A COMPARATIVE ANALYSIS OF SOCIO-ECONOMIC STATUS OF CENTRAL INDUS BASED FISHERMEN COMMUNITIES AND NATIONAL INDICATORS OF PAKISTAN

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Abstract:

Current study argues that wetlands in Pakistan can serve as a catalyst for enhancing the socio-economic status of the dependent communities. Factually, natural resources are usually enough for livelihood of the dependent communities but somehow the Indus-based fisherfolks are seemingly deprived, destitute, despondent and have lower socio-economic status, despite of intense interaction with natural capital. Wetlands are considered as a significant component of environment that provide tangible and intangible benefits to fisherman communities regarding eco-resources and eco-services. The study has been conducted for Central Indus Wetland Complex (CIWC) including Chashma, Taunsa, Guddu, Sukkur barrages and Indus basin crossing nine districts of the Punjab and Sindh provinces. The main objective of research was to examine the effect of CIWC on the socio-economic status of these fisherfolks. Using purposive sampling technique, a sample of 608 fishermen households (Punjab=373 and Sindh=235) having fishing as major occupation was carefully chosen. Results show that there is a huge difference of socio-economic status (income, expenditure, education and house status) of the fishermen communities as compared to the same national indicators of the Pakistan. Simultaneously the significant (0.000) difference has also been recorded in the socio-economic status of the both provinces due to provincial policies.

Keywords: Socio-economic Status, Central Indus Wetlands Complex, Wetlands, National Indicators

INTRODUCTION

Indus River is the largest river of Pakistan having ancient civilization. It flows from mountains of Kashmir and Khyber Pakhtunkhwa (KP), passing through lands of the Punjab enters in deserts of Sindh. Numerous cities and villages are neighboring the Indus river, fishermen are people, directly dependent on the wetlands of Indus. Human being in the form of social structure (social groups, organizations and institutions), directly or indirectly attached with each other. Culture fills the color of life in social structure, however, some communities around us, are detached from mainstream of social life. Worldwide, rural and urban, societies are highly dependent on the natural resources to fulfill their socio-economic needs.

Generally, natural resources support the essential human needs from the earliest starting point. Already they were legitimately associated with the way of life, be that as it may, after the post industrialization period last merchandise are currently by implication demonstrating the nearness of nature (Adesina, 2005). Comprehensively, provincial networks are particularly dependent upon natural resources to satisfy their role. Logical assessment show that these assets assume a key role in financial development of a nation. Unique encounters of improvement during nineteenth and

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first half of twentieth century show that economic resources are the system of financial advancement of a state. Common capital can lift the financial advance and speed up the economy of a country (Behbudi, Mamipour, & Karami, 2010)). Pakistan's wetlands have a great deal of financial significance for its neighborhood networks. Significantly, Punjab and Sindh share a vast region with watersheds. As flyway to Central Asia and South Asia, these wetlands are likewise the natural surroundings for transitory fowls. Angler people of Pakistan are legitimately subject to these wetlands because of prompt neighborhood (Nousheen Akber Pradhan, 2018).

The reliance is through fishing, greenery, fauna, development, domesticated animals, local utilization of water-based items (IUCN, 2007). Focal Indus Wetland Complex comprises of four significant wetlands including Chashma, Taunsa, Guddu and Sukkur barrages. In Punjab, anglers' networks work under legally binding framework; be that as it may, Sindh government lifted this limitation and now anglers can take advantage by just containing yearly allows. For the most part anglers' networks have a place with Sindhi throws because the Indus River and these anglers' networks have long verifiable relationship in Sindh. Indus River has these individuals along all banks of various locale in Punjab and Sindh. A few people are proficient anglers; in any case, a few people do this movement just for recreational reason (World Wide Fund for Nature Pakistan, 2014).

Socio-economic status (SES) are the combination of resources, finance, material goods, health and educational facilities, power, social capital and leisure time (Oakes & Rossi, 2003). SES indicators are many in the list, however, most important are income, occupation, health and education. These indicators are also dependent on each other. Income is dependent on occupation and education while health is directly related to the education (Marilyn, et al., 1992). SES usually defines the individuals' social and financial status in the community (Foley, 2007; Mukherjee, 1999). SES must include the financial, cultural, human, social and capitals. There is no single measure for the true judgement of SES as it is the combination of the list of indicators (Ainley & Long, 1995).

