

and highly structured economic activity in ancient days. The following shall be undertaken:

- a) to increase and enhance participation of fishermen and farmers (farmers organization and cooperatives) in fishery activities using inland water bodies,
- b) to provide extension and training services to fishermen and farmers,
- c) to identify seasonal tanks and undertake pilot programs for fry nursing to fingerlings or fish culture or integrated fish cum poultry farming,
- d) to organize farmers and strengthen community organizations or cooperatives and assist in nursing of fry to fingerlings, and
- e) to undertake awareness program through pilot and demonstration projects to ensure the productivity and sustainability of the under-utilized perennial and seasonal tanks.

#### **4.3 Development Projects and Related Measures**

##### **(1) Development programs and projects**

Fishery development in Southern Area will be supported by a set of development projects/programs and related institutional/policy measures. The fisheries development projects/programs consist of two major programs to support respectively marine and inland fisheries, a project to promote particularly prawn farming, and two additional projects indirectly supporting fishermen through training and research, and improved marketing.

The Marine Fisheries Complex Development is the program to encourage offshore fisheries to make this type of fishery activities a mainstream economic activities for coastal communities. Under this program, fisherfolk would be organized to enter into a large scale operation for offshore fisheries with larger and better equipped boats. Support facilities would be improved or newly constructed. The following component projects are included: Rehabilitation of Existing Fishery Harbours, Rehabilitation/Upgrading of Anchorages, and Construction of a New Building and Upgrading of the Tangalle Regional Fisheries Center.

The Inland Fisheries Re-Establishment is the program to re-vitalize inland fisheries through rehabilitation and upgrading of existing facilities, and improved fingerling stocking and rearing systems involving rural communities. Component projects under this program include the following:

- Upgrading and Rehabilitation of the Udawalawe Inland Fishery Station,
- Upgrading and Rehabilitation of the Muruthawela Inland Fishery Station,

- Stocking of Perennial Village Tanks and Reservoirs with Fingerlings,
- Rearing of Fingerlings for Stocking of Perennial Tanks and Reservoirs Using Fry from the Udawalawe and the Muruthawela Fishery Stations,
- Rearing of Fingerlings by Farmers Using Potential Seasonal Ponds and Other Water Bodies, and
- Integrated Fish Culture with Poultry Rearing.

The Prawn Farming will be promoted with caution, utilizing marginal land and brackish water areas to be identified through detailed land use planning, to provide alternative income and employment opportunities. The strengthening of Faculties of Fisheries Science in the University of Ruhuna will generate trained fishery experts, develop appropriate technologies for marine and inland fisheries, and promote hydro-biological research activities. The Fish Markets Improvement will contribute to improving fish quality and increasing value-added. Profiles of these projects and programs are found in a separate volume.

## (2) Related measures

### Marine fisheries

The following measures apply to the development of marine fisheries.

- 1) The "Open Gate Policy to the existing harbours should be stopped and charges for boat anchorage and other services for fishing vessels should be introduced.
- 2) User charges should be collected such as levies on fish sales, harbour charges from boats, land leases, entrance fees, profit margin on water and fuel supply. A feasibility study on harbour management system of selected harbours at Chilaw, Beruwala, Mirissa and Puranawella has indicated that the harbour users are agreeable to pay charges provided that the basic facilities are provided within the harbour and also such measures as law and order, security and the up-keep of the shore facilities are instituted. A pilot project on harbour management system is being implemented in Beruwala, and based on the experience and results it should be extended to other harbours.
- 3) Technical cooperation/assistance in the form of despatch of experts particularly for fishing harbour management, master fisherman, and overseas training of counterparts should be sought in order to improve and develop fishing technology and fishery harbour management.

### Inland fisheries

The following measures apply to the development of the inland fisheries.

- 1) From the stage of fingerlings, fish production in the seasonal tanks is envisaged to be a private or village sector activity with no direct government involvement apart from extension support. Fingerlings will be distributed free, at least in the early phase.
- 2) Each rehabilitated tank is expected to have a tank committee composed of representatives of the farming population benefiting from the tank, and coordinated by the Division of Agrarian Services. The Fisheries Extension Officer will participate in this tank committee with the explicit purpose of creating awareness of the prospect of rearing fish in the tanks, assisting in the procurement of fingerlings by the village, monitoring during the grow-out period and finally assisting and ensuring adequate marketing.
- 3) The Government will finance staff for extension activities, provide them with training in extension and supply equipment for the public dissemination of the techniques to be employed for the inland fisheries development.
- 4) Necessary credit is allocated by the Government for provision of boats and fishing gears.
- 5) Technical cooperation/assistance in the form of provision of equipment and facilities and despatch of experts, and overseas training of counterparts should be sought in order to improve and develop aquaculture technology.

Table 2.1 Operating Fishing Craft by DFEO Division, 1995

DFEO Divisions	NON-MECHANIZED										OUT BOARD ENGINES					IN BOARD ENGINES					TOTAL	
	Vallam (Dug-out canoes)					Theppam Kattu (Log crafts)					Orus (Oru riggers)					MULTIDAY						Sub-total
	Orus (Oru riggers)	Vallam (Dug-out canoes)	Theppam Kattu (Log crafts)	Madel Oru	Madel Vall	Sub-total	17.5-23 footers	Orus (Oru riggers)	Vallam (Dug-out canoes)	Theppam	Sub-total	>34'	32-34'	28'-32'	32-34'	28'-32'	32-34'	28'-32'				
Batticaloa	1,963	77	-	78	-	2,118	201	-	-	-	201	-	-	-	8	-	-	119	127	2,446		
Chilaw	263	1	1,810	-	35	2,109	1,709	-	-	-	1,709	55	50	87	14	-	-	5	211	4,029		
Colombo	50	-	-	6	463	519	120	190	-	26	336	6	-	18	-	-	-	53	77	932		
Galle	301	3	-	46	62	412	204	66	194	-	464	15	47	75	-	-	-	72	209	1,085		
Jaffna	-	790	530	-	120	1,440	442	-	190	380	982	-	-	-	-	-	-	60	60	2,482		
Kalmunai	895	-	-	-	123	1,018	60	165	-	-	225	-	-	-	-	-	-	228	228	1,471		
Kalutara	554	-	-	10	47	611	164	-	-	-	164	73	118	17	1	-	-	32	241	1,016		
Kilinochchi	34	58	-	-	-	92	42	-	-	-	42	-	-	-	-	-	-	-	0	134		
Mannar	2	121	133	-	23	279	455	-	26	-	481	3	-	-	-	-	-	27	30	790		
Matara	836	-	-	2	7	845	265	163	-	-	428	66	141	248	-	-	-	295	750	2,023		
Mullaitivu	37	21	28	-	29	115	116	65	18	109	308	-	-	-	-	-	-	-	0	423		
Negambo	1,064	-	-	14	58	2,340	1,927	-	-	-	1,927	30	85	54	5	-	-	82	256	4,523		
Puttalam	203	335	980	27	212	1,757	1,667	-	256	-	1,923	2	31	9	-	-	-	8	50	3,730		
Tangalle	650	-	-	103	-	753	467	517	-	-	984	-	83	144	-	-	-	126	353	2,090		
Trincomalkee	438	467	-	-	91	996	457	-	45	-	502	80	1	-	-	-	-	232	313	1,811		
	7,290	1,873	4,685	286	1,270	15,404	8,296	1,166	729	485	10,676	330	556	660	20	1,339	2,905			28,985		

