CHAPTER II

ECONOMIC ORGANIZATION

RS
30/4/45
The study of any community is not complete until and unless a mention is made about the economic aspects of that community. Firth (1946) stated that economics is the study of that broad aspect of human activity which is most closely concerned with limited resources, with their uses and organisation capabilities where they brought into relation with unlimited human wants. The economic institution is as important as that of the other institutions, such as political, religious and social institutions. It is not only the maintainer but also the regulator of different aspects of life, and this explains why it is very commonly mentioned that one who is economically dependent cannot but be dependent in all other aspects.

Though one of the most important factors which determines the social status of any individual is birth economic position of an individual has also been playing an important role in determining the status of an individual or a group. Here an attempt is made to study the economic life of the Gangaputras in all the four villages under study where they predominantly live, eking out their living mainly through inland fishing. Their economic activity include several other
occupations but fishing is the major occupation and at secondary level agriculture, daily wage agriculture labouring and fruit selling are the other important occupations. Each of these have been discussed in terms of their technology and production.

FISHING

The fishing activity which is mainly in inland water sources could be carried out in the Madannapeta tank and Pakhal lake throughout the year which have a permanent water sheet all through the year. The water levels fluctuate at different seasons in a year. Fishing is practised in these areas by using net like traps, which are locally termed as paddavala, chinnorsola, yeddarsola, amicola, sanupola and so on. Besides this, fishing is also practised in canals by using specially made fishing traps, locally known as mavu and topela. It is because the net will flow along in the direction of water force in the canals, and the nets usage at canals or pools is not practised because they are too narrow where a net could be used. Even if the nets are used the fish catch is meagre in quantity and the amount of risk involved is more.
FISHING TECHNOLOGY

The fishing technology is developed in such a manner that the nature of fish culture and capture are made easy. The fishing technology adopted by the respondents in the present study consists of various types of craft and tackle. The craft and tackle are prepared by the Gangaputras' themselves. The description of craft and various types of tackle which have been used in fishing is detailed below.

CRAFT

The economic benefits accrued mostly depend on the type of technology adopted to exploit the maximum untapped resources. In the present study, Gangaputras are making use of their traditional craft for fishing which is known as Teppa. They use logs and bamboos to make this type of craft. They tie three to four logs in a vertical row and with the help of bamboo they drive the logs nearer to their fishing grounds.

NETS

Fishing with the help of nets is limited. The type of nets in vogue in the study area are Peddavala, Chinnorsola, Yeddarsola, Anucola and Sanupola.
The fishing technology evolved by the community mainly involves the making of net valves made of nylon thread and the nets made of cotton thread. Though the fishermen have been purchasing the thread from the market, the indigenous technique of thread making is not lost altogether. It is claimed that the quality of hand-made thread is better than that of machine-made thread. Though the hand-made thread is in great demand, due to the laborious and lengthy process involved in producing it has made those who are engaged in producing this type of thread are not able to meet their demands. Hence, many are switching over to machines for manufacturing thread. This in turn has been reducing the number of people who have been making the thread with hand for fishing nets.

Out of 315 respondents, 83.49 per cent have been using the nets prepared by themselves, 11.43 per cent have been using nets bought in the market and 5.08 per cent have been using nets both prepared by themselves and purchased. Because the occupation being seasonal in nature majority of them were able to prepare their own nets during the lean seasons in the process of their fishing activity.
TYPE OF NETS

Pedda Vala

It is woven to form a mesh of five finger width. The webbing is provided with a selvedge on the upper margin with a rope and is hung to the plastic rope at the top, which is of 4 mm diameter.

Peddavala is used to catch the type of fishes like Bocche, Ravu, Peddavaluga, Bangaruteega, Bomme fishes etc. The weight of these fish varies between 5 kgs to 15 kgs, depending on its size. Fishermen catch this type of fish in the middle of the tank or lake where the water level is very deep. Peddavala is used during the months of April and May. It (Peddavala) involves a cost of Rs.1,200/-.

Chinnorsola

It is woven with cotton thread maintaining a mesh size of three fingers width. It is used to catch the various types of fishes like, Bangaruteega, chitra, godupaperu, shanku bocche, etc. The weight of these fish varies between 2 kgs to 4 kgs depending on its
size. Fishermen catch these types of fish only where the water is not deeper than five feet. Chinnorsola is used during the months of June and July. The cost of this net involves Rs.800/-.

**Anucola**

It is woven with cotton thread maintaining a mesh size of two fingers width. This type of net is used to catch fish like, chinna bocche, chinna bomme, marpulu, mottalu, etc. The weight of fish varies between half a kilogram to one kilogram. Fishermen catch these types of fish where the water is not more than three feet deep. This type of net is used during the months of January and February. The cost incurred on making of this net is Rs.750/-.

**Yeddarsola**

It is woven with cotton thread maintaining a mesh size of one finger width. It is used to catch the various types of fish which are locally called, chinna papera, guddujellalu, pedda parakalu, etc. The weight of this type of fish is generally below one kilogram. Fishermen catch these types of fish in the
middle of the tank where the water level is moderately deep. This type of net is used during whole year and the making of this net involves a cost of Rs.750/-.

Sanupola

It is woven with cotton thread maintaining a very small mesh size. It is used to catch fish like chinna jellalu, chandamamalu, ilamkodipe, royyalu, kodelalu, etc. The weight of this type of fish is found to be below half kilogram. These are found in the peripheral waters in the tank or lake. The usage of this type of net is carried out through out the year and the cost incurred in preparing this net is Rs.450/-.

Net Fishing

It is observed that the use of net fishing has become imperative. By using different types of nets, fishing is carried out throughout the year. Fishermen use various types of nets in fish catching. From among the five types of fishing nets which are used, the fishermen practices the same process in fishing, irrespective of the structure, type and length of the net.
The fishermen are also using *Teppa* for fish catch. The net is piled in folds by the fishermen together with the coils of long handling line. The free end will be remaining in his hand or tied to his wrist. With a dexterous movement of the body, the net is cast on the water in such a way to assume a circular shape. The weighed periphery of the net drags the net downwards and the net quickly assumes the form of a hallow cone which engulfs all the fish that comes in the way. The hauling rope is then pulled by until the net is drawn inwards. He then begins to drag the net carefully towards him and finally out of water to collect the fish caught in the net. With the release of the handling line, the net gets normal shape and is again ready for the next operation.

**TRAPS**

**Mavu**

Mavu is one type of the fishing aid. It is prepared by the fishermen themselves. This type of fishing trap is made by bamboo sticks in rectangular shape tied with cotton thread. The length, the width and the height of the mavu are 1.5 metres, 1 metre and
half a metre respectively. Three to four small door type entrances at the bottom are provided in this trap so that once the fish enters into it, the fish may not escape. The size of the entrance ranges from eight centimetres to ten centimetres. In the top side corner of this trap a round shaped hole is also provided to collect the fish trapped. The width of the hole is approximately 16 cm to 18 centimetres. The mavu is structured with negligible gaps in between the bamboo slices. They are arranged in such a way that water is flown to either sides. The operation of mavu setting will be undertaken only during rainy season. The cost of mavu is around Rs.400/-. 

