

## Socio-economic status of fisherwomen community in coastal Vizianagaram district of Andhra Pradesh, India

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### Abstract

The socio-economics of six fisherwomen co-operative societies in coastal Vizianagaram district of Andhra Pradesh were studied through field surveys by interviewing a total of 185 respondents. Respondents were mostly middle aged (31 – 56 years; 61.6%) living in nuclear families (64.9%). Majority of the fisherwomen were found illiterate (88.1%). A greater proportion (84.9%) of fisherwomen involved in fish marketing as a primary occupation followed by salting and curing (9.73%) and pickling of fishes (5.4%). More than half (56.2%) of the respondents earned > Rs. 25,000 (USD\$ 1 = Rs. 75) every month. The study revealed that the socio-economic condition of the fisherwomen in the study area is poor, with a high percentage of the illiteracy. Necessary steps should be taken by the Governments organizations, NGOs and respective stakeholders to improve the literacy level as well as livelihood status.

**Keywords:** Socio-economics; livelihood; fisherwomen community; Vizianagaram district

## 1 | INTRODUCTION

The fisheries sector plays an important role in the boosting of the Indian economy by contributing to the national income, employment generation, and foreign exchange earnings. Fish and fishery products are recognised as the cheapest source of protein and an important source of diet for thousands of people in many parts of the world. It is estimated that more than 12 million people are directly engaged in fishing activities and about 60 million are exclusively depend on fisheries activities for livelihood in India (Rao *et al.* 2016).

Vizianagaram district of the state of Andhra Pradesh has

approximately 28 km of coastal area and supports nearly 6,993 active fishermen. Several fishery co-operatives societies have been established by these fishermen. Fisherwomen in this area are very active in fishing-based activities including direct fishing, fish processing and marketing. Fishing community is considered vulnerable in many regards and thus a range of studies have been conducted on their socio-economic status in different parts of the world (*e.g.* Flowra *et al.* 2009; Islam *et al.* 2013; Galib *et al.* 2016) including India (Devi *et al.* 2012; Kalita *et al.* 2015; Jasna and Palai 2016) with a view to improving their livelihood status through identifying problems and constraints.

Limited knowledge on socio-economic conditions of fishing communities is a great hitch for proper planning and implementation of various programmes for their improvement (Shankar 2010; Saxena *et al.* 2014). The study of the socio-economic status of fishing community is a prerequisite, in order to achieve the relevant and cost-effective solutions. To the best of our knowledge, no studies have been conducted on the socio-economic status of the fisherwomen community of Vizianagaram district so far, despite their significant involvement in the fishery sectors of the state. Therefore, the present study was carried out with an aim to investigate the socio-economic status of the fisherwomen community of the Vizianagaram district of Andhra Pradesh.

## 2 | METHODOLOGY

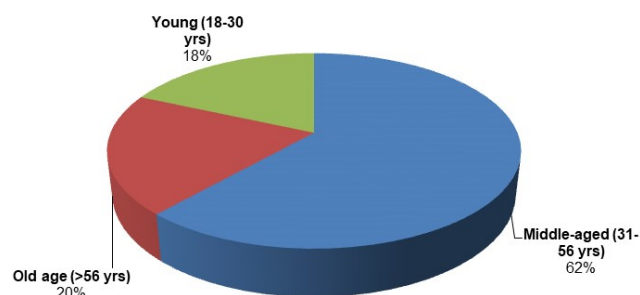
The present study was carried out at Vizianagaram district of Andhra Pradesh for a period of one year (2013–14). The primary data were collected through interviewing 185 respondents from six selected fisherwomen cooperative societies; societies were Sri Shyamamma Mahila Sagara Matsya Parishramika Sahakara sangham, Veelagaddapeta, Pasupatirega (M), Matsyakara Mahila Sangham, Y.M. Palem and Bhogapuram (M). Collected data were numerically tabulated and analysed through simple statistical methods in Microsoft Excel (version 2016).

## 3 | RESULTS AND DISCUSSION

Data on personal, socio-economic, communicational and situational characteristic of the respondents were collected for close examination.

### 3.1 Age

The study showed that 61.6% of the respondents were aged between 31 and 56 years (Figure 1) which indicates that the fisherwomen communities were dominated by the middle-aged group. However, all groups actively participated in fishing-related activities.