Pakistan is the World's 6th most populous nation with 220 million individuals which will touch 310 million by 2050 (Govt. of Pakistan, 2019; Govt. of Pakistan, 2018; Population Matters, 2017), its per capita income is $1,622 US. The poverty rate of people has diminished from 13.2 percent in 2007 to 4.9 percent in 2017-18. In any case, the human advancement pointers (instruction and wellbeing) stay low when contrasted with different nations, particularly in South Asia (Tarar et al., 2019). The fishing areas (both new and marine water) scarcely contributes in local and national monetary development as not exactly the 0.4 percent of absolute GDP is involved fisheries. As per World Bank estimates in 2015, 360,000 tons of marine water and 132,500 to 151, 000 huge amounts of freshwater fisheries have been financed in the nation's economy. The marine fisheries are just practiced in the waterfront territories of Sindh and Baluchistan while freshwater fishing is done across Pakistan. All out 360,000 individuals are legitimate while 900,000 to 1800,000 individuals are in a roundabout way joined with the fisheries-related ventures in the country (ILO, 2016).

Human Rights has extremely important role in the ongoing universal improvement approaches. The "rights-based methodology" has taken unmistakable for the human thriving (Fukuda-Parr, 2003; Sen, 2001). In its application to regular assets it is basically founded on a human right-based system which contains foundations and force structures to evaluate asset distribution and their entrance to guarantee their commitments to employments and prosperity, in some cases named as

natural privileges (Leach, Mearns, & Scoones, 1999; Nakamura et al., 2018). Human Rights application in common assets, the executives picks up, the dedication of associations and establishments around the world. It has essential commitments in employment and prosperity of neighborhood networks which frequently framed the ecological privileges, particularly the United Nations (UN) and US Department of State passed numerous goals to feature the cutting edge subjugation in fish industry (United Nations Inter-Agency Project on Human Trafficking, 2009; United Nations, 1948; United Nations, 2001; United Nations, 2011; US Department of State, 2010; US Department of State, 2013).

The fisherfolks of Pakistan have monstrous need of improving work through exploring and re-changing the arrangements of Punjab and Sindh governments, by breaking the force political nexus of medieval and temporary workers and arrangement of essential human offices like instruction. Privileges of land, wellbeing and free condition to work are basically required. There are various strategy disadvantages in administrative structure that expand the hopeless states of anglers, e.g. the yearly legally binding frameworks, impact of medieval, low planning, rehashed portion of agreements from 30 years to a solitary individual/family, illicit fishing, defilement in fisheries division of Punjab and Sindh, among others (Shah et al., 2018). During 2007 the National Policy and Strategy for Fisheries and Aquaculture Development of Pakistan was started yet it could not be completely executed because of absence of political will. In spite of the fact, this and other numerous strategies are straightforwardly or in a roundabout way profiting the economy and creation of fish as opposed to elevating the financial status of anglers, a national Policy Framework is expected to legitimately fortify the fisherfolks and to update their employment and free them from abuse (International Institute of Sustainable Development, 1999).

THEORETICAL FRAMEWORK

Shiva (2015) gives the concept of nature's economy based on the human and nature relationship. The nature derives the economy by providing raw material and the humans are considered as a single family living over planet sharing the resources commonly. The basic security for survival is the ecological security and the security of the environmental resources. The nature's economy provides the goods and services for the people and in response it deserves care in sustainable way. The exploitation of nature to the extent of destroying its resources is not true reciprocal response by developers of modern economy. It is therefore, asserted that CIWC in Pakistan can fill in as an impetus for upgrading the financial status of the reliant networks if the job of mediators is limited and intercessions are planned/reinforced for the supportability of the regular capital.

REVIEW OF LITERATURE

The physical environment includes air, flora, fauna, energy, water, soil and calculations (Adesina, 2005). Humans and nature have historical relationship, although humans have degraded the environment for its benefits. This dilapidation is also responsible for destruction of many old societies for example Ancient Rome and Babylonian Empire (Mebratu, 1998). The complex relationship between the ecology and economics results in confusion about the importance of nature (Lambert, 2003). Rural economy is mostly dependent upon natural resources provided by the wetlands and substantially used by the near and far communities. Both ecology and economy are dependent on wetlands whereas conservation of wetlands depends on management practices

adopted by the stakeholders (Roy, Roy, Samal, & Mazumdar, 2012). Sustainability of biodiversity rests on the conservation of wetlands (Ramachandra, Alakananda, Rani, & Khan, 2011). Historically, it was specified that waterbodies also provide cultural benefits to the local communities. In present context, wetlands are considered as the kidneys of the landscape because of their ability to recycle and regulate water and thus regarded as biological supermarkets due to supply of various goods and services for the benefit of mankind (Mitsch & Gosselink, 1993).