Mavu Fishing

In the present study, the Gangaputras have also been using mavu in fishing. The mavu fishing generally commences in the evening times. Fishermen enters into the tank and lake channels with the mavu. The weeds are removed with a sickel in such a suitable way to fix up a mavu under submerged conditions near the fishing site. The door of mavu is tied up with a creeper and mavu is then concealed by the removed weeds.
Generally 2 or 3 such mavirus will be laid by a single fisherman in different parts of the channel, and they collect the fish caught in the mavirus early in the morning. The mavirus is exclusively meant for fishing in channels and running waters in the stream courses. The type of fish caught are jellalu, parakalu, motta-pillalu, chandamamalu, etc.

Topela

Topela is another type of the fishing aid. This type of fishing trap is made by bamboo canes and net prepared with nylon thread. It consists of three bamboo canes which are tied in a triangular shape. Out of these three bamboo canes, one is relatively longer which is used as a handle. The triangular shape of the Topela is made of bamboo with 3 metres long on the one side and within it a handle is also crafted and the two other sides are of 1.5 metres. The size of the mesh is half a centimetre. It is so crafted that the nearby fish has no chance of escape, it is because of the mesh size and structure of the topela in a triangular shape. The topela is used in summer and rainy seasons and it costs about Rs.250/-. 
Topela Fishing

The fishermen thrusts the topela deliberately at the thickly grown weeds of the channels of the tank and lake. The slow and continuous process yields high fish catching. The topela should only be handled with two hands and cannot be handled with one hand. It is used to catch the types of fish like parakalu, jellalu, royyalu, etc. The usage of topela, is restricted to peripheral regions of tank, where the depth of the water is less, and it is also used to channels.

Hooks

Hooks are locally known as galamulu. They are made up of bamboo sticks and thread. A long bamboo stick roughly with a diameter of 1 to 2 cm and a length of 3 metres. To the tapering end of the stick, a nylon twine of 3 to 4 metres is tied and at the end of the twine a metal hook is attached. Different kind of baits are used depending upon the variety of fish to be caught. The baits consists mainly of earthworms or a paste well rounded to the baits so as to conceal the metal hook. A cork or any other light weighing material is tied to the line which floats on the surface.
of the water. It gives an indication of fish caught when it is pulled below the water surface. The amount of the fish caught by this method is generally far less, it is because only one fish is trapped in a single operation.

Various fishing methods have been devised by the fishermen which are suitable for different fish catches under different hydrological conditions of the tank and lake. The tank and lake fishing is carried out individually on certain occasions with the assistance of a grown-up child who also gets trained in course of time.

**Thatakula Butta**

*Thatakula Butta* (Palmyrah leaves bag) is made up of freshly dried palmyrah leaves, which are woven in the form of a basket. It contains a narrower and circular mouth with a diameter of 15 cm and it is reinforced with palmyrah reeds which are houped around the mouth of the basket. It has a handle also made up of palmyrah reeds, to be hung down from the waist of fishermen while fishing in the tank and lake waters and it is also used to carry the fish caught.

The following table shows the type of nets and the number of units of each type of net possessed by the respondents in the present study.
### Table 2.1: Distribution of Respondent by Possession of Fishing Craft

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4</td>
<td>14</td>
<td>4.70</td>
<td>11</td>
<td>3.93</td>
<td>8</td>
<td>4.79</td>
<td>4</td>
<td>1.60</td>
<td>3</td>
<td>1.21</td>
</tr>
<tr>
<td>4-6</td>
<td>219</td>
<td>73.49</td>
<td>212</td>
<td>75.71</td>
<td>99</td>
<td>59.28</td>
<td>182</td>
<td>72.90</td>
<td>185</td>
<td>74.60</td>
</tr>
<tr>
<td>6-8</td>
<td>57</td>
<td>19.13</td>
<td>49</td>
<td>17.50</td>
<td>54</td>
<td>32.33</td>
<td>61</td>
<td>24.40</td>
<td>61</td>
<td>20.61</td>
</tr>
<tr>
<td>8-10</td>
<td>8</td>
<td>2.68</td>
<td>8</td>
<td>2.86</td>
<td>6</td>
<td>3.59</td>
<td>6</td>
<td>3.12</td>
<td>5</td>
<td>2.02</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>298</th>
<th>100.00</th>
<th>280</th>
<th>100.00</th>
<th>167</th>
<th>99.99</th>
<th>250</th>
<th>100.00</th>
<th>248</th>
<th>100.00</th>
<th>296</th>
<th>100.00</th>
<th>240</th>
<th>100.00</th>
<th>22</th>
<th>(100.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.40</td>
<td></td>
<td>5.39</td>
<td></td>
<td>5.69</td>
<td></td>
<td>5.50</td>
<td></td>
<td>5.5</td>
<td></td>
<td>5.5</td>
<td></td>
<td>5.5</td>
<td></td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.11</td>
<td></td>
<td>1.25</td>
<td></td>
<td>0.98</td>
<td></td>
<td>0.99</td>
<td></td>
<td>1.05</td>
<td></td>
<td>0.94</td>
<td></td>
<td>1.66</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Out of 298 respondents who possessed pedawala, 4.70 per cent possessed 2-4 units, 73.49 per cent possessed 4-6 units, 19.13 per cent possessed 6-8 units and 2.68 per cent possessed 8-10 units.

Out of 280 respondents possessing chinnorsola, 3.93 per cent possessed 2-4 units, 75.11 per cent possessed 4-6 units, 17.50 per cent possessed 6-8 units and 2.86 per cent possessed 8-10 units.

Out of 167 respondents possessing yeoddarsola, 4.79 per cent possessed 2-4 units, 59.28 per cent possessed 4-6 units, 32.33 per cent possessed 6-8 units and 3.59 per cent possessed 8-10 units.

Out of 250 respondents possessing sanupola, 1.60 per cent possessed 2-4 units, 72.80 per cent possessed 4-6 units, 24.40 per cent possessed 6-8 units and 1.20 per cent possessed 8-10 units.

Out of 248 respondents possessing anucola, 1.21 per cent possessed 2-4 units, 74.60 per cent possessed 4-6 units, 22.17 per cent possessed 6-8 units and 2.02 per cent possessed 8-10 units.
Out of 296 respondents possessing topela, 1.69 per cent possessed 2-4 units, 74.66 per cent possessed 4-6 units, 20.61 per cent possessed 6-8 units and 3.04 per cent possessed 8-10 units.

Out of 22 respondents possessing mavu, 45.45 per cent possessed 4-6 units, 27.27 per cent possessed 6-8 units and 27.27 per cent possessed 8-10 units.

Thus it can be observed from the above data that majority of the respondents possessed peddavala, chinnorsola, topela followed by sanupola, anucola, yeddarsola and only a meagre percentage (6.98) of the respondents possessed mavu. The reasons for the possession of the above mentioned type of fishing craft by majority of them gives an indication that fishing in deep waters is being carried out by majority of the respondents whereas the usage of mavu, is restricted to channels and pools of the tank and lake, and only a small percentage of the respondents have been using mavu in addition to other types of crafts used by them.

**OCCUPATIONAL PATTERN**

In rural India occupations are so rigidly structured that there is a direct relationship between
the occupational pattern and the social structure. All the traditional occupations have an association with their caste hierarchy. In any society we find that majority of the people engage themselves in some kind of occupation or other. But these occupations have not been able to keep individuals preoccupied only with that particular occupation. The nature of occupation, time to be devoted for the occupation, seasonal variation in carrying out that particular occupation have been responsible in allowing many individuals to accept secondary occupations.