**FIGURE 1** Age distributions of the fisherwomen respondents in coastal Vizianagaram district of Andhra Pradesh, India

Joshua (2009) reported that majority (46.7%) of the fishermen belonged to middle-aged group followed by 42.5% young and 10.8% old age groups from tsunami affected areas of Nagapattinam and Kollam of the country. In an-

other study based of fishers of Chandakhola wetland, Dhubri, Assam (Sheikh and Goswami 2013) it was revealed that age of 52.5% respondents ranged between 31 and 50 years followed by 18 – 30 years (25%) and the rest were above 50 years. Kalita *et al.* (2015) reported that the age of 49.3% of the total respondents from the fishermen community of Bekiriver, Barpeta, Assam varied from 31 – 40 years and 23.91% between 41 and 50 years. Age of fisher folks engaged in mussel fishery in Kanyakumari District of Tamil Nadu, India is reported as 40 – 50 years (46%), 50 – 60 years (24%), 30 – 40 years (18%) below 30 years (8%) and above 60 years (4%) (Mary *et al.* 2015).

### 3.2 Family size and family types

Of the total 185 fisherwomen families surveyed, 48.7% of the respondents had a family size of ≤5 family members and rest 51.3% constituted with >5 family members. Anon (2005) studied socio-economic status of fishermen in Nuvvurevu village of Srikakulam district, Andhra Pradesh and found that 38% of the families consisted of <5 members and 62% families were with >5 members. Shankar (2010) reported that the family size of 30.7% of the fishermen was <5 and 69.3% consisted of >5 members. Mary *et al.* (2015) reported that 52% of the fishermen family involved in mussel fishery in Kanyakumari district had 2 – 4 members followed by 4 – 6 members (41%), 6 – 8 members (4.4%) and 8 – 10 members (2%). The present study is agreeing with the studies concerned.

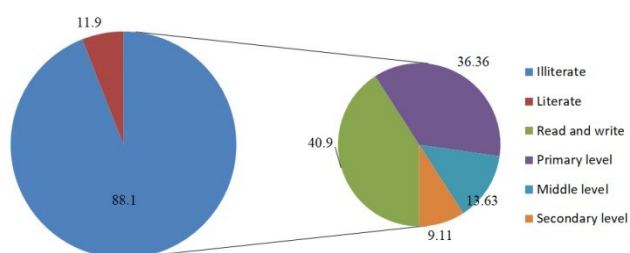
The survey results also showed that the majority of the respondents lived in nuclear families (64.9%) whereas remaining 35.1% lived in joint families. Anon (2005) reported that most of the fishermen families were nuclear (87%) followed by joint families (13%). 53% and 47% of the respondents were reported to be lived in joint and nuclear families respectively (Sheikh and Goswami 2013). The finding of the present study resembles the findings of these studies.

### 3.3 Education

The majority of respondents (88.1%) were illiterate and remaining fisherwomen (11.9%) completed some sort of formal education. Among the latter group, 40.9% of the respondents were able to read and write only (Figure 2).

The status of education of the respondents was not satisfactory. Similar low levels of education status among the fishermen community in different parts of the country was also reported earlier (Perumal *et al.* 1992; Shivalingaiah *et al.* 1996; Mohinighadhia *et al.* 1999; Devi *et al.* 2012). Mohinighadhia *et al.* (1999) reported that 76.5% of the fishers were illiterates followed by primary level (20%), secondary level (2.5%) and college level (6.9%). Shahjahan *et al.* (2001) also reported that the majority of fishermen were uneducated (63.3%) adjacent to Jamuna River, Bangladesh. Similar illiteracy rate of fishers (63%)

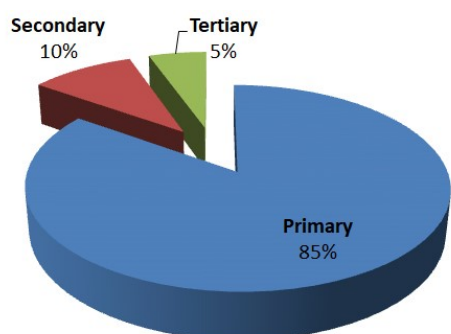
was also reported for fishing community in Assam by Sheikh and Goswami (2013) whereas Kalita *et al.* (2015) reported it as 72.1%. Saxena (2014) reported a little bit higher percentage of literacy (55%) among the fisherman community of upper lake, Bhopal. Bhuyan and Islam (2016) studied socio-economic conditions of the fishing community of Meghna River adjacent to Narsingdi district of Bangladesh and reported that most of the fishermen (71%) were illiterate. In Kanyakumari district of India, a similar observation was made for mussel fishermen (68.7% illiteracy; Mary *et al.* 2015). As high as 80% illiterate were also observed in the fishermen community of Rampur district, Uttar Pradesh (Saxena *et al.* 2014).



