

Marine Capture Fisheries

02



Livelihood Status of Fishers in India



Marine Capture Fisheries

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Settings

India contributes significantly to the marine fish production of the country sharing 42.29 per cent of the production and has a comparatively higher marine fisheries resources comprising of a coastal belt of 6068 kms passing through 3388 fishing villages and 1511 landing centres across 9 coastal states and two union territories. Total marine fisherfolk population was about 4 million comprising in 864,550 families. About 38 per cent of marine fisherfolk were engaged in active fishing in which 85 per cent are having full time engagement. In this study, sample states were selected from both east and west coasts of India comprising of Kerala, Karnataka, Goa, Maharashtra and Gujarat from west coast, and Tamil Nadu, Andhra Pradesh, Orissa, West Bengal and Puduchery (UT) from the latter, to assess the literacy, health and income status of marine fisherfolk in India. The study covered 1800 respondent households and was selected by random sampling method from the selected districts. The study covered the different sectors viz., mechanized, motorized and traditional sectors.

The results and discussions are presented under the following heads:

- A. General particulars
- B. Literacy status
- C. Health status
- D. Income status

A. General particulars

The general particulars of respondent's households included age, family size, family composition etc.

(i) Age distribution

The age distribution of respondent households are given in Table 2.1

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Table 2.1: Age distribution of the sample respondents (years)

Sl.No.	State	<35	36-55	>56	Total
1.	Andhra Pradesh	75 (17.61)	105 (11.85)	70 (20.77)	250 (15.16)
2.	Goa	8 (1.88)	80 (9.03)	65 (19.29)	153 (9.28)
3.	Gujarat	70 (16.43)	60 (6.77)	10 (2.97)	140 (8.49)
4.	Karnataka	12 (2.82)	76 (8.58)	52 (15.43)	140 (8.49)
5.	Kerala	10 (2.35)	88 (9.93)	42 (12.46)	140 (8.49)
6.	Maharashtra	74 (17.37)	171(19.30)	18 (5.34)	263 (15.92)
7.	Orissa	67 (15.73)	53 (5.98)	22 (6.53)	142 (8.61)
8.	Puduchery	49 (11.50)	83 (9.37)	8 (2.37)	140 (8.49)
9.	Tamil Nadu	43 (10.09)	83 (9.37)	14 (4.15)	140 (8.49)
10.	West Bengal	18 (4.23)	87 (9.82)	36 (10.68)	141 (8.55)
11.	Total	425(100.00)	886(100.00)	337(100.00)	1649(100.00)

Figures in parenthesis indicate percentage to total

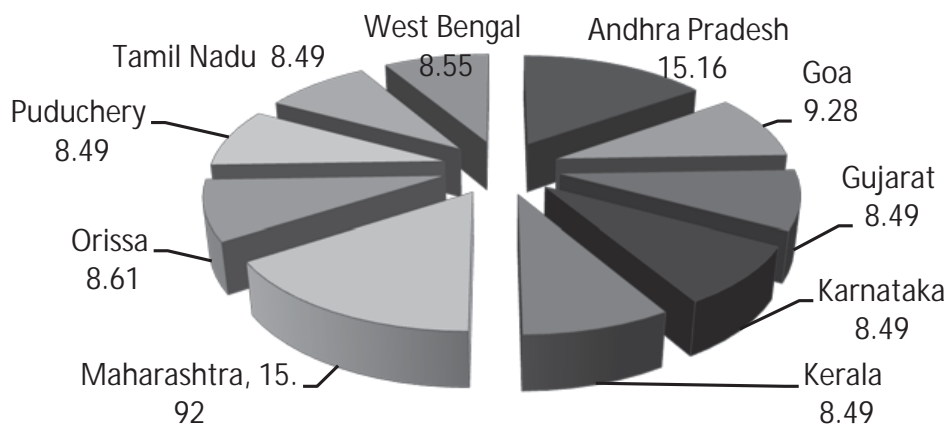


Fig 2.1. Age distribution of respondent households

(ii) Family composition

The family composition of the respondents is indicated in Table 2.2

The results indicate shrinking male-female ratios in urban and rural households.

Table 2.2. Family composition of the respondent households –Male and Female (Number)

Sl. No.	State	Households	Male	Female	Total	Male - Female Ratio
1.	Andhra Pradesh	250(15.16)	507(12.82)	494(13.84)	1001(13.84)	1.03
2.	Goa	153(9.28)	370(9.36)	349(9.78)	749(9.92)	1.06
3.	Gujarat	140(8.49)	396(10.02)	314(8.80)	710(9.40)	1.26
4.	Karnataka	140(8.49)	330(8.35)	331(9.27)	661(8.75)	1.00
5.	Kerala	140(8.49)	390(9.86)	346(9.69)	736(9.74)	1.13
6.	Maharashtra	263(15.92)	617(15.60)	587(16.44)	1204(15.94)	1.05
7.	Orissa	142(8.61)	347(8.78)	284(7.96)	631(8.35)	1.22
8.	Puduchery	140(8.49)	318(8.04)	282(7.90)	600(7.94)	1.13
9.	Tamil Nadu	140(8.49)	307(7.76)	289(8.10)	596(7.89)	1.06
10.	West Bengal	141(8.55)	372(9.41)	294(8.24)	666(8.82)	1.27
11.	Total	1649(100.00)	3954(100.00)	3570(100.00)	7554(100.00)	1.11

Figures in parenthesis indicate percentage to total

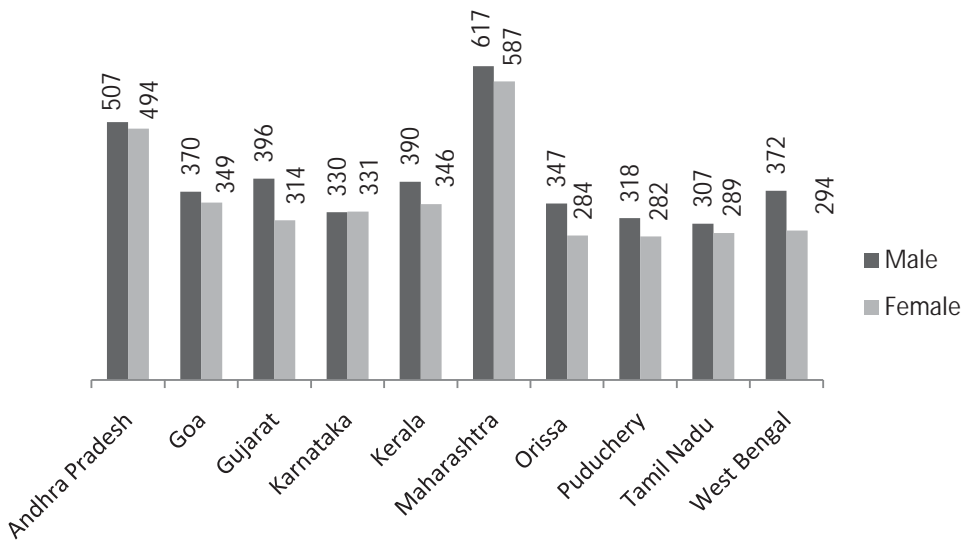


Fig 2.2 Family composition of the respondent households

(iii) Family size

Family sizes of the respondent households are given in Table 2.3. The small family norm is mostly adopted by the fisher households of India. The average size of family in India worked out to be 4.56 ranging from 3.78 in Andhra Pradesh to 5.25 in Kerala. It is interesting to note that 51 per cent of the fisher households in India is housing 2-4 members and hardly 12 per cent of households are having more than 7 members in the family. There exist only minor differences in the family size across the states which indicate the popularization of the small family norms across the states.

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Table 2.3 Family size of the respondent households (Number)

Sl. No.	States	2-4	5-6	7-10	>10	Total	Average family size
1.	Andhra Pradesh	162 (19.2)	84 (13.35)	4 (2.22)		250(15.1)	3.78
2.	Goa	66 (7.86)	73 (11.61)	14 (7.78)		153(9.28)	4.66
3.	Gujarat	51 (6.07)	63 (10.02)	26(14.44)		140(8.49)	5.06
4.	Karnataka	68 (8.10)	50 (7.95)	22(12.22)		140(8.49)	4.74
5.	Kerala	64 (7.62)	46 (7.31)	30(16.67)	3 (10.00)	140(8.49)	5.25
6.	Maharashtra	99 (11.79)	123 (19.55)	41(22.78)	23(76.67)	263(15.9)	4.58
7.	Orissa	79 (9.40)	47 (7.47)	16 (8.89)		142(8.61)	4.28
8.	Puduchery	88 (10.48)	49 (7.79)	3 (1.67)	3 (10.00)	140(8.49)	4.28
9.	Tamil Nadu	89 (10.60)	43 (6.84)	8 (4.44)	0 (0.00)	140(8.49)	4.25
10.	West Bengal	74 (8.81)	51 (8.11)	16 (8.89)	1 (3.33)	141(8.55)	4.72
11.	Total	840(100.00)	629(100.00)	180 (100)	30(100.0)	1649(100)	4.56

Figures in parenthesis indicate percentage to total

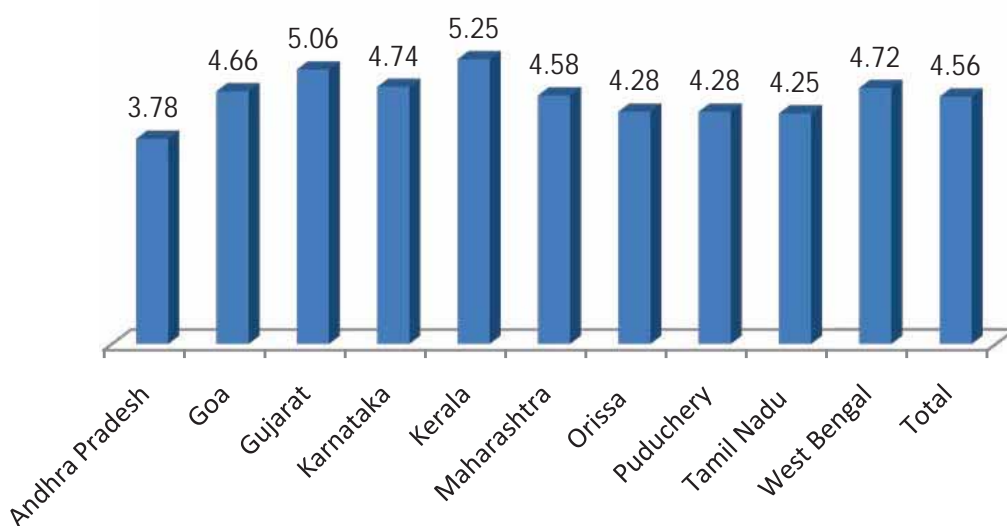


Figure 2.3 Family size of respondent households (Number)

(iv) Age composition

The classification of fisher population as adults (above 15 years) and children (less than 15 years) are given in Table 2.4.

