(91.7)	9(81.8)	32(94.1)	21(95.5)	5(71.4)	83(88.3)
- Commode	3(37.5)	1(8.3)	2(18.2)	2(5.9)	1(4.5)	1(14.3)	10(10.6)
ODOC[2]							
- Open-air	-	-	-	-	-	-	-
- Pit	-	-	-	-	-	-	-
- Flush	2(100.0)	11(100.0)	11(84.6)	5(100.0)	17(100.0)	3(100.0)	49(96.1)
- Commode	-	-	2(15.4)	-	-	-	2(3.9)
FRP[3]							
- Open-air	-	1(7.7)	-	-	-	-	1(1.0)
- Pit	-	3(23.1)	2(15.4)	-	-	4(20.0)	9(8.5)
- Flush	17(94.4)	9(69.2)	11(84.6)	16(100.0)	26(100.0)	15(75.0)	94(88.7)
- Commode	1(5.6)	-	-	-	-	1(5.0)	2(1.9)
MTC[4]							
- Open-air	1(14.3)	-	-	2(12.5)	-	-	3(3.8)
- Pit	-	1(11.1)	-	-	-	6(12.5)	3(3.8)
- Flush	6(85.7)	8(88.9)	8(100.0)	14(87.5)	24(100.0)	10(62.5)	74(92.5)
- Commode	-	-	-	-	-	-	-
NMTC[5]							
- Open-air	-	-	-	1(7.1)	-	-	1(1.4)
- Pit	8(40.0)	1(14.3)	4(36.7)	1(7.1)	-	3(37.5)	17(23.0)
- Flush	12(60.0)	6(85.7)	7(63.6)	12(85.7)	14(100.0)	5(62.5)	56(75.7)
-Commode	-	-	-	-	-	-	-
All craft owners							
- Open-air	1(2.0)	1(2.0)	-	3(4.0)	-	-	5(1.2)
- Pit	8(15.0)	5(10.0)	6(11.0)	1(1.0)	-	14(26.0)	30(7.4)
- Flush	42(76.0)	45(86.0)	46(82.0)	79(93.0)	102(99.0)	38(70.0)	356(879)
- Commode	4(7.0)	1(2.0)	4(7.0)	2(2.0)	1(1.0)	2(4.0)	14(3.5)

Table 14: Sanitary Facilities in Housing Units – Sri Lanka

Type of Latrines	**Percentage of Population**
Housing units without latrines	6.9 (in 1996)
Housing units having water-sealed and flush toilets	63.4 (in 1994)

Source: Central Bank[25]

In respect of aggregate information on sanitary facilities, 6.9 per cent of the housing units in Sri Lanka did not have latrines, while 63.4 per cent were equipped with either water-sealed or flush-type latrines (see Table 14). According to these standards, all craft-owner households enjoyed better sanitary conditions than those enjoyed by the average Sri Lankan.

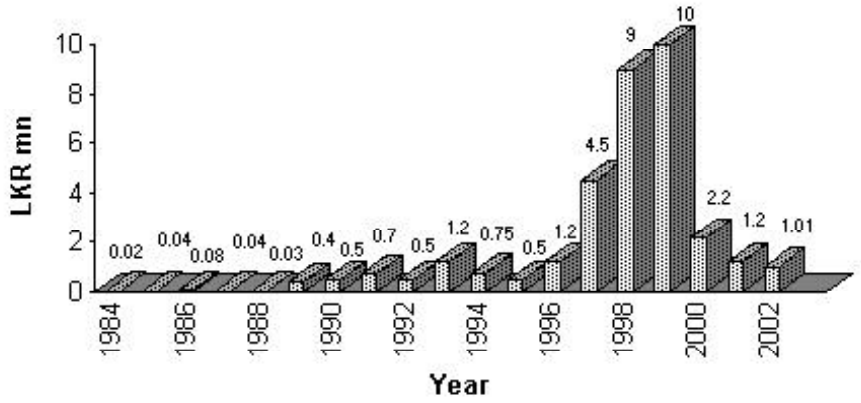
It should be mentioned at this juncture that, unlike the rural agrarian villages in Sri Lanka, fishing villages are often densely populated and, therefore, poor sanitation will have increased social costs. It was observed that fishermen who live along the coastal strip of south Sri Lanka pay less attention to good latrines. The fishermen find the open sandy beaches a cheap and more convenient alternative to costly latrines. For instance, a row of latrines built by the government on the beach of the Hambantota landing centre is not used by the fishers, who prefer the sea's edge as a "toilet" facility. This gives rise to serious negative environmental externalities, given that beaches are the centres of productive activities and highly valued resources in both fisheries and the tourism trade. The lack of awareness of the high social costs of poor sanitation, rather than the lack of finance to build latrines, has evidently led to this sad state of affairs.

B. 2. Drinking Water

Among the various measures adopted by the Sri Lankan government to improve water supply to rural areas have been assistance for the construction of wells, and building infrastructure for pipe-borne water supply and rainwater harvesting. While fishing villages situated close to urban areas and the main roads have benefited significantly from pipe-borne water supply, most rural dwellers depend on water from wells.

Figure 7 shows the expenditure on the provision of drinking water over the 1984-2003 period. It is quite evident that government involvement in the provision of drinking water has been highest during the UF regime, during 1994-2001. As in the case of other facilities, expenditure on the provsion of drinking water declined since 1999. In 2003, only LKR1 mn was allocated for the provision of drinking water, which is hardly sufficient for meeting the needs of the fishing communities, especially those living along the remote coastal areas.

Figure 7. Funds Allocated for the Provision of Drinking Water, 1984-2003



Assessment of Benefits

The availability of water can also be considered an index of the welfare of a household. It should be noted that the availability of pipe-borne water in fishing villages depends on services extended by the country's Water Supply and Drainage Board. Wells in coastal areas suffer from high salinity and often do not provide good drinking water. However, well-water is widely used in other household activities such as bathing and washing. Those who lack easy access to good drinking water and water for washing and bathing are likely to suffer from water-borne diseases and/or incur costs in terms of labour time spent in search for water. Table 15 gives information on the availability of a source of water within the premises of households of different types of craft owners.

Table 15: Craft-owner Households Not Having Own Source of Water

Fishing Village	NMTC[26]	MTC[27]	FRP[28]	ODOC[29]	MDOC[30]	All craft owners
Balapitiya	8 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	8 (15.0)
Hikkaduwa	1 (14.3)	1 (11.1)	5 (38.5)	0 (0.0)	0 (0.0)	7 (13.0)
Mirissa	5 (45.5)	1 (12.5)	1 (7.7)	0 (0.0)	0 (0.0)	7 (13.0)
Dondra	3 (21.4)	0 (0.0)	0 (0.0)	0 (0.0)	3 (8.8)	6 (7.0)

Kudawella	7 (50.0)	6 (25.0)	5 (19.2)	2 (11.8)	0 (0.0)	20 (19.0)
Kirinda	4 (50.0)	5 (31.3)	7 (35.0)	0 (0.0)	2 (28.6)	18 (33.0)
TOTAL	28	13	18	2	5	66
Total no. of households	74	80	106	51	94	405
Households not having own source of water as a percentage of total no. of households	37.8%	16.3%	17.0%	3.9%	5.0%	16.0%

Table 16: Availability of Water Among Households in Sri Lanka

Availability of water	Percentage of housing units (1996)
Households not having own source of water	27.9
Households having pipe-borne water supply	30.6

Source: Central Bank[31]

More than a third of fishermen engaged in traditional fisheries did not have their own source of water and, only a mere 4-5 per cent of owners of ODOC (large day boats with inboard engines) and MDOC (multi-day craft) lacked this facility. It is apparent that the modernization of fisheries has increased the living standards of fishermen, if the availability of water is taken as a good indicator of wealth. In general, 16 per cent of all fishing households did not have their own source of water, while the corresponding figure for Sri Lanka as a whole was 27.9 per cent (see Table 16).

Pipe-borne water supply is available in almost all areas of the study since they are located close to the main transport routes. An attempt had been made to determine the availability of pipe-borne water supply in craft-owner households, which is also an indication of the living standards of the fishermen studied (see Table 17).