Source: MFAR, 1995

**Table 2.2 Fish Production by Sub-Sector (1975-1995)**

Year	Unit: MT				
	Marine Fisheries			Inland Fisheries	Total
	Coastal	Offshore	Sub-total		
1975	114,863	970	115,833	13,307	129,140
1976	122,783	548	123,331	12,540	135,871
1977	125,386	312	125,698	13,068	138,766
1978	136,900	2,949	139,849	16,738	156,587
1979	148,851	2,099	150,950	17,425	168,375
1980	165,264	2,148	167,412	20,266	187,678
1981	175,075	2,178	177,253	29,590	206,843
1982	182,532	1,078	183,610	33,323	216,933
1983	184,049	689	184,738	36,068	220,806
1984	136,642	823	137,465	31,882	169,347
1985	140,266	2,400	142,666	32,743	175,409
1986	144,266	3,400	147,666	35,390	183,056
1987	149,278	4,259	153,537	36,465	190,002
1988	155,099	4,425	159,524	38,012	197,536
1989	157,411	8,155	165,566	39,720	205,286
1990	134,132	11,666	145,798	31,265	177,063
1991	159,151	15,080	174,231	23,832	198,063
1992	163,168	22,000	185,168	21,000	206,168
1993	169,900	33,000	202,900	18,000	220,900
1994	174,500	37,500	212,000	12,000	224,000
1995	157,500	60,000	217,500	20,000	237,500

Remarks: Inland fisheries for 1995 includes 5,000 MT of coastal aquaculture and lagoon production.

Source: Ministry of Fisheries and Aquatic Resources (MFAR)

**Table 2.3 Fish Production from Offshore/Deepsea in 1995**

Type of Fish	Quantity
Skipjack tuna	23,520
Yellowfin tuna	9,060
Bigeye yellowfin tuna	420
Sharks	14,460
Billfish	9,840
Others	2,700
<b>Total</b>	<b>60,000</b>

Remarks: 1) Production includes about 17,000 MT landed by foreign fishing vessels.  
 2) Major varieties of billfish are marlin, sailfish and swordfish.  
 3) Others include small tuna varieties, dolphin fish, rainbow runner, wahoo, etc.

Source: Ministry of Fisheries and Aquatic Resources (MFAR)

Table 2.4 Coastal Fish Production by Type of Fish (1989-1995)

Type of Fish	1989	Share(%)	1990	Share(%)	1991	Share(%)	1992	Share(%)	1993	Share(%)	1994	Share(%)	1995	Share(%)
Spanish mackerel (Seer)	3,899	2.5	3,314	2.5	3,916	2.5	3,524	2.2	3,369	2.0	3,200	1.8	2,993	1.9
Carangids (Paraw)	9,085	5.8	7,722	5.8	8,975	5.6	8,526	5.2	8,378	4.9	8,000	4.6	6,910	4.4
Skipjack (Balaya)	13,597	8.6	12,237	9.1	16,690	10.5	18,359	11.3	19,316	11.4	20,475	11.7	23,548	15.0
Yellowfin (Kelawalla)	7,536	4.8	6,406	4.8	10,664	6.7	11,730	7.2	11,981	7.1	13,180	7.6	12,050	7.7
Other tuna (blood fish)	7,066	4.5	6,359	4.7	9,325	5.9	10,258	6.3	10,681	6.3	11,215	6.4	17,642	11.2
Sharks/skates	16,958	10.8	15,293	11.4	18,360	11.5	18,306	11.2	19,061	11.2	19,500	11.2	14,017	8.9
Large demersals (Rock fish)	7,863	5.0	6,688	5.0	8,658	5.4	9,870	6.0	10,277	6.0	10,585	6.1	7,088	4.5
Shore seine var.	31,064	19.7	27,958	20.8	33,426	21.0	35,097	21.5	37,379	22.0	38,870	22.3	49,785	31.6
Prawns	4,704	3.0	4,469	3.3	5,176	3.3	6,470	4.0	6,737	4.0	7,000	4.0	**	**
Lobsters	663	0.4	629	0.5	789	0.5	828	0.5	862	0.5	1,000	0.6	400	0.3
Others	54,976	34.9	43,087	32.1	43,172	27.1	40,200	24.6	41,859	24.6	41,475	23.8	23,067	14.6
	157,411	100.0	134,162	100.0	159,151	100.0	163,168	100.0	169,900	100.0	174,500	100.0	157,500	100.0

Remarks: \*\* included in aquaculture production.

Source: Ministry of Fisheries and Aquatic Resources (MFAR)

Table 2.5 Coastal Fish Production by DFEO Division (1989-1995)

DFEO Divisions	1989	1990	1991	1992	1993	1994	1995
Batticaloa	3,432	3,218	8,745	9,371	9,750	10,538	6,261
Chilaw	16,047	15,052	17,351	19,217	20,198	21,308	21,554
Colombo	2,328	2,183	2,561	2,625	2,250	1,923	2,152
Galle	12,885	12,087	13,429	13,765	14,173	14,386	15,309
Kalmunai	9,050	6,489	9,261	10,344	11,150	12,198	6,099
Kalutara	6,654	6,241	8,621	8,837	9,368	9,703	9,903
Matara	10,821	10,150	12,597	12,975	13,823	14,375	14,809
Negambo	22,524	17,428	19,371	21,405	22,277	25,634	25,570
Puttalam	23,695	22,089	23,431	24,017	24,867	26,732	27,028
Tangalle	11,436	10,727	12,086	13,295	14,427	15,204	15,499
Trincomalee	10,899	8,223	11,412	13,048	14,250	14,565	8,739
North Province *)	27,640	20,245	20,286	14,269	13,367	7,934	4,577
TOTAL	157,411	134,132	159,151	163,168	169,900	174,500	157,500

Remarks: \*) North Province consists of Jaffna, Killinochchi, Mullaitivu, Mannar DFEO divisions.