The primary and the secondary occupations of the respondents in the present study are presented in the following table.
Table 2.2: Distribution of Respondents by Primary and Secondary Occupations

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Occupation</th>
<th>Primary</th>
<th>Percentage</th>
<th>Secondary</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fishing</td>
<td>315</td>
<td>100.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Agriculture</td>
<td>-</td>
<td>-</td>
<td>172</td>
<td>55.84</td>
</tr>
<tr>
<td>3.</td>
<td>Daily Wage Agricultural Labour</td>
<td>-</td>
<td>-</td>
<td>83</td>
<td>26.95</td>
</tr>
<tr>
<td>4.</td>
<td>Fruit Selling</td>
<td>-</td>
<td>-</td>
<td>53</td>
<td>17.21</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>315</td>
<td>100.00</td>
<td>308</td>
<td>100.00</td>
</tr>
</tbody>
</table>

There are totally 315 respondents in the present study. Fishing is major occupation of the respondents. Besides this they are also involved in secondary occupations such as agriculture, daily wage agricultural labour and fruit selling, which is also practised occasionally by some respondents as their secondary occupation.
Among 315 respondents, 55.84 per cent of the fishermen had agriculture as their secondary occupation. 26.95 per cent of them had agricultural labour and 17.21 per cent of them had fruit selling as their secondary occupation.

The above data indicates that a majority of fishermen in the present study had agriculture as their secondary occupation to support and fulfill their economic needs substantially and it is also an indication that majority of them had land holdings. The indulgence in secondary occupations is mainly due to seasonal variations in fishing activity which otherwise is their main occupation.

**FISHERMEN'S KNOWLEDGE OF THE TANK AND LAKE FISH**

From among the people of different castes in the villages, Mudirajas and Gangaputras are traditional fishermen. Other caste people are not engaged in fishing as a primary occupation. According to District Fisheries Department, in Narsampet Mandal there are 4,657 fishermen and among them, active fishermen are 562 who are Mudirajas and Gangaputras whose primary occupation is fishing and the remaining fishermen have
not been engaging in fishing as a primary occupation because they had better irrigational facilities which allowed them to engage in agricultural activities and occasionally go for fishing.

The following discussion presents the fishermen's knowledge about the tank and lake waters, the types and behaviour of fish. It is because of a constant and closer association with tank and lake fishing activity, the fishermen have obtained reliable facts and sufficient knowledge regarding the varying nature of fish and the waters in which they carry out fishing activity.

It is of great importance to study the changing water levels in the tank and lake which will have a definite bearing on the availability of different types of fish. In rainy season, low visibility of turbid tank and lake water made the fishermen not able to identify the fish movements which has a direct bearing on the amount of fish catch. But in the clearly visible waters fish movement could be easily observed which has allowed the fishermen to increase their catch. The water in the tanks and lakes starts receding from December onwards, and in the month of April–May
the level of water is seen at the lowest level. It is observed that the agriculture and the subsidiary agricultural activities have been utilizing the tank and lake water which resulted in the low level of water in the summer seasons in addition to evaporation. Irrespective of the fluctuations in the water level the amount of fish catch does not fall to a very low level. Consequently the water spread gets restricted to the channels which are infested with weeds, and fishing is done mainly with the help of Mavu and Topela. The water at such low levels is very much conducive to high rate of fishing activity.

**TYPES OF FISH AND THEIR BEHAVIOUR**

The movement of various fish in the tanks and lakes is well acquainted by the fishermen. Accordingly different fish nets and traps, with different valve structures are fabricated to catch the different size and types of fish. It has been observed that there are different types of fish traps and nets which are used to catch different types and sizes of fish, which also vary in different seasons of fish catching.
Table 2.3: Availability of Different Types of Fish in Different Seasons

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Seasons</th>
<th>Type of Fish Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Summer</td>
<td>Bangaruteega, Bocche, Ravu, Peddavaluga, Yerratokamosu, Shanku Bocche, Korramenu Fish.</td>
</tr>
<tr>
<td>2.</td>
<td>Rainy</td>
<td>Chinajellalu, Chandamamalu, Ilamkodepa, Royyalu, Kodepelu, Chinnapapera, Guddujellalu, Inglikamu.</td>
</tr>
<tr>
<td>3.</td>
<td>Winter</td>
<td>Chinna Bocche, Chinna Bomme, Marpulu, Mottalu, Chitra.</td>
</tr>
</tbody>
</table>

The above table shows the availability of different types of fish in different seasons. The type of fish available in Summer season is Bangaruteega, Bocche, Ravu, Peddavaluga, Yerratokamosu, Shankubocche and Korrameenu fish. During rainy season, Chinajellalu, Chandamamalu, Ilamkodepelu, Chinnapapera, Guddujellalu, Inglikamu fish are available and in Winter season the fish varieties available are Chinna Bocche, Chinna Bomme, Marpulu, Mottalu, Chitra and so on.
Besides their understanding of fish catch in different seasons, the fishermen have profound knowledge about the movements of fish in tanks and lakes. The fish catch is substantially high during the days of new moon than during the fortnight days of the full moon. The simple reason for high catch of fish is due to the fish's inability to visualize the trap during the matured nights of the new moon.

Later it is also studied that, the fish catch is substantially less during the rough weather and cloudy weather. The bright sunny days are favourable to fish to hide themselves beneath the submerged leaves and weeds, each type of fish has its preferential selection of weeds to hide. The knowledge about the weeds and the type of fish which is hidden enabled the fishermen to plan accordingly to have a higher fish catch.

**SEASONAL VARIATION IN THE AMOUNT OF TIME SPENT IN FISH CATCH**

The following table illustrates the amount of time spent by the respondents in fishing activity in different seasons.
Table 2.4: Time Spent by the Respondent in Fishing

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Hours Spent in a day (Hours)</th>
<th>Summer Percentage</th>
<th>Winter Percentage</th>
<th>Rainy Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2 - 4</td>
<td>1</td>
<td>0.31</td>
<td>306</td>
</tr>
<tr>
<td>2.</td>
<td>4 - 6</td>
<td>30</td>
<td>9.52</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>6 - 8</td>
<td>174</td>
<td>55.24</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>8 - 10</td>
<td>110</td>
<td>34.92</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>315</td>
<td>99.99 (100.00)</td>
<td>315</td>
</tr>
</tbody>
</table>

Mean = 7.50
S.D. = 1.25

Mean = 3.03
S.D. = 0.47

Mean = 3.67
S.D. = 0.96
Out of 315 respondents the number of hours spent in fishing activity in a day during summer season is that 0.31 per cent were spending 2-4 hours, 9.52 per cent were spending 4-6 hours, 55.24 per cent were spending 6-8 hours and 34.92 per cent of the respondents were spending 8-10 hours in a day in fishing.

During the winter season, out of 315 respondents 97-14 per cent were spending 2-4 hours, 1.90 per cent were spending 4-6 hours, 0.95 per cent were spending 6-8 hours and none of the respondents have spent above eight hours in fishing.

And during the rainy season, out of 315 respondents 66.67 per cent were spending 2-4 hours, 33.01 per cent were spending 4-6 hours, 0.31 per cent were spending 6-8 hours and none of the respondents have spent above eight hours in a day in fishing activity.