The male – female ratio of the adult group (>15 years) was found to be 1.06:1.00 whereas the same for the children (<15 years) was found to be 1.21:1.00. Adult females in the age group of above 15 year outnumber the males in Goa and Karnataka. Otherwise in all other states males outnumber the females perhaps justifying the common notion preference of males to females in the coastal areas. It is also significant to note that that the younger generation of children is almost represented mostly by males over female.

The dependency ratio was found to be 1:2.43 for the total sample whereas in Goa, Maharashtra and Karnataka it was found to be highest with a rate of 4.57, 4.84 and 5.01 respectively (figure 2.4). The number of children outnumbers the adults only in the case of Andrapradesh with a ratio of 1:0.99. The results clearly indicate that changing paradigms of family size in Indian states.

Table 2.4 Age composition of the respondent households (Number)

Sl. No.	State	Adult (> 15 years)		Children < 15 years)		Total	
		Male	Female	Male	Female	Male	Female
1.	Andhra Pradesh	247(9.09)	229(8.92)	260(21.78)	220(22.36)	507(12.97)	449(12.63)
2.	Goa	289(10.64)	296(11.53)	73(6.11)	55(5.59)	362(9.26)	351(9.87)
3.	Gujarat	237(8.72)	195(7.60)	156(13.07)	119(12.09)	393(10.05)	314(8.83)
4.	Karnataka	272(10.01)	279(10.87)	58(4.86)	52(5.28)	330(8.44)	331(9.31)
5.	Kerala	305(11.23)	272(10.60)	85(7.12)	72(7.32)	390(9.98)	346(9.73)
6.	Maharashtra	501(18.44)	497(19.36)	116(9.72)	90(9.15)	617(15.78)	587(16.51)
7.	Orissa	194(7.14)	174(6.78)	151(12.65)	109(11.08)	343(8.77)	283(7.96)
8.	Puduchery	214(7.88)	183(7.13)	104(8.71)	99(10.06)	318(8.14)	282(7.93)
9.	Tamil Nadu	216(7.95)	210(8.18)	91(7.62)	76(7.72)	307(7.85)	289(8.13)
10.	West Bengal	242(8.91)	232(9.04)	100(8.38)	92(9.35)	342(8.75)	324(9.11)
11.	Total	2717(100)	2567(100)	1194(100)	984(100)	3909(100)	3556(100)

Figures in parenthesis indicate percentage to total

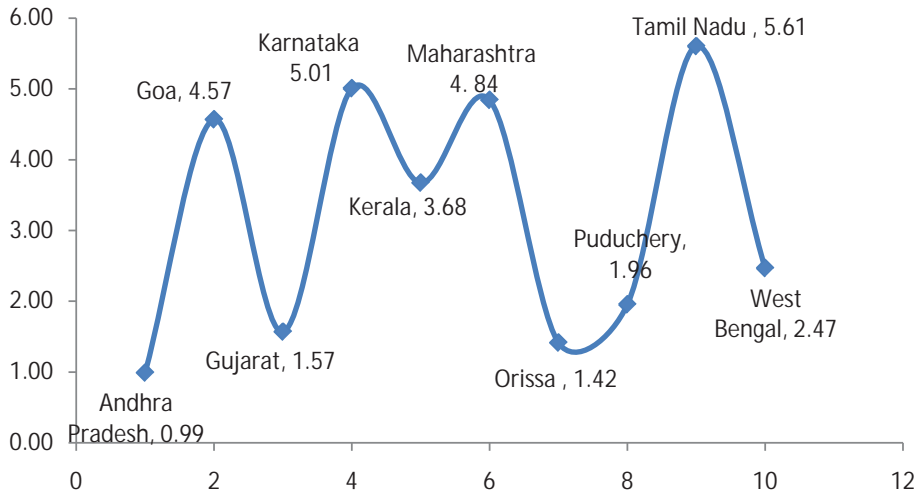


Figure 2.4 Dependency Ratio

B. Literacy status

The literacy status of the respondent households was analysed through the literacy level, educational status – continuing and dropouts and access to educational facilities. The illiterate indicates fisherfolk without any formal education and does not even possess functional literacy.

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(i) Literacy status of sample respondent households

The literacy status includes the level of education as indicated by primary, secondary and collegiate. The primary level indicated schooling till fourth grade, secondary level indicated by high school, secondary and vocational education. The collegiate level of education was denoted by college and professional education.

The general literacy rate of India was 73.52 per cent (Census-2001) against the literacy rate of 77.01 per cent among the fisherfolk. The results indicate that among the literates, 30.55 per cent have primary level of education, 56.69 per cent have secondary level of education and hardly 12.77 per cent have collegiate level of education. The person with collegiate education was more in Karnataka and Goa. The overall literacy rate for the total sample fisherfolk was found to be 77.01 per cent which is slightly higher than the state average.

The highest literacy rate of fishers (95.01%) was obtained in Kerala followed by Karnataka (91.71%) and Puduchery (90 %) . The lowest literacy rate of fishers was found in AP (48.55 %)

Table 2. 5 Literacy Status of respondent households (Number)

Sl. No.	States	Total	Illiterate	Literate	Primary Level	Secondary Level	Collegiate Level	Literacy rate
1.	Andhra Pradesh	1001 (13.37)	515 (34.24)	486 (8.43)	237 (13.46)	217 (6.64)	32 (4.35)	48.55
2.	Goa	713 (9.52)	115 (7.65)	598 (10.37)	127 (7.21)	395 (12.09)	76 (10.33)	83.87
3.	Gujarat	707 (9.44)	143 (9.51)	491 (8.52)	274 (15.56)	209 (6.40)	8 (1.09)	69.45
4.	Karnataka	661 (8.83)	13 (0.86)	628 (10.89)	158 (8.97)	321 (9.82)	149 (20.24)	95.01
5.	Kerala	736 (9.83)	37 (2.46)	675 (11.71)	143 (8.12)	489 (14.96)	43 (5.84)	91.71
6.	Maharashtra	1204 (16.08)	134 (8.91)	1070 (18.56)	150 (8.52)	551 (16.86)	369 (50.14)	88.87
7.	Orissa	602 (8.04)	277 (18.42)	325 (5.64)	255 (14.48)	67 (2.05)	2 (0.27)	53.99
8.	Puduchery	600 (8.01)	26 (1.73)	540 (9.37)	125 (7.10)	395 (12.09)	20 (2.72)	90.00
9.	Tamil Nadu	596 (7.96)	43 (2.86)	524 (9.09)	109 (6.19)	389 (11.90)	27 (3.67)	87.92
10.	West Bengal	666 (8.90)	201 (13.36)	428 (7.42)	183 (10.39)	235 (7.19)	10 (1.36)	64.26
11.	Total	7486 (100)	1504 (100)	5765 (100)	1761 (100)	3268 (100)	736 (100)	77.01 (100)

Figures in parenthesis indicate percentage to total

(ii) Educational profile

The information on education of the respondents in terms of continuance and discontinuance of education would provide the scope of employment opportunities, possible migration, and alternative avocation of the sample households. Thus continuing - dropout ratios were calculated among the respondent households across the sample states.

The dropouts were more at secondary level of education with 54.76 per cent ranging from 3.67 per cent in Maharashtra to 24.40 per cent in Kerala (Table 2.6). The dropouts at primary level of education were about 31.05 per cent ranging from 0.22 per cent in Maharashtra to 26.42 per cent in Andhra Pradesh. The highest number of dropouts at collegiate level was from Maharashtra (39.48 per cent) followed by Puduchery and Andhra Pradesh with 14.16 per cent and 13.73 per cent respectively. The continuing to dropout ratio, which indicates a parameter

Table 2.6 Educational status of respondent households - Continuing and Dropout Number

Sl. No.	States	Continuing	Drop outs			
			Primary	Secondary	Collegiate	Total
1.	Andhra Pradesh	486(23.18)	237(26.42)	217(13.72)	32(13.73)	486(16.82)
2.	Goa	143(6.82)	11(1.23)	72(4.55)	15(6.44)	98(3.39)
3.	Gujarat	106(5.05)	94(10.48)	82(5.18)	4(1.72)	180(6.23)
4.	Karnataka	69(3.29)	48(5.35)	112(7.08)	27(11.59)	205(7.10)
5.	Kerala	189(9.01)	93(10.37)	386(24.40)	7(3.00)	486(16.82)
6.	Maharashtra	324(15.45)	2(0.22)	58(3.67)	92(39.48)	152(5.26)
7.	Orissa	142(6.77)	121(13.49)	86(5.44)	3(1.29)	210(7.27)
8.	Puduchery	288(13.73)	115(12.82)	164(10.37)	33(14.16)	312(10.80)
9.	Tamil Nadu	191(9.11)	32(3.57)	297(18.77)	8(3.43)	337(11.66)
10.	West Bengal	159(7.58)	144(16.05)	108(6.83)	12(5.15)	423(14.64)
11.	Total	2097(100)	897(100)	1582(100)	233(100)	2889(100)