Table 17: Availability of Pipe-borne Water supply in Craft-owner Households

Fishing Village	NMTC[26]	MTC[27]	FRP[28]	ODOC[29]	MDOC[30]	All craft owners
Balapitiya	4 (20.0)	4 (57.1)	12 (66.7)	2 (100.0)	5 (62.5)	27 (49.0)
Hikkaduwa	1 (14.3)	4 (44.4)	2 (15.4)	8 (72.7)	9 (75.0)	24 (46.0)
Mirissa	0	0	0	3 (23.1)	1 (9.1)	4 (7.1)
Dondra	5 (35.7)	14 (87.5)	14 (87.5)	4 (80.0)	30 (91.2)	67 (79.0)
Kudawella	0	5 (20.8)	9 (34.6)	6 (35.3)	16 (72.7)	36 (35.0)
Kirinda	0	4 (25.0)	2 (10.0)	2 (66.7)	1 (14.3)	9 (17.0)
TOTAL	10	31	39	25	62	167
Total No. of households	74	80	106	51	94	405
Households having pipe-borne water supply as a percentage of total no. of households	13.5%	38.8%	36.8%	49.0%	66.0%	41.0%

Access to pipe-borne water supply is available to a limited number of fishing households, but that reveals the presence of such a facility in the neighbourhood. However, obtaining pipe-borne water supply to one's own house depends on one's wealth. It is clearly evident from Table 17 that, with the increasing degree of mechanization of fishing craft, fishermen enjoy higher living standards in terms of easy access to drinking water. The traditional and artisanal fisherfolk are the ones who have the least access to pipe-borne water supply.

In the three villages of Kandegodalla, Dondra and Sisilasagama, studied this year (2004), about 77 per cent have access to pipe-borne water supply, indicating that the majority of fishing households (at least those in the southern coastal regions of the country) have access to sources of clean water.

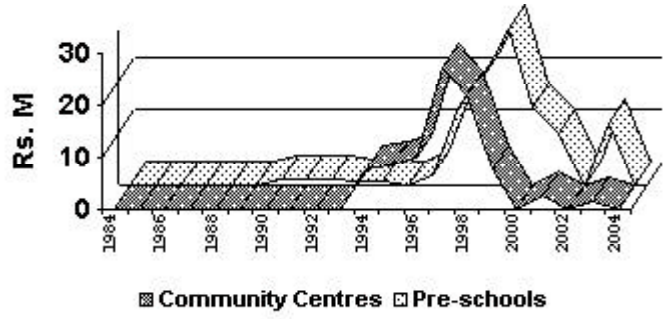
Of all households in Sri Lanka, about 30.6 per cent had pipe-borne water supply (Central Bank 2001[32]) and, compared to these national standards,

the fishermen appear to enjoy better facilities. This is mainly because most development activities in Sri Lanka are concentrated along the coastal areas of the country, which enjoy good infrastructural facilities. However, one must note the sectoral differences, as large parts of the rural areas in the country are not served by the Water Supply and Drainage Board, which provides pipe-borne water, while a good number of urban areas have easy access to it. Most of the fishing villages studied are located close to urban areas, but we do not have sectorwise data to make a more robust analysis.

B. 3. Community Centres and Pre-schools

Community centres have been constructed by the government in many fishing villages to provide the fishing population with facilities for reading, community interaction (discussions, meetings), and for various training classes, while pre-schools have been constructed to improve the educational standards of the younger generation. Some of the community centres have developed into well-equipped libraries and discussion centres, while some have been abandoned for lack of facilities. The total expenditure on these two facilities during the study period is shown in Figure 8.

Figure 8. Allocation of Funds for Community Centres and Pre-schools



Source: MFAR[33], 1984-1996; MFAR[34] 1997-2003

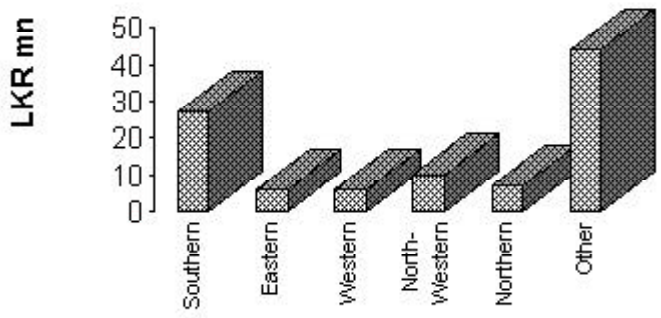
It is quite evident that no serious attention to these facilities has been paid by the government until 1994. The expenditure on community centres and pre-schools reached the LKR30 mn mark during the 1996-1998 period. While interest in community centres continues, although at a low ebb, it appears that the government is now paying very low attention to the provision of pre-schools to fishing communities.

Assessment of Benefits

Regional Disparities

Allocation of funds for community centres during the study period (1984-2000) shows very high regional disparities (see Figure 9). There are nine provinces in the country and only the southern, eastern, western, Wayamba (northwestern) and northern provinces have coastal districts, while the rest ("other" in Figure 9) consists of inland districts where a large number of inland fishing communities are present.

Figure 9. Expenditure on Community Centres by Province



Source: Galappaththy, 2003[35]

It is important to note that the funds channelled to "other" provinces refer to those channelled to inland fishing areas in the interior of the country. Apparently, the southern province has had privileged access to funds, compared to the Tamil-speaking northern and eastern provinces.

Lack of Facilities

While the government has been involved in providing community centres and pre-schools to fishing villages, the communities themselves have built a large number of such facilities, especially with the involvement of fisheries co-operative s. Field studies reveal that these facilities have been better located and constructed to suit the needs of the communities since the initiatives came from the community organizations rather than from the government.

Sisilasagama

Sisilasagama has two community centres, one constructed with the involvement of the fisheries co-operative and the other by the government. The latter was constructed first, but it was badly located and ill-equipped. The one constructed by the co-operative was well located and is being used for mending nets, weighing catches, as shelter during rainy days and as a resting place. However, the community is not satisfied with the facilities available and are waiting for government support to improve the centre.

Field studies revealed the following shortcomings in the community centres and pre-schools:

- Lack of space, the centres being too small for the size of the community
- Lack of proper access roads to the centres
- Lack of any source of water and latrines
- Poor maintenance

Due to the above deficiencies, some of the community centres have been abandoned and are being used by groups engaged in the selling of illicit liquor and drugs.

B. 4. Fisheries Training and Education

The government has long recognized the importance of investment in human capital as an important means of developing the fisheries sector. Although training is not generally considered a welfare measure, due to the fact that it helps people improve their productive capacities and adds to their welfare, it is discussed here as a welfare measure.

The Sri Lanka Fisheries Training Institute, located at Mattakkuliya, and the Divisional Training Centres, located in Tangalle, Negombo, Jaffna and Batticaloa, provide the youth training facilities in navigation, fish-catching technology, boat repairs, and so on (see Table 18). The impetus for the establishment of these training facilities came with the introduction of mechanized fishing. On-the-job training was also extended to fisher people by "mobile services" of the training centres, which took groups of instructors and training vessels to fishing villages.

Youth having completed the Graduate Cambridge Examinations (GCE) (Ordinary) Level are selected for training. Residential facilities are provided to trainees. After satisfactory completion of the courses, the trainees are awarded the Higher National Certificate in Marine Fisheries by the Sri Lanka Fisheries Training Institute. The National Certificate of Marine Fisheries is awarded to those trainees who satisfactorily complete the courses offered by the provincial fisheries training institutes. A subsistence allowance of LKR150/ per day is also paid to the resident trainees. The mobile fisheries training component and extension activities are financed by the United Nations Development Programme (UNDP) and the Food and Agriculture Organization of the United Nations (FAO). Training modules have also been designed for Assistant Directors of Fisheries (formerly District Fisheries Extension Officers) and Fisheries Inspectors. The provisional training centres at Batticoloa and Jaffna were not functioning for the last few years due to the war situation in those areas, while the activities of the other centres were also interrupted at times for the same reason.