Due to diverse physiography, and weathers, Pakistan has immense significance in terms of its biological resources. The existing diversity even under low forest cover plays a key role in the livelihood of millions of rural people. Total forest area of Pakistan is about 4.2 million ha which is 4.8 percent of the total land area (about 796,096 square kilometers). This area appears too meagre when compared with total 30 percent forest area of the world. Pakistan is comprised of different provinces with different edaphic and climatic conditions. Sindh, Baluchistan, Punjab, Khyber Pakhtunkhwa (KP), Azad Kashmir and Gilgit Baltistan support about 0.92, 0.33, 0.69, 1.21, 0.42, and 0.66 million ha of forest area, respectively (Shahbaz, Ali, & Suleri, 2003). Fishermen always practiced distinct traditions in different regions. South Asian fishermen follow different religions, contrary to it, in Pakistan and Bangladesh, majority of the fishermen communities believe in Islamic religion while in India scattered minorities have faith in Christianity, Islam and others. Fishermen of the region belong to a very poor economic class and mostly uses traditional mode of fishing instead of relying upon modern technology because of their very low economic level. The average size of fishermen household is between 4.7 to 8.6 and are highly exploited by middlemen who indebt them at the time of need and in return they hire their labour and take away fish catch at very low prices. Various factors such as low economic level coupled with low social status, illiteracy, lack of alternative livelihood and skills, dependency on loan, traditional fishing methods and low production effect the socioeconomic stability of the fisher communities in India (Central Marine Fisheries Research Institute India, 1977, 1998; Nammalwar & Prakasam, 1979).

Fishermen remain under debt due to excessive borrowing from middlemen, based in different towns of Kerala. As the loans are more than income, their inability results the annual incensement of debt on households and called as Coastal Rural Indebtedness (CDI). Community generally take loans from money lenders as formal loans at high interest rates (30%) along with dictated terms and conditions leading to greater exploitation in future. Other equipment such as boats, nets, generators, ice etc. are supplied through debt deals (Panikkar, 1980).

Panikkar & Alagaraja (1981) studied the impact of modern technology on the socioeconomic status of fishing communities in Calicut region of India. Total 350 families were selected, as sample of the study. The sampled individuals were provided boats equipped with modern mechanism supplied by Agricultural Refinance Development Corporation (ARDC) in this project. This venture resulted in the uplift of socioeconomic conditions of villagers and provided more income opportunities. Whereas neighbouring villages were in the same condition which shows the importance of modern technology for incensement of socioeconomic status. Another study (Kalawar, 1981) carried in Maharashtra, India examined the living conditions of fishermen. The low economic growth in this region compels the fishing communities to move for suitable place. Researchers suggested the accessibility of basic infrastructure and water-supply facilities to local communities which may reduce the migration of fishing labour and degradation of fisheries industries (Librero, 1985;

Kalawar, 1981; Samuel, 1986). Fernando (1981) documented some suggestions to uplift the socioeconomic status of fisherfolks such as provision of fish storage (chillers, ice boxes, and ice blocks) facilities and transportation (vehicles to approach the market). Roads, education, provision of technology had also influenced social status of poor fisherfolks.

World Wide Fund for Nature Pakistan in collaboration and funding of the Department of International Development of UK implemented a project on "Global Poverty Alleviation Fund" (GPAF 2012-2015). The core objective of this project was to change the indigenous livelihood practices of the fishermen community of CWIC from fishing to any other suitable alternative practices. This objective was considered as ultimate benefiter to the CWIC as silhouette for the conservation and sustainability of speedily degrading resources with time. Secondly, this may also effectively help the poor fisherfolks who are victim of low socioeconomic status due to influential role of middlemen and their exploitation through the administration and feudal by the Fisheries Department of Punjab and Sindh. Thirdly, during the off-season and under the extreme weather conditions and unexpected circumstances, the fishermen were unable to do fishing which ultimately affected their livelihood badly. The project covered the Jinnah Barrage, Tounsa Barrage, Indus Basin of Rajanpur, Rahim Yar Khan, Guddu Barrage and Sukkhar Barrage which is stretched hundreds of kilometers between Punjab and Sindh. The project focused on 2100 households with improvement in their livelihood through the introduction of various alternative livelihood practices. The total population in the study area was 17000 households including other than fishermen families or households with second occupation as fishing (World Wide Fund for Nature Pakistan, 2014).