Figures in parenthesis indicate percentage to total

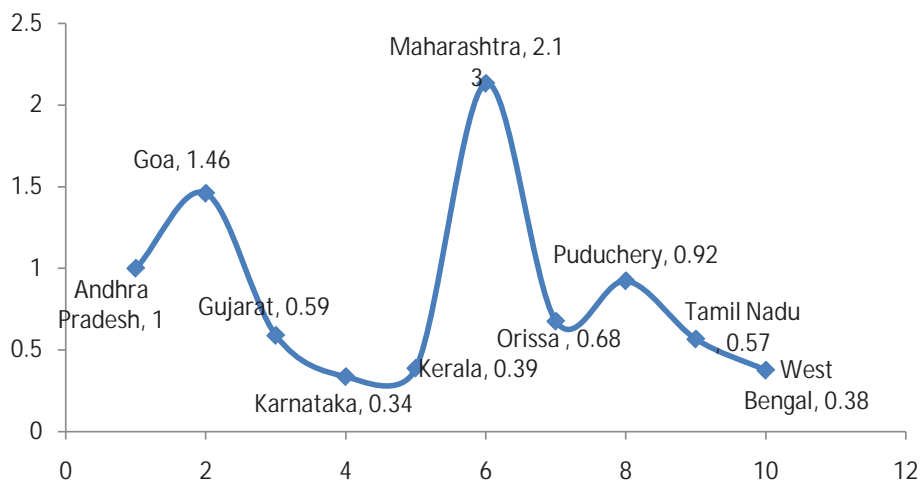


Figure.2.5 Continuing Dropouts ratio among respondent households

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on increasing education was found to be the highest in Maharashtra, Goa and Andra Pradesh with 2.13, 1.46 and 1 respectively (Figure 2.5). The highest number of dropouts was observed in Andra Pradesh and Kerala with 16.82 per cent each and among the dropouts highest number accounted during primary level in Andrapradesh and secondary level in Kerala. Alternative source of livelihood, possibility of seeking employment in fisheries enterprises, scope of labour etc. can be the reasons for the increasing dropouts among these states.

(iii) Access to educational institutions

Access to education is an important yardstick to measure the socio-economic well-being of a society. The proximity of the educational institutions like primary school, high school, college and professional college provides a major impetus when it comes to continuing education. That was something the fisherfolk were said to be denied earlier which was disproved by this analysis.

The access to education was analysed by finding the distance to nearby educational institutions. The average distance from fishing villages to nearby primary, high school, college and professional institution are given in (Table 2.7). As a whole the average distance to a primary school in India is calculated to be 1.05 km from fishing villages of the selected states. Similarly, high schools are at 2.59 km, colleges are at 8.00 km, and professional institutions are at 12.44 km, apart from fishing villages in India. (Figure 2.6 b)

The average distance to primary school ranges from 2.1 km in Orissa to 11.72 km for Gujarat (Figure 2.6.a). The distance for high schools ranges from 1.8 km for Orissa district to 4.00 km for Andra Pradesh. With regards to colleges average distance ranges from 3.6 km for Orissa to 16.15 km for Goa. The average distance for professional institution ranges from 5 to 24.4 km among different states. The results very clearly indicated the reasons for growing literacy among the fisherfolk. Hence it is true that the improved or increased access to educational facilities has helped to increase the literacy level of the fisherfolk.

Table 2.7: Access to Education (km)

Sl. No.	States	Primary School	High School	College	Professional College
1.	Andhra Pradesh	1.00	4.00	4.00	5.00
2.	Goa	2.16	3.25	16.15	20.2
3.	Gujarat	0.89	3.2	18.4	24.4
4.	Karnataka	1.78	2.37	4.85	12.75
5.	Kerala	1.33	2.33	6.38	12.19
6.	Maharashtra	0.8	1.9	4.78	11.3
7.	Orissa	0.2	1.8	3.6	2.8
8.	Puduchery	1.1	3.12	7.65	9.5
9.	Tamil Nadu	0.52	1.76	3.97	15.91
10.	West Bengal	0.7	2.13	10.21	10.36
11.	Average	1.05	2.59	8.00	12.44

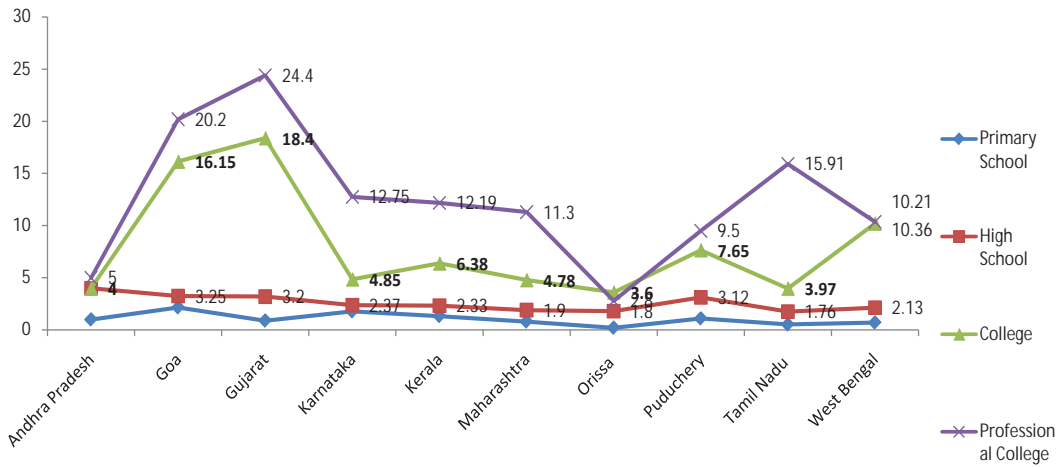


Fig 2.6 a) Access to educational institutions - Distance in km

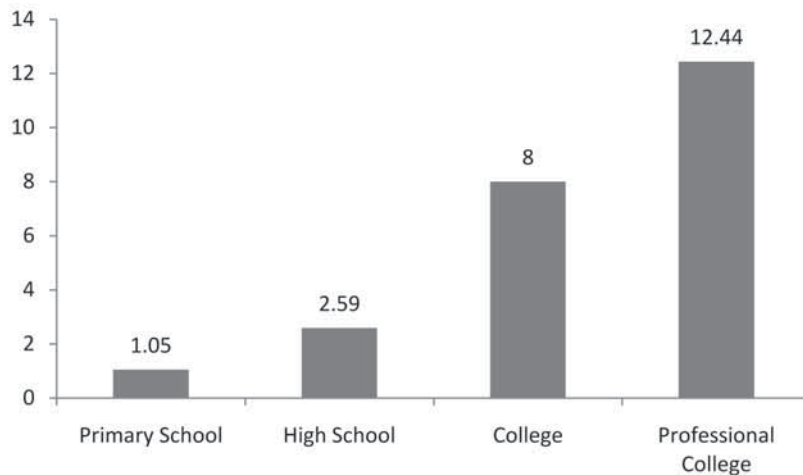


Fig 2.6 b) Access to educational institutions - km

C. Health status

The average life expectancy of people in the state is worked out at 65.5 years ranging from 62.8 years for male to 68.2 years for female. The health status of the respondent households was studied based on the parameters like administration of vaccines, incidence of discontinuation, birth weight of infants, incidence of maternal and child mortality at the time of birth, incidence of common diseases and special ailments among adults and children. Disease management aspects like access to health care, problems in health management and suggestions to improve the health care facilities are also dealt in this session.

(i) Vaccination regime of infants / children (less than 15 years)

The average age of administration of vaccination and incidence of discontinuation among infants / children with age less than 15 years in the selected coastal states of India is furnished in (Table 2.8). The vaccination for Pox, BCG, MMR and Polio were regularly taken by all the respondent families.

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The average age at which the vaccination for pox was given to the child worked out at 1.05 years ranging from 0.75 years at West Bengal to 1.31 years at Goa. The BCG was administered at 2.62 years ranging from 0.09 years at Maharashtra to 10.1 years each at Gujarat and Karnataka. The average age for administering MMR was 2 years which varies from 0.99 years at Kerala to 1.87 years at Goa. Polio vaccine was administered at the age of 4.50 years varying from 3.09 at Puduchery to 5 at majority of the states including Andhra Pradesh, Goa, Gujarat, Karnataka, Maharashtra, Orissa and West Bengal (Figure 2.7). Normally polio administration continues till the age of 5 years .

Table 2.8: Vaccination regime of infants / children (less than 15 years) – Average age of administration and incidence of discontinuation

Sl. No.	States	Pox		BCG		MMR		Polio		Others	
		Age	IOD (per cent)	Age	IOD (per cent)	Age	IOD (per cent)	Age	IOD (per cent)	Age	IOD (per cent)
1.	Andhra Pradesh	1.00		1.5		1.00		5	0	0	0
2.	Goa	1.31	0	0.1	0	1.87	0	5	0	0	0
3.	Gujarat	1.00	0	10.1	0	1.00	0	5	0	0	0
4.	Karnataka	1.00	0	10.1	0	1.00	0	5	0	0	0
5.	Kerala	1.03	0	0.18	0	0.99	0	3.34	0	0	0
6.	Maharashtra	1.17		0.09		1.41		5	0	0	0
7.	Orissa	1	19.4	1	19.4	1.00	30.8	5	0	0	3.8
8.	Puduchery	0.97	0	1.01	0	1.00	0	3.09	0	0	0
9.	Tamil Nadu	1.25	0	1.16	0	1.22	0	3.60	0	0	0
10.	West Bengal	0.75	0	1	0	1.5	0	5	0	0	0
11.	Average	1.05		2.62		1.199		4.50		0.10	

*Incidence of Discontinuation (IOD)