Source: Ministry of Fisheries and Aquatic Resources (MFAR)

Table 2.6 Fish Supply and Per Capita Consumption (1977-1994)

	Unit	1977	1980	1983	1986	1987	1988
Supply							
Domestic	tons	138,770	187,680	220,810	183,060	190,000	197,540
Imports	tons	13,050	55,360	41,950	81,000	95,340	114,050
Sub-total	tons	151,820	243,040	262,760	264,060	285,340	311,590
Less export	tons	5,280	6,090	6,540	8,530	6,040	8,740
Availability	tons	146,540	236,950	256,220	255,530	279,300	302,850
Population	mil	13.9	14.7	15.4	16.2	16.4	16.7
Per capita Consumption	kg	10.54	16.12	16.64	15.82	17.03	18.13

(Continued)

	Unit	1989	1990	1991	1992	1993	1994
Supply							
Domestic	tons	205,290	177,063	198,159	206,168	220,900	224,000
Imports	tons	89,990	60,293	83,371	127,168	133,715	140,650
Sub-total	tons	295,280	237,266	281,530	333,336	354,615	364,650
Less export	tons	9,960	5,059	5,533	6,350	10,020	12,230
Availability	tons	285,320	232,207	275,997	326,986	344,595	352,420
Population	mil	16.9	17.6	17.9	17.4	17.62	17.75
Per capita Consumption	kg	16.88	13.19	15.42	18.78	19.56	19.85

Source: 1) For 1992 - 94 estimated and 1977-1991 from FAO/ADB, 1991

2) Population data: Statistical abstract, Department of Census and Statistics, MPEANI, 1994

Table 2.7 Quantity and Value of Imports of Major Fishery Products (1990-1995)

Type of Products	1990		1991		1992		1993		1994		1995	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Maldive fish	1,615	92.4	3,169	264.3	3,043	300.2	4,011	348.1	4,193	460.3	3,371	412.5
Dried fish	24,165	587.2	41,078	1,420.3	41,247	1,497.0	42,466	1,421.4	39,404	1,629.9	44,799	1,738.7
Canned fish	8,138	225.2	7,860	318.5	10,682	534.3	7,008	417.4	12,665	802.9	20,169	1,215.2
Others	3,711	46.7	0	0.3	29	2.5	0	0.3			4	2.6
Total	37,628	949.5	52,107	2,003.3	55,001	2,334.0	53,486	2,187.2	56,262	2,893.0	68,343	3,369.0

Source: Customs, Sri Lanka

Table 2.8 Quantity and Value of Exports of Major Fishery Products (1990-1995)

Type of Products	1990		1991		1992		1993		1994		1995	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Shrimp	1,855	485.9	943	454.6	1,246	613.1	1,426	808.0	2,301	1,650.4	2,781	2,153.1
Lobsters	165	50.0	188	139.6	154	125.1	312	209.2	364	257.6	283	259.7
Crabs			323	39.3	533	66.9	546	82.2	909	168.1	898	181.4
Beche-de-mer	36	27.1	19	14.4	25	36.6	37	25.6	92	69.2	248	148.2
Ornamental fish	154	68.1	98	40.7	246	142.9	291	204.9	383	247.6	331	273.3
Chank & shells	821	174.6	70	22.9	93	12.3	122	19.9	236	33.8	746	41.3
Shark fins	1	13.3	182	108.6	90	135.2	59	98.9	81	110.3	127	162.8
Other crustaceans					159	42.7	155	47.6	113	48.6	53	18.0
Frozen fish	78	28.9	5	29.3	1,130	116.1	2,901	625.1	2,707	702.2	1,978	413.5
Others	51	35.1	1	5.8	59	13.0	47	22.2	9	3.3	12	4.2
Total	3,163	883.0	1,828	855.1	3,735	1,303.9	5,895	2,143.6	7,194	3,291.1	7,457	3,655.5

Source: Customs, Sri Lanka



**Table 2.9 Coastal Fish Production of Galle, Matara and Hambantota Districts (1989-1995)**

D.F.E.O Division	1989	Share(%)	1990	Share(%)	1991	Share(%)	1992	Share(%)
Galle	12,885	8.2	12,087	9.0	13,429	8.4	13,765	8.4
Matara	10,821	6.9	10,150	7.6	12,597	7.9	12,975	8.0
Hambantota	11,436	7.3	10,272	7.7	12,086	7.6	13,295	8.1
Sub-total (Southern Area)	35,142	22.3	32,509	24.2	38,112	23.9	40,035	24.5
SRI LANKA	157,411	100.0	134,132	100.0	159,151	100.0	163,168	100.0

(Continued)

(Unit: MT)

D.F.E.O Division	1993	Share(%)	1994	Share(%)	1995	Share(%)
Galle	14,173	8.3	14,386	8.2	15,309	9.7
Matara	13,823	8.1	14,375	8.2	14,809	9.4
Hambantota	14,427	8.5	15,204	8.7	15,499	9.8
Sub-total (Southern Area)	42,423	25.0	43,965	25.2	45,617	29.0
SRI LANKA	169,900	100.0	174,500	100.0	157,500	100.0

Source: Ministry of Fisheries and Aquatic Resources (MFAR)

Table 2.10 Fishing Households, Fishermen and Fishing Boats in Southern Area by Division

	Number of Fishermen and Household			Type and Number of Fishing Boats						Total
	Fishing Households	Fishing Population	Active Fishermen	Multi-day Boats	Day Boats	FRP Boats with OBE	Oru Boats with OBE	Non Mechanized Oru	Madel Oru	
<b>GALLE DIST.</b>										
1) Balapitya	460	2,363	589	27	-	62	17	42		148
2) Dondunwa	620	3,393	2,192	-	-	121	136	47		304
3) Hikaduwa	750	3,909	868	26	26	13	180	-		245
4) Ambalangoda	270	1,190	744	32	5	67	55	29		188
5) Galle	859	4,725	500							200
<b>TOTAL</b>	<b>2,959</b>	<b>15,580</b>	<b>4,893</b>	<b>85</b>	<b>31</b>	<b>263</b>	<b>388</b>	<b>118</b>	<b>0</b>	<b>1085</b>