From the above data, it can be seen that, the number of hours spent in a day in fishing is more during summer season than in winter and rainy seasons.
Thus the observation drawn clearly indicate that summer season is ideal for fishing, because of low level of water in the tank than that of the rainy and winter seasons.

In the present study, it is observed that the family members are also assisting the fishermen during their fishing and other related activities.

Table 2.5: Person Assisting in Fishing Activity and their Relationship with the Respondent

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Assisted in Fishing Activity</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wife</td>
<td>250</td>
<td>82.24</td>
</tr>
<tr>
<td>2.</td>
<td>Wife and Son</td>
<td>45</td>
<td>14.80</td>
</tr>
<tr>
<td>3.</td>
<td>Father</td>
<td>3</td>
<td>0.99</td>
</tr>
<tr>
<td>4.</td>
<td>Mother</td>
<td>6</td>
<td>1.97</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>304</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The table shows different persons who assisted the respondents in fishing and the nature of their relationship with the respondent.
Out of 304 respondents 82.24 per cent had the assistance of their wives, 14.80 per cent had the assistance of their wife as well as sons, 0.99 per cent had the assistance of their fathers only and 1.97 per cent had the assistance of their mothers in fishing activity.

By examining the above data it is observed that the majority of the respondents had the assistance of their wives followed by their wife and sons and only a negligible percentage had their father's and mother's assistance. The assistance of an outsider is completely absent. This clearly indicates that fishing has been exclusively a familial occupation of Gangaputras. If at all the fishing activity requires the assistance of additional hands family members alone have come to assist.

The following table shows the amount of fish catch in a month during different seasons.
Table 2.6: Quantity of fish caught in a month in different seasons

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Quantity caught (Kgs.)</th>
<th>Summer</th>
<th>Percentage</th>
<th>Winter</th>
<th>Percentage</th>
<th>Rainy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Below 30</td>
<td>1</td>
<td>0.32</td>
<td>308</td>
<td>97.78</td>
<td>243</td>
<td>77.14</td>
</tr>
<tr>
<td>2.</td>
<td>30 - 60</td>
<td>63</td>
<td>20.00</td>
<td>4</td>
<td>1.27</td>
<td>71</td>
<td>22.54</td>
</tr>
<tr>
<td>3.</td>
<td>60 - 90</td>
<td>203</td>
<td>64.45</td>
<td>3</td>
<td>0.95</td>
<td>1</td>
<td>0.32</td>
</tr>
<tr>
<td>4.</td>
<td>90 - 120</td>
<td>38</td>
<td>12.06</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>120 - 150</td>
<td>10</td>
<td>3.17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>315</td>
<td>100.00</td>
<td>315</td>
<td>100.00</td>
<td>315</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Mean = 74.33  Mean = 15.95  Mean = 21.25
S.D. = 19.44  S.D. = 6.71  S.D. = 12.73
The above table shows that the calendar of fishing activity is divided into three seasons. They are: summer, winter and rainy seasons. From among the seasons the total fish catch is higher in summer season followed by rainy and winter seasons. Out of 315 respondents, in the summer season, 64.44 per cent of the respondents had a catch between 60-90 kgs of fish, 20 per cent of the respondents had a catch of 30-60 kgs of fish, 12.06 per cent of respondents had a catch of 90-120 kgs of fish, 3.17 per cent of respondents had a catch of 120-150kgs of fish and a meagre percentage of 0.32 per cent catch below 30 kgs of fish.

In the winter season, out of 315 respondents 97.78 per cent had a catch below 30 kgs of fish, 1.27 per cent had a catch of 30-60 kgs of fish and 0.95 per cent had a catch of 60-90 kgs of fish.

In the rainy season, 77.14 per cent had a catch below 30 kgs of fish, 22.54 per cent had a catch of 30-60 kgs of fish and 0.32 per cent had a catch of 60-90 kgs of fish.
The analysis of data from the above table shows that the highest percentage of fish catch is during the summer season due to the low level of water, the fish catch is high and followed by the rainy and winter seasons. During the winter season and rainy seasons the level of water and the climatic conditions are not favourable to the fishing activity.

**FISH TRADE**

Marketing of fish is a daily phenomenon monopolised by private fish merchants. Keeping in view of the variation in the amount of fish catch, the fish trade is classified into two broad types. They are: daily fish marketing and seasonal fish marketing.

**DAILY FISH MARKETING**

The fish caught by the individual fishermen in the tank as well as lake, is disposed off in the local village and to merchants from outside villages, who generally happen to be the women of Gangaputras. In some other instances, the local fish merchants themselves purchase the fish from several fishermen where they generally gather to sell their daily catch. These
village merchants then move the bulk of fish which they bought through engaging vans to the nearest places like Warangal, Hanamkonda and Kzipet markets.

The daily fish marketing operation which takes place at these centres is considered to be the second stage in nature. This kind of fish trade is largely handled by the established professional businessmen. The rates of fish are fixed in accordance with the type of fish; size and season. The village merchants normally purchase the fish from fishermen depending on the demand of fish in the market, the prices prevailing and the transportation cost of the fish. But the fishermen have to dispose off the fish totally on the same day because of its perishable nature. However, the cost of fish at the first stage of wholesale trade varies depending upon the type of fish. The local fish merchant normally gets a profit of Re.1/- or Rs.2/- per kg., of fish disposed off at the second stage of operation.

SEASONAL FISH MARKETING

Mostly middlemen are involved in seasonal fish marketing. The middlemen will consult the caste council for a joint venture of trade. When the terms in between the caste council and the middlemen are settled both the parties will execute a bond about the terms and
conditions. Then the middlemen purchase a fine quality of fish seed and mixes it in the fishermen's tank or lake. After the maturity period of seed is over, the fishermen will catch the fish and sell it to the middlemen. As per the bond, the fishermen have no right to sell the fish to other than the middlemen. If at all the fishermen individually purchases another variety of seed he can mix it in the same tank or lake. After its maturity the fishermen have right to market the fish variety which they have mixed in the tank, at the local market or transport it to the nearby markets. He can market the fish according to his own wish. In the study area there are no restrictions by the fishermen in this type of fish culture and capture. The middlemen are exporting the fish to nearby towns, such as Warangal, Hanamkonda, Kzipet and so on.

In the present study area the fishermen market the fish in different ways.
Table 2.7: The Mode of Selling the Fish

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Marketing</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Inside the Village</td>
<td>38</td>
<td>12.06</td>
</tr>
<tr>
<td>2.</td>
<td>Local Fish Merchant</td>
<td>163</td>
<td>51.75</td>
</tr>
<tr>
<td>3.</td>
<td>Middlemen</td>
<td>114</td>
<td>36.19</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>315</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The above table shows the mode of marketing of the fish by the respondents.

Among the 315 respondents 12.06 per cent were found to market the fish within the village, 51.75 per cent have been selling it to the local fish merchant and 36.19 per cent have been selling the fish to middlemen.

From the above data, it is clearly observed that majority of fishermen were selling the fish to the local fish merchant, this is followed by those who were selling to the middlemen and those who were selling within the village. Though this reduces the burden of transportation to the fishermen majority of them
have been resorting to this because there was no means
to transport and also majority of them could not afford
the transportation costs.