Table 18: Training Programmes Conducted by the Regional Fisheries and Nautical Engineering Colleges

	Number of Trainees				
	Mattakkuliya	**Batticaloa**	**Tangalle**	**Negombo**	**Jaffna**
Marine engine technology	17				
Ornamental fish farming & management	43				
Fisheries Deck Officer	80				
Fishing gear technology		16			
Marine engine technician		45	52		
Diving & lifesaving			60		
Coastguard training			89		
Post-harvest technology				10	
Fibre glass technology				20	
Marine practical training				10	
TOTAL					

Source: MFAR, 2003[36]

National Institute for Fisheries and Nautical Engineering (NIFNE) (Sagara Viswavidyalaya)

NIFNE was established in 1999 with financial help from the Japan Industrial Co-operation Agency (JICA), with the intention of providing more advanced education in fisheries and nautical engineering to youth passing the GCE (Advanced) Level examination. It designed courses in the fields of fisheries and nautical engineering, leading to a Bachelor of Science (B.Sc.) degree. The institute recently obtained affiliation to the Sri Jyawardenapura University. Below is the course outline :

a. Aquaculture
b. Post-harvest fish processing
c. Marine fisheries
d. Fisheries extension and management
e. Marine engineering
f. Harbour construction, cost conservation and management
g. Aquaculture engineering
h. Refrigeration, airconditioning and naval electrical engineering

According to Progress Report 2000 of the Ministry of Fisheries, NIFNE intends to carry out its future teaching and learning processes in collaboration with foreign universities and higher educational colleges. Accordingly, some initiatives have already been taken to discuss with the Norwegian Agency for Development (NORAD) and universities in Australia and the United States.

MFAR's performance report highlights a new division started in 1997, which conducted or assisted in several training programmes on ornamental fish farming, fish shrimp diseases, revitalization of co-operative societies, fish farming and seed production, and so on. About 375 fishermen and 28 officers participated in these programmes. Foreign training is also provided to officers under short-term courses.

According to MFAR's Progress Report 2003, it has also conducted a series of training courses and workshops for field staff of the Department of Fisheries and managers of the newly formed fisheries co-operative societies. The State-sponsored People's Bank provided the necessary finance for the residential training courses conducted at the School of Co-operative s, Polgolla.

Quite recently, under the Coastal Environment Education Programme, the Ministry of Fisheries also conducted three programmes:

- training for social studies teachers in Polonnaruwa, Kurunegala and Tangalle
- regional officer training programmes in the Divisional Secretariat of Tangalle, Bentota, Beruwala and Dikwella
- exhibitions in Kandy, Kegalle, Kurunegala and Kalutara

Scholarships for Students

Under this programme, scholarships are offered to selected students from very poor fisher families to undergo training or degree courses, although the extent of such help extended is quite small.

Assessment of Benefits

Very few of the young people trained in regional training centres have gone into fisheries. The major setback in the training programmes is that very few youths having a fisheries background are selected for training. Since the trainees are paid a daily allowance, this training opportunity is considered by many as a "means of living" rather than as a training opportunity. Moreover, trainees not having a fisheries background hardly opt to work in the fisheries sector, especially in active fishing operations, for lack of motivation, understanding, perseverance, and the ability to engage in long fishing trips.

The hastily formed NIFNE too has become a white elephant. It has become another "university" providing more room for GCE-equipped youth to pursue higher education. Rather than their interest in fisheries, it is the lack of other alternatives that motivates the students to enter NIFNE. Although it was earlier suggested that NIFNE should give priority to students from fishing communities, this has not been a criteria for selection. NIFNE has not produced graduates yet, and its contribution towards fisheries development is yet to be seen.

Of the various programmes offered, the on-the-job training courses offered by the mobile services of the regional training centres appear to the most popular among the fisher population. Participation of fishers in these training programmes has been quite high. However, the major obstacle

for expanded operations of the mobile services by the regional training centres is the lack of facilities and funds. Very few training vessels and equipment are available with the regional training centres to extend this facility.

B. 5. Fisheries Co-operative Societies

The fisheries co-operative movement in Sri Lanka has contributed positively to social welfare in many respects. First, the asset-poor fishers were able to gain access to modern capital-biased technology (mechanized craft and associated gear) through co-operative s that could offer group guarantees as collateral. Second, most of the State help reached the poorest categories of fishers through the fisheries co-operative system. Third, some of the well-functioning co-operative s were able to raise the capital required to develop community facilities such as community centres and auction sheds. Fourth, some co-operative s were even able to provide some social security benefits to their members. Fifth, by promoting savings among their members, certain fisheries co-operative societies were able to design loan schemes for their members, providing them with credit to meet diverse economic and social needs.

The modern co-operative movement in Sri Lanka had its beginning in 1912 with the emergence of rural credit societies. The history of fisheries co-operatives proper dates to the early 1940s. During the period 1941-1947, there were around 49 fisheries co-operatives of several kinds, which shared the requirement that the catch was sold by the society on behalf of the members. Even at the infant stages of development of fisheries co-operatives, loans were issued to them to meet the credit needs of their members, especially to enable them to adopt mechanized fishing. Most of the issues of 3.5-tonne day boats with inboard engine (ODOC) were made through fisheries co-operatives that offered a 50 per cent subsidy.

By 1989, there were only 15 large primary co-operative societies actively operating in the fisheries field, out of the total of 60 such societies. The total membership, including the non-operative societies, stood at approximately 20,000. This represented only 17 per cent of the total fishing community. The Department of Co-operatives and MFAR, after obtaining the opinions of various fisheries representatives on the declining status of the fisheries societies, arrived at a policy decision to remedy the

situation — a major re-organization of the societies, which led to the establishment of fisheries co-operative societies at every *grama niladhari* (village-level administrative division). This programme was extended to various districts by 1993 and many societies started to operate quite successfully. The type and number of fisheries co-operative societies functioning in 1993 are given in Table 19.

Table 19: Active Fisheries Co-operative Societies in 1993

Type of Society	Number
a. Large primary societies	15
b. *Grama Niladari* division-level societies (including inland fisheries co-operatives)	766 09
c. Day-boat owners (mechanized) societies	01
d. All Ceylon *Madel* (Beach-seine) Owners Society	01
e. All Ceylon Abu Dhabi Trawler Owners Co-operative. Society[37]	01
f. Fish producers society	01
g. Boat builders society	01
h. Small Fish Traders Society	01
TOTAL	795

By 1998, there were a total of 746 co-operative societies related to fisheries activities in the country, of which 630 were primary societies in the marine sector, while 91 were in the inland sector. The membership stood at 77,656, of which 60,571 were male members. Of all the primary societies, only 392 were found to be active (53 per cent), 53 were defunct and 173 (40 per cent) were designated as "weak societies".

Despite the structural changes noted in the co-operative movement, the number of co-operative societies declined during the 1993-1998 period. However, a slight improvement in numbers is evident by the year 2000. Also worthy of note is the establishment of co-operative societies of owners of multi-day craft (see Table 20).

Table 20: Status of Fisheries Co-operative Societies in 1998 and 2000

	1998	2000
	No. of societies	No. of societies
Village-level societies (marine)	630	747
Inland fisheries societies	91	101
Large primary societies	04	
Day-boat and multi-day boat owners societies		06
District societies	06	08
Madel owners co-operative societies	01	01
District unions	08	
Other societies	05	05
Sri Lanka National Fisheries Union	01	01
Total	746	869
Total Membership	77,656	101,223

Source: MFAR, 1998[38]; MFAR, 2000[39]

Idiwara Bank Programme

In 1998, the village-level co-operative societies which were dedicated to the development of the fishing community through the strength of their membership and management skills (in the operation of lending and savings schemes) were elevated to the status of banks (called *idiwara* banks). The number of *idiwara* banks operating in 1998 was 13, and the number rose to 60 by 2000. Action was also taken to set up a national fisheries co-operative bank by amalgamating the co-operative banks and other co-operative societies that are illegible to obtain banking status. Grouping the small-scale fish traders using pushcarts and motorcycles in Colombo and Gampaha districts, two co-operative societies have been registered under a post-harvest technology project funded by the Overseas Development Agency of the British government. A work manual on co-operative laws and bookkeeping was also prepared and distributed among the co-operative societies and fisheries inspectors.

