



## ECONOMIC DEVELOPMENT OF FISHERFOLK COMMUNITY A STUDY IN PRAKASAM DISTRICT OF ANDHRA PRADESH

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### ABSTRACT

It is believed, with the advent of modern technology into fishing in India, apparently that there are stocks of fish in the sea that could be caught in any quantity. Besides this, the existing artisanal technology becomes outdated and inefficient for large catch of fishing. Craft and gear were 'modernised' in order to catch large quantities of traditional as well as hitherto unexploited varieties for the domestic market and to earn the foreign exchange necessary for the import of newer technology. The introduction of modern technology did result in a boom, setting off a spurt in the construction of infrastructural facilities such as fishing harbours large landing sites, cold storages and processing plants, apart from new markets and marketing infrastructure. Against this background it is explained that economic development of fisher folk in Prakasam district of Andhra Pradesh.

### Introduction:

A detailed account of the economic development of the sample respondents must take into account of their perception about the various fisherfolk development programmes. It will throw good rays of light upon the social awareness of the fisherfolk.

The impact of the various welfare development programmes and schemes can be considered as valid one as they are the beneficiary of the programmes. It can be considered as a mirror to reflect their views about plethora of economic development programmes and schemes introduced by the government.

### Universe and Sampling:

The study is taken up in Prakasam district of Andhra Pradesh, which has 56 mandals. Out of these, 9 mandals are in coastal area and the major population of fisher folk lives in the nine mandals. The respondents are selected 50 in each village in sequential order by using simple random sample method. Thus, a total of 300 respondents from all the 6 villages are finalised.

**Table-1: Possessing of Craft Vs. Place of Residence**

Place of residence	Do you possess Craft				Total
	Individually owned	Jointly owned	Lease	Wage earner	
Chinaganjam	4 1.3%	47 15.7%	29 9.7%	20 6.7%	100 33.3%
Kothapatnam	11 3.7%	31 10.3%	33 11.0%	25 8.3%	100 33.3%
Singarayakonda	1 .3%	33 11.0%	39 13.0%	27 9.0%	100 33.4%
<b>Total</b>	<b>16</b> <b>5.3%</b>	<b>111</b> <b>37.0%</b>	<b>101</b> <b>33.7%</b>	<b>72</b> <b>24.0%</b>	<b>300</b> <b>100.0%</b>

$\chi^2=16.571$ ,  $df=6$ ,  $P < 0.011$ , Significant at 0.01 level

The economics of catamaran fishing along the Madras coast has been studied and concluded that the catamaran owners can enhance their earnings by increasing the size of craft as well as number of gears. The poor economic condition coupled with limited availability of finance from the institutional agencies force the fishermen to sustain with the less equipped fishing equipment's, which in turn results in less returns entangling them in a vicious circle of poverty (Sathiadhas and Panikkar, 1991).

Table 1 shows the ownership status of craft. More than half of the fisherfolk (37.0 percent) are jointly owned craft. It is followed by 33.7 percent of the fisherfolk have leased, whereas 24.0 per cent of them wage earners. Further, 5.3 per cent of the fisherfolk are owned individually. Thus, it is concluded that majority of the fisherfolk are jointly owned crafts.



The study shows the results of the Chi-square test that there is significant difference between place of residence and possessing of craft (P= 0.011) at 0.01 levels. The results show that there is statistically significant difference in possessing craft by their place of residence.

**Table -2: Possessing of Gear Vs. Place of Residence**

Place of residence	Do you possess Gear				Total
	Individually owned	Jointly owned	Lease	Wage earner	
Chinaganjam	1	52	28	19	100
	.3%	17.3%	9.3%	6.3%	33.3%
Kothapatnam	16	25	34	25	100
	5.3%	8.3%	11.3%	8.3%	33.3%
Singarayakonda	0	31	40	29	100
	.0%	10.3%	13.3%	9.7%	33.3%
Total	17	108	102	73	300
	5.7%	36.0%	34.0%	24.3%	100.0%

$\chi^2=43.719$ ,  $df=6$ ,  $P < 0.000$ , Significant at 0.01 level

The impact of globalization and sea food trade legislation on poverty in Andhra Pradesh shows a growing trend in districts like Srikakulam, East Godavari and Prakasam, for boat owners to remove the engines from their boats during certain periods, to operate them non-motorized boats, in view of the high cost of operation, poor catches and undertaken returns. The implications of such high initial investments and operating costs for ownership patterns of craft and gear need to be explored (ICM, 2002).