The findings of baseline survey of GPAF project, which was obviously without any intervention, revealed that average income of the households of the study area is $232 US which was almost one fifth of the country's per capita income in 2011. At the time of survey, the National Per Capita Income was $1194 US. Majority of national population (83 percent) was falling below the poverty line category. The adult literacy rate in the study area was 14 percent while the literacy rate of Pakistan in 2012 was 56 percent. The youth literacy rate in the study area was 21 percent while in 2012 the country's youth literacy rate was 71 percent. The national Child Enrolment in 2012 was 94 percent in the country while study area was having the only 13 percent. The study also showed 35 percent of the total students enrolled could complete 5 year of education in schools. This lack of education and high rate of dropout is because of absence of higher formal education setup in whole study area. Only community-based efforts were made at local level for boys and girls to have their basic informal education. Health condition of fishermen families was also very poor due to non-availability of health facility in the area.

The child mortality rate was 112/1000 which is 11.2 percent while the national child mortality rate was 72/1000 (7.2 percent) in 2011. The highest mortality rate among children was 7 out of 10 (70%) in 2011 in the villages Alam Mirani and Ghotki of Sindh. Among the households selected during the survey, total 3 percent members of each family were admitted in the city hospitals. The average annual per capita expenditure could not exceed 1000 rupees of the villages in the selected list. The more astonishing statistics was that 7 out of 11 villages had rupees 200 per annum per capita expenditure for health while two villages; Alam Mirani and Ghandi had zero expenditure on health care in this modern time. In context of land ownership, majority (about 84 percent) had no

land ownership in study area and 73 percent of the total selected households were illegal tenants while 11 percent were legal. Rest of the population was living on their own registered land. Housing condition of fisherfolk was also very miserable as majority was living in unpaved thatched houses. Total 68 percent houses were found unpaved in Chashma while this number went up to 83 percent in Tounsa and 86 percent in Sukkur. Only 2 percent houses were found paved overall in the study area. The residential capacity of the household was also bad as 7 percent families had 1 person in single room, 34 percent had 6 persons per room. About 95 percent of the total population of fisherfolks used fuelwood as household energy while only very limited number of households had the facility of biogas. Thus, very low number of families in the total population had smoke-free fuel facility. About 48 percent of the total population had no facility of toilets and was using open field for defecation while 30 percent of the total households had no flush toilets.

The fresh drinking water and domestic water facility was available to 99 percent of the population because of nearby Indus River. They used hand pumps for fetching water, but the quality of water was never tested. The water source got contaminated day by day due to effluents from factories and human waste. Agriculture as secondary occupation was generally absent among the sample population. Only in Basti Gadi some households had agriculture as the primary occupation and did fishing for recreation. The fisherfolks generally using their cultural equipment for fishing while very few were using modern technology. Out of the majority (64 percent) had very old motors for boats while rest were using good quality motors. Only 14 percent of the total population had television facility to receive information about development in their life. Cellular phones for communication were found with majority of population (74 percent) having at least one mobile phone per household. Chashma and Tounsa Barrages population (82 percent) had cell phones while Sukkur had 67 percent of cell phones at the rate of one per household. Electricity facility was not available in the whole area except very few villages. The fishermen got their cell phones charged from the Masjids where the generator facility was available for Adhan (Call for Prayer). Only 6 percent of the respondents had the facility of motorized transportation as majority had motor bikes. However, people also used the donkey carts or oxcarts for transportation but very low in numbers GPAF (WWF-Pakistan) (Atiq-ur-Rehman, 2012).

METHODOLOGY

The study is quantitative in nature, focusing on measuring the socio-economic status of fishermen folks of CIWC and drawing its comparison with the national indicators. Consequently, using cross sectional survey research method, the data for this research were collected from the fishermen of CIWC, stretching from Jinnah Barrage in Punjab province to Sukkur Barrage in Sindh province. A structured interview schedule was used to collect the data against the selected indicators to measure the socio-economic status with the help of a trained team of enumerators. The field survey was completed from March to April 2017. In total, 608 respondents were selected for this study, including 373 (61.00%) from Punjab and 235 from Sindh (39.00%). Fishing being a masculine occupation, only those fishermen were included in this study who were heads of their families and had fishing as their primary occupation and sole source of income. The respondents were selected from 14 different sites of CIWC using purposive sampling technique. The researchers decided to use the non-probability sampling technique mainly due to unidentified population of CIWC fishermen and no availability of any vital source of data; and, difficulty to access fishermen due to their

scattered population, seasonal migration and frequent movement. Before formal data collection, each respondent was informed about the study objectives and their informed consent was obtained. The reliability of the data collection tool was measured through the Cronbach's Alpha test, run on most of the questions (243 out of 304) and attained the satisfactory score of 0.0709.