Source: DFEO Office Galle

	Number of Fishermen and Household			Type and Number of Fishing Boats						Total
	Fishing Households	Fishing Population	Active Fishermen	Multi-day Boats	Day Boats	FRP Boats with OBE	Oru Boats with OBE	Non Mechanized Oru	Beach Seine Boats	
<b>MATARA DISTRICT</b>										
<b>WELLIGAMA D.S.</b>										
1) Kapparatota	188	990	307	14	40	5	2	144	-	205
2) Welligama	439	2,229	368	3	5	-	21	46	6	81
3) Mirissa	510	3,000	750	99	43	48	60	26	-	276
4) Kamburugamuwa	150	685	215	1	-	-	-	23	-	24
Sub-total	1,287	6,904	1,640	117	88	53	83	239	6	586
<b>DONDRA D.S.</b>										
1) Matara	500	2,070	635	18	18	18	13	31	1	99
2) Dondra	505	2,300	1,212	174	34	24	37	142	1	412
3) Gandara West	535	2,183	602	14	6	29	33	87	2	171
4) Gandara	386	1,773	584	101	25	80	2	117	2	327
Sub-total	1,926	8,326	3,033	307	83	151	85	377	6	1,009
<b>DIKWELLA D.S.</b>										
1) Kottegoda	575	2,900	798	9	76	46	-	130	-	261
2) Dickwella	315	1,698	365	-	-	-	-	47	-	47
3) Nilwella	395	1,961	454	42	4	6	2	248	-	302
Sub-total	1,285	6,559	1,617	51	80	52	2	425	-	610
<b>TOTAL</b>	<b>4,498</b>	<b>21,789</b>	<b>6,290</b>	<b>475</b>	<b>251</b>	<b>256</b>	<b>170</b>	<b>1,041</b>	<b>12</b>	<b>2,205</b>

Source: DFEO Office Matara

	Number of Fishermen and Household			Type and Number of Fishing Boats						Total
	Fishing Households	Fishing Population	Active Fishermen	Multi-day Boats	Day Boats	FRP Boats with OBE	Oru Boats with OBE	Non Mechanized Oru	Madel Oru	
<b>HAMBANTOTA DIST.</b>										
1) Kudawella	1,100	5,750	1,990	132	38	110	123	83	5	491
2) Tangalle	385	2,100	422	24	10	8				42
3) Mawella	275	2,830	560	7	6	35	51	55	11	165
4) Kalametiya	368	1,869	410	24	8	46	6	54	17	155
5) Hambantota	890	4,647	925	-	13	37	65	105	3	223
6) Kirinda	411	2,087	426	9	9	29	24	85		156
7) Other FI Divisions	1,553	5,129	1,294	-	2	211	100	314	75	1,108
<b>TOTAL</b>	<b>4,982</b>	<b>24,412</b>	<b>6,027</b>	<b>196</b>	<b>86</b>	<b>476</b>	<b>369</b>	<b>696</b>	<b>111</b>	<b>2,340</b>

Source: DFEO Office Tangalle

Table 2.11 Facilities and Services of Fishery Harbours in Southern Area

District	Location	Facility/Service	Capacity	Remarks	
Galle	Galle	Flake ice plant (jetty)	25 TPD	Non-operational	
		Ice storage	100 TPD	Non-operational	
		Flake ice plant (market)	25 TPD	Non-operational	
		Ice storage	60 TPD	Operational	
		Plate freezing	4 TPD	Non-operational	
		Blast freezing	15 TPD	Non-operational	
		Office area	90 sq m	Under-utilized	
		Stores	100 sq m	Under-utilized	
		Basin area	5 ha	Used	
		Quay wall	102 m		
		Boat lifting	20 T	Leased out	
		Workshop	120 sq m		
		Water tank	114000 L	Operational	
		Fuel tank	9100 L	Operational	
Matara	Mirissa	Ice storage	10 T	Non-operational	
		Fish on ice storage	5 TPD	Non-operational	
		Workshop	195 sq m		
		Water tank	18000 L	Non-operational	
		Fuel tank	9100 L	Operational	
		Basin area	7 ha	Used	
		Quay wall	156 sq m	Used	
		Boat lifting	5 T		
		Office area	32 sq m	Not used	
		Stores area	60 sq m	Not used	
	Puranawella	Breakwater			
		Block ice	5 TPD	Non-operational	
		Basin area	8.4 ha		
Hambantota	Kirinda	Breakwater	434 m		
		Basin area	3.2 ha		
		Groyne	125 sq m		
		Quaywall	180 m		
		Fish on ice storage	5 TPD	Non-operational	
		Ice storage	10 TPD	Non-operational	
		Blast freezing			
		Office building	130 sq m	Not used	
		Market area	319 sq m	Not used	
		Workshop	208 sq m	Not used	
		Rest room	108 sq m	Not used	
		Stores	104 sq m	Not used	
		Fuel tanks	9000 L	Not used	
		Water tanks	25000 L	Not used	
	Tangalle	Fish on ice storage	50 TPD		
		Block ice storage	10 TPD		
		Ice storage	30 TPD		
		Water tank	318000 L		
		Basin area	2.0 ha		
		Quay wall	152 m		
	Jetty	30 m			
	Slipway	20 T			

Source: Fisheries Sector Development Project, ADB/FAO, 1991

Table 2.12 Names and Locations of Ice Plants in Southern Area

Districts	Name and Location	Type of Ice	Capacity (tpd)
Galle	1) Harbour View Ice Plant - Galle Fishery Harbour	Flake	25
	2) Lanka Ice Company - Galle Fishing Harbour	Block	20
	3) Hettigoda Ice Plant - Hikkaduwa	Block	15
	4) CFC Ice Plant - Ambalangoda	Block	15
Matara	5) South Lanka Ice Co. - Dondra	Block	20
	6) Inkoshin Co. - Walgama	Block	20
	7) Lalithe Ice Plant - Walgama	Block	30
	8) Inkoshin Co - Weligama	Block	15
	9) Gandara Ice Co. - Gandara	Block	15
	10) Harichandra Mills Ltd.- Matara	Block	15
	11) Ice Plant in Mirissa Fishery Harbour	Block	15 (NO)
	12) Ice Plant in Puranawela Fishery Harbour	Block	5 (NO)
Hambantota	13) Galapati Ice Co. - Tangalle Fishery Harbour	Block	10
	14) Hambantota Ice Plant - H'tota	Block	5
	15) Ice Plant in Kirinda Fishery Harbour	Block	15 (NO)
Remarks:	1) NO means not in operation. 2) tpd = tons per day		
Source:	Field survey in February/March 1996 and July 1996.		