Table 2 describes the ownership status of gear used in fishing and the fisherfolk. Majority of the fisherfolk (36.0 per cent) are jointly owned gear. Subsequently 34.0 per cent of fisherfolk are used leased gear for fishing and 24.3 per cent are wage earners. Whereas, 5.7 per cent of the fisherfolk have individually owned gears.

The study shows the results of the Chi-square test that there is significant difference between place of residence and possessing of gear (P= 0.000) at 0.01 levels. The results show that there is statistically significant difference in possessing gear by their place of residence.

in fishing and 56.0 per cent respondents had not taken any formal training in fishing, out of

**Table-3: Type of Fishing Method Vs. Age**

Age	Type of Fishing Method		Total
	Traditional	Scientific	
< - 25	19	50	69
	6.3%	16.7%	23.0%
26 - 35	38	42	80
	12.7%	14.0%	26.7%
36 - 45	38	77	115
	12.7%	25.7%	38.3%
46 - 55	9	16	25
	3.0%	5.3%	8.3%
56 - >	4	7	11
	1.3%	2.3%	3.7%
Total	108	192	300
	36.0%	64.0%	100.0%

$\chi^2=7.174$ ,  $df=4$ ,  $P < 0.127$ , Not Significant at 0.01 level

The traditional fisherfolk were undertaking fishing primarily subsistence with a sense of companionship and community participation. Through continuous interaction with the ocean and fish the artisanal fisherfolk had accumulated a trans generationally treasure of scientific knowledge on diverse marine eco-systems and fish behavior. The new modes of fish production and distribution have resulted in loss of traditional skills and knowledge systems, and had converted passive gear to an active gear technology; a low cost to



a high cost technology: and from an eco-friendly to an eco-destructive technology (Rajan, 2000). As per this study, majority of the respondents (36.0 per cent) use traditional methods of fishing. The remaining 64.0 per cent use scientific methods in fishing. It is noted that majority of the respondents use scientific methods in fishing.

The chi-square table 3 revealed the relationship between age and Type of Fishing Method. There is no relationship in between age and Type of Fishing Method. It is statistically no significant difference at 0.05 level.

**Table-4: Socio-economic status of the fishermen improved through training Vs. Marital status**

Marital status	Do you think that the socio-economic status of the fishermen can be improved through better training		Total
	Yes	No	
Married	182	60	242
	60.7%	20.0%	80.7%
Un married	50	8	58
	16.7%	2.7%	19.3%
<b>Total</b>	<b>232</b>	<b>68</b>	<b>300</b>
	<b>77.3%</b>	<b>22.7%</b>	<b>100.0%</b>

$\chi^2=3.230$ ,  $df=1$ ,  $P < 0.048$ , Significant at 0.05 level

The table portrays that do you think that the socio-economic status of the fishermen can be improved through better training. In this regard the majority of the respondents about 77.3 per cent are agreed that they can improve their social economic status by taking training in fishing. Whereas 22.7 per cent are not agreed to the statement on it is not helpful for improving socioeconomic status in the society.

There is significant association between marital status and the socio-economic status of the fishermen can be improved through better training at 0.01 level. The opinions of married and unmarried are different and perceptions on the socio-economic status of the fishermen can be improved through better training are different among married and unmarried.