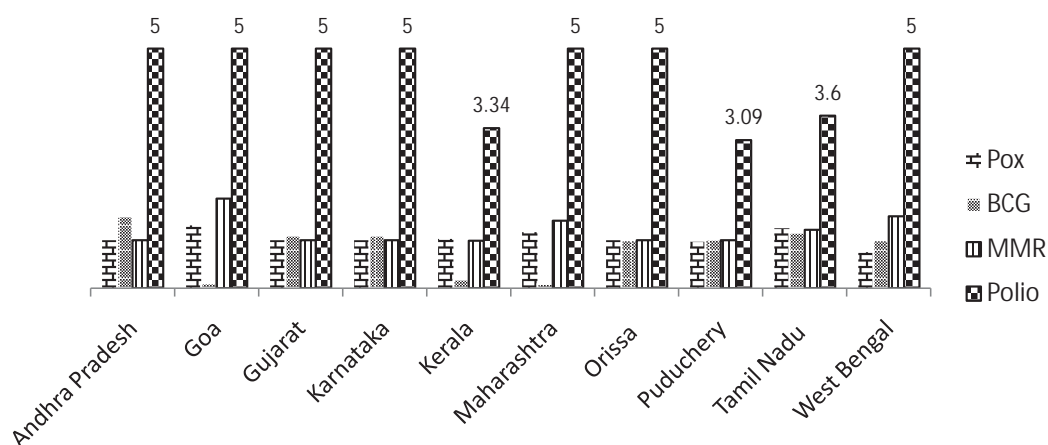


Figure.2.7 Average age of administration of vaccination

The reason for the discontinuation of vaccination regime of infants is given in Table 2.9. The traditional beliefs, lack of awareness about the availability of vaccines, lack of time to access the vaccination, lack of sufficient doses of vaccine at the locality and poor reliability on vaccines provided by government agencies were listed as the reasons for discontinuation of vaccination in the questionnaire. However in India no cases of discontinuation of vaccination among the infants of fisherfolk were reported in majority of the study areas except in Maharashtra. There were 8 cases of discontinuations of vaccinations among the infants of fisherfolk reported in Maharashtra due to the above given reasons.

Table 2.9: Vaccination regime of infants/children - Reason for the discontinuation (Frequency)

Sl. No.	Reasons	AP	GA	GU	KN	KR	MH	OR	PU	TB	WB	TOT
1.	Traditional beliefs	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	1
2.	Lack of awareness about the availability of vaccines	NA	NA	NA	NA	NA	2	NA	NA	NA	NA	2
3.	No time to access the vaccination	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	1
4.	Lack of sufficient doses of vaccine at the locality	NA	NA	NA	NA	NA	3	NA	NA	NA	NA	3
5.	Poor reliability on vaccines provided by government agencies	NA	NA	NA	NA	NA	1	NA	NA	NA	NA	1

(ii) Birth weight of infants

The birth weight of infants in fisher households at selected states is given in Table 2.10. The average birth weight of males was 2.72 kg and female was 2.59 kg. The average weight of male infants ranges from 2.20 kg at Orissa to 3.25 kg at Karnataka and female infants ranges from 1.90 kg at Orissa to 2.98 kg at Puduchery. This is in conformity with the average birth weight of a male and female child in India (Census-2001).

Table 2. 10: Birth weight of infants (kg)

Sl. No:	States	Weight (kg)		
		Male	Female	Total
1.	Andhra Pradesh	2.90	2.50	2.70
2.	Goa	2.52	2.52	2.52
3.	Gujarat	2.45	2.52	2.48
4.	Karnataka	3.25	2.91	3.08
5.	Kerala	2.75	2.64	2.69
6.	Maharashtra	2.57	2.41	2.39
7.	Orissa	2.20	1.90	2.10
8.	Puduchery	2.94	2.98	2.98
9.	Tamil Nadu	2.83	2.65	2.74
10.	West Bengal	2.78	2.86	2.82
11.	Average	2.72	2.59	2.65

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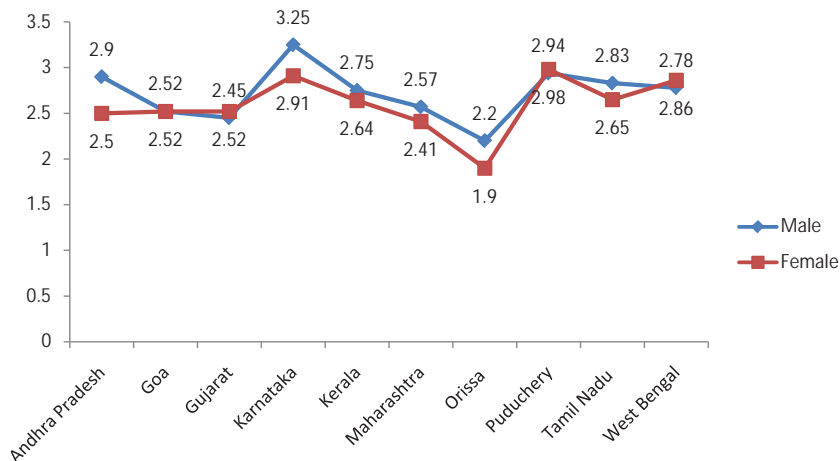


Fig: 2.8 Birth weights of infants (kg)

(iii) Incidence of mortality among mother/ child during birth

Maternal and child mortality at the time of birth and infant mortality had been pressing concerns over the past. The incidence of child mortality was limited to 15 cases among the selected fisher folks of selected states and 3 incidence of maternal mortality also was observed across all the selected respondent fisherfolk. Two cases of maternal mortality were observed in Orissa and one in Gujarat (Table 2. 11). Highest number of child mortality was observed in Orissa (7) followed by Gujarat (4) and Karnataka (3). Generally in India adequate care is being taken now to reduce the incidence of maternal and infant mortality.

Table 2.11: Incidence of mortality among mother/ child during birth (Number)

Sl. No.	States	No of delivery	Mortality of mother/ child during birth				Total
			Mother	Reason	Child	Reason	
1.	Andhra Pradesh	NA	NA	NA	NA	NA	NA
2.	Goa	NA	NA	NA	NA	NA	NA
3.	Gujarat	75	1	NA	4	NA	5
4.	Karnataka	64	NA	NA	3	NA	3
5.	Kerala	19	NA	NA	NA	NA	NA
6.	Maharashtra	1	NA	NA	1	NA	1
7.	Orissa	142	2	NA	7	NA	9
8.	Puduchery	39	NA	NA	NA	NA	NA
9.	Tamil Nadu	38	NA	NA	NA	NA	NA
10.	West Bengal	32	NA	NA	NA	NA	NA
11.	Total	410	3	NA	15	NA	18

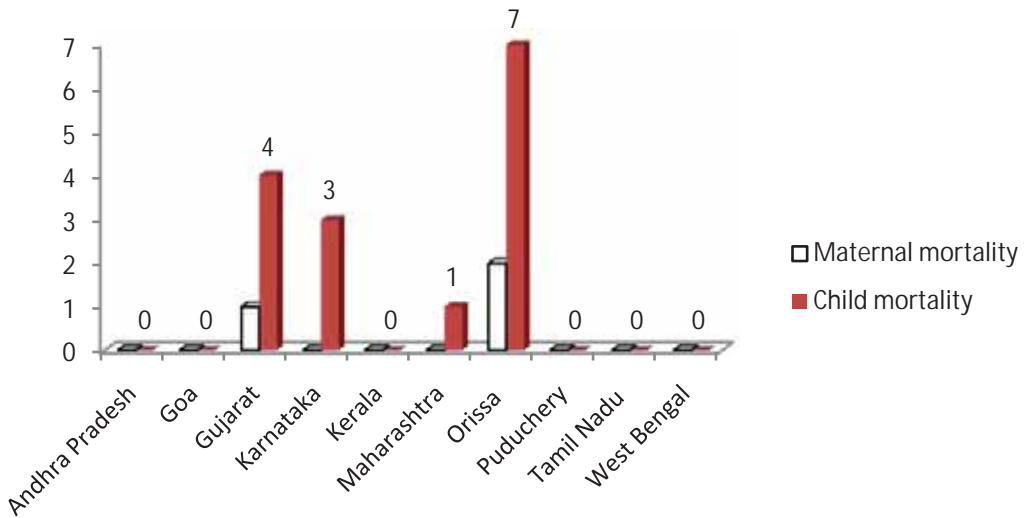


Fig: 2.9 Maternal and Child mortality ratio

(iv) Incidence of diseases among adults

The incidence, frequency, and previous occurrence of diseases among the adult family members of the respondents across the 9 coastal states and one UT are discussed in the Table 2.12A and 2.12B. Major diseases found among the respondents were categorized under two groups, viz; common diseases and special ailments. Fever/flu, body ache, diarrhoea, gastroenteric disease, skin disorder, reproductive disorders are included in common diseases. Special ailments include diseases like cardiac failure, tuberculosis, anaemia, diabetics, blood pressure, AIDS and others.