**FISH CURING AND ITS MARKETING**

The routine fish marketing is always not
profitable to the fishermen. Sometimes it happens
that the colour of fish and size of the fish may make
the consumer not to purchase it, which directly affects
the fishermen, sometimes the fishermen would not reach
the market place with his catch. The fish catch thus
left behind is inevitably dried up. The fishermen
sprinkle common salt on the fish proportionately and
spread the fish on a smooth ground or on stone slabs
to sun dry them. When the fish are properly dehydrated,
the dried fish is stored in the gunny bags. Later the
dried up fish is marketed in the nearby villages and
towns. In this process of marketing, Gangaputra women
share a major part of the work. It is they who carry
the dried fish to market.

In the seasonal fish marketing, as per the
agreement in between them a particular quality of fish
has to be sold to the middlemen. It is the whim and
fancy of middlemen either to leave the small size fish to the fishermen or arrange himself for further market-ing. It is general phenomena that the export qualify fish is taken by the middlemen and the fish which does not suit for export is left to the fishermen. If the small size fish is not marketed in village or adjacent towns, the fishermen take them back and dehydrates it to make marketing an easy process. This marketing process yields additional income to the Gangaputras.

SECONDARY OCCUPATIONS

In the present study, most of the respondents had secondary occupations like agriculture, daily wage agricultural labourers and fruit selling, etc. Majority of them were taking up agriculture as their secondary occupation.

AGRICULTURE

Agriculture has been a secondary source of occupation for fishermen. While fishing activity is not at its peak, they seem to concentrate on agricultural activities, even during this period fishing activity is carried out but on a modest scale. While carrying out agriculture, they carry on fishing as well as market-ing of fish simultaneously.
They have two different types of lands, i.e., wet and dry. In wet lands they cultivate two crops throughout the year, the dry lands are cultivated in rainy season only. Though agricultural income is quite uncertain, it remained as one of the major occupations for people other than fishermen, mostly at the subsistence level. Fishermen have also adopted this as a parallel occupation, as fishing operations are generally carried out in the morning hours of the day. The agricultural land scape is overwhelmingly dominated by the paddy cultivation. The paddy cultivation is broadly divided in two seasons, viz., the kharif and rabi seasons.

It is noticed that the growing of paddy in the kharif season is higher than in the rabi season. Farming activities involved in the cultivation of kharif and rabi paddy are discussed hereunder in detail.

**Kharif Season**

The kharif season is highly consistent, with the low level of tank water in summer, all the weeds get dried up, but with the onset of south-west monsoons in the middle of the June, the paddy nursery beds are
prepared and all the farmers uniformly choose only such varieties of crops like Vijaya Masuri, Hamsa, etc.

The farm land in the study area is under the purview of village Panchayat which guides the farmers about the water levels in the tank and the usage and extent of land to be cultivated.

Keeping in view of the extricacies during this season the farmers raise huge bunds upto a height of 3-4 ft. The bunds are so raised to curb the water wastage from the tank and to ensure proper utilization of water available in the tank. The input usage like manures and chemical fertilizers are minimised. But pesticides are occasionally sprayed to protect the crop from the diseases like stem borer and brown plant hooper. After the completion of duration of crop, the farmer will thresh paddy. Before resorting to threshing, they traditionally sacrifice a cock in the fields and prays the deity of Maisamma. Later the crop-food grains are stored in a local made basket, which is termed as Gummi. The dry grass is stored again in a separate place. This grass is used as a fodder to the bullocks, buffalos and cows.
RABI SEASON

The availability of water in the tank during Kharif season is sufficient for agriculture. Farmers utilize water to the maximum extent needed, abiding by the regulations of village panchayat. Generally the standing water levels in Rabi season ranges from 3 to 6 feet only. The farmers are compelled to practice cultivation with a little water left. They have to abide by the decision of the village panchayat in the utilisation of water from the nearby tank. The village panchayat will give the directions to the farmers keeping in mind the future demand and receding water levels in the tank, so farmers would select the short duration varieties of crops. In the rabi season the inputs like pesticide and chemicals usage in the cultivation and protecting the crop is higher than in the kharif season. The composite manures and the chemical fertilizers like superammonium phosphate, urea and other required fertilizers are sprayed 2 to 3 times till the harvest season. The farmer has also takes care to use the pesticides and insecticides to prevent the diseases. The rest of the agricultural operations are the same as during the kharif season.
Wells are the main source of irrigation to some of the fishermen. These fishermen won't get the tank irrigation facility because the land holdings are far away from the tank. They are using diesel engines and electric motors to the wells. They cultivate the wet and dry lands during the two seasons. In the wet lands they sow, the food crops like paddy and jowar and in the dry lands they cultivate the commercial crops like groundnut, cotton and chillies, etc.

The following table shows the distribution of respondents according to the source of land acquisition

Table 2.8: Land Acquisition Pattern of the Respondents

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Land Acquired</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hereditary</td>
<td>126</td>
<td>73.25</td>
</tr>
<tr>
<td>2.</td>
<td>Purchased</td>
<td>22</td>
<td>12.79</td>
</tr>
<tr>
<td>3.</td>
<td>Both Hereditary and Purchased</td>
<td>24</td>
<td>13.95</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>172</td>
<td>99.99 (100.00)</td>
</tr>
</tbody>
</table>
Amongst 172 respondents who had agriculture as their secondary occupation, 73.25 per cent of respondents had inherited land from the ancestors, 12.79 per cent have acquired land by purchasing on their own and 13.95 per cent of the respondents had land both inherited and purchased.

The above table clearly shows that in the present study the majority of the respondents have inherited land from the ancestors and followed by the other. Land acquisition through their own effort by the fishermen indicates the economic position and their inclination towards agriculture as source of additional income and also to engage themselves during the lean seasons in fishing.

The following table shows the cultivable land owned by the respondents in the present study area.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Land in Acres</th>
<th>Wet Only</th>
<th>Dry Only</th>
<th>Dry &amp; Wet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F</td>
<td>P</td>
<td>F</td>
</tr>
<tr>
<td>1.</td>
<td>0.5 - 1.0</td>
<td>16</td>
<td>24.24</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>1.0 - 1.5</td>
<td>13</td>
<td>19.70</td>
<td>14</td>
</tr>
<tr>
<td>3.</td>
<td>1.5 - 2.0</td>
<td>11</td>
<td>16.67</td>
<td>13</td>
</tr>
<tr>
<td>4.</td>
<td>2.0 - 2.5</td>
<td>12</td>
<td>18.18</td>
<td>15</td>
</tr>
<tr>
<td>5.</td>
<td>2.5 - 3.0</td>
<td>9</td>
<td>13.64</td>
<td>8</td>
</tr>
<tr>
<td>6.</td>
<td>3.0 - 3.5</td>
<td>5</td>
<td>7.57</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>66</td>
<td>100.00</td>
<td>51</td>
</tr>
</tbody>
</table>

Mean = 1.75  \quad \text{Mean} = 1.95  \quad \text{Mean} = 2.09
S.D. = 1.20  \quad \text{S.D.} = 0.83  \quad \text{S.D.} = 0.96
CULTIVABLE LAND OWNED BY RESPONDENTS

The above table shows, out of 315 respondents, 51 respondents possessed dry land, 66 respondents possessed wet land and 55 respondents possessed both dry and wet land. The details of possession of land is as follows.