**Table-5: Landing centre in your locality Vs. Type of family**

Type of family	Is there landing centre in your locality		Total
	Yes	No	
Joint	13	34	47
	4.3%	11.3%	15.7%
Nuclear	45	171	216
	15.0%	57.0%	72.0%
Extended	6	31	37
	2.0%	10.3%	12.3%
<b>Total</b>	<b>64</b>	<b>236</b>	<b>300</b>
	<b>21.3%</b>	<b>78.7%</b>	<b>100.0%</b>

$\chi^2=1.730$ ,  $df=2$ ,  $P < 0.421$ , Not Significant at 0.01 level

If any single factor could be pin-pointed for the economic ills of the fishing sector, it is inadequacy of infrastructural facilities. Among the infrastructural facilities the availability of a suitable berthing and landing centre where the fishing vessels can safely berth and land fish and get all their requirements such as fuel, water, ration, cargo etc. is an important necessity. The table reveals that 21.3 per cent of the respondents have the landing centres and 78.7 per cent not having the landing centres.

The chi-square table revealed the relationship between type of family and landing centre in your locality. There is no relationship between type of family and landing centre in your locality. Hence, there are statistically no impact of type of family on Is there landing centre in your locality at 0.01 level.

**Table-6: Berthing facility Vs. Occupation**

Occupation	Is there berthing facility		Total
	Yes	No	
Fishing	3 1.0%	93 31.0%	96 32.0%
Boat owner	3 1.0%	86 28.7%	89 29.7%
Fish vender	3 1.0%	35 11.7%	38 12.7%
Fish processor	2 .7%	36 12.0%	38 12.7%
Fish marketing	1 .3%	38 12.7%	39 13.0%
<b>Total</b>	<b>12</b> <b>4.0%</b>	<b>288</b> <b>96.0%</b>	<b>300</b> <b>100.0%</b>

$\chi^2=2.152, df=4, P < 0.708$ , Not Significant at 0.01 level

It is important that berthing facility is very important and playing vital role in fishing at sea in the sample villages there is no berthing facility but they have landing facility to stop their motorised boats. The majority (96.0 per cent) does not have the berthing facility at their locations. Only 4.0 per cent have the berthing facility in their location.

The study shows the results of the Chi-square test that there is no significant difference between berthing facility and occupation ( $P=0.708$ ) at 0.01 levels. The results show that there is no statistically significant difference in berthing facility by occupation.

**Table-7: Assistance provided by Government**

Sl. No	Statement	Yes	No	Total N=300
1	Financial	29.3	70.7	100.0
2	Fishing equipment	32.0	68.0	100.0
3	Vocational training	12.0	88.0	100.0
4	Technical assistance	08.0	92.0	100.0
5	Any other	07.7	92.3	100.0
<b>Total Average Per centage</b>		<b>17.8</b>	<b>82.2</b>	<b>100.0</b>

The table 7 shows that assistance provided by government to the fisher folk community for their socio economic development. The statement reveals that the financial assistance about 29.3 per cent of the respondents benefitting whereas, 70.7 per cent not benefitting with financial assistance.

The other statement is similar to that 32.0 per cent are receiving fishing equipment and 68.0 per cent are not receiving any fishing equipment.

The vocational training were receiving about 12.0 per cent of the respondents and the majority (88.0 per cent) not receiving any vocational training.

About 8.0 per cent are receiving technical assistance and the majority (92.0 per cent) are not receiving any technical assistance from the government.

An overall total percentage, the respondents i.e. 17.8 per cent were receiving assistance from government and 82.2 per cent are not receiving any assistance from government.

**Table-8: Level of satisfaction on Government welfare schemes**

Sl. No	Particulars	Highly satisfied	Satisfied	Moderate	Dissatisfied	Highly dissatisfied	Total N=300
1	Fishermen Group Accident Insurance	26.7	20.7	2.0	14.6	36.0	100.0
2	National Fishermen Savings-cum-Relief	21.0	33.3	2.0	11.0	32.7	100.0
3	Provide Motors to the Traditional crafts	15.7	19.7	9.6	21.3	33.7	100.0
4	Supply of Deiseal at subsidized price	12.0	17.0	3.0	17.3	50.7	100.0
5	Cash awards to 10 & 12 students of Fishermen families	12.0	17.0	3.0	18.7	49.3	100.0
6	Daily relief assistance to families of missed fishermen	12.3	17.3	3.0	16.4	51.0	100.0
7	Relief to the families of deceased fishermen	12.0	17.0	3.0	18.7	49.3	
<b>Total Average Per centage</b>		<b>15.9</b>	<b>20.3</b>	<b>3.7</b>	<b>16.9</b>	<b>43.2</b>	<b>100.0</b>