Table 2.12A: Incidence of diseases among adult (Male and Female) - Annual frequency - East coast India

Sl. No:	Diseases	Districts											
		TN		PU		AP		OR		WB		Total	
		M	F	M	F	M	F	M	F	M	F	M	F
(i) Common Diseases													
1.	Fever/Flu	2.73 (74)	2.45 (72)	1.93 (135)	2.05 (76)	0.96 (241)	1 (250)	2.10 (131)	1.8 (106)	1.21 (61)	1.38 (57)	2.73 (74)	2.73 (74)
2.	Body Aches	3.34 (72)	1.95 (20)	0.44 (50)	0.8 (84)	0.8 (84)	0.052 (13)	2.80 (50)	3.8 (27)	8.92 (13)	11.83 (18)	3.34 (72)	3.34 (72)
3.	Diarrhoea	0.82 (40)	2.02 (37)	1.29 (131)	1.5 (133)	Nil	Nil	1.70 (14)	1.4 (12)	2.25 (4)	1 (4)	0.82 (40)	0.82 (40)
4.	Gastroenteric disease	Nil	Nil	0.007 (1)	Nil	Nil	Nil	2.1 (47)	1.8 (35)	5.53 (13)	4.82 (17)	Nil	Nil
5.	Skin disorder	1.37 (12)	1.08 (3)	0.007 (1)	Nil	Nil	Nil	1.3 (20)	1.7 (19)	12 (15)	0	1.37 (12)	1.37 (12)
6.	Reproductive disorder	1.10 (5)	0.50 (1)	Nil	Nil	Nil	Nil	2 (2.)	2 (2)	12 (1)	12 (1)	1.10 (5)	1.10 (5)

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(ii) Special Ailments													
7.	Cardiac failure	0.66 (3)	0.56 (4)	0.007 (1)	Nil	Nil	Nil	1 (1)	1 (2)	1 (4)	1 (1)	Nil	Nil
8.	TB	1.33 (7)	0.25 (2)	Nil	Nil	Nil	Nil	1 (10)	1 (2)	7	0	Nil	Nil
9.	Anaemia	0.37 (2)	2.12 (12)	Nil	Nil	Nil	Nil	1.8 (5)	0 (0)	0	12 (1)	Nil	Nil
10.	Diabetes	Nil	Nil	Nil	Nil	Nil	Nil	0 (0)	Nil	12	12	Nil	Nil
11.	Blood Pressure	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
12.	AIDS	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
13.	Others*	Nil	Nil	0.02 (4)	0.01 (2)	Nil	Nil	2.5 (13)	2.1 (7)	11.23	10.61	Nil	Nil

Figures in parenthesis indicate the number of incidence in families,
(* others include Thyroid, Sinus)

Table 2.12B: Incidence of diseases among adult (Male and Female) -
Annual frequency - West coast India

Sl. No:	Diseases	Districts											
		KR		KN		GA		MH		GU		Total	
		M	F	M	F	M	F	M	F	M	F	M	F
(i) Common Diseases													
1.	Fever/Flu	2.18 (115)	2.12 (111)	122	88	3.00 (94)	2.78 (88)	1.67 (180)	1.38 (112)	287	296	Nil	Nil
2.	Body Aches	3.18 (69)	3.91 (55)	3	2	3.25 (42)	3.40 (57)	6.03 (123)	1.37 (67)	183	143	Nil	Nil
3.	Diahorrea	1.50 (9)	1.36 (7)	39	2	0.05 (3)	0.05 (2)	1.21 (25)	0.60 (8)	174	148	Nil	Nil
4.	Gastro- enteric disease	1.23 (26)	1.26 (17)	5	2	0.55 (9)	0.05 (6)	1.84 (42)	0.71 (21)	32	53	Nil	Nil
5.	Skin disorder	1.33 (6)	1.28 (15)	23	15	Nil	0.05 (1)	0.90 (9)	0.64 (23)	22	15	Nil	Nil
6.	Reproductive disorder	Nil	Nil	7	Nil	Nil	Nil	Nil	0.47 (15)	0	Nil	Nil	Nil
(ii) Special Ailments													
7.	Cardiac failure	Nil	0.16 (1)	6	Nil	Nil	Nil	0.20 (3)	0.40 (2)	Nil	Nil	Nil	Nil
8.	TB	2.00 (1)	Nil	15	Nil	Nil	Nil	0.20 (2)	0.20 (2)	Nil	Nil	Nil	Nil
9.	Anaemia	0.16 (6)	0.19 (7)	Nil	Nil	Nil	Nil	0.40 (4)	0.30 (14)	Nil	Nil	Nil	Nil

10.	Diabetes	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
11.	Blood Pressure	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
12.	AIDS	Nil	Nil	Nil	Nil	Nil	Nil	0.40 (2)	Nil	Nil	Nil	Nil	Nil
13.	Others*	2.44 (10)	3.08 (10)	3	Nil	Nil	Nil	0.62 (23)	0.25 (19)	Nil	Nil	Nil	Nil

Figures in parenthesis indicate the number of incidence in families, (* others include Thyroid, Sinus)

In continuation with the above tables, the major diseases found in both east coast and west coast of India were fever/flu, body aches, diarrhoea, gastro enteric disease, skin disorder and reproductive disorder. The most common diseases found among the respondent families of both areas were fever and body aches. In the east coast of India, on an average, the annual frequency of fever/flu found among male members of the respondent families was 1.79 times and it was 1.74 times among female members. In the case of body aches, the annual frequency was found to be 3.26 times/year in males and 3.69 times in females. Occurrence of diarrhoea and skin disorder was at a frequency of 1.52 times a year among male and 1.48 times in a year among females. Whereas in the case of west coast, frequency of fever/flu among male members was at 2.28 numbers and it was 2.09 numbers among female members. In the case of body ache the annual frequency was 4 times in males and 2.9 times in females.

The most common special ailments found among the respondents in both areas were cardiac failure, TB and anaemia etc.

(v) Access to health care

The access to health care is also an important parameter which determines the continued health of the fisherfolk. Often the distance leads to the non treatment or its delay. The access to health care was measured using the distance required to avail the same. (Table 2.13). The results indicate that there exists considerable access to the primary health centre

Table 2.13: Access to health care (km)

Sl. No.	States	Primary Health Centre	Hospital
1.	Andhra Pradesh	1.10	2.05
2.	Goa	4.97	5.78
3.	Gujarat	6.06	18.37
4.	Karnataka	1.16	7.06
5.	Kerala	1.18	5.78
6.	Maharashtra	0.71	3.66
7.	Orissa	2.80	3.90
8.	Puduchery	3.15	7.45
9.	Tamil Nadu	0.84	5.08
10.	West Bengal	1.08	16.00
11.	Total (Average)	2.31	7.51

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and hospital across the states. On an average the primary health centre was available at a distance of 2.31 km and the hospital at 7.51 km across the states. However, Gujarat is having comparatively less access to health care facilities as the distance to hospital and primary health centre was more than the other states with 18.37 km and 6.06 km respectively. Likewise, access to hospital facilities in West Bengal was also comparatively poor as it located 16 km apart (figure 2.10).

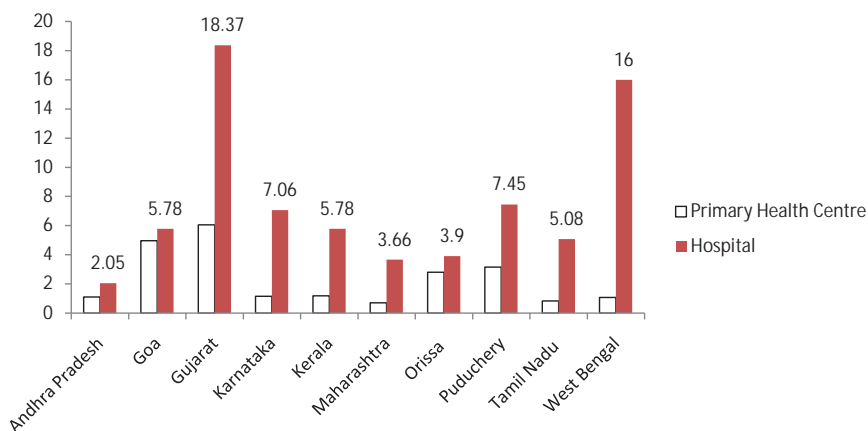


Fig: 2.10 Access to health care institutions

(vi) Problems in health management

The major problems underwent in health management was analyzed based on the opinion of the sample respondents. The major reasons cited by the respondents are indicated in Table 2.14. The major reasons suggested include difficulty in accessing the hospital due to distance, non availability of specialist and paramedics in health centres, poor infrastructure, lack of adequate effective medicines, problems on cleanliness/sanitation, drinking water problem and work related stress.

Non availability of specialist and paramedics in health centres was the major problem as perceived by the respondent households across the states (41.44 per cent) especially in West Bengal (57.75), Goa (10.80), and Karnataka (13.62). 40 per cent of the total respondents opined on lack of adequate effective medicines as a major problem followed by poor infrastructure (26 per cent). Drinking water and problems on cleanliness/sanitation was found to be an impeding factor in Karnataka and Orissa. Work related stress is not a big concern for most of the respondents

(vii) Suggestions to improve healthcare facilities

The respondent households opined on the different suggestions for improving the health care facilities and the details are furnished in Table 2.15. The major suggestions include, increasing the number of doctors/specialists, construction of quarters facility for doctors so that they are available 24 x 7, providing available sufficient medicines for all diseases with free of cost, construction of the modern hospital with all infrastructure and healthcare

Table 2.14: Problems in health management (Frequency)

Sl. No	Problems	States										
		AP	GA	GU	KN	KR	MH	OR	PU	TN	WB	TOT
1.	Difficulty in accessing the hospital due to distance	5	0	1	0	2	0	0	18	1	18	45
2.	Non availability of specialist and paramedicines in health centres	5	23	0	0	29	0	0	15	18	123	213
3.	Poor infrastructure	4	0	0	0	33	11	0	10	32	46	136
4.	Lack of adequate effective medicines	4	0	0	0	25	3	48	3	48	76	207
5.	Problems on Cleanliness/ Sanitation	4	0	0	0	45	0	23	0	8	0	80
6.	Drinking water problem	4	0	0	0	54	1	23	0	13	0	95
7.	Work related stress	5	0	0	0	2	0	10	0	0	0	17
8.	Others	5	0	100	75	0	2	0	0	0	0	182
9.	Total	36	23	101	75	0	17	104	46	112	0	514

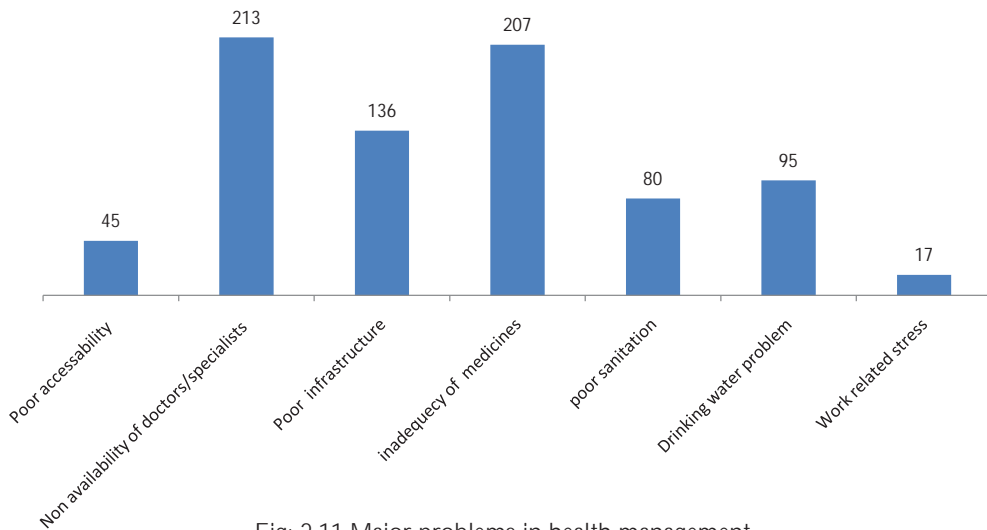


Fig. 2.11 Major problems in health management

facilities, provision of ambulance for emergency (especially during delivery, accidents, etc.) and providing good drinking water facility. More than 50 per cent of the respondents across the states demanded for modern hospital with all infrastructure and health care facilities and 41 per cent of the respondents demanded for more number of doctors/specialists.