Assessment of Benefits

The political changes in the country have had a significant impact on the fisheries co-operative movement. The channelling of credit, subsidies, craft and gear through co-operatives followed a highly fluctuating trend,

along with shifts of political power from one party to the other. Most of the fisheries co-operatives in the past were hastily formed soon after the general elections, and the office bearers usually consisted of persons closely associated with the political party in power. The politicians then channelled the limited goods through the political clientele system. Once the privileged individuals managed access to expensive craft and gear, the co-operatives collapsed.

Poor management of co-operatives are usually attributed to lack of interest among office bearers, lack of training of personnel in business management, lack of awareness among members of principals of co-operation, political interventions, and poor loan recovery rates. In June 1994, MFAR decided not to channel subsidies through the co-operatives but to grant them to individual applicants. This had serious repercussions on the functioning of the co-operatives, and many fishworkers who had already obtained loans from fisheries co-operatives stopped repaying them. Co-operative officials claimed that this change in policy led to the collapse of many co-operatives. MFAR appointed a special Committee for Rehabilitation and Development of Fisheries Co-operatives in 1995 to study the present status of fishery co-operatives and to make recommendations on how they could be re-organized to meet the varying needs of fishworkers. Among other things, this committee recommended granting of subsidies to fishworkers through the co-operatives, and several changes are likely to take place in this sphere in the future.

A major change in fishing community organizations took place in 2003, when MFAR decided to establish Landing Site Fisheries Management Committees, which were to be recognized as those representing the true interests of the fisher population. All public help to the fisheries sector were to be channelled through these committees. Moreover, it was intended to introduce fisheries management measures through these committees, starting with management at the landing site. Each society was pledged LKR1 mn financial support initially. Unfortunately, this programme was never properly implemented, and today these landing site committees remain dormant. The consequences of this initiative were very damaging to the fisheries sector. But most damaging was the collapse of the entire fisheries co-operative movement.

PART III

State Involvement in the Provision of Social Security Measures in Sri Lankan Fisheries

Introduction

If social security measures include medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' family benefit, as defined by the ILO, then the Sri Lankan government's involvement can only be found in the sphere of old-age, invalidity and survivors' family benefits. Taken in a broader sense, craft and gear insurance could also be considered as a measure of social security because the absence of such insurance may drag fishers into crises of subsistence in the short run. Delays in meeting craft and gear repair expenses (for lack of insurance for the risk of damage or loss of craft and gear) put fishers out of employment.

Social security is often regarded an important element in poverty alleviation programmes, indicating that social security is a matter for the poor. In the fisheries sector, this is a debatable issue, because fishers do not belong to a homogeneous group and the wealth status of different groups varies too. For example, the owners of multi-day craft, who belong to a rich business class, do not require social security from various hazards and risks. However, the owners of small boats may require such protection, because they may not be wealthy enough to hedge the various risks and uncertainties that might befall them. Based on the income levels[40], it may be generally argued that all workers and owner-operators in fisheries and their families should be provided with some form of social protection against various hazards and risks.

Government Expenditure on Social Security Measures

State involvement in social security measures is in the form of operating fisheries insurance schemes and pension and social security benefit scheme. The government expenditure on these activities during the study period is given in Table 21.

Table 21: Government Expenditure on Social Security

Time Period	Insurance schemes(LKR)	Pension scheme(LKR)
1984-1994	75	0.86 *(0.08)*
	(19.2%)	(0.2%)
1995-2001	70 *(10)*	5 *(0.71)*
	(3.5%)	(0.2%)
2002-2003	1.5 *(0.75)*	7.02 *(3.51)*
	(0.61%)	(3.29%)

1 average annual allocation of funds is in italics

2 given in parentheses are percentages (percentage from the total government expenditure on social welfare and social security)

Source: MFAR[41]

Expenditure on fisheries insurance schemes remained quite high both during the UNP regime (1984-1994) and the UF regime (1995-2001). However, expenditure on the operation of insurance schemes dropped drastically from about LKR70 mn in the 1995-2001 period to LKR1.5 mn in the 2002-2003 period. The high expenditure in the operation of the insurance schemes in the two early periods can be attributed to the development of deep-sea fishing in the late 1980s and the need to insure expensive multi-day craft, gear and accessories against the risk of damage or loss. The low interest shown by the government in these schemes since 2001 could be due to the poor economic situation of the country, as indicated by the negative rate of growth of the GDP in 2001. However, the interest in the fishermen's pension scheme appears to be growing gradually, although the amounts spent are small.

An Assessment of Social Security Schemes

Fishermen's Pension Scheme

The fishermen are provided with benefits in the event of any physical disability (invalidity benefit) or old age (old-age benefit), while upon death, the dependents are provided with compensation (survivors' benefit / family benefit). Among all insurance schemes, the fishermen's pension scheme

is the most popular among the fishing communities, and features the following objectives (as stated in government reports):

- § providing social security for fishermen during any disability or old age
- § providing compensation to the dependents of the fisherman at the time of his death
- § encouraging the fishermen to engage continuously in fishing
- § stimulating youth to engage in fishing
- § improving savings and thrifts habits among the fishing community

Of course, the last three objectives do not fall under social security measures.

The Fisheries Pension and Social Security Benefit Scheme Act No.23 of 1990 was implemented with effect from 21 April 1991. By 30 September 1993, 18,169 fishermen had contributed to this scheme. All registered fishermen contributing to the scheme had access to its benefits. The beneficiaries would receive a pension after they reach the age of 60 years, while they would also receive "full" or "partial" benefits in case of disability (see Table 22).

Table 22: Disability Benefits and Death Gratuity Allowances

Age (as at the date of incidence)	Full Disability Benefit (LKR)	PartialDisability Benefit (LKR)	Death Gratuity Allowance (LKR)
Between 18 – 30 years	50,000	25,000	25,000
Between 31 – 35 years	40,000	20,000	20,000
Between 36 – 40 years	30,000	15,000	15,000
Between 41 – 45 years	20,000	10,000	10,000
Between 46 – 60 years	12,000	6,000	6,000

Source: MFAR 1991[42]

Fishermen falling in the age group of 18-54 years could apply for the pension once they are 60 years old, while those contributing when they are between 55-59 years, could only apply for pension five years after they commence contributing to the scheme. Then they are entitled to

receive the pension continuously. If the contributor dies or becomes disabled before he starts to receive the pension, the premia paid and accumulated interest are paid to his/her inheritor/s. If a contributor who was receiving a pension dies, his spouse will be eligible to receive the pension up to the 85th birthday of the demised contributor. This shows that the pension scheme, while providing old-age benefits, also provides invalidity and survivors' benefits.

To be considered eligible for benefits under the scheme, the contributor must:

a. be a fisherman between the age of 18 and 59, and engaged in fish catching or breeding in sea/lagoons/inland waters bodies;

b. not be an owner of three or more boats of more than 6 tonnes weight;

c. not be an owner of one or more fishing plots of more than 5 acres;

d. should not be an employee receiving, or has received, benefits from an employees provident fund;

e. should not be an employee of a pensionable job or receiving a pension;

f. should not be a person paying income tax[and

g. should not be a person claiming any widow's and orphan's pension.

Premia are paid in accordance with the age at the date of commencement of contributions to the scheme. The government contribution to the fund is equal or more than the premium paid by the contributor. Premia are paid every three months. If all premia are paid at once at the time of enrolment in the scheme, the contributor will receive a discount equal to 50 – 85 per cent, depending on age.

Assessment of Benefits

In the sphere of social security, the fishermen's pension scheme appears to be the best means of security for fishermen in old age and when they are disabled. The premia payable appear to be quite low compared to the kind of social security that the scheme offers to the contributors. However,

field studies did not reveal such a happy state of affairs. What follows is a discussion based on field studies conducted in Kandegodalla and Dondra in Matara District, and Sisilasagama in Hambantota District.

