



Research Article

Socio Economic Status of Fishermen Community, South Punjab, Pakistan

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MSH and KJI planned the study. MA presented the idea of the study. MSH collected the data. AJ, Irfan, HM and NK helped in writing the article.

Keywords

Socio economic, Fishermen community, Head taunsa, Punjnad, Pakistan

Abstract | This study was conducted to evaluate the socio-economic status of fishermen community at Rivers of Pakistan in South Punjab. Head Taunsa and Punjnad were selected as study sites to collect information from fishermen through well prepared questionnaire. It was observed fishermen in both study sites were of 20 -55 year of age having maximum family size of 7-10 individuals. Illiterate fishermen were recorded to be 50 and 40 % at head Punjnad and Taunsa, respectively. Fishermen maximum yearly income at both study sites were in the range of 70,000 - 80,000 PKR (Pakistan rupees). The study had confirmed most of the fishermen were living in poor conditions which accounts 60 and 80 % of head Punjnad and Taunsa, respectively. However, most of them were dependent on tap as well as tube well water as drinking source. On the other hand, to run the fishing business, majority of them were relying on loans from non-government sources. It is concluded that fishing is a profitable business but with educating the fishermen especially in fish handling could improve their status of living as well as in generating brilliant mind towards global economy.

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Introduction

Fisheries sector play an important role on socio-economic development of fishermen community. Pakistan has an extensive inland water areas system and water bodies which possess varying potential for development of inland and aquaculture subsectors. Inland water bodies, like dams, water locks, reservoirs, rivers, lakes and ponds cover an area of approximately 8 million hectares. Punjab is the most populous, developed and prosperous province of Pakistan

rich in green fields due to five rivers (Sindh, Chenab, Jhelum, Ravi and Sutlej) running through it. Punjab is quite favorable for fishing as well as in recreational and hunting activities.

Community information on various aspects such as income, living costs, fishing gear, boat transport, marketing infrastructure are termed socioeconomic information. Socioeconomic status is the strongest indicator of people's life (Kitagawa and Hauser, 1973; Marmot *et al.*, 1987) that provides social, cultural, economic and political characteristics of people, households, community groups, and institutions. It is used to identify possible impacts of

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management decisions on stakeholders that can in term of policy and decision-making to minimize negative outcomes and to maximize positivity for local resource owners and for fishing communities. The present study was planned to evaluate the socio-economic status of fishermen community in Punjab, Pakistan to improve the great economy generator sector with the outcomes of this research.

Materials and Methods

Study Area

Present study was carried out on Head Punjnad located on river Chenab at downstream which is the confluence point of River Sutlej. The estimated terrain elevation above sea level is 99 meters (Latitude: 29°19'59.99", Longitude: 71°0'0"). It was constructed during 1925 -1929 with design discharge of 450,000 cusec and with upstream high flood level (HFL) of 341.5 to irrigate 1.8325 million acres agricultural land in Bahawalpur and Rahimyar Khan district by diverting 11882 cusecs. However, second site named Taunsa Barrage is located at Indus river in Muzaffargarh district of Punjab province. Taunsa Barrage was designated Ramsar site on March 22, 1996 that served 2.351 million acres along with diverting flows from Indus River through Taunsa-Punjnad (TP) Link Canal.

Methods

The questionnaire was taken from [Ali et al. \(2014\)](#) and is used with few modifications to evaluate the socio-economic status of fisher's community. Fishers were asked several questions to know the socio-economic status e.g. age, family size, educational status (illiterate, capable to sign only, primary, secondary), sources of income (Professional, Occasional, Subsistence), occupational status (Fishing, Agriculture, Day labor), annual income, credit access (AGO's loan, bank loan, any other), drinking water facilities, sanitary facilities, housing condition, health facilities, nets used.

Results and Discussion

Different categories of age groups were observed at Head Punjnad and Taunsa. At Head Punjnad highest percentage (36 %) of fishers were 35 - 45 year of age that suggests prioritization of fishery sector minds for business purpose. However, in case of Head Taunsa the highest percentage (60 %) was 40-50 year that orient fishers to opt in last developmental age ([Table 1](#)). [Ali et al. \(2009\)](#) reported 31- 40 year was the highest (50 %) and 41-60 found to be lowest (10 %). However, [Saxena, 2014](#) reported socio-economic status of fishers at upper lake Bhopal and the percentages of following age groups were 1-20 (45 %), 21-30 (29 %), 31- 40 (11 %), 41-50 (6 %) and above 50 (9 %). Surprisingly, [Kigbu et al. \(2014\)](#) reported highest percentage (60.6 %) of 21-31 year age group in Gidan-

Zayero followed by 39.9 % in Tunga-Dauda and 39.4 % in unga-Nupawa.