Table 2.13 Number of Fingerlings Stocked from Udawalawe Station  
(From January to July, 1996)

Districts	Planned Stocking Number for 1996	Carp	Tilapia	Total
Moneragala	181,000	24,500	10,050	34,550
Hambantota	215,000	47,350	32,100	79,450
Ratnapura	80,000	25,600	1,250	26,850
Galle	50,000	1,715		1,715
Matara	55,000	12,860	7,750	20,610
Sub-total	581,000	112,025	51,150	163,175
SLCDF		31,750		31,750
<b>TOTAL</b>		<b>143,775</b>	<b>51,150</b>	<b>194,925</b>

Remarks: SLCDF = Sri Lanka Canada Development Fund

Source: MFAR

Breakdown by months and waterbodies

Month	District	Name of water body	Carp	Tilapia	Total
January	Hambantota	Deniya wewa	450		450
		Kotuhewala wewa	450		450
		Gamage wewa	1,050		1,050
		Hindakara wewa	1,050		1,050
		Wattehengoda wewa	300		300
		Yahaminulla wewa	600		600
		Kirama-obda wewa	300		300
		3 fish ponds	450		450
	Ratnapura	Tunkama	18,900		18,900
		Rockwood Estate	5,000	1,250	6,250
	Dissanaya Pond	1,500		1,500	
	Sub-total	30,050	1,250	31,300	
February	Hambantota	Andiyadeniya	2,500		2,500
		Sasthara wewa	2,500		2,500
		Punchi wewa	2,500		2,500
		Bhannara wewa	2,500		2,500
		Olopuruwila wewa	500	2,000	2,500
		Thalawa wewa	1,500		1,500
		Weeragas wewa	1,000		1,000
		Demafathihara wewa	2,000		2,000
		Medayala wewa	1,500		1,500
		Mawcha lagoon		10,000	10,000
	Sub-total	16,500	12,000	28,500	
March	Matara	Maramba wewa	5,660		5,660
	Matara	Anilkanda watta	150		150
	Hambantota	Village pond	4,800		4,800
	Hambantota	Ratawewa-Midhettiya	2,500		2,500
	Hambantota	Habaralu wewa		6,000	6,000
	Moneragala	Bunduruwagala	5,000		5,000
		Sub-total	18,110	6,000	24,110
April	Hambantota	Bidumkadulla wewa	3,000	600	3,600
		Bogamuwa Mahawewa	3,625	1,200	4,825
		Palugaswala wewa	225	300	525
		Halekada wewa	2,400	1,500	3,900
		Bandagiriya wewa	6,650	2,000	8,650
	Sub-total	15,900	5,600	21,500	
May	Matara	Reservoirs in Matara	7,050	7,750	14,800
	Hambantota	Anguna wewa		2,500	2,500
	Ratnapura	Army camp (Embilipitiya)	200		200
	Moneragala	Aliyagala seasonal tank	8,000		8,000
		SLCDF	31,750		31,750
	Sub-total	47,000	10,250	57,250	
June	Moneragala	Handapanagala		5,000	5,000
July	Hambantota	Metinawala wewa	600	1,250	1,850
		Polugaswala wewa		500	500
		Kattakaduwa wewa	750	1,250	2,000
		Pattiyapola wewa	450	1,750	2,200
		Bidumkadulla wewa	1,200	1,250	2,450
	Moneragala	Kesellanda Dambagalla	2,700	1,050	3,750
			3,000	4,000	7,000
		5,800		5,800	
	Galle	Balagoda Massala	1,300		1,300
		Mahalapitiya	215		215
		Nanayakkara's pond	200		200
		Sub-total	16,215	11,050	27,265
<b>TOTAL</b>			<b>143,775</b>	<b>51,150</b>	<b>194,925</b>

Table 3.1 Location, Characteristics, Fishing Vessels of Fishing Harbours/Major Anchorages in Galle, Matara and Hambantota Districts (1/3)

GALLE				
Location	Characteristics and Facilities	Fishing vessels	Fishermen	Remarks
Balapitiya	Anchorage located on a river mouth. Safe and convenient river anchorage, but the mouth gets silted up. Fishing activities during limited time of the year. Multi-day boats land their catches in Beruwella or Galle due to siltation. No on-land facilities	27 multi-day boats 62 FRP boats with outboard engine (OBE) 17 oru boats with OBE 42 non-mechanized boats Total = 148	460 fishing households 2363 fishermen population 589 active fishermen	Identified for anchorage development in the Fisheries Sector Study (ADB), but was found to be non-viable due to occurrence of a sand bar year after year.
Dondurwa	Anchorage located on a river mouth. Presence of submerged rocks causes difficulty in navigation. No landing facilities; according to the interview survey about 25 multi-day boats of Dondurwa anchored in Galle. An important center for traditional fishing boats	multi-day boats * day boats* 121 FRP boats with outboard engine (OBE) 136 oru boats with OBE 47 non-mechanized boats Total = 304	620 fishing households 3393 fishermen population 2192 active fishermen	Proposed for blasting and removal of rocks at the entrance to facilitate the safe entry of vessels, and provision of net mending & fish receiving stations, fuel pump, rest rooms, etc..
Hikaduwa	Anchorage; near shore coral reef. Rock breakwater, and presence of submerged rocks outside entrance causes difficulty in navigation. No on-land facilities. Multi-day boats of this anchorage land their catches in Galle	26 multi-day boats 26 day boats 13 FRP boats with outboard engine (OBE) 180 oru boats with OBE Total = 245	750 fishing households 3909 fishermen population 868 active fishermen	Coastal engineering studies and environmental impact assessment by ADB underway.
Ambalangoda	Anchorage located on a river mouth. Granite shore coral reef. Presence of boulders and rocks due to old damaged groyne at the entrance causes difficulty in navigation.	32 multi-day boats 5 day boats 67 FRP boats with outboard engine (OBE) 550 oru boats with OBE 29 non-mechanized boats Total = 188	270 fishing households 1190 fishermen population 744 active fishermen	Need to be studied.
Galle	Planned as a deep sea fisheries harbour with a basin area of app. 5 ha., a quay wall of 102 m and could accommodate about 350 day & multi-day boats. A large number of service facilities and store complexes are now non-operational.	Currently used by over 300 mechanised boats from Galle and surrounding anchorages.	859 fishing households 4725 fishermen population 500 active fishermen	A new flake ice plant 25 ton capacity and a slipway have been constructed by private sector. Quaywall is being extended to accommodate the growing fleet.

Remarks: \* DFEO data do not indicate any multi-day or day boats; however the fishermen multi-day and day boats of Dondurwa are anchored in Galle.