DRY LAND

Out of 51 respondents possessing dry land 27.45 per cent possessed 1.0-1.5 acres, 25.49 per cent possessed 1.5-2.0 acres, 29.41 per cent possessed 2.0-2.5 acres, 15.69 per cent possessed 2.5-3.0 acres and 1.96 per cent possessed 3.0-3.5 acres of dry land.

WET LAND

Out of 66 respondents possessing wet land, 24.24 per cent possessed 0.5-1.0 acre, 19.70 per cent possessed 1.0-1.5 acres, 16.67 per cent possessed 1.5-2.0 acres, 18.18 per cent possessed 2.0-2.5 acres, 13.64 per cent possessed 2.5-3.0 acres and 7.57 per cent possessed 3.0-3.5 acres of wet land.
WET AND DRY LAND

Out of 55 respondents possessing both wet and dry land, 21.82 per cent possessed 1.0-1.5 acres, 27.27 per cent possessed 1.5-2.0 acres, 23.04 per cent possessed 2.0-2.5 acres, 16.36 per cent possessed 2.5-3.0 acres and 10.91 per cent possessed 3.0-3.5 acres of both wet and dry land.

In the present study 54.60 per cent owned land useful for cultivation, and out of the 315 respondents, 20.95 per cent owned exclusively wet land, 16.19 per cent owned only dry land and 17.46 per cent owned wet and dry land. The fact that owning of cultivable land is an indication of economic position and possession of wet land is a further indication of their better economic status.

Out of 172 respondents resorting to agriculture as secondary occupation 21.51 per cent restricted their cultivation activity to only one crop and 78.49 per cent of the respondents have resorted two crop pattern. Those who resorted to one crop pattern were mostly the respondents with dry land and the respondents who possessed wet and wet-cum-dry land have resorted to two
crop pattern. The lands which were exclusively dry were those which were not fed from the irrigation channel of the tank and the other type of wet lands were those which were in close proximity to the tank and the wet-cum-dry lands were lying between wet and dry lands.

DAILY WAGE AGRICULTURAL LABOURING

Daily wage agricultural labouring, though not an attractive proposition, in terms of occupation yet is an additional source of income to the Gangaputras community. The landless fishermen mainly are resorting to daily wage agricultural labouring. The fishermen have been getting Rs.15/- for male and Rs.12/- for a female through daily wage agricultural labouring. Their children were also taken to the agriculture and its allied fields by their parents. The fishermen who work in the agriculture fields were also rewarded in kind.

In addition to the daily wage agricultural labouring the fishermen were also selling ice, fruits in leisure time. This has been yielding additional income to them to improve to their economic condition.
These types of activities have become a secondary occupation to the Gangaputra fishermen.

FRUIT SELLING

Besides fish trade and daily wage earnings in the study area the respondents were also indulging in fruit selling, which is their secondary occupation. The inhabitants of the study area would go to the orchards and get fruits at low price and sell them for a profit. Sometimes they have also been taking the orchards on lease when the crops have failed and they had problems in fishing and fish trade. The Gangapurtras have also been earning additional income through selling of fruits by going around the villages as well as nearby towns on bicycles, sometimes they also sold fruits to the wholesale mandi (market) owners. This has also been improving their economic condition.

REARING OF LIVE STOCK

Live stock rearing, though not directly related to the cultivation, it has remained as a secondary occupation. The fishermen have been taking-up several non-farm activities to supplement their income. The fishermen non-farm activities comprise mainly of cattle (cows, bullocks and buffalos) and goats, fowl rearing.
Cattle rearing has been so reduced to a considerable extent that the operation of agricultural farming is not hindered. Many of them were maintaining milk cattle. After the milk was used for the domestic consumption the remaining milk was sold by the Gangaputras women to the adjacent households on the monthly payment or to the tea stalls at nearby towns. Rearing of chicks so as to meet the domestic demand has also become the common phenomenon for the Gangaputras' community like the other communities in the study area. The goats, though counted in small number, are raised exclusively for meat purpose. They sold these goats to others in the market depending upon their personal necessity for money.

Apart from the primary occupation of fishing and secondary occupation of agriculture and fruit selling possession of livestock was also helpful to improve one's own economic condition. In the present study area 197 respondents were owning livestock of different nature, such as bullocks, buffalos, goats, ducks and hens etc., the value of livestock is computed in order to ascertain the economic position of the respondents. The following table presents the details of the value of livestock possessed by the respondents.
Table 2.10: Value of Livestock Owned by the Respondents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Value (Rs.)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Below 1000</td>
<td>34</td>
<td>17.26</td>
</tr>
<tr>
<td>2.</td>
<td>1000 - 2000</td>
<td>48</td>
<td>24.37</td>
</tr>
<tr>
<td>3.</td>
<td>2000 - 3000</td>
<td>67</td>
<td>34.01</td>
</tr>
<tr>
<td>4.</td>
<td>3000 - 4000</td>
<td>32</td>
<td>16.24</td>
</tr>
<tr>
<td>5.</td>
<td>4000 - 5000</td>
<td>16</td>
<td>8.12</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>197</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Mean = 22.36
S.D. = 7.96

From the above table it is observed that out of 315 respondents, only 197 respondents have possessed livestock, the value of livestock of different nature which the respondents possessed is as follows.

Out of 197 respondents, 17.26 per cent possessed livestock worth below Rs.1,000/-, 24.37 per cent possessed livestock valued at Rs.1000-2000, 34.01 per cent possessed livestock valued at Rs.2000-3000, 16.24 per cent possessed livestock valued at Rs.3000-4000 and 8.12 per cent possessed livestock valued at Rs.4000-5000.
The data presented above shows that a majority of the respondents possessed livestock valued at Rs. 2000-3000. It can be observed from the above data that considerable income could be drawn from the livestock which the respondents possessed and that could be the reason why a majority of them possessed livestock of some nature.

**INCOME AND INVESTMENT EXPENDITURE**

From the foregoing discussion, it could be observed that the Gangaputras adopted mixed economy. Apparently they are accruing income from different sources like, fishing which is their primary occupation and agriculture, daily wage agricultural labour and also fruit selling as a secondary occupations. This has shown in the variance of the levels of income and investment expenditure of the respondents.

The following observations are noteworthy to mention, based on the statistics computed from the data of 315 households drawn from the four sample villages.
<table>
<thead>
<tr>
<th>Occupation</th>
<th>No. of households</th>
<th>Total annual household income</th>
<th>Average household income</th>
<th>Per capita annual income</th>
<th>Total annual investment expenditure</th>
<th>Average household investment expenditure</th>
<th>Per capita investment expenditure per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Primary Fishing</td>
<td>315</td>
<td>24,46,000.00</td>
<td>7,765.08</td>
<td>647.09</td>
<td>8,03,061.00</td>
<td>2,549.40</td>
<td>212.45</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Daily wage Agricultural Labour</td>
<td>83</td>
<td>3,34,078.32</td>
<td>4,025.04</td>
<td>335.42</td>
<td>97,608.00</td>
<td>1,176.00</td>
<td>98.00</td>
</tr>
<tr>
<td>3. Fruit Selling</td>
<td>53</td>
<td>2,18,000.00</td>
<td>4,113.21</td>
<td>342.77</td>
<td>70,271.64</td>
<td>1,325.88</td>
<td>110.49</td>
</tr>
</tbody>
</table>
From the above table it can be seen that fishing as a primary occupation of the Gangaputras generated a major portion of their total annual income. From among the primary and secondary occupations of the 315 respondents fishing yielded the highest source of income. It is worth mentioning to note that the total annual income of the respondents is Rs. 24,46,000, and the total annual investment expenditure is Rs. 8,03,061. The average household income is Rs. 7,765.08 and the average household investment expenditure is Rs. 2,549.40. The per capita income and investment expenditure per month are Rs. 647.09 and Rs. 212.45 respectively. The total annual investment expenditure on fishing nets, crafts and tools are also included in the total annual investment expenditure.