Table 1: Socioeconomic status % age of fishermen of South Punjab, Pakistan.

Socioeconomic status	Head punjnad	Head taunsa
Age		
Young (25-35)	20	20
Middle (35-45)	36	36
Old (45-55)	22	22
Family size		
Small family (2-4)	16	10
Medium family (5-6)	30	30
Large family (7-10)	54	60
Educational status		
Illiterate	50	40
Capable to sign only	30	30
Primary	14	20
Secondary	6	10
Income level in rupees (PKR)		
80000	60	30
90000	30	40
110000	10	30
Credit access		
AGO's Loan	20	10
Bank Loan	10	10
Any other	70	80
Housing condition		
Good	10	6
Medium	30	14
Poor	60	80
Health facilities		
Good (25-35)	20	10
Medium (35-45)	36	20
Poor (45-55)	44	70
Water facilities		
Tube well	30	10
Hand pump	60	80
Pound water	10	10
Sanitary facilities		
Good	-	10
Medium	30	30
Poor	70	60

Medium family size of the fishers at Head Punjnad was consisted of 5 to 6 members (30 %) and small accounted for 2 to 4 members (16 %). While, large family percentage (54 %) accounted for 7-10 members. However, at head Taunsa large family accounted for (7-10) members (60 %),

medium family 5-6 members (30 %) and small family was consisted of 2 - 4 members (10 %). Conclusively, maximum 7-10 family member size was recorded at Head Punjnad (54 %) and Head Taunsa (60%), respectively as shown in [Table 1](#). [Ali et al. \(2009\)](#) reported (45 %) small family size of 4 - 5 member's at Mymen Singh District. [Hossain et al. \(2009\)](#) confirmed 31- 40 years Bangladeshi fishers and of larger family 5 - 8 members belong to landless fishers. [Faruque and Ahsan \(2014\)](#) confirmed highest percentage (57.14 to 78.26 %) Hilsa fishers of the River Padma, Bangladesh were of medium (4 - 6 members) family size followed by 21.74 to 33.33 % medium (1- 3) and 4.17- 14.29 % large (7 - 9) family size.

Most of the fishers at Head Punjnad were illiterate (50%) and 30% can only does signature. Some were primary pass (14%) and only 6% having secondary education. Similarly, 40 % of the fishers were illiterate at Head Taunsa site while the primary education level was higher (20 %) at this site compared to Head Punjnad ([Table 1](#)). [Kalita et al. \(2015\)](#) conducted a study at Beki River and evaluated the socio-economic status of fishermen. A total sample of respondents was 276 fishermen in which it was found that about 72.10% were illiterate and 90.22% fishermen were married. [Faruque and Ahsan \(2014\)](#) conducted one-year survey to observe the Hilsa fishermen living status of the River, Padma, Bangladesh. They found approximately 67.54% were just signed their name while 16.62% (illiterate), 14.05% (primary) and 1.57% were secondary level of education.

Annual incomes of fishers at Head Punjnad varied from 80,000 to 110,000 pak rupees (PKR). The selected fishers were grouped into three categories based on annual income and it was found 60% of the fishers had annual income of 80000 and 30 % of them had 90,000 PKR. While, only small fraction (10 %) were getting 110,000 PKR. At Head Taunsa this level reduced from 60,000 to 80,000 PKR. About 40 % of the fishers had annual income 70,000 and 30% were earning 60, 000. However, the highest income was considerably less (80,000) than Head Punjnad that accounts only 10 % of the people ([Table 1](#)). [Ali et al. \(2009\)](#) recorded 60% fishers had annual income between BDT 24000 to 35000 and 30 % had ranged BDT 35001 to 45000. However, annual income of fishers was from BDT 30000 to 50000. [Faruque and Ahsan \(2014\)](#) confirmed average income of fishers 30,000 to 39,999 (85.13%) and only 1.79 % had above 50,000 taka. [Adbullah-Bin-Fareed et al. \(2013\)](#) also reported similar annual income of fishers as described above. [Reza et al. \(2015\)](#) also reported majority (72%) of fishers had annual income in Bangladesh taka (BDT) was 15,000-25,000 per person per year.