Table 1: Distribution of respondents according their study area profile

Site	District	Barrage/Basin	Sample size *f* (%)
Punjab Province			
Basti Manchari Mirani	Rajanpur	Indus Basin	14 (03.80)
Asghar Abad	Rahim Yar Khan	Indus Basin	11 (02.90)
Basti Dost Muhammad	Rahim Yar Khan	Indus Basin	11 (02.90)
Basti Sheikhan	Muzaffargarh	Taunsa Barrage	62 (16.60)
Boat Residents	Muzaffargarh	Taunsa Barrage	16 (04.30)
Allah Wali Basti	Mianwali	Chashma Barrage	14 (03.80)
Haider Colony	Mianwali	Chashma Barrage	57 (15.30)
Sindhian Wala Ban	Mianwali	Chashma Barrage	83 (22.30)
Basti Ghandi	Mianwali	Chashma Barrage	98 (26.30)
Jalal Pur	Mianwali	Jinnah Barrage	07 (01.90)
Total			373 (100.00)
Sindh Province			
Sharfa Abad	Sukkur	Sukkur Barrage	42 (17.90)
Sher Dil Mahar	Ghotki	Indus Basin	12 (05.10)
Chattal Mirani	Ghotki	Indus Basin	146 (62.10)
Sher Alam Mirani	Kashmor	Guddu Barrage	35 (14.90)
Total			235 (100.00)
Central Indus Wetlands Complex			
Total			608 (100.00)

Table 1 explains the detail picture of the study area as most upstream site was Jinnah Barrage, Mianwali with 07 (01.90%) of total sample size of the Punjab Province. Next site was larger in demography as it contains the 238 (53.90%) of the total sample size allocated for Punjab then the second largest site was Tounsa Barrage with 92 (27.70%) households. Rahim Yar Khan and Rajan Pur were having very low population with 22 (05.80%) and 14 (03.80%) of Indus fishermen families, respectively. The total sample size of the Punjab province was 373 comprising of 61.00% of total fishermen population of CIWC selected for current study. The most upstream site in Sindh province was Guddu with 35 (14.90%) households of the total sample of this province while next was District Ghotki with largest sample size comprised of 158 (67.20%) households divided in two villages. The most downstream site of CIWC was Sukkur Barrage with the sample size of 17.90% of Sindh portion completing the total 235 (39.00%) of total sample size of this second province. The grand total of both provinces was 608 fishermen families which were selected to assess the socio-economic status of fresh water-based fishermen.

RESULTS AND DISCUSSIONS

The socio-economic status comprises of list of variables. Likewise, the current study includes income, expenditure, remaining debt, saving, household head education and house statuses. Table 2 depicts the data collected during the survey against the previously mentioned variables. Data shows that the average income, expenditure, remaining debt and savings of the fishermen of the Punjab provinces was recorded as 10025.45, 12311.54, 4297.59 and 65451.07 PKR respectively while the Sindh province has the same data against listed variables were 14518.72, 17697.40, 6622.13 and 116865.53 PKR, accordingly. Further the household heads' education (literacy,