Fishermen's contribution to the pension scheme

Almost all fishermen are aware of the existence of the pension scheme, but only about half of them are aware of its terms and conditions. Of the total sample population, only 45 per cent have contributed to the scheme. The following were noted as the factors responsible for fishermen's involvement in the scheme:

a. The presence of an active community organization has a major role to play in creating awareness or an interest in the scheme. It should be noted in this respect that geographical and social immobility are the two characteristics of fishermen that prevent them from having access to information. It is well known that fishermen have fewer dealings with outsiders and especially with external institutions. In the Sri Lankan context, the fisheries co-operatives function as the arena for interaction among fishermen and various forms of collective action. They form the only institutional setup in which fishermen seek membership. Fisheries co-operatives also have a long history of mobilizing fishermen. Since the country's independence, all State help has been channelled to the fishing communities through the fisheries co-operatives, which have played a very important role in providing the less resourceful fishermen with access to new technology. The fishermen-government link was also maintained through the co-operatives. Therefore, fisheries co-operatives have a major role to play in creating awareness among their members of the pension scheme. The fishermen's contributions to the scheme were found to be high where the fisheries co-operatives were found to be active.

b. It is also to be noted that the link between the Crop Insurance Board, which is operating the pension scheme[43], and the fishing communities is quite weak. Informational asymmetries between the two groups and the physical distance lead to misunderstandings and long delays in payments.

c. It is difficult to get fishermen involved in any scheme requiring regular payment of premium because of the irregular nature of fishing incomes. Even after enrolling in a scheme, a fisherman-contributor may be forced to default premium payments when his income is low, due to bad seasons, bad weather, low catches, etc. The emergence of insurance agencies providing insurance against the risk of low catches due to bad weather or lean seasons is unlikely because of the problem of covariant catches[44].

d. Some fishermen feel that the pension is too low to meet their subsistence requirements. This is quite surprising because the average incomes of those who make such comments appear to be lower than the potential pension they could receive from the scheme. Yet, the fishermen who are confronted with high catch fluctuations also face "lucky catches" (random large catches), which help them to purchase durable consumption goods, which is not possible with low, but regular, incomes. This could be one reason why fishermen consider the pension to be too low. Moreover, fishermen, especially those engaged in artisanal small-scale fisheries, hardly have incomes over and above their subsistence needs, and therefore regular payment of premia would be difficult for them. The other side of the coin is that they may find the pension benefits to be inadequate due to their use of high discount rates in comparing the present value of future pension benefits with present incomes. Of course, it is natural for people living at the level of subsistence to use high discount rates.

Suggestions for Improvement

i. Fishermen feel that the pensionable age should be brought down to 50 years. Due to the arduous work associated with fishing, fishermen say that they become feeble by the age of 50. Yet, during field studies, it was difficult to find fishermen retiring from work at 50. The fishermen pension scheme should be operated through the fisheries co-operative system, which can act as a mediator and a catalyst. A village-level institution is likely to succeed better than an outside institution in respect of mediatory services.

ii. Awareness programmes should be carried out through community organizations such as fisheries co-operatives to educate the fishermen about the scheme.

Fisheries Insurance

Due to the highly fluctuating and unpredictable nature of fish catches and the hazardous nature of the marine environment in which craft and gear are put into operation, fishermen are likely to confront two types of shocks: idiosyncratic shocks and aggregate shocks, both affecting food entitlements of fishing households.

Idiosyncratic shocks are shortfalls in income confronted by individuals in a fishing community at random, meaning that all individuals in a group or community do not confront these shocks at one and the same time. These shocks can originate from many sources. Catch variability due to the unpredictable nature of fish behaviour may result in income shortfalls which are resource-related. Then there are operational hazards such as those arising from sudden loss or damage to craft and gear, or health hazards, which again will affect food entitlements of households. In the case of certain fisheries, such as the beach-seine fisheries, uncertainty in having access to resources, may also give rise to income shortfalls. The most distinguishing feature of idiosyncratic shocks is the absence of any positive correlation in outcomes among individual fishermen[45].

In the short run, changes in weather, fish migratory habits, changes in seawater temperature, etc. may result in poor fish catches, affecting all fishermen in a particular geographical area in a similar fashion. These are aggregate shocks. They can also originate from long-term catch fluctuations, such as those arising out of the seasonal nature of fishing operations. At such instances, outcomes of all fishermen rise and fall together.

Both idiosyncratic shocks and aggregate shocks affect the consumption of fishermen to varying degrees, and there exists a high demand for insurance among fishermen to smooth consumption.

Formal insurance is a phenomenon in modern societies, where specialized insurance agents emerge to cater to the demand for insurance, leading to the emergence of insurance markets. Formal insurance usually exists only for idiosyncratic shocks. If all fishermen make claims for indemnity

payments at one and the same time (due to aggregate shocks), the scheme cannot function. Since anonymity between insurers and insurees is greater, formal insurance is constrained heavily by incentive problems, although the insurers are better equipped to enforce punishment through the legal apparatus on those who breach the conditions of the contract. When information is asymmetrically distributed, the insurance agents are forced to collect information, the cost of which will have to be charged from insurees by way of higher premia. Moreover, the cost of information collection will also be time-consuming. High premia and delays are likely to make formal insurance less attractive to fishermen.

Due to the hazardous nature of the marine environment, craft and gear often confront damages or losses, the risk of which exist both in traditional and modern fisheries. Nevertheless, due to the fact that the new technology is costly, the cost of this risk is greater in mechanized fishing than in traditional fishing. Two components of this cost can be identified: the cost of repairs and replacement of craft and gear; and the cost in terms of loss of fishing time. The high cost of repairs and replacement in mechanized fishing is related to (i) the need for specialized technical services and (ii) the high cost of spare parts. By contrast, the traditional fishing communities had their own carpenters and village "technicians" who could attend to all repair needs. Repairs could be done with locally available material, such as wood, glue, ropes, splinters, etc. As for the mechanized craft, which are highly sophisticated, they require the attention of qualified technicians for serious repair. Moreover, spare parts for engines have to come from outside the fishing village or the country. Therefore, unless spare parts are readily available, there arises the uncertainty of securing the necessary spare parts at the time they are needed. Further, the need to replace a particular part (of an engine or a communication device or a fish-finding devices) may demand a very high financial commitment on the part of the craft owner. Therefore, fishermen who are engaged in mechanized fishing are confronted with new risks, which were only very weakly present in traditional fisheries.

Types of Insurance Schemes

The Sri Lanka Insurance Corporation and the National Insurance Corporation are the two major organizations providing insurance against fishing-related risks.

Sri Lanka Insurance Corporation

In 1982, the Sri Lanka Insurance Corporation commenced a scheme that provided insurance against total loss or damage to fishing equipment. Subsequently, the scheme was expanded to cover both total and partial loss or damage. In order to contribute to this scheme, the needy fishermen are required to obtain a licence for the craft, which gives them the right to fish with their craft.

National Insurance Corporation

The scheme that is being operated today commenced on 27 June 1984. The basic features of the scheme, called the "Fishing Boat Policy", follow those designed for the fisheries insurance scheme operated by the Sri Lanka Insurance Corporation.

At present, three types of insurance schemes are being operated by the above institutions:

a. Insurance for loss or damage to both craft and gear (full coverage scheme)
b. Partial coverage scheme
c. Accident insurance scheme

In Sri Lanka, all craft owners are required to insure their craft and gear before registration. It is also a requirement for craft owners interested in borrowing from State-sponsored banks for productive purposes. However, the interest of craft owners in insurance schemes appears to be quite weak.

A study was carried out during the period 1989-1991 by Amarasinghe (see Amarasinghe 2005[46]) to find out the extent of contribution of different categories of fishermen to these insurance schemes. It is evident from information provided in Table 23 that the owners of large mechanized craft (3.5 to 5.5 tonnes) have shown a greater interest in these schemes and they represented 80.49 per cent of the total insurers. Of this, a considerable number of craft owners (63.39 per cent) have insured their craft fewer than two times. The interest of these craft owners in the schemes initially could be attributed to their intention of obtaining credit from the formal credit market, which required fishermen to insure their crafts before loans were issued. Therefore, once the fishermen obtained the required loan, they probably lost their interest in insurance.