Source: Data on fishing vessels and fishermen from the records of DFEO Galle (1996)

Table 3.1 Location, Characteristics, Fishing Vessels of Fishing Harbours/Major Anchorages in Galle, Matara and Hambantota Districts (2/3)

MATARA

Location	Characteristics and Facilities	Fishing Vessels	Fishermen	Remarks
Minissa	Fishing harbour near shore granite reef. It serves a large number of multi-day boats. Poor state of the marine structures and shore facilities. No repair and maintenance facilities. existin 150 m long quaywall is inadequate; boat operators have requested it be extended by 100 m.	99 multi-day boats 43 day boats 48 FRP boats with outboard engine (OBE) 60 oru boats with OBE 26 non-mechanized boats <u>Total = 276</u>	460 fishing households 2363 fishermen population 589 active fishermen	Identified as urgently requiring rehabilitation under ADB. In addition to dredging which was completed in August 1994, rehabilitation work include repair to main breakwaters. Provision for installation or improvements of existing services, including access roads, water & electricity.
Puranawella	Main breakwater has been built. No landing quay and shore facilities, but serves a large number of multi-day boats. Landing and unloading using canoes takes an hour to unload catch and to load fuel, ice and other supplies takes another hour. No repair and maintenance facilities. Existing ice storage room is used for ice purchased from outside. Ice supply is poor, and requires about 40 tons a day.	174 multi-day boats 34 day boats 24 FRP boats with outboard engine (OBE) 37 oru boats with OBE 143 non-mechanized boats <u>Total = 412</u>	505 fishing households 2300 fishermen population 1212 active fishermen	Identified as urgently requiring rehabilitation under ADB fund. Initial channel blasting and dredging completed in March 1995. Other works to include completion of main breakwater, construction of groyne, rock excavation and construction of a ship lift, jetty and revetments. Provision for installation or improvements of existing services, including access roads, water & electricity.
Cardara	Bay anchorage. East facing good shelter. Navigation difficult during south-west monsoon due to rough seas.	101 multi-day boats 25 day boats 80 FRP boats with outboard engine (OBE) 2 oru boats with OBE 119 non-mechanized boats <u>Total = 327</u>	386 fishing households 1773 fishermen population 584 active fishermen	Need to be studied.
Kottegoda	Bay anchorage, south & east facing rocks offshore. Navigation difficulty due to presence of submerged rocks in the entrance channel and lack of shelter from wave attack	9 multi-day boats 76 day boats 46 FRP boats with outboard engine (OBE) 130 non-mechanized boats <u>Total = 261</u>	575 fishing households 2900 fishermen population 798 active fishermen	Coastal engineering studies and environmental impact assessment by ADB underway.
Nilwella	Bay anchorage. Navigation difficulty due to narrow mouth and presence of submerged rocks in the entrance channel and lack of shelter from wave attack	42 multi-day boats 4 day boats 6 FRP boats with outboard engine (OBE) 20 oru boats with OBE 248 non-mechanized boats <u>Total = 302</u>	395 fishing households 1961 fishermen population 454 active fishermen	Need to be studied

Source: Data on fishing vessels and fishermen from the records of DFEO Matara (1996)

Table 3.1 Location, Characteristics, Fishing Vessels of Fishing Harbours/Major Anchorages in Galle, Matara and Hambantota Districts (3/3)

HAMBANTOTA				
Location	Characteristics and Facilities	Fishing Vessels	Fishermen	
Kudawella	Bay anchorage. East facing is good shelter. Rough sea at entrance during south-west monsoon; no safe anchoring for small boats. Has Fisheries Service Centre built by NORAD (1983) with ice storage, insulated cool room (for 2-3 days storage) and not being used. Facilities are in bad condition. Multi-day boats of Kudawella visit Tangalle	132 multi-day boats 38 day boats 110 FRP boats with outboard engine (OBE) 123 oru boats with OBE 88 non-mechanized boats Total = 491	1100 fishing households 5750 fishermen population 1990 active fishermen	Coastal engineering studies and environmental impact assessment by ADB underway.
Kailemetiya	Bay anchorage and no breakwater. Rough seas at entrance during monsoon. Multi-day boats visit Tangalle. Has Fisheries Service Centre built by NORAD (1983) with ice storage, insulated cool room (for 2-3 days storage) and not being used except by the fisheries cooperative as office. Facilities are in bad condition. Multi-day boats of Kailemetiya visit Tangalle.	24 multi-day boats 8 day boats 46 FRP boats with outboard engine (OBE) 6 oru boats with OBE 71 non-mechanized boats Total = 155	368 fishing households 1869 fishermen population 410 active fishermen	Need to be studied
Tangalle	Fishery harbour. Granite reef and with breakwater. Has ice plant, ice storage and fuel and water supply facilities. CFC purchasing office. It is used by multi-day boats from Kudawella, Dondra, Kailemetiya, Dondra, Kottegoda and Trincomallee.	24 multi-day boats 10 day boats 8 FRP boats with outboard engine (OBE) Total = 42	385 fishing households 2100 fishermen population 422 active fishermen	Need to be studied
Hambantota	Anchorage and old jetties	multi-day boats 13 day boats 37 FRP boats with outboard engine (OBE) 65 oru boats with OBE 108 non-mechanized boats Total = 223	890 fishing households 4647 fishermen population 925 active fishermen	Need to be studied
Kurinda	Fishery harbour built in 1995 has 3.2 ha basin area and 180 m quaywall, and extensive breakwaters, good on-shore facilities. Facilities are not operated except fuel supply by CFHC.	9 multi-day boats 9 day boats 29 FRP boats with outboard engine (OBE) 24 oru boats with OBE 85 non-mechanized boats Total = 156	411 fishing households 2087 fishermen population 426 active fisher	Harbour management to be introduced by CFHC.

Source: Data on fishing vessels and fishermen from the records of DFEO Tangalle (1996)



**Table 3.2 Inland Water Resource Area in Southern Area**

	Unit: ha			
Districts	Reservoirs	Perennial tanks	Seasonal tanks	Total
1) Hambantota	3,000	4,188	143	7,331
2) Matara		292	84	376
3) Moneragala		3,121	533	3,654
4) Ratnapura	2,834	434	68	3,336
5) Ampara		283		283
6) Galle				
	5,834	8,318	828	14,980