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Table 2.15: Suggestions to improve health care facilities (Frequency)

Sl.No	Suggestions	States										
		AP	GA	GU	KN	KR	MH	OR	PU	TN	WB	TOT
1.	Increase the number of doctors/ specialists	0	1	0	0	25	0	33	13	28	100	200
2.	Make quarters facility for doctors so that they are available 24 x 7	0	0	0	0	0	0	0	13	15	24	52
3.	Make available sufficient medicines for all diseases with free of cost	0	1	0	22	34	0	40	0	23	34	154
4.	Construction of modern hospital with all infrastructure and health care facilities	0	0	41	54	22	11	25	0	0	97	250
5.	Provide ambulance for emergency (especially during delivery accidents, etc.)	0	0	0	0	8	0	0	6	8	0	22
6.	Need good drinking water facility	0	0	0	0	31	3	21	0	13	0	68
7.	Total	0	2	41	76	120	14	117	32	87	0	489

D. Income status of respondent households

The income profile of the respondent households were analyzed using income patterns, respondent's involvement in non fisheries activities and expenditure pattern. In addition the indebtedness and savings were analyzed using details on savings, indebtedness, sources of lending, purpose of availing loan and suggestions for enhancing the income and employment generation.

(i) Income pattern of respondent households

The income pattern of the respondent household were analyzed using the monthly income across the coastal states of India are discussed in the Table 2.16.

The major income sources of the respondent households comprised of income from fishery, business, agriculture, labour services, and other service sectors. The highest monthly average income generated by the total respondents across different coastal states was through fisheries sector contributing Rs. 6757.08 (77.29 per cent of the total income) with a highest share from Puducherry (Rs. 17657) and Andhra Pradesh (Rs. 11223). This is followed by income from labour at Rs. 956.56, income from business at Rs. 576.82 and from agriculture sector at Rs.269.83.

The state wise monthly income status of the respondents indicated that Karnataka had no other sources of income other than fisheries sector contributing an average monthly income of Rs.4308.16. In Andrapradesh the average income shared by fisheries sector, business and other service sectors was 76.45 and 15.72 and 7.83 per cent respectively.

In Tamil Nadu the major income sources of respondents were fisheries sector, business sector, labour and other service sector making a total monthly income of Rs. 8531.50. The total income of Rs.13715.00 in Gujarat was shared by fishery sector with a total amount of

Rs.5354.19 (39.04), labour with a total amount of Rs. 5961.20 (43.46) and business with a total amount of Rs.2000 and Rs.400 respectively.

Table 2.16 Income pattern of respondent households

Sl.No	States	Enterprise					Total
		Fishery	Labour	Agriculture	Business	Any others	
1.	Andhra Pradesh	11223.10 (76.45)	0.00 (0.00)	0.00 (0.00)	2307.80 (15.72)	1150.00 (7.83)	14679.00 (100.00)
2.	Goa	5826.12 (75.94)	797.36 (10.39)	13.08 (0.17)	964.72 (12.57)	70.72 (0.92)	7671.90 (100)
3.	Gujarat	5354.19 (39.04)	5961.20 (43.46)	2000.00 (14.58)	400.00 (2.92)	0.00 (0.00)	13715.00 (100)
4.	Karnataka	4308.16 (100)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4308.16 (100)
5.	Kerala	5719.66 (74.44)	1056.10 (13.74)	0.66 (0.01)	627.90 (8.17)	279.66 (3.64)	7690.20 (100)
6.	Maharashtra	4196.19 (88.87)	321.67 (6.81)	18.52 (0.39)	185.49 (3.93)	0.00 (0.00)	4721.87 (100)
7.	Orissa	2659.20 (97.02)	11.20 (0.41)	0.00 (0.00)	70.40 (2.57)	0.00 (0.00)	2740.80 (100)
8.	Puduchery	17657.10 (97.16)	200.00 (1.10)	0.00 (0.00)	128.48 (0.71)	188.56 (1.04)	18174.20 (100)
9.	Tamil Nadu	7954.19 (93.23)	92.85 (1.09)	0.00 (0.00)	355.88 (4.17)	128.57 (1.51)	8531.50 (100)
10.	West Bengal	2672.92 (51.48)	1125.24 (21.67)	666.00 (12.83)	727.60 (14.01)	0.00 (0.00)	5191.20 (100)
11.	Average	6757.08 (100)	956.56 (100)	269.83 (100)	576.82 (100)	181.75 (100)	8742.41 (100)

Figures in parenthesis indicate percentage to total

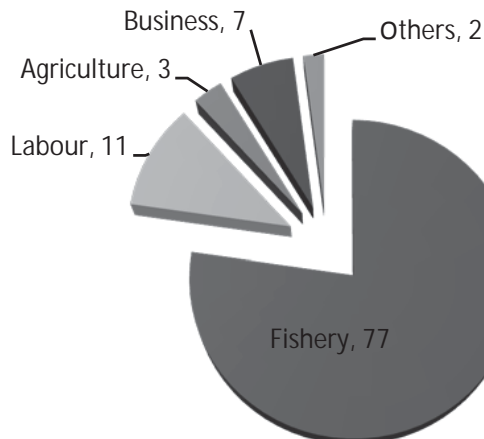


Fig. 2.12 Income status of the respondents

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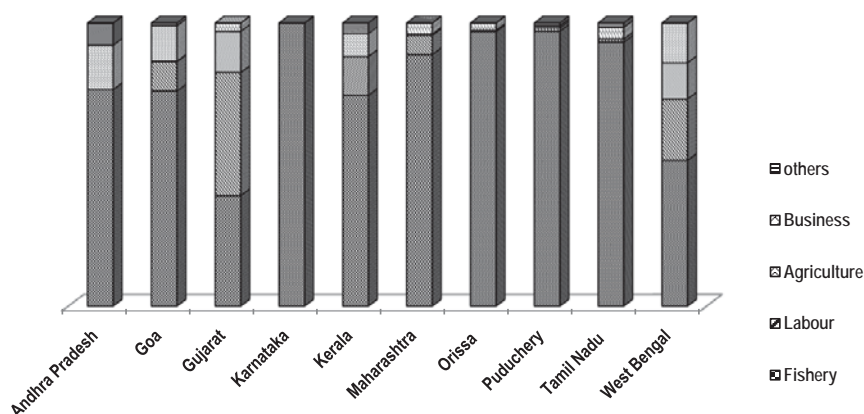


Fig 2.13 Income status of the respondents (statewise)

(ii) Involvement in non-fisheries activities

The involvement of respondent households' in non-fisheries activities are illustrated in the Table 2.17.

The analysis on the respondent households' involvement in the non-fisheries activities indicated that many of the respondents were involved in non-fisheries activities, which provided them an additional source of income. The major non-fishing activities involved by respondents were business, labour, agriculture and other service sectors with a contribution of 25.79, 45.41, 12.21 and 17.97 per cent respectively. The total number of respondents involved in business was 22.34 per cent in Andhra Pradesh. In West Bengal 38.37 per cent of the respondents involved in labour activities which might be due to the higher wage rate prevailing in the state. It was found that there was not even a single respondent involved in labour and agriculture activities in Karnataka. Likewise in Orissa, Puduchery, and Tamil Nadu there was not a single respondent involved in agriculture activities to gain additional income.

The result clearly indicated the existence and practice of alternative avocation in the selected respondent households.