Table 23: Participation of Craft-owners in State Insurance Schemes

	Percentage of craft owners reporting (%)		
	Contribution to formal insurance	Withdrawing after paying less than two premia	Continuing to contribute to insurance after the second year
NMTC[47]	6.67	6.67	0
MTC[48]	29.41	29.41	0
FRP[49]	57.40	46.43	10.97
ODOC[50] & MDOC[51]	80.49	63.39	17.10

sample informants (n=101)

Those who have insured their fishing craft more than two times (17.10 per cent) consisted mainly of fishermen who have obtained large (5.5 tonne) craft through loan schemes established by MFAR. In these schemes, the ownership of the boat was vested with the bank, which was the collateral for the loan, and insurance of craft and gear was made compulsory. Asked as to what made them withdraw from State insurance schemes, almost all fishermen stated that there were long delays in making indemnity payments and that the insurance premia were too high.

In another study carried out in the south of Sri Lanka in 1997 (see Amarasinghe 2005[52]), an attempt was made to find out the contribution of different sources in meeting the cost of craft and gear repairs. Tables 24 and 25 give the amounts obtained by fishermen from all different sources in meeting the cost of craft and gear repairs. Formal insurance has been the least attractive source of funds for craft and gear repairs, for various reasons, such as, registration of craft, access to credit, craft owners being compelled to contribute to State insurance schemes, and so on. Due to the use of highly valued fishing equipment, most of the recent owners of MDOCs have insured their craft and gear and, as revealed by Tables 24 and 25, approximately a third of the repair expenses have been secured through indemnities paid by the insurance agencies. Fishermen are usually interested in securing repair funds within the shortest time possible in order to reduce the number of fishing days lost, a need which is unlikely to be fulfilled by the formal insurance agencies, which need time for information collection. It is well known that when insurance is lacking or when insurance markets are inadequately formed, people tend

to resort to credit, which is an insurance substitute. While fishermen have resorted to both formal and informal sources of credit, the latter have played a more important role than the former. The village moneylender, fish merchants, fellow fishermen, etc. have all been important sources of credit for fishermen who were looking for external sources of funds to meet repair expenses.

Table 24: Sources of Funds for Craft Repairs

	Average amount of funds obtained from different sources for craft repairs (LKR)					
	Formal Insurance	Formal Credit	Money Lender	Fish Merchant	Friends and Relatives	Savings
NMTC	500	100	350	75	311	3690
MTC	0	269	733	2000	400	3847
FRP	0	0	929	1762	484	5698
ODOC	0	5682	2500	4773	5318	11327
MDOC	1000	530	1909	3636	4121	22667

Source: Amarasinghe, 2005[53]

Table 25: Source of Funds for Gear Repairs

	Average amount of funds obtained from different sources for gear repairs (LKR)					
	Formal Insurance	Formal Credit	Money Lender	Fish Merchant	Friends and Relatives	Savings
NMTC	0	78	316	694	213	3384
MTC	0	229	200	686	0	3969
FRP	474	337	211	1018	491	7545
ODOC	0	0	4000	1108	1703	14644
MDOC	8088	3509	2842	5474	1491	28719

Source: Amarasinghe, 2005[54]

What is quite interesting to note in the information furnished in Tables 24 and 25 is the importance of personal savings in meeting repair expenses. Irrespective of the technological category, personal savings have been the major source of funds used in meeting craft and gear repairs/ replacement. This study showed that fish merchants did form an important

source of funds within the fishing community, but this was not the major source of funds for repairs.

It is to be noted that craft owners generally insure their craft and gear (although not in a regular manner), but not the crew. With craft mechanization, modernization and the introduction of deep-sea fishing, the crew workers are increasingly facing higher risks of personal injury and even death. Therefore, the need for insuring crew workers against such injury and death has become more pronounced in modern fisheries. Yet, many craft owners refrain from purchasing such insurance because national laws for compulsory insurance do not exist.

Assessment of Benefits

Private insurance agencies providing insurance against fishing-related risks are absent in Sri Lanka. A large number of fishermen had contributed to formal insurance schemes, but after the initial premia had been paid, many of them have withdrawn from them. The owners of highly valued craft, such as the modern MDOC, continued to contribute to State insurance schemes, and they formed the major beneficiaries of these schemes as well. Yet, field studies have revealed that the indemnity payments received by them from formal agencies accounted for less than 30 per cent of the total repair and replacement expenses incurred on the affected fishing assets. Long delay in indemnity payments is the major complaint made by fishermen against State insurance agencies. However, time-series data has revealed an increasing degree of participation in formal insurance schemes by fishermen operating large mechanized craft.

Under the condition of inadequately formed insurance markets, fishermen often turned to insurance substitutes, such as credit. Two major sources of credit can be identified: formal credit institutions (consisting of banks and co-operatives) and informal credit sources (consisting of fellow fishermen, relatives, moneylenders and merchants). While fishermen borrow from both sources, informal credit represents the larger share of the total borrowings of fishermen. Craft owners depend heavily on self-insurance to cope with the risk of damage and loss of fishing assets. It appeared that, in the face of inadequately developed insurance markets, inadequately available community funds, and lack of suitable collateral acceptable to lenders, the fishermen finds "self insurance"[55] to be the best hedge against the risk of damage and loss of fishing asset.

In respect of personal injuries, the affected fishermen have to seek help from the community. The absence of any national laws protecting crew from risk of injury and death is the major reason for the apathy of craft owners in insuring their crew against such risks. This is a serious problem in multi-day fishing where fishermen are engaged in longer fishing trips and fish in deeper waters. Another safety-at-sea issue that repeatedly arises in discussions with fishermen is the threat of capture, arrest or conflict at sea. Almost every month, five to 10 Sri Lankan deep-sea fishing boats are arrested and detained for alleged illegal fishing in foreign territorial waters. Many boatowners who are outsiders and, therefore, have no concern for their crew workers other than extracting the highest returns from their labour, often turn a blind eye to incidences of arrest of crew workers. Their main concern, under such circumstances, is to get the boat, not the crew, released.

In order to improve the work conditions of crew on board multi-day vessels, it has recently been suggested that a work agreement (contract) be signed between the owner and crew member at the time of latter's recruitment to the craft, and that such agreement should indicate, among other things, the duration of employment, the catch-share and assistance when confronted with personal injury, etc. It has also been suggested that craft owners should insure both craft, equipment and the crew against the various fishing-related risks and uncertainties.

Other Schemes

Apart from the schemes that have been discussed earlier, the State has assisted fishing communities and the fisheries sector in general in a number of ways, although all of them cannot be clubbed under "social welfare measures". For example, subsidies constituted a very important element in the "assistance package" of the government. Since the late 1950s, the government channelled large amounts of funds to the fisheries sector in the form of subsidies. Mechanized fishing, which had a capital bias, and therefore was not attractive to ordinary resource-poor fishermen, was introduced to the latter through subsidies and subsidized credit, channelled through fisheries co-operatives. This had the important consequence of curtailing the process of marginalization of artisanal and small-scale fishermen and guaranteeing them secure livelihoods and higher average incomes. This was the case in the introduction of small mechanized craft

and day boats with inboard engine (3.5-tonne craft) in the early 1960s. Beach-seining was the most popular technique of fishing prior to the introduction of these craft and the introduction of mechanized craft using gill nets had adverse impacts on the beach-seine fisheries. Their catches were low and crew shares were becoming insufficient to meet family subsistence requirements. There was also the problem of controlling the entry of more and more nets into the beach-seine fisheries, and pressure within the beach-seine fisheries was also growing. Therefore in the mid-1990s, the government intervened to control the number of nets in beach-seine fisheries. For example, in Tangalle, in southern Sri Lanka, the government brought down the number of seines from 96 to 7, and they were allowed to operate under a co-operative system. By the time the new technology was introduced, there were large numbers of fishers who had been displaced from beach-seine fisheries or who were earning very low incomes. These fishers were provided with assistance, in the form of subsidies and subsistence credit to take up mechanized fishing and to use new fishing techniques. It is now evident that subsidies had played an important function at that time, in preventing or curtailing the process of marginalization of artisanal and small-scale fishers.

The assistance lent to families hit by calamities, such as cyclones, disappearance of craft and crew at sea, is irregular, and families are also badly affected by the arrest of fishermen for poaching in foreign waters. For example, the government took steps to provide dry rations worth LKR492,898 to 177 fishing families who were affected by the disappearance of crew members along with the fishing boats. In addition, the government took steps to release 147 fishermen who were detained in foreign countries, along with 21 boats, during the same year. However, such assistance is quite random, and there is no clear-cut government policy concerning these issues.