Table 8 shows the level of satisfaction of the respondents regarding **Government welfare schemes**. As regards to Fishermen Group Accident Insurance that 26.7 percent of the respondents highly satisfied followed by 20.7 percent of the respondents satisfied and 2.0 percent of the respondents are moderately satisfied to Fishermen Group Accident Insurance. About 14.6 percent of the respondents are dissatisfied while 36.0 percent highly satisfied to Fishermen Group Accident Insurance.

Table 8 shows the level of satisfaction of the respondents on National Fishermen Savings-cum-Relief. About 21.0 percent of the respondents are highly satisfied. 33.3 per cent of the respondents satisfied followed by 2.0 per cent are moderately satisfied. About 11.0 per cent and 32.7 per cent of the respondents are dissatisfied and highly dissatisfied to National Fishermen Savings-cum-Relief.

Table 8 conveys that about 15.7 percent are highly satisfied to Provide Motors to the Traditional crafts, 19.7 per cent of the respondents satisfied followed by 9.6 per cent are moderate. About 21.3 per cent and 33.7 per cent of the respondents are dissatisfied and highly dissatisfied respectively to Provide Motors to the Traditional crafts.

Table 8 explains the Supply of Deiseal at subsidized price that 12.0 per cent and 17.0 percent highly satisfied and satisfied Supply of Deiseal at subsidized price. Further, 3.0 per cent are moderate with the Supply of Deiseal at subsidized price. About 17.3 per cent and 50.7 percent dissatisfied and highly dissatisfied to Supply of Deiseal at subsidized price.

As regards the Cash awards to 10 and 12 students of Fishermen families that 12.0 per cent of the respondents highly satisfied. 17.0 per cent and 3.0 per cent are satisfied and moderate to Cash awards to 10 and 12 students of Fishermen families and 18.7 per cent and 49.3 per cent are dissatisfied and highly dissatisfied to Cash awards to 10 and 12 students of Fishermen families.

The table revealed that Daily relief assistance to families of missed fishermen about 12.3 per cent and 17.3 per cent are highly satisfied and satisfied respectively. Further, 3.0 per cent of the respondents are moderate. About 16.4 per cent and 51.0 per cent of the respondents are dissatisfied and highly dissatisfied with the Daily relief assistance to families of missed fishermen.



The level of satisfaction of the respondents regarding Relief to the families of deceased fishermen. As regards to Relief to the families of deceased fishermen that only 12.0 percent of the respondents highly satisfied followed by 17.0 per cent of the respondents satisfied and 3.0 per cent of the respondents are just moderate. About 18.7 percent of the respondents are dissatisfied while 49.3 per cent highly dissatisfied to Relief to the families of deceased fishermen.

The overall level of satisfaction on government welfare schemes, the respondents 15.9 per cent are highly satisfied followed by 20.3 per cent and 3.7 per cent are satisfied and moderate respectively. About 16.9 per cent and 43.2 per cent are dissatisfied and highly dissatisfied to government welfare schemes.

Table-9:

## Level of satisfaction on Government welfare schemes Vs. Religion

Statement	Religion	N	Mean	Std. Deviation	F Value	P Value
Fishermen Group Accident Insurance	Hindu	254	3.1969	1.68949	2.878	.091
	Christian	46	2.7391	1.65240		
	Total	300	3.1267	1.68922		
National Fishermen Savings-cum-Relief	Hindu	254	3.0354	1.61353	.412	.522
	Christian	46	2.8696	1.61395		
	Total	300	3.0100	1.61201		
Provide Motors to the Traditional crafts	Hindu	254	3.4134	1.51095	.993	.320
	Christian	46	3.1739	1.43456		
	Total	300	3.3767	1.49965		
Supply of Deiseal at subsidized price	Hindu	254	3.7835	1.49186	.034	.854
	Christian	46	3.7391	1.56964		
	Total	300	3.7767	1.50143		
Cash awards to 10 & 12 students of Fishermen families	Hindu	254	3.7283	1.50132	.907	.342
	Christian	46	3.9565	1.45993		
	Total	300	3.7633	1.49492		
Daily relief assistance to families of missed fishermen	Hindu	254	3.7717	1.51508	.050	.824
	Christian	46	3.7174	1.52990		
	Total	300	3.7633	1.51492		
Relief to the families of deceased fishermen	Hindu	254	3.7835	1.47588	.300	.584
	Christian	46	3.6522	1.60855		
	Total	300	3.7633	1.49492		

ANOVA has been applied to find whether there are any significant differences between Government welfare schemes to Fishermen and their religion. The responses of respondents on welfare schemes the descriptive table 9 displays the sample size, mean, standard deviation, F value and P value. The study shows the results of the ANOVA test that there are significant difference responses on the welfare schemes by their level of religion. Fishermen Group Accident Insurance F value (2.878) P Value (0.091), National Fishermen Savings-cum-Relief F value (0.412), P Value (0.522), Provide Motors to the Traditional crafts F value (0.993), P Value (0.320), Supply of Deiseal at subsidized price F value (0.034), P Value (0.854), Cash awards to 10 & 12 students of Fishermen families F value (0.907), P Value (0.342), Daily relief assistance to families of missed fishermen F value (0.50), P Value (0.824), Relief to the families of deceased fishermen F value (0.300), P Value (0.584) and its corresponding P-values are not significant at 0.01 levels. The results show that there are no significant difference responses on Government welfare schemes to Fishermen in between religion wise categories of fisherfolk. Hence, we accept research hypothesis and reject null hypothesis.

**Table-10: Monetarily exploited the fisherfolk in various forms Vs. Education**

Statement	Education	N	Mean	Std. Deviation	F Value	P Value
Govt. Officials	Illiterate	143	1.7063	.45706	2.137	.096
	Primary	96	1.6667	.47388		
	Secondary	48	1.6667	.47639		
	Degree & above	13	2.0000	.00000		
	Total	300	1.7000	.45902		
Money lenders	Illiterate	143	1.6923	.46316	1.186	.315
	Primary	96	1.6771	.47005		
	Secondary	48	1.7292	.44909		
	Degree & above	13	1.9231	.27735		
	Total	300	1.7033	.45755		
Whole sellers	Illiterate	143	1.6573	.47627	.246	.864
	Primary	96	1.6562	.47745		
	Secondary	48	1.6458	.48332		
	Degree & above	13	1.7692	.43853		
	Total	300	1.6600	.47450		
Middle man	Illiterate	143	1.7063	.45706	.109	.955
	Primary	96	1.7083	.45692		
	Secondary	48	1.6875	.46842		
	Degree & above	13	1.7692	.43853		
	Total	300	1.7067	.45605		

ANOVA has been applied to find whether there is any significant difference between Particulars of monetarily exploited the fisherfolk Vs. Education. The responses of respondents of Particulars of monetarily exploited the fisherfolk, the descriptive table 10 displays the sample size, mean, standard deviation, F value and P value. The study shows the results of the ANOVA test that there is no significant difference responses on the problems by their level of education. Govt. Officials F value (2.137), P Value (0.096), Money lenders F value (1.186), P Value (0.315), Whole sellers F value (0.246), P Value (0.864), and its corresponding all P-values are not significant at 0.01 levels. The results show that there are no significant difference responses on Particulars of monetarily exploited the fisherfolk in between education wise categories of fisherfolk.

**Table-11: Caste panchayat is still functional Vs. Religion**

Religion	Do you think that caste panchayat is still functional			Total
	Yes	No	Sometimes	
Hindu	150	57	47	254
	50.0%	19.0%	15.7%	84.7%
Christian	29	10	7	46
	9.7%	3.3%	2.3%	15.3%
Total	179	67	54	300
	59.7%	22.3%	18.0%	100.0%

$\chi^2=0.346$ ,  $df=2$ ,  $P < 0.841$ , Not Significant at 0.01 level

In the present scenario, the fishermen also follows the caste panchayath system and it is very important to these people. The elders who in the society they form as group and dictate other community people to follow the taboos and systems which implement in their society.