Agriculture, one among the secondary occupations of 172 respondents, has yielded a total annual income of Rs. 9,90,000. The total annual investment expenditure is Rs. 3,05,472.00. The average household income through agriculture is Rs. 5,755.81 and the average household investment expenditure is Rs. 1,776.00. The per capita income and investment expenditure per
month are Rs.479.65 and Rs.148.00 respectively. The total annual investment expenditure on agriculture includes the following: The investment on seeds, pesticides and chemicals, sprayers, labour and transportation costs, etc.

The daily wage agricultural labour occupies the second position from among the secondary occupations. The total annual income and investment expenditure are Rs.3,34,078.32 and Rs.97,608.00. The average household income of daily wage agricultural labour is Rs.4,025.04 and the average household investment expenditure is Rs.1,176.00. The per capita income and investment expenditure of daily wage agriculture labour are Rs.335.42 and Rs.98.00. The daily wage agricultural labour are spending their income on fodder and tools and implements and major portion of income on personal household expenses. This is the reason why their saving potentiality is comparatively far lesser.

And finally, 53 respondents have been in fruit selling as their secondary occupation. The total annual income of the fruit selling respondents is Rs.2,18,000 and the total annual investment expenditure
is Rs.70,271.64. The average household income and investment expenditure are Rs.4,113.21 and Rs.1,325.88 respectively. The per capita income and investment expenditure per month are Rs.342.77 and Rs.110.49 respectively. The investment expenditure of fruit sellers is on purchase of fruits, interest payments and transportation.

The analysis of above data shows that the Gangaputras are in fishing which is their primary occupation, due to anticipated yield and the profitability is far higher when compared to the other non-farm agricultural, operations and the other subsidiary occupations. The saving potentiality through daily wage agriculture labour and fruit selling is less, hence they are maintaining fish culture and capture successfully through the investments from middlemen and borrowings from the relatives and money lenders.

The following table shows the income range of respondents from different primary and secondary occupations.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Income Range (Rs.)</th>
<th>Fishing Frequency</th>
<th>Fishing Percentage</th>
<th>Agriculture Frequency</th>
<th>Agriculture Percentage</th>
<th>Daily wage Agricultural Labour Frequency</th>
<th>Daily wage Agricultural Labour Percentage</th>
<th>Fruit Selling Frequency</th>
<th>Fruit Selling Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Below 2000</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>7.56</td>
<td>22</td>
<td>26.51</td>
<td>17</td>
<td>32.07</td>
</tr>
<tr>
<td>2.</td>
<td>2000- 4000</td>
<td>13</td>
<td>4.13</td>
<td>36</td>
<td>20.93</td>
<td>34</td>
<td>40.96</td>
<td>16</td>
<td>30.19</td>
</tr>
<tr>
<td>3.</td>
<td>4000- 6000</td>
<td>97</td>
<td>30.79</td>
<td>82</td>
<td>47.67</td>
<td>21</td>
<td>25.30</td>
<td>20</td>
<td>37.74</td>
</tr>
<tr>
<td>4.</td>
<td>6000- 8000</td>
<td>119</td>
<td>37.76</td>
<td>41</td>
<td>23.84</td>
<td>6</td>
<td>7.23</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>8000-10000</td>
<td>86</td>
<td>27.30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>315</td>
<td>100.00</td>
<td>172</td>
<td>100.00</td>
<td>83</td>
<td>100.00</td>
<td>53</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Mean = 6765.08  Mean = 4755.81  Mean = 3265.06  Mean = 3113.21  
S.D. = 1708.80  S.D. = 1720.47  S.D. = 1777.64  S.D. = 1600.00
In the primary occupation of fishing, out of 315 respondents, 4.13 per cent were in the annual income range of Rs.2000-4000, 30.79 per cent were in the annual income range of Rs.4000-6000, 37.78 per cent were in the annual income range of Rs.6000-8000 and 27.30 per cent were in the annual income range of Rs.8000-10000.

In secondary occupations like agriculture, out of 172 respondents, 7.56 per cent of respondents were in the annual income range of below Rs.2000, 20.93 per cent were in the annual income range of Rs.2000-4000, 47.67 per cent were in the annual income range of Rs.4000-6000 and 23.84 per cent were in the annual income range of Rs.6000-8000.

In daily wage labouring, out of 83 respondents 26.51 per cent of respondents were in the annual income range of below Rs.2000, 40.96 per cent were in the annual income range of Rs.2000-4000, 25.30 per cent were in the annual income range of Rs.4000-6000 and 7.23 per cent were in the annual income range of Rs.6000-8000 and in fruit selling, out of 53 respondents, 32.07 per cent of respondents were in the annual income range of below Rs.2000, 30.19 per cent were in the
annual income range of Rs.2000-4000 and 37.74 per cent were in the annual income range of Rs.4000-6000 respectively.

Fishing as a primary occupation is contributing a major portion of income to the Gangaputras. One third of the respondents are in the income range of Rs.6000-8000 and it is followed by Rs.4000-6000 and a meagre per cent 4.13 (13) respondents fell in the category of Rs.2000-4000.

In agriculture nearly half of the respondents are in the income range of Rs.4000-6000 which is followed by Rs.6000-8000 income range respondents by about 7.56 per cent. In daily wage agricultural labour nearly half of respondents are in the income range of Rs.2000-4000 which is followed by below Rs.2000 income range by about 30.12 per cent. And in fruit selling one-third of the respondents fell in the category of below Rs.4000-6000 income range. The remaining respondents constitute who are in the income range of below Rs.2000 and Rs.2000-4000 nearly the same percentage (32.97, 30.19).

The following table shows the range of investment expenditure from different primary and secondary occupations.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Investment Expenditure Range (Rs.)</th>
<th>Fishing</th>
<th></th>
<th>Agriculture</th>
<th></th>
<th>Daily Wage Agricultural Labour</th>
<th></th>
<th>Fruit Selling</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1.</td>
<td>Below 2000</td>
<td>96</td>
<td>30.48</td>
<td>65</td>
<td>37.79</td>
<td>58</td>
<td>69.88</td>
<td>33</td>
<td>62.27</td>
</tr>
<tr>
<td>2.</td>
<td>2000– 4000</td>
<td>104</td>
<td>33.02</td>
<td>81</td>
<td>47.09</td>
<td>16</td>
<td>19.28</td>
<td>17</td>
<td>32.06</td>
</tr>
<tr>
<td>3.</td>
<td>4000– 6000</td>
<td>89</td>
<td>28.25</td>
<td>19</td>
<td>11.05</td>
<td>9</td>
<td>10.84</td>
<td>3</td>
<td>5.67</td>
</tr>
<tr>
<td>4.</td>
<td>6000– 8000</td>
<td>24</td>
<td>7.62</td>
<td>7</td>
<td>4.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>8000–10000</td>
<td>2</td>
<td>0.63</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>315</td>
<td>100.00</td>
<td>172</td>
<td>100.00</td>
<td>83</td>
<td>100.00</td>
<td>53</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Mean = 3298.41  Mean = 2627.91  Mean = 1819.28  Mean = 1867.92
S.D. = 1925.62  S.D. = 1829.75  S.D. = 1354.70  S.D. = 1197.49
In fishing 30.48 per cent of respondents have incurred an annual investment expenditure, it was below Rs.2000, by 33.02 per cent of respondents it was in the range of Rs.2000-4000, by 28.25 per cent it was in the range of Rs.4000-6000, by 7.62 per cent it was in the range of Rs.6000-8000 and by 0.63 per cent it was in the range of Rs.8000-10000.