PART IV

Concluding Remarks

The provision of social welfare facilities for the fishing population in Sri Lanka has been a responsibility of the government since independence in 1948. The government has been channelling huge amounts of public funds towards a number of social security measures, during the latter half of the last millennium. However, the emphasis has mainly been on promotional type of measures. This has also shown a fluctuating trend, depending on the political vision of the government in power. Evidently, the expenditure on social welfare measures has been higher during the left-aligned United Front regime than during the UNP regime, the latter representing more bourgeois interests. This notable fluctuation in the allocation of funds during different political regimes can be easily attributed to the lack of a national fisheries policy in the country. However, quite recently, a draft national fisheries policy was prepared, which clearly identifies a number of social security measures that should be adopted to increase the welfare of various individuals and groups in the fisheries sector.

Regional disparities in the allocation of funds also give rise to serious problems. This differential treatment would have definitely fuelled the already escalating ethnic problems in the country. Immediate attention should be paid to improve the social welfare measures in the coastal districts of the north and the east of the country. Another alarming trend is the declining amount of investment on social welfare measures evident since 2001. Although the poor growth rate and the war situation have had a depressive impact on all government expenditure on social welfare, this situation, if remain unattended, would even lead to the collapse of some of the existing social welfare schemes.

Government attention to social security has been quite recent. Community initiatives in devising modes of providing social security have been quite weak in Sri Lanka. This can be attributed to several reasons. First, people expect the government to provide them with everything. It is to be noted that the Sri Lankan government has been the major catalyst in the introduction of mechanized fishing in the 1950s, the “agent of change” in the process of the “blue revolution”, the “big brother” in providing the

community members with subsidies and subsidized credit, development of fisheries infrastructure, the provider of houses, health and sanitation, training, insurance, old-age security, etc. Therefore, community initiatives in meeting social security needs of members rarely emerged.

Second, fisheries co-operatives remained the only dominant form of community organization in the modern fisheries. Yet, these were sponsored by the government, and many of them were hastily formed to obtain State help in the form of mechanized craft under subsidy schemes, engines and subsidized credit that were issued to fishers through government banks. Every time a new government was elected to power, those who had links to the political party in power formed a co-operative in order to receive government aid to be distributes to their political clientele. With the fall of that government, such co-operatives too collapsed.

Third, even though a number of co-operatives succeeded in promoting savings among their members and then designing various credit and insurance schemes that provided many forms of social security, such organizations operated independently and in isolation. Some co-operatives are actually functioning as banks. A few efficiently functioning co-operatives provide a number of social security benefits to their members on occasions of personal injury, illness, death, disability, etc. Unfortunately, no attempt has been made to unify the fisheries co-operatives that were scattered throughout the country. The fisheries co-operative system is also politically divided, due to its various political affiliations. Such affiliations could be traced back to the time of the establishment of the individual co-operatives, with the involvement of those supporting the political party in power. Therefore, unification of such organizations was difficult and, therefore, the co-operative movement did not form a strong community organization that could influence government action.

Fourth, due to the short-sighted political aims of the government in 2002 that led to the establishment of landing site committees, the whole co-operative system collapsed and today, hardly any community initiative to provide social security measures to fishers and their families exists, apart from certain individual initiatives of co-operatives operating in the northwestern, northern and eastern districts. The success story of the latter could be attributed to the non-intervention of the government in the establishment of landing site committees of the said districts due to the prevailing war situation

With the adoption of mechanized fishing, especially with the development of deep-sea fishing, many new risks have emerged, which were non-existent or weakly present in traditional fisheries. Apart from the higher risks of damage and loss of craft and gear, these risks include a large array of personal risks such as the risk of injury, illness, disability, death and arrest at sea. It is to be noted that very little attention has been paid by the government of Sri Lanka in providing insurance against such risks. Although the State introduced very ambitious fisheries insurance schemes in the 1970s, they were meant to provide insurance against damage or loss of craft and gear. Neither public nor private agencies have emerged to provide insurance cover against personal risks. Nevertheless, one solution was to get the craft owners to provide such insurance cover for their crew. In the early 1990s, there was a move by two strong fisheries NGOs, namely, the United Fishermen's and Fishworkers Congress (UFFC) and the National Fisheries Solidarity (NAFSO), to provide for some of these social security requirements by making compulsory the signing of a work contract between the craft owners and crew workers. But this suggestion has yet to be adopted.

It is also worthy of mention that the United Front government (1994-2001), which made all arrangements to adopt this measure, withdrew from implementing it at the last moment, probably due to lobbying activities by the rich class of multi-day craft owners. The weak bargaining power of the fisheries-related NGOs can be attributed to their scattered nature, their unwillingness to work together towards a common objective, diversity in interests, lack of a common platform for interaction, the interest of individual NGOs to impress the donors by maintaining a dominant position, political affiliations, and so on. In this sphere, the recent efforts by the ILO to seek the possibility of adopting five conventions and two recommendations defining conditions of work in commercial fishing, for small-scale fisheries, should be appreciated. A great interest has been shown by many fishworker organizations in adopting these measures and the process of preparing new guidelines defining work conditions in small-scale fisheries is under way.

Safety at sea is another issue that has hardly received the attention of fisheries planners and policymakers. One good example is the failure of the government to take into account safety measures on board, and in registering and issuing fishing licences to mechanized boats. A good majority

of multi-day craft do not have even simple life-saving devices such as life jackets, distress flares, etc. The time has come for fishery planners and policymakers to seek the possibility of introducing simple sea-safety measures to small-scale fishing units.

Provision of social security to women and children is another issue that has to be addressed immediately. The household responsibilities of women are growing along with the development of the deep-sea fisheries subsector, in which the fishing trips are longer. Not only do the women have to feed, educate and protect children and manage the household, but they are also supposed to confront and resolve all health and other household problems, and meet social obligations. Many more problems are confronted by fisherwomen in the deep-sea sector due to the increasing incidence of arrests of their husbands for illegal fishing in neighbouring countries. When the breadwinner gets arrested, the fisher family is seriously affected and the fisherwomen have to undergo tremendous hardships. Another serious problem confronted by women in the deep-sea fisheries subsector is the difficulty of controlling the children, especially the boys, when their fathers are away from home for long periods. More serious is the problem of child abuse and drug abuse, which are now quire pervasive in the coastal areas in the south of Sri Lanka. Neither the boatowners nor the government have designed any effective means of helping these families. A number of NGOs can be found organizing savings and investment groups among women in certain areas. Some of these NGOs are involved in the provision of financial help to take up income-generating activities. However, there is no national policy on these issues. Women form one group that has received least attention in respect of social security. The same is true with children. The country's training schools and the National Institute of Fisheries and Nautical Engineering have become educational and training institute that harbour those students who have dropped out in their attempt to pursue the conventional university education. Very few children from fisher families have access to these training institutions.

The Draft National Fisheries Policy Paper and Social Security

MFAR has recently drafted a National Fisheries Policy, which has given serious concern to a number of social security needs of fishers and their families. Some of the policy actions suggested are given below.

- Standards for multi-day craft shall be defined, which may include standards for craft designs, engine horsepower, accessories such as communication, navigation and safety equipment, and facilities such as accommodation for crew, medical facilities, size of fuel, ice and water holds. Craft that do not conform to such standards shall not be registered and shall not be allowed to fish.
- Work conditions of crew labourers in multi-day craft shall be clearly indicated in a work agreement signed between the crew workers and boatowners, prior to the employment of the former. Employment of crew labourers in multi-day boats without such work agreements shall be considered a punishable offence.
- A basic minimum requirement of health facilities and safety equipment for multi-day craft shall be determined, which would become a necessary condition for craft registration.
- Work conditions of fishworkers in the harvesting and the processing sector shall be subject to Sri Lanka's labour laws.
- Craft propelled by inboard engines shall be required by law to hold a valid insurance policy, which shall cover not only damage or loss of craft and gear, but also compensation payable to crew members for injuries incurred whilst engaged in fishing, and to the family of the crew member in the case of his death at sea.
- All owners of multi-day craft shall be required to contribute, by way of a fee, to a Boat Crew Welfare Fund at the time of paying annual registration fees. This fee shall be used to help families of crew workers who are arrested and detained in foreign countries.
- The NIFNE shall develop certificate courses of short duration, to train youth from fishing communities. In the selection of candidates for training, children of fishing families shall receive priority, provided that they meet the basic requirements for enrolment.
- Fisherwomen shall be provided with self-employment opportunities by helping them take up fish-processing activities or other income-generating activities. Such help shall take the form of awareness campaigns, training and soft loans.