Punjab=09.90 and Sindh=09.80%) was almost same. The house status of the Punjab=00.80% and Sindh=01.70% was also in same pattern. The data shows the worse socio-economic conditions of the fishermen communities in both provinces that was far below the poverty line. When the data was compared with national indicators of Pakistan against the same variables the socio-economic status of fishermen expressed more as being a developing country the Pakistani nationals are already at average level of life standard but this deprived, suppressed, marginalized and socially isolated portion of the human society is showing dark portrait of the civilization. Data in Table 3 compares the socio-economic status of the study area with the national indicators of the Pakistan which clarifies that in average a Pakistani has 56762.039 rupees more income than poor fishermen of CIWC while the expense power of an average Pakistani citizen is 48188.409 rupees more than this deprived community. Same difference was observed in education as the average literacy rate of the Pakistan is 63.00% while fishermen heads were 5.10% low in terms of education. Even the worst situation was observed in terms of residence where the average paved houses in Pakistan were 65.48% while only 01.15% fishermen had the facility of paved houses. To measure the socio-economic status, differences between the fishermen of both provinces due to the contractual policy in the Punjab and annual permit for fishing in Sindh the comparison of mean (ANOVA-F) test statistics was applied on the income, expenditure, savings and remaining debt of the both provinces. Data in Table 4 shows that difference in income, expenditure and remaining debt is highly significant (0.000) because the fishermen of the Punjab are more deprived due to the contractual system as the local politicians and feudal are the usual contractors which oppress them more for their economic benefit. This results into the more decline in socio-economic status of the fishermen. On the other side the fishermen of Sindh are free for fishing from government side which results into a slight rising in socio-economic status but the same feudal are exploiting them to get more benefit from the Indus river. The savings have no significant difference in both fishermen communities. (ANOVA-F) test statistics was applied on the income, expenditure, savings and remaining debt of the both provinces. Data in Table 4 shows that difference in income, expenditure and remaining debt is highly significant (0.000) because the fishermen of the Punjab are more deprived due to the contractual system as the local politicians and feudal are the usual contractors which oppress them more for their economic benefit. This results into the more decline in socio-economic status of the fishermen. On the other side the fishermen of Sindh are free for fishing from government side which results into a slight rising in socio-economic status but the same feudal are exploiting them to get more benefit from the Indus river. The savings have no significant difference in both fishermen communities.

Table 2: Socio-economic Status Variables

SES VARIABLES	PUNJAB	SINDH
Income (Mean)	10025.45	14518.72
Expenditure (Mean)	12311.54	17697.40
Savings (Mean)	4297.59	6622.13
Remaining Debt (Mean)	65451.07	116865.53
Education[4]	Literate 09.90%, Illiterate 90.10%	Literate 09.80%, Illiterate 90.20%
House Status	Paved 00.80%, Sami/Unpaved 99.40%	Paved 01.70%, Sami/Unpaved 98.30%

Table 3: Comparison of Socio-Economic Status Indicators of The Pakistan With Central Indus Wetlands Complex

SES VARIABLES	PAKISTAN	CENTRAL INDUS WETLANDS COMPLEX[5]	DIFFERENCE
Average per capita income (June 2016)[6]	650.644 $ 68524.199 Rs	111.68 $ 11762.16 Rs	538.964 $[7] 56762.039 Rs
Average per capita expenditure (June 2016)[3]	594.219 $ 62581.659 Rs	136.66 $ 14393.25 Rs	457.559 $ 48188.409 Rs
Education (2016-17)	Literacy 63% Illiteracy 37%	Literacy=09.90% Illiteracy=90.10%	Literacy=53.10% Illiteracy=-53.10%
House Status (2016-17)[8]	Paved=65.48% Unpaved= 34.52%	Paved=01.15% Unpaved=98.85	Paved=64.33% Unpaved=-64.33

Table 4: Comparison of Means between Continuous Variables of Socio-Economic Status in Sindh and The Punjab Provinces

SES VARIABLES	SINDH Mean (S.D)[9]	PUNJAB Mean (S.D)	DIFFERENCE [Anova (F) (Significance)]
Income	14518.72 (7678.507)	10025.45 (4645.356)	4493.27 **(0.000)**[10]
Expenditure	17697.40 (9301.965)	12311.54 (4640.209)	5385.86 **(0.000)**
Saving	6622.13 (24413.836)	4297.59 (22353.975)	2324.54 **(0.229)**
Debt	116865.53 201162.985	65451.07 87617.057	51414.46 **(0.000)**

[4] Household Heads Education
[5] Central Indus Wetlands Complex is consisting of the Punjab and Sindh Indus basin and barrages
6 (CEICDATA, 2019).
7 (X-Rates, 2019)
8 Government of Pakistan, 2017
[9] Standard Deviation
[10] Significance Level is 0.05

CONCLUSION AND RECOMMENDATIONS

Current study showcases that fishermen of the Indus River of the Punjab and Sindh provinces having very low socio-economic status as they are very diminutive in comparison with the average national citizen of Pakistan. Further the socio-economic status of the fishermen of both provinces also has significant difference due to provincial policies of contractual system in the Punjab and annual permit system in Sindh. External forces like politicians, feudal and landholders also affect their true benefit from biological resources of the Indus River. Conventional and environmental education, unanimous policy for fishing, protection of basic human rights, alternative livelihood, defense from influential power regimes and provision of basic life necessities are main lifesaving shields needed to mainstream the socio-economic status and ensure existence of these isolated humans.

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