Source: MFAR

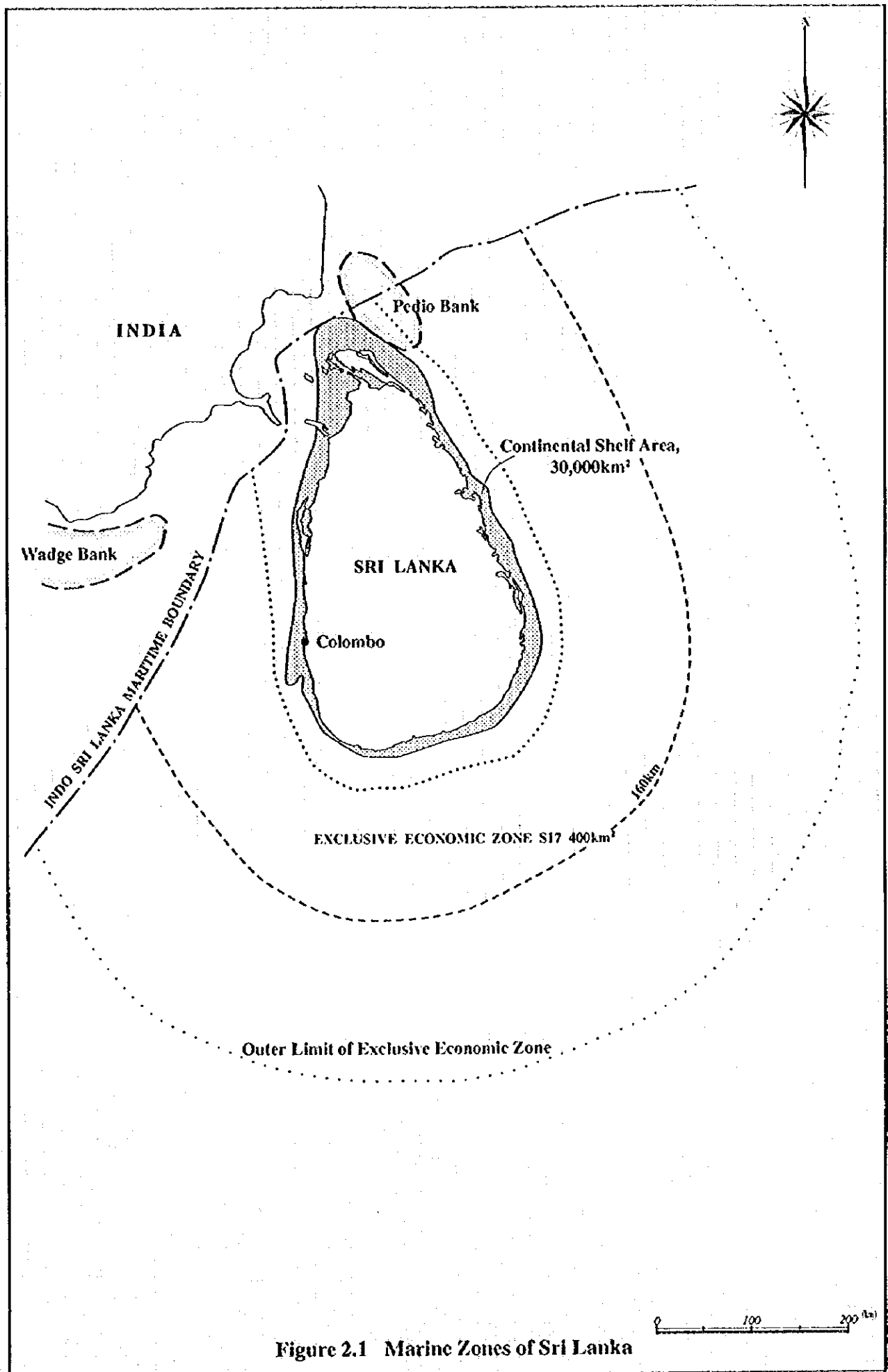


Figure 2.1 Marine Zones of Sri Lanka

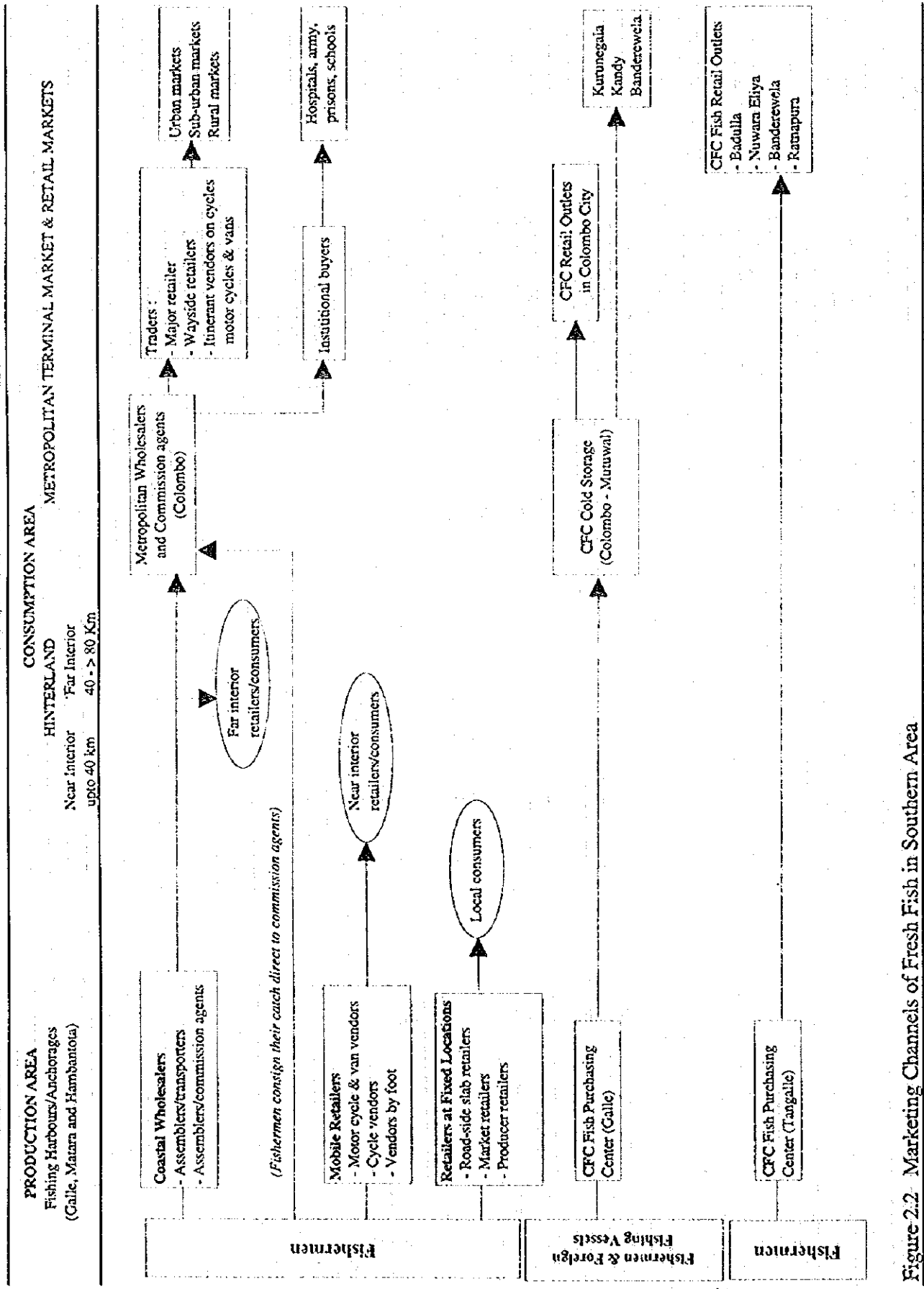
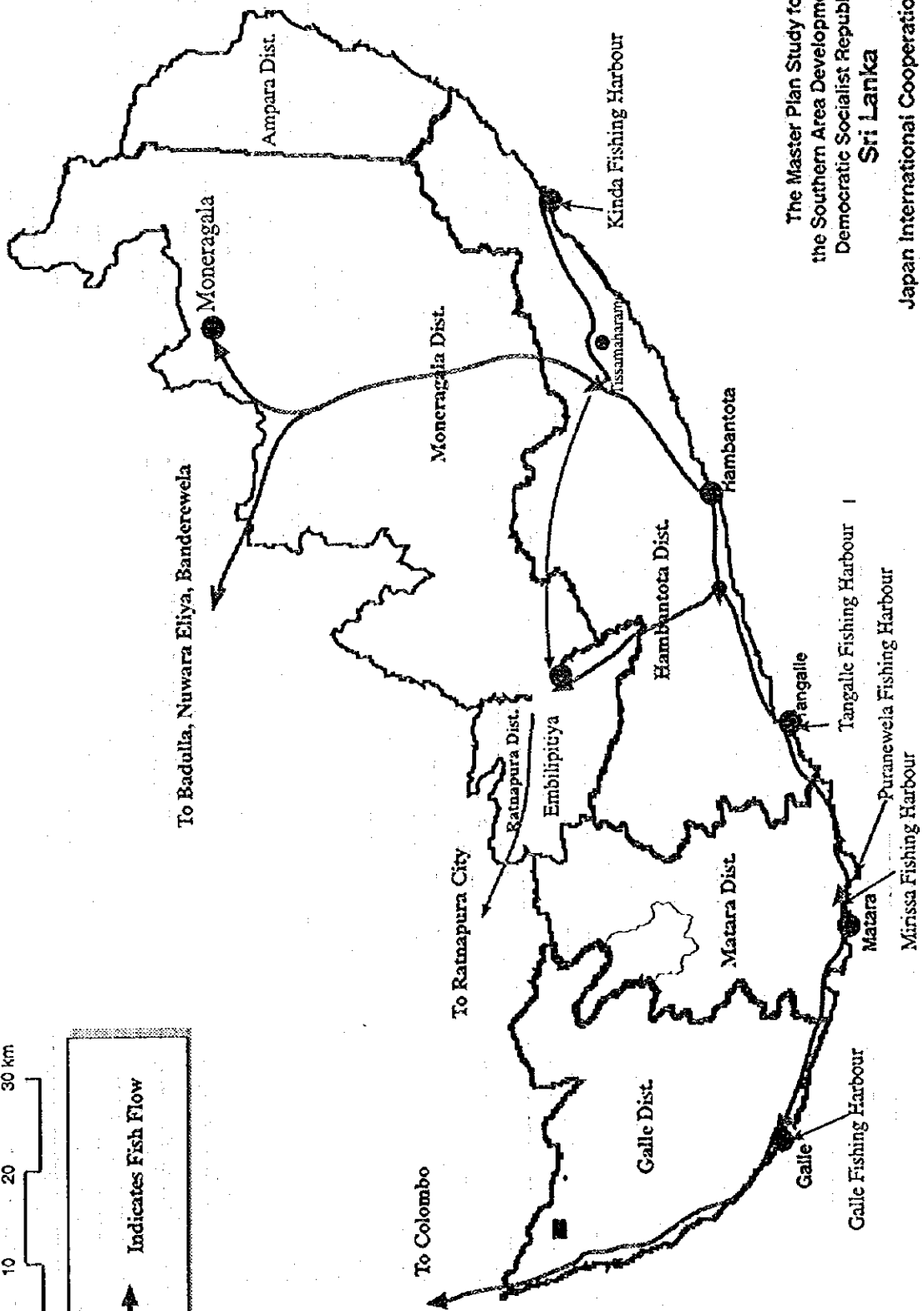
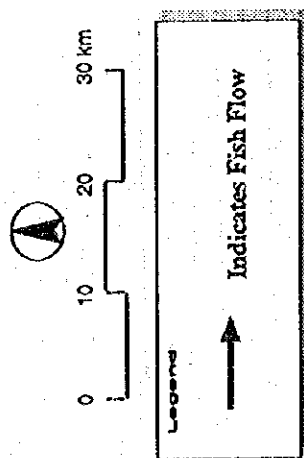


Figure 2.2 Marketing Channels of Fresh Fish in Southern Area



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Figure 2.3 Distribution of Fresh Fish from Major Landing Centers

### Appendix: List of Fish by Local and English Names

	English Name	Family Name	Local Name
Seer	Spanish mackerel		Thora, Anjila
Paraw	Horse mackerel	<i>Carangidae</i>	Paraw, Katta
Blood fish	Skipjack	<i>Tunnidae</i>	Balaya
	Mackerel tuna		Altawalla
	Frigate tuna		Alagoduwa
	Yellowfin		Kelawalle
	Sail fish	<i>Istiophoridae</i>	Thalapath
	Marlin	<i>Istiophoridae</i>	Koppara
	Sword fish	<i>Xiphidae</i>	Gappara
Sharks	Sharks		Mora
Skates	Rays		Maduwa
Rock fish	Snapper	<i>Lutianidae</i>	Kelameeya
	Breams	<i>Lethinae</i>	Meevatiya
	Croakers	<i>Sciaenidae</i>	Pannava
	Groupers	<i>Serranidae</i>	Kossa
Shore seine varieties	Sardines	<i>Clupeidae</i>	Salaya
	Herrings		Hurulla
	Sprat	<i>Engraulidae</i>	Halmassa
	Anchovy		Laagga
	Wolf herring		Katuvalla
	Indian mackerel		Kumbala
	Ribbon fish		Savalaya
	Grey mullet		Godaya
	Whitings		Kalanda
	White fish		Pullunna
	Horse mackerel		Parati
	Spade fish		Hada
	Spotted bat fish		Handeya
	Mullet		Nagaraya
Pomfret		Vauvalaya	
Prawns and others	Prawns		Issa
	Lobsters		Pokirissa
	Lagoon crab		Kalapukakuluwa
	Squid		Dhalla
	Cuttlefish		Pothu Dhalla
	Octopus		Boovalla









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