- MFAR shall design a scholarship scheme to help fishermen's children who qualify to continue into secondary and tertiary education but are unable to do so due to financial constraints.
- MFAR shall make special efforts to help fishing families affected by natural calamities, including loss of lives at sea. Such assistance shall be extended to affected families in the form of assistance to women to take up employment, assistance to grown-up children to undergo training in fisheries-related fields of their choice, assistance by way of providing houses, soft loans to grown-up male children to take up fishing and any other measure deemed appropriate.

It is quite evident that most of the social security measures have been well addressed in the draft fisheries policy paper. However, its adoption and implementation have been delayed by the recent chaotic situation in the country caused by the Indian Ocean tsunami of 26 December 2004.

Endnotes

[1] Senior Lecturer, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka

[2] Amarasinghe, O. (2005) Modernization and Change in Marine Small-scale Fisheries of Southern Sri Lanka (in print)

[3] Amarasinghe, O. (2004) International Trade in Fish and Fish Products

[4] Kurien, J. and A. Paul (2000) Nets for Social Safety

[5] Kurien, J. and A. Paul *op cit.*

[6] Dreze, J. and A. Sen (1987) Coping with Vulnerability and Disaster

[7] Kurien, J. and A.Paul *op cit.*

[8] 1 US $ = LAR. 103

[9] Fisheries Administration Reports, 1984-1996, Ministry of Fisheries and Aquatic Resources, Colombo

[10] Our Progress 1998-2003, Ministry of Fisheries and Aquatic Resources, Colombo

[11] Administration Reports and Progress Reports, 1994-2001, Ministry of Fisheries and Aquatic Resources, Colombo

[12] *ibid.*

[13] *ibid.*

[14] *ibid.*

[15] *ibid.*

[16] Our Progress 2001, Ministry of Fisheries and Aquatic Resources, Colombo

[17] Fisheries Year Book 2001, National Aquatic Resources Research and Development Agency, Colombo

[18] Our Progress 2003, Ministry of Fisheries and Aquatic Resources, Colombo

[19] Printouts from Statistical Department, Ministry of Fisheries and Aquatic Resources, Colombo

[20] 160 perches = 1 acre

[21] Our Progress 1999, Ministry of Fisheries and Aquatic Resources, Colombo

[22] Our Progress 2000, Ministry of Fisheries and Aquatic Resources, Colombo

[23] Fisheries Administration Report, Ministry of Fisheries and Aquatic Resources, Colombo

[24] Amarasinghe, O. (2005) *op cit.*

[25] Central Bank of Sri Lanka (2001). Economic and Social Statistics of Sri Lanka, Colombo

[26] Non-mechanized traditional craft

[27] Mechanized traditional craft

[28] 17-23 ft. fibreglass boats with OBM

[29] Large day-boats with inboard engines

[30] Multi-day craft with inboard engines, ice holds, fuel holds and cabins for crew

[31] Central Bank of Sri Lanka (2001). Economic and Social Statistics of Sri Lanka, Colombo

[32] *ibid.*

[33] *ibid*

[34] *ibid.*

[35] Galappaththy (2003) Social Security Measures in the Fisheries Sector of Sri Lanka

[36] Our Progress 2003, Ministry of Fisheries and Aquatic Resources 2003, Colombo

[37] Boats were issued to fishermen with subsidies through a programme financed by the 'Abu Dhabi Fund'. The beneficiaries formed a co-operative.

[38] Ministry of Fisheries 1988 *op cit.*

[39] Ministry of Fisheries 2000 *op cit.*

[40] Amarasinghe, O. (2004) *op cit.*

[41] Administration Reports and Progress Reports, 1994-2001, Ministry of Fisheries and Aquatic Resources

[42] Fishermen's Pension Scheme (1991), Ministry of Fisheries and Aquatic Resources, Colombo, Sri Lanka

[43] The Crop Insurance Board earlier operated the Agricultural Insurance Scheme. This scheme had to be abandoned for high indemnity payments, which exhausted the funds allocated to the scheme by the government. Rather than dissolving the Board, the government decided to assign the task of operating the fishermen's pension scheme to the Crop Insurance Board.

[44] Catches of all fishermen will rise and fall together during bad weather or lean seasons.

[45] In agriculture, the harvest of all farmers rise and fall together with changes in the natural environment: weather, pest and diseases, etc. (This is called yield risk covariance or covariant yields.) This is not generally true in fisheries.

[46] Amarasingh, O. (2005) *op cit.*

[47] Non-mechanized traditional craft

[48] Mechanized traditional craft

[49] 17-23 ft. fibreglass day boat with OBM

[50] Large day-boat with inboard engine

[51] Multi-day craft

[52] *ibid.*

[53] *ibid.*

[54] *ibid.*

[55] Self-insurance strategies inclued activity diversification, accumulation of assets (gold, durable consumer goods), savings, etc.

REFERENCES

Amarasinghe, O. (2005) *Modernization and Change in the Marine Small-scale Fisheries of Southern Sri Lanka* (in print)

Amarasinghe, O. (2004) *International Trade in Fish and Fish Products and Food Security in Sri Lanka*, FAO, Rome, Italy

Kurien, J. and A. Paul (2000) *Nets for Social Safety*, International Collective in Support of Fishworkers (ICSF), Chennai, India

Central Bank of Sri Lanka (2001) *Economic and Social Statistics of Sri Lanka*, Colombo, Sri Lanka

Dreze, J. and A. Sen (1987) *Coping with Vulnerability and Disaster*, London School of Economics, London, UK (mimeo)

Galappaththy (2003) *Social Security Measures in the Fisheries Sector of Sri Lanka*, Faculty of Agriculture, University of Ruhuna, Matara, Sri Lanka (unpublished dissertation)

Ministry of Fisheries and Aquatic Resources (1984-1996) *Fisheries Administration Reports*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (1991) *Fishermen's Pension Scheme*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (2003) *Our Progress: 1998-2003*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (2003) *Our Progress: 2003*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (1994-2001) *Administration Reports and Progress Reports: 1994-2001*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (2001) *Our Progress: 2001*, Colombo, Sri Lanka

Ministry of Fisheries and Aquatic Resources (2004) Printouts from Statistical Department, Colombo, Sri Lanka

National Aquatic Resources Research and Development Agency (2001) *Fisheries Year Book 2001*, Colombo, Sri Lanka

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Since Sri Lanka's independence in 1948, social welfare for the country's fishing populations has been the responsibility of successive governments. During the latter half of the last millennium, the State has been channelling huge amounts of public funds into a number of social welfare and social security measures. However, the emphasis has mainly been on promotional welfare measures, such as housing, sanitation, infrastructure and training. Among the common problems in the delivery of such measures are regional disparities in the distribution of benefits (with the southern regions receiving the lion's share), and expenditure on welfare dwindling with a change of government.

If social security measures are defined, as by the ILO, to include medical care, sickness benefit, unemployment benefit, old-age benefit, employment injury benefit, family benefit, maternity benefit, invalidity benefit and survivors' benefit, then only the Fishermen's Pension and Social Security Benefit Scheme provides some kind of social security for Sri Lanka's fishing populations. There is an urgent need to address the social security issues of deep-sea fishworkers, women and children.

ICSF is an international NGO working on issues that concern fishworkers the world over. It is in status with the Economic and Social Council of the UN and is on ILO's Special List of Non-Governmental International Organizations. It also has Liaison Status with FAO. Registered in Geneva, ICSF has offices in Chennai, India, and Brussels, Belgium. As a global network of community organizers, teachers, technicians, researchers and scientists, ICSF's activities encompass monitoring and research, exchange and training, campaigns and action, as well as communications.

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