Table 2.17: Respondents involvement in non-fisheries activities

Sl. No	States	Respondents involved in non-fisheries activities				Total
		Labour	Agriculture	Business	Any others	
1.	Andhra Pradesh	98(29.61)	55(61.80)	42(22.34)	85(64.89)	280(38.41)
2.	Goa	13 (3.93)	1(1.12)	14(7.45)	4(3.05)	32(4.39)
3.	Gujarat	1 (0.30)	1(1.12)	30(15.96)	0	32(4.39)
4.	Karnataka	0	0	1(0.53)	0	1(0.14)
5.	Kerala	33 (9.97)	2(2.25)	24(12.77)	28(21.37)	87(11.93)
6.	Maharashtra	49 (14.80)	6(6.74)	40(21.28)	0	95(13.03)
7.	Orissa	3 (0.91)	0	11(5.85)	0	14(1.92)
8.	Puduchery	4 (1.21)	0	3(1.60)	9(6.87)	16(2.19)
9.	Tamil Nadu	3(0.91)	0	8(4.26)	5(3.82)	16(2.19)
10.	West Bengal	127(38.37)	24(26.97)	15(7.98)	0	156(21.40)
11.	Total	331(100)	89(100)	188(100)	131(100)	729(100)

Figures in parenthesis indicate percentage to total

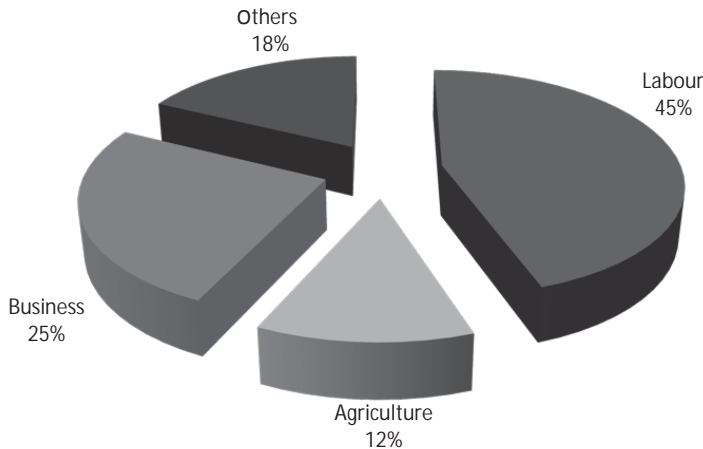


Fig: 2.14 Involvement in non-fisheries activities – All India

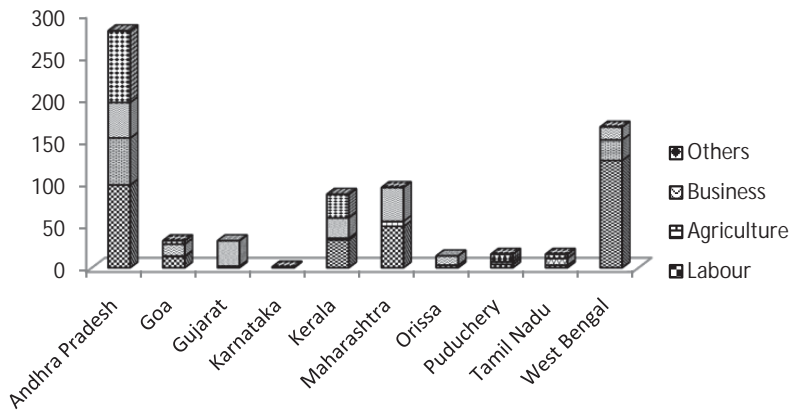


Fig: 2.15 Involvement in non-fisheries activities – State wise

(iii) Pattern of expenditure

The major household expenses measured include expenditure on food, clothing, fuel, medical, education, entertainment, personal and durables. The result of the pattern of monthly expenditure is represented in Table 2.18.

The average monthly expenditure pattern of the households worked out across the states, was at Rs 6961.57 with an average share of Rs 2741.981 (41 per cent) on food, Rs 893.044 (14 per cent) on personal and 665.224 (10 per cent) on medical expenses. The least expenditure was at Rs 374.78 (6 per cent) to purchase fuels.

The total expenditure pattern of the selected states indicates that the highest household expenditure was noticed in Puduchery with an average amount of Rs. 13488 and the least in Orissa with an average amount of Rs 2595.2. In Karnataka fisherfolks spent more on education, with an average amount of Rs 1369.46, than that of other selected states. The least amount spent on education was by respondent households of Orissa with an average amount of Rs 87.2.

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In Puduchery the least expenditure was incurred on entertainment with an average amount of Rs 26.4. The medical expense was high in Karnataka at Rs 2557.42 when compared with other selected coastal states.

The results clearly spelt out that the expenditure incurred on food contribute most of the family expenditure. Education, entertainment and social security measures share higher proportion in the family expenditure across the selected coastal states (Fig. 2.16, 2.17).

Among the different components of expenditure Rs 2741.98(41 per cent) was spent on food followed by personal 893.04 (14 per cent).

Table 2.18: Monthly expenditure pattern of the fisher family (Rs.)

Sl.No	States	Items								Total
		Food	Clothing	Fuel	Medical	Education	Entertainment	Personal	Durables	
1.	Andhra Pradesh	3004.8	852.88	601.73	601.92	400.00	1603.84	1842.30	67.30	8917.11
2.	Goa	1827.44	244.48	477.00	484.24	350.72	343.96	1700.64	288.00	5716.48
3.	Gujarat	1597.82	177.71	187.10	399.48	214.09	166.64	734.84	1366.66	4844.32
4.	Karnataka	2023.98	751.42	210.38	2557.42	1369.46	236.30	215.50	0.00	7364.66
5.	Kerala	2888.89	302.80	329.79	350.96	366.00	260.64	689.33	2274.04	7961.72
6.	Maharashtra	3683.36	1593.84	291.84	463.76	581.56	256.32	434.88	573.48	7879.04
7.	Orissa	1516.40	135.20	100.00	126.40	87.20	147.20	470.40	4.80	2595.20
8.	Puduchery	8434.72	931.52	857.92	631.52	895.36	26.40	1142.12	568.96	13488.00
9.	Tamil Nadu	2781.82	309.27	260.96	726.76	454.81	1163.95	1305.59	82.87	7086.03
10.	West Bengal	2160.58	175.72	431.08	309.78	156.64	41.76	394.84	93.20	3763.60
11.	Average	2741.99	547.48	374.78	665.22	487.58	424.70	893.04	531.93	6961.57

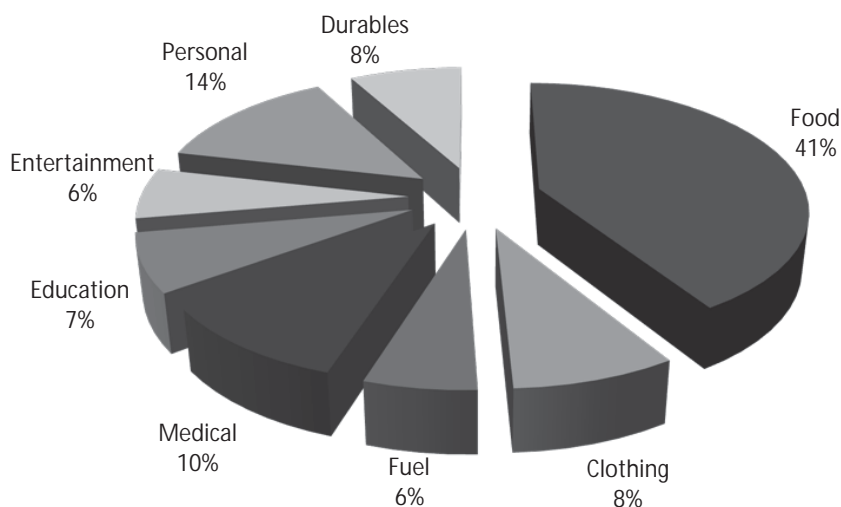


Fig. 2.16 Average monthly expenditure pattern

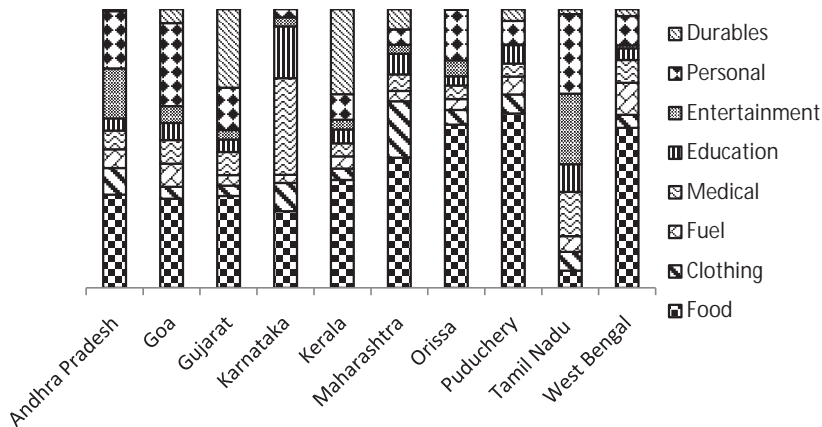


Fig: 2.17 Pattern of expenditure of the fisher family (Monthly Rs) state wise

(iv) Indebtedness and Savings

The saving details of the respondent’s household indicated that about 65.5 per cent of the respondents have no savings. 30.24 per cent of the respondent households possessed a saving of less than Rs.50000. It is significant to note that 96.43 per cent of the households which had savings were from Puduchery. Lack of savings or dis savings related to the need for indebtedness for the sustenance of the livelihoods. The average savings of a household in Puducherry was found to be 96.43 per cent whereas that of a household in Orissa was 43.66 per cent. The plight of respondent households from Kanyakumari and Tuticorin is well understood where none of them possess savings.

Table 2.19: Savings details of respondent households (Number)

Sl.No	States	Frequency of respondents having Savings				Total
		Nil	< 50 k	50-100.00k	>100.00k	
1.	Andhra Pradesh	125	100	25	0	250
2.	Goa	82	69	2	0	153
3.	Gujarat	73	52	15	0	140
4.	Karnataka	124	16	0	0	140
5.	Kerala	116	24	0	0	140
6.	Maharashtra	150	108	5		263
7.	Orissa	62	80			142
8.	Puduchery	135	1	3	1	140
9.	Tamil Nadu	122	17	0	1	140
10.	West Bengal	92	32	14	0	142
11.	Total	1081	499	59	2	1650

(v) Indebtedness of the respondents households

The lack of savings and increased expenditure for mere sustenance often lead to indebtedness.

The results indicated that the average amount of indebtedness per person was Rs. 32027.66 in which the highest average amount of indebtedness was recorded in Kerala with

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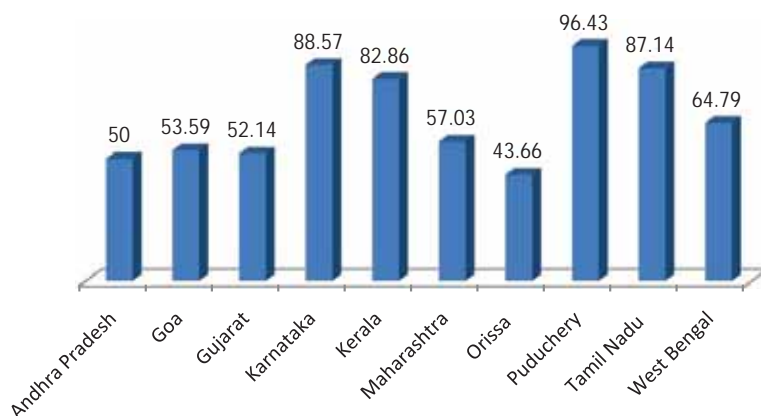


Fig. 2.18 Percentage of fishers having savings

Rs. 82292.80. The highest proportion of respondents who borrowed money for different purposes was found in Andhra Pradesh with 31.85 per cent followed by Kerala with 10.83 per cent. It was found that the average amount repaid by the respondents in Goa was high with 53.61 per cent.