**FIGURE 2** Education of fisherwomen respondents in coastal Vizianagaram district of Andhra Pradesh.

### 3.4 Occupational status

Three different occupation levels were recorded in the studied community, *i.e.* primary (fish marketing), secondary (salting and curing) and tertiary (fish pickling). The majority of the respondents (85%) were involved in fish marketing as a primary occupation followed by salting and curing of fish and fish pickling as well as fish marketing (Figure 3).

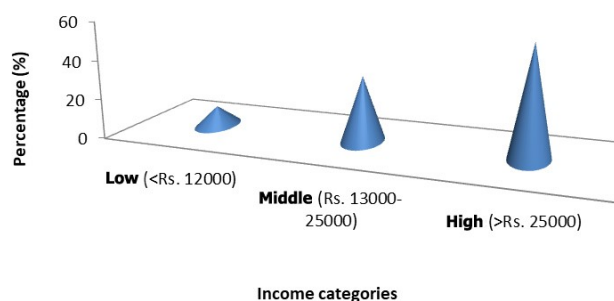


**FIGURE 3** Levels of occupation of the fisherwomen in coastal Vizianagaram district of Andhra Pradesh.

A survey disclosed that the main occupation of the fishermen community of Chenugonipally Pedda Cheruvu Gadwal, Mahabubnagar district, Telangana is fishing followed by agriculture, working as unskilled employees and businessmen, casual labours and Government employees (Mahender *et al.* 2016). The present study found to be almost similar to the works done by previous researchers in aspects of the socio-economic status of fishers' women community in different regions.

### 3.5 Income status

The monthly income of fisherwomen was categorised into three groups *i.e.* low (<Rs. 12,000 per month), middle (Rs. 13,000 – 25,000) and high (> Rs. 25,000). Majority of the respondents (56.2%) belonged to the high-income group followed by middle and low income groups group (Figure 4). A study revealed that the monthly income of fishermen in Chandakhola wetland, Dhubri, Assam was low (<Rs. 3000) for 35% of the respondents followed by Rs. 3001 – 4500 (20% respondents) and Rs. 4501 – 6000 (30% respondents) (Sheikh and Goswami 2013). The income status of the majority of the fisher folks (55%) engaged in mussel fishery at Kanyakumari district of Tamil Nadu varied between Rs 5,000 and 15,000 whereas monthly income of Rs 15,000 – 25,000 for 24% respondents was also reported (Mary *et al.* 2015). Saxena *et al.* (2014) reported a high level of income, Rs. 60,000 to 100,000 per month, in fishermen community of Rampur district, Uttar Pradesh.



**FIGURE 4** Monthly income of fisherwomen community in coastal Vizianagaram district of Andhra Pradesh (USD \$ 1 = Rs. 75).

### 3.6 Communication facilities and mass media participation

Survey data revealed that the communication facilities (*e.g.* schools, markets etc.) among the fisherwomen were categorised as low (16.8% respondents), moderate (50.8%) and high (32.4%). Participation in mass media data showed that 56.8% fisherwomen involved in low level of mass media participation followed by moderate level participation (22.7% respondents) and high level participation (20.5% respondents).

### 3.7 Extension agency contact

Majority of the respondents (45.4%) maintained medium level of contacts to the extension service agencies whereas 14.1% fisherwomen maintained low level of extension agency contact and remaining 40.6% respondents maintained high level of contact.

Nagarajaiah (2002) reported this phenomenon as low (40% respondents), medium (30.8%) and high (29.3%) levels of contacts with the extension agencies among composite fish farmers. Shankar (2010) observed that the

majority of the fishermen (57.3%) had medium-level extension agency contact followed by high-level (28%) and low-level (14.7%) contact. On the basis of extension agent contacts, the present study outcomes regarding extension agency contacts may be considered very good, especially compared to earlier works.

#### 4| CONCLUSIONS

Despite full engagement in fishery-related activities poor socio-economic conditions of the fisherwomen in Vizianagaram district of Andhra Pradesh was revealed in this study. A large numbers of fisherwomen families were unable to fulfil their minimum needs. Most of the fishermen were middle aged, mostly illiterate and lived in families with >5 members. Very low communication facilities were observed in the area. Necessary steps should be taken by the Governments organizations, NGOs and respective organisations or groups to assist the community with a view to improving their livelihood. Priority on literacy level and alternative income-generating options may be considered in this regard.

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#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author (BBC).

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#### CONTRIBUTION OF THE AUTHORS

**KB** data collection; **BBC & AD** data analysis; **SB & DB** manuscript preparation