As far as economic status is concerned, at Head Punjnad mostly fishers were credited from bank (10 %)

and local non-governmental organization (NGO) 20 % for fishing gears and boats. However, they were getting around (70 %) credit from other sources (Personal contacts) to run the fishing business. On the other hand, at Head Taunsa highest source of credit (80%) was from other sources, while 10 % fraction was contributed from bank and NGOs each ([Table 1](#)). [Alam et al. \(1995\)](#) confirmed 40 % of fishers become self-dependent and only 14 % were dependent on other sources (neighbors, relatives, NGO and from co-operatives). However, [Hossain et al. \(2014\)](#) studied socio-economic status of fishers and confirmed similar status as reported in recent study. Accordingly, 56% of fishers borrowed money lenders and 44% from NGO's. Similarly, [Bhattacharya \(2011\)](#) reported similar trend of fisher's reliability on loans as main source of fishing business.

At Head Punjnad living condition of people were in poor status (60 %) and 30% households were in medium condition. while 10 % households were having good living conditions. However, at head Taunsa 80 % households of fishers were in poor, 14 % households were in medium and only 6 % were in good living condition ([Table 1](#)). [Alam et al. \(1995\)](#) observed that 82.22 % of household were poor old kacha houses, 11.11 % were medium and 6.66 % were in good living condition at Basantapurbeel. Similarly, [Saxena, 2014](#) and [Hossain et al. 2009](#) study has reported similar socio-economic status at upper lake Bhopal that was in line with our findings.

Health facilities were poor (44 %) at Head Punjnad compared to head Taunsa (70 %). The fisher's households were dependent on village doctors (paramedics) and only few were availing professional doctor facility ([Table 1](#)). [Ali et al. \(2009\)](#) reported 60 % fishers households were dependent on village doctors and only 10 % got health service professional health expert. [Adbullah-Bin-Fareed et al. \(2013\)](#) reported socioeconomic status with reference to health facility access in Bangladesh that was in line to our reports. Similarly, [Kabir et al. \(2012\)](#) reported similar health services access at old Brahmaputra River that was in accordance to the findings of our reported results.

About (40 %) fishers were on consumption of tube-well water and 60-80 % were dependent on tap water as drinking source at both sites ([Table 1](#)). [Alam \(1995\)](#) confirmed 54 % fishers were on tube-well usage. Similarly, [Kabir et al. \(2012\)](#) also confirmed tube well dependency of fishers at old Brahmaputra River and was in line with our findings.

As far as sanitary conditions at Head Punjnad are concerned, 70 % toilets were of miserable condition and 30 % in useable condition. While at head Taunsa, it was further reduced to 60 % and 15 %. However, only small fraction (5 %) had access to good sanitary like well-

conditioned toilets (Table 1). Ali *et al.* (2009) confirmed sanitary conditions of fishers that suggest 65 % of toilets were kacha, semi-paka (5 %) and 30% were relying on fields. Similarly, Kabir *et al.* (2012) at old Brahmaputra River confirmed 30 % fishers were lacking toilet facility.

Variety of nets were in use of fishers at Head Punjnad and Taunsa like drag, fixed, Sotwaan, Kondi, Moiyajal etc (Table 1). According to Jambhale (2014) fishing in South Konkan with gears such as gill (52 %), bag (22 %), drag nets (10 %), hooks and lines (7.5%) have been preferred. Kigbu *et al.* (2014) also confirmed fishing gears viz. Hook and line, Gill, Trap and Cast net as fish catch source.

Conclusion

No doubt fishing is a profitable business that needs proper skills and business mind strategies. The fisher's socio-economic condition better orient fishing practices. However, fisher's education especially in fish handling could contribute economy generating business like fishing. In Punjab being major province majority of them were illiterate. As per our study socio-economic statuses of fishers belonging to main tributaries should be increased on national level to make this profession a hub of national economy. Conclusively, government involvement should be increased to encourage fisher's community with better incentives so that they may able to feed themselves and later to the nation qualitatively.

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