Table 2.20. Indebtedness of respondent's households (Rs.)

Sl.No	States	Indebtedness			
		Number of persons	Average Amount per person	Average Amount repaid	Per cent repaid
1.	Andhra Pradesh	250 (31.85)	17500.00	2000.00	11.43
2.	Goa	74 (9.43)	13606.51	7294.90	53.61
3.	Gujarat	62 (7.90)	63944.15	16625.25	26.00
4.	Karnataka	0.00	0.00	0.00	0.00
5.	Kerala	85 (10.83)	82292.80	15225.49	18.50
6.	Maharashtra	71 (9.04)	8919.74	504.90	5.66
7.	Orissa	80 (10.19)	24792.75	6198.25	25.00
8.	Puduchery	54 (6.88)	44178.60	11044.60	25.00
9.	Tamil Nadu	76 (9.68)	27394.30	2463.00	8.99
10.	West Bengal	33 (4.20)	5620.05	1120.00	19.93
11.	Total	785 (100.00)	32027.66	6941.82	21.67

Figures in parenthesis indicate percentage to total

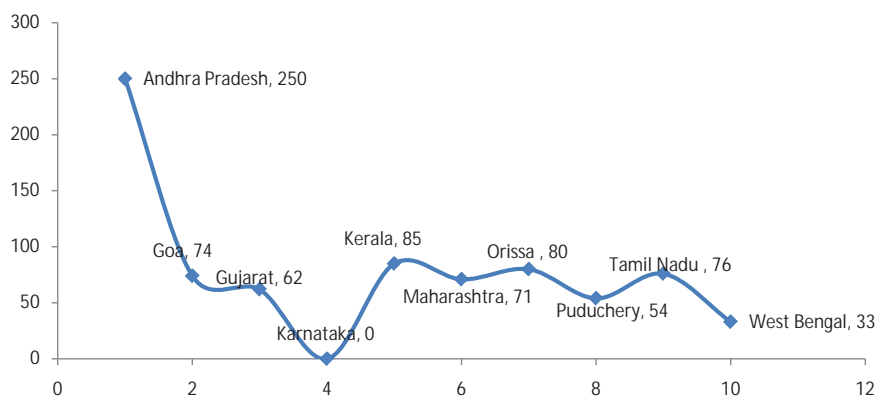


Fig 2.19 Level of indebtedness

On an average 19.41 per cent of the availed loans was repaid .The analysis of repayment of the debt indicated that the respondent's households in Goa repaid 53.61 per cent of the loans availed whereas the least repayment was found in Maharashtra with 5.66 per cent.

(vi) Sources of lending

The indebtedness often results in availing loans from the different institutions. The major lending organizations include banks, co-operatives, private money lenders, friends/relatives and jewel loans. The details of the sources of money lending as availed by the respondent households is furnished in Table 2.21.

A total of 839 respondents had availed loans for various purposes. It was found that private money lenders constituted the major source of lending with more than 29.32 per

Table 2.21: Sources of lending

Sl.No	Sources	States										TOTAL
		AP	GA	GU	KN	KR	MH	OR	PU	TN	WB	
1.	Banks	13	47	0	0	26	41	5	1	35	11	179 (21.33)
2.	Co-operative	12	12	0	0	39	1	1	0	7	4	76 (9.06)
3.	Private money lenders	50	0	58	0	25	2	8	46	41	16	246 (29.32)
4.	Friends / Relatives	25	0	4	0	0	7	0	0	0	1	37 (4.41)
5.	Jewel loans	150	0	0	0	3	0	0	13	3	0	169 (20.14)
6.	Others (SHGs)	0	8	0	0	0	2	37	0	85	0	132 (15.73)
7.	Total	250	67	62	0	93	53	51	60	171	32	839 (100.00)

Figures in parenthesis indicate percentage to total

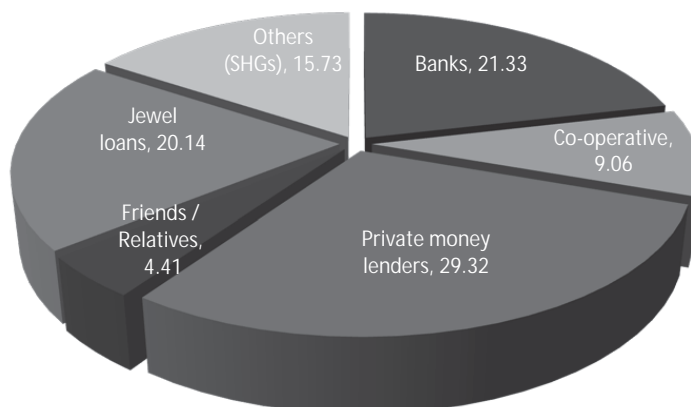


Fig 2.20: Sources of lending

Livelihood Status of Fishers in India

cent beneficiaries of the respondent household availing credit. Banks provided credit to 179 respondents and constituted more than 21.33 per cent of the sample respondents.

Among the 839 loans availed 29.32 per cent was provided by the private money lenders followed by banks (21.33 per cent). The analysis indicate that the non institutional credit still holds good among the fishers in India. It was found that the highest number of respondents (29.32 per cent) was depending on money lenders for borrowing money in emergency situation.

(vii) Purpose of availing loans

The details on the purpose of availing loans and number of loans availed by the respondent households are indicated in Table 2.22.

The major purposes for which loans were availed included purchase of craft gear and other fishing related equipments, house construction/land purchase, marriage expenses, education and health and social security.

House construction and land purchase were the major reason for availing loans. It was found that of the 714 respondents who availed loans, more than 17 per cent was availed for the purpose of house construction and land purchase. Purchase of gears and other fishing related equipment found importance among 39.22 per cent of the respondent households.

Table 2.22. Purpose of availing loans (Number of respondents who had availed)

Sl.No	Purpose	States											TOT
		AP	GA	GU	KN	KR	MH	OR	PU	TN	WB		
1.	Purchase of craft/ gear and other fishing related equipments	40	42	55	0	17	39	7	32	23	25	280 (39.22)	
2.	House construction / Land purchase	10	15	1	0	52	7	3	9	29	2	128 (17.93)	
3.	Marriage expense	20	0	0	0	14	1	0	2	11	2	50 (7.00)	
4.	Education	20	10	0	0	3	4	0	5	11	0	53 (7.42)	
5.	Health and social security	0	15	4	0	4	3	1	5	11	0	43 (6.02)	
6.	Any others (business and purchase of vehicles)	10	17	2	0	2	38	1	2	85	3	160 (22.41)	
7.	Total	100	99	62	0	92	92	12	55	170	32	714 (100)	

Figures in parenthesis indicate percentage to total

In Andhra Pradesh, expenses for the purchase of craft and gear was found to be the major stake (40 per cent) among the sample respondents followed by marriage and education expense (20 per cent). In Goa the amount of loan availed was highest for the purchase of craft and gear (42 per cent) followed by other expenses (business and purchase of vehicles) (17 per cent). In Gujarat the major chunk of loans were attributed towards purchase of craft/gear and other fishing related equipment followed by house construction and land purchase (55 per cent). In Kerala 52 per cent of the respondents availed loans for house construction and land purchase followed by purchase of crafts/gear and other fishing related equipment. (17 per cent)

(viii) Suggestions to enhance the income and employment generation

The percentage response of the respondents’ suggestions for enhancing the income and employment generation by fishermen is indicated in Table 2.23

Table 2.21: Suggestions to enhance the income and employment generation

Sl. No:	Suggestions	AP	GU	KR	OR	PU	TN	WB	TOT
1.	Arranging the institutional financial support like micro credit for fisheries, SHG, etc	48	Nil	39	8	47	39	103	284 (46.79)
2.	Regulation of fish marketing through institutional interventions	38	Nil	Nil	Nil	0	17	73	128 (21.09)
3.	Vocational training for fisher women to undertake household income activities during dry/ off season	22	Nil	Nil	Nil	7	8	Nil	37 (6.1)
4.	Regulation of PDS and supply of the basic food items and fuel (like kerosene, LPG, etc) by the govt. agencies	10	Nil	Nil	Nil	6	5	Nil	21 (3.46)
5.	Provision of rural infrastructure for general societal / human development	15	18	Nil	5	0	3	96	137 (22.57)
6.	Total	133	18	39	13	60	72	272	607 (100)

Figures in parenthesis indicate percentage to total

The major suggestions perceived by the households included arranging the institutional financial support like micro credit for fisherfolk through SHG, regulation of fish marketing through institutional interventions; vocational training for fisherwomen to undertake household income activities during dry/off season; regulation of PDS and supply of the basic food items and fuel (like kerosene, LPG, etc) by the Govt. agencies and provision of rural infrastructure for general societal/human development.

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The percentage response of the respondents indicated that 46.79 per cent of the respondents felt that arranging the institutional financial support like micro credit for fisheries through SHG, can provide a major impetus in enhancing the income and employment generation followed by the regulation of fish marketing through institutional interventions (21.09 per cent). Vocational training for fisherwomen to undertake household income activities during dry/ off season was suggested by 6.10 per cent of the respondents. The suggestions on regulation of PDS and supply of the basic food items and fuel (like kerosene, LPG, etc) by the Govt. agencies and provision of rural infrastructure for general societal / human development was expressed by 3.56 and 22.57 per cent of the respondents respectively.