In secondary occupations like agriculture, out of 172 respondents, 37.79 per cent of respondents have incurred an annual investment expenditure below Rs.2000, by 47.09 per cent it was in the range of Rs.2000-4000, by 11.05 per cent it was in the range of Rs.4000-6000 and by 4.07 per cent it was in the range of Rs.6000-8000.

In daily wage agricultural labouring, out of 83 respondents, 69.88 per cent of respondents have incurred an annual investment expenditure below Rs.2000 by 19.28 per cent it was in the range of Rs.2000-4000 and by 10.84 per cent it was in the range of Rs.4000-6000. The daily wage agricultural labour spend the largest segment of their income on fodder for their bullocks, bullock cart, purchasing tools and on their daily basic amenities.
In fruit selling, out of 53 respondents, 62.27 per cent of respondents have incurred an investment expenditure below Rs. 2000, by 32.06 per cent it was in the range of Rs. 2000-4000 and by 5.67 per cent it was in the range of Rs. 4000-6000.

**NATURE OF INDEBTEDNESS**

Every occupation in the present study area requires some amount of investment which almost becomes a sort of recurring expenditure. The investment in various economic activities of Gangaputras is broadly categorised into three types, i.e., fishing equipment, assets like livestock, investment on permanent assets like agricultural land, domestic expenditure on daughter's marriage, house construction, medical services and so on.

Gangaputras, who could save a part of their income would reinvest that amount on their economic activities. They are even forced to borrow a part of the required amount from money lenders. There are several instances of money being borrowed on their personal capacity mostly from relatives or friends without pledging anything.
Table No.2.14: The distribution of respondents by the nature of indebtedness

<table>
<thead>
<tr>
<th>Nature of Indebtedness</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Amount of Indebtedness</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Rate of Interest of Respondents</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Sources of loan obtained</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment of primary occupation</td>
<td>149</td>
<td>50.85</td>
<td>Below 2000</td>
<td>77</td>
<td>26.28</td>
<td>Rs.2/-</td>
<td>186</td>
<td>63.48</td>
<td>Money lender</td>
<td>218</td>
<td>74.40</td>
</tr>
<tr>
<td>Investment of secondary occupation</td>
<td>68</td>
<td>23.21</td>
<td>2000-4000</td>
<td>67</td>
<td>22.87</td>
<td>Rs.3/-</td>
<td>89</td>
<td>30.38</td>
<td>Relations</td>
<td>54</td>
<td>18.43</td>
</tr>
<tr>
<td>Domestic purpose</td>
<td>52</td>
<td>17.75</td>
<td>4000-6000</td>
<td>88</td>
<td>30.03</td>
<td>No interest</td>
<td>18</td>
<td>6.14</td>
<td>Friends</td>
<td>21</td>
<td>7.17</td>
</tr>
<tr>
<td>Towards house construction &amp; repairs</td>
<td>24</td>
<td>8.19</td>
<td>6000-9000</td>
<td>43</td>
<td>14.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8000-10000</td>
<td>18</td>
<td>6.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>293</td>
<td>99.99 (100.00)</td>
<td>TOTAL 293</td>
<td>99.99 (100.00)</td>
<td>TOTAL 293</td>
<td>99.99 (100.00)</td>
<td>TOTAL 293</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In the present study, the purpose of borrowing of money by the respondents is for varying reasons. Out of the 293 respondents who have borrowed money, 50.85 per cent have borrowed money for investing on their primary occupation related to fishing. 23.21 per cent have borrowed money for initial investment on their secondary occupations which are agriculture fruit selling and other related activities and 17.75 per cent have become indebted for domestic purposes which include marriages and various ceremonies connected with festivals, birth, death and so on, and 8.19 per cent were indebted because of house construction and the repairs for houses.

Thus from the observations made in the study it is clear that the majority of the respondents were indebted because of their borrowings to purchase raw material for manufacturing of their fishing crafts. Indebtedness has been mainly to sustain in the primary occupation which was helping them to make a better living.

The table No. 2.14 shows the distribution of respondents by the nature of indebtedness. The amount of loan and rate of interest at which the loan was
borrowed and the source of loan from where it was obtained
In the present study area, out of 315 respondents 93.01
per cent of the respondents were indebted.

**EXTENT OF INDEBTEDNESS**

Out of 293 respondents indebted, 26.28 per cent
have borrowed below Rs.2000, 22.87 per cent have bor-
rowed Rs.2000-4000, 30.03 per cent had a sum of Rs.4000-
6000 as loan, 14.67 per cent had a sum of Rs.6000-8000
as loan and 6.14 per cent had a sum of Rs.8000-10000,
which they have borrowed.

It clearly shows that majority of respondents
has borrowed a sum of Rs.4000-6000. This clearly indi-
cates the amount of indebtedness is considerably less
compared to their earnings. It can be mentioned that
the indebtedness of the respondents did not cause any
stress and strain for the majority of the respondents
because their income allowed them to borrow and repay
the loans.

**RATE OF INTEREST**

Out of 293 respondents indebted, 63.48 per cent
were paying an interest of 24 per cent per annum, 30.38
per cent have been found to have paid an interest of
36 per cent per annum and 6.14 per cent have been found to have not paid any interest on their loans which was from their relatives and friends.

Though a majority have borrowed smaller amounts yet the interest rate would have become a burden but for the nature of their occupation which allowed them to pay interest regularly (every month or so) which is not possible in other occupations like agriculture.

**SOURCE OF LOAN OBTAINED**

In general, people residing in villages borrow money from various sources such as money lenders, relatives and friends. In the present study the various sources of loans obtained are as follows.

Out of 293 respondents indebted, 74.40 per cent got their loans from money lenders, 18.43 per cent got their loans from relatives and 7.17 per cent got the loans from their friends. It is only those who have taken loans from money lenders with high rate of interest probably have faced the burden of borrowing. In the present study, 74.40 per cent of them have borrowed from the above said source but yet did not face borrowing
as a serious difficulty because they were able to pay interest regularly for the amount borrowed as has been already mentioned. Apart from money lenders, relatives and friends have been coming to the rescue of the respondents at the time of dire necessity where-ever it was possible for them.

Indebtedness which is one's own making and indebtedness inherited have in fact been a major source of stress and strain for many in the rural economic sense.

But in the present study, the situation has been different in the sense that the respondents had some amount of stress and strain which was considerably less.

The discussions made about the economic organisation of Gangapatras would help us better in understanding comprehensively the other inter-related sub-systems like social and political organisations which have been elaborated in the later chapters.