The table revealed that 59.7 per cent of the respondents said that they follow the caste panchayats and still these working in fishermen community, where as 22.3 per cent of the respondents said that they are not following the caste panchayaths and remaining 18.0 per cent of the respondents solve their problems in sometimes. It means that the majority of the respondents are still follow the caste system.



The study shows the results of the Chi-square test that there is no significant difference between caste panchayat is still functional and religion ( $P= 0.841$ ) at 0.01 levels. The results show that there is no statistically significant difference in caste panchayat is still functional by religion wise.

**Table-12: Settle your problem Vs. Marital status**

Marital status	Do you prefer to settle your problem through			Total
	Caste panchayath	Gram panchayath	Through court	
Married	128	80	34	242
	42.7%	26.7%	11.3%	80.7%
Un married	32	21	5	58
	10.7%	7.0%	1.7%	19.3%
Total	<b>160</b>	<b>101</b>	<b>39</b>	<b>300</b>
	<b>53.3%</b>	<b>33.7%</b>	<b>13.0%</b>	<b>100.0%</b>

$\chi^2=1.244$ ,  $df=2$ ,  $P < 0.537$ , Not Significant at 0.01 level

The table 12 revealed that Do you prefer to settle your problem through panchayath if there is any problem arises in the community where they go for settlement of the problem. The majority (53.3 per cent) of the respondents resolve their problems in the cast Panchayat system. About 33.7 percent of the respondents settle their problems at gram Panchayat office, whereas only 13.0 per cent of the respondents resolve their problems through court. It concluded that the majority of the respondents are still follow the caste system and the problems are resolved at their community level.

The chi-square table revealed the relationship between marital status and prefer to settle your problem through. Marital status wise there are no significant relationship between two groups. Hence, there are no statistically significant in between marital status and prefer to settle your problem through at 0.01 level.

### Conclusion:

The present study has been conducted in a sample of 300 fisherfolk in the coastal villages of Prakasam district and highlights the socio-economic development of the fisherfolk. Thus, it is concluded that an attempt has been made to illustrate the major findings of the study. Based on the findings, some conclusions are derived for the improvement of socio-economic status of the fisherfolk.

Though fish marketing holds a huge potential, it is still highly unorganized and unregulated occupation in India. It has long been neglected for various reasons and serious efforts have not been made on marketing of fish as compared to that of its production. The improvement in fish marketing system and distribution would reduce not only the demand-supply gap of fish across the country, but would also contribute to food and nutritional security of a vast majority of resurgent middle income population or the bourgeois. To improve the market facilities in the coastal villages of Prakasam district, adequate structures need to be in place.

### References

1. Chidambaram.K and Soundrarajan.A., (1990) Marine Fish Marketing in Thiruchendur Area in Tamilnadu, Fishing Chimes, 1(2): 1990, pp.43-55.
2. Das Kennady J. (2015) Problems and Prospects of Mechanised Fishing in Kanyakumari District. Ph.D. Thesis, M.S.University, Tirunelveli, 2015.
3. Dayananda, L., P., D., (2004). "Enhancing Sustainable Livelihoods in Puttalam Lagoon, Sri Lanka", Poverty, Livelihoods, and Ecosystems.
4. Mahesh V. Joshi, (1996). Economics of Fisheries, APH. Publishing Corporation, New Delhi.
5. Sathiadhas, R. and K.K.P. Pannikar. (1988). Socio-economics of small scale fishermen with emphasis on costs and earnings of traditional fishing units along Trivandrum coast, Kerala- A case study. Sea Food Export Journal, 20 (11); 21-36.
6. Vinoth P 2018)Socio-economic status of fisherfolk In selected rural coastal villages of Tuticorin district in Tamilnadu. Social Scientist. Vol 12 No.1-3: pp 89-98.