

**A Study on Attitude of Youth of Fishing Communities  
Towards Fishing as an Occupation**

**Ishrat Aishi  
(2017-F-62-M)**



**Faculty of Fisheries  
Sher-e-Kashmir University of Agricultural Sciences &  
Technology of Kashmir**

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Towards Fishing as an Occupation**

**Ishrat Aishi  
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*Dedicated  
To my beloved Parents  
And Advisor*



**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Kashmir**  
**Faculty of Fisheries, Rangil, Ganderbal**

**Certificate – I**

This is to certify that the thesis entitled, “**A Study on Attitude of Youth of Fishing Communities Towards Fishing as an Occupation**” submitted in partial fulfilment of the requirements for the award of the degree of **Master of Fisheries Science (Fisheries Extension)**, to the **Faculty of Fisheries, Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir** is a record of bonafide research work carried out by **Ms. Ishrat Aishi (Reg. No. 2017-F-62-M)** under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

It is further certified that information received during the course of investigation has duly been acknowledged.

**(Dr. Rizwana Malik)**  
Chairperson  
Advisory Committee

Endorsed

**Dean,**  
Faculty of Fisheries

**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Kashmir**  
**Faculty of Fisheries, Rangil, Ganderbal**

**Certificate – II**

We, the members of the Advisory Committee of **Ms. Ishrat Aishi (Reg. No. 2017-F-62-M)**, a candidate for the degree of **Master of Fisheries Science (Fisheries Extension)** have gone through the manuscript of the thesis entitled, “**A Study on Attitude of Youth of Fishing Communities Towards Fishing as an Occupation**” and recommend that it may be submitted by the student in partial fulfilment of the requirements for the award of the degree.

**Advisory Committee**

**Chairperson**

**Dr. Rizwana Malik**  
Assistant Professor  
(Division of Social Sciences)  
Faculty of Fisheries,  
SKUAST-Kashmir

**Members**

**Dr. Sajad Hassan Baba**  
Associate Professor,  
(Fisheries Economics)  
Faculty of Fisheries,  
SKUAST-Kashmir

**Dr. Anayitullah Chesti**  
Associate Professor  
(Division of Aquaculture)  
Faculty of Fisheries,  
SKUAST-Kashmir

**Dr. Bilal Ahmad Bhat**  
Associate Professor  
(Fisheries Statistics)  
Faculty of Fisheries, SKUAST-  
Kashmir

**Dr. Ashwani Kumar**  
Associate Professor  
(Fish Nutrition & Biochemistry)  
Faculty of Fisheries,  
SKUAST-Kashmir  
(Dean's Nominee)

**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Kashmir**  
**Faculty of Fisheries, Rangil, Ganderbal**

**Certificate – III**

This is to certify that the thesis entitled, “**A Study on Attitude of Youth of Fishing Communities Towards Fishing as an Occupation**” submitted by **Ms. Ishrat Aishi (Reg. No. 2017-F-62-M)** to the **Faculty of Fisheries, Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir** in partial fulfilment of the requirements for the award of the degree of **Master of Fisheries Science (Fisheries Extension)** was examined and approved by the Advisory Committee and External Examiner on .....

**Chairperson**  
Advisory Committee

**External Examiner**

**Dean**  
Faculty of Fisheries  
SKUAST-Kashmir

**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Kashmir**  
**Faculty of Fisheries, Rangil, Ganderbal**

-::o::-

Name of the student : **Ishrat Aishi**

Registration No. : 2017-F-62-M

Major Subject : Fisheries Resource Management

Minor Subject : Aquaculture/Fisheries Resource Management

Major Advisor : **Dr. Rizwana Malik**  
Assistant Professor  
(Division of Social Sciences)  
Faculty of Fisheries, SKUAST-Kashmir

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### **ABSTRACT**

Attitude can be defined as “a predisposition or a tendency to respond positively or negatively towards a certain idea, object, person or situation. The socio-economic development and prosperity of the society depends to a considerable extent, on the type of youth living in the society, because youth have abilities to orient themselves to go along the main stream of the development process.

The present study was designed and conducted in District Bandipora of Jammu and Kashmir to study the attitude of youth of fishing communities towards fishing as an occupation. The study was based upon primary data collected from 120 respondents selected by employing simple random sampling technique. The SPSS software version 16 was used for the analysis. The findings of the study revealed that majority of the respondents had moderately favourable attitude towards fishing as an occupation. The attitude of youth was found to have significant and positive relation with active fishing days and income through fishing in summer. The variables namely educational qualification, marital status, age, family type, household earners, investment on fishing inputs and factors constraining youth involvement in fishing had significant but negative relation

with attitude of youth towards fishing occupation. The coefficient of determination ( $R^2$ ) was 0.954 which indicates that 95.4 % variation in the attitude by all the variables together. The major constraints expressed by the respondents were the profession being disrespectful in the society, less catch availability, lack of technical trainings, fishing is irregular source of income, unavailability of suitable market, this occupation being time consuming, fishing requires more efforts than with less output, inadequate storage facilities, low price offered by buyers. Thus, the study concluded that in order to retain the interest of youth in fishing occupation various training and awareness drives are to be organised regarding the developmental programmes and technological interventions that can be incorporated in this profession to make it attractive for the youth.

**Keywords:** Attitude, fishing occupation, correlation

Signature of Student

Dated \_\_\_\_\_

Signature of Major Advisor

Dated \_\_\_\_\_

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## **Chapter 1**

### **INTRODUCTION**

Youth being the strongest segment of the population form the backbone of the country. The youth of today are the hopes of tomorrow. The overall development of a country depends on their regimented, active and skilled youth power. Development of youth thus determines the development of community and country as a whole. The size of the youth population determines the country's ability and potential for growth and development. Youth participation in any economic activity is of paramount importance. These people make invaluable contributions in their communities and empowered themselves when they participate. If the energy and passion of the youth is utilized properly, it can help to bring huge positive change to the society and thus progress to the nation. Youth being active citizens and creative digital innovators in their community are eager to positively contribute to the sustainable development. Therefore, to bring rapid progress for a country, this section of the population need to be harnessed, motivated, skilled and streamlined properly. About 87 per cent of youth in developing countries face challenges due to limited and unequal access to resources, healthcare, education, training, and employment and also economic, social and political opportunities. In many developing countries, youth face poverty, hunger, barriers to education, multiple and interesting forms of discrimination, violence and limited opportunities for growth and employment prospects. About 600 million youth are living in fragile and conflict-affected countries. Youth are the primary productive human resource of socio-economic development. It is therefore, essential to locate the role of youth in mainstream development. The youth of India is diverse ethnically, religiously and in socio-economic backgrounds. Such diversity necessitates customised initiatives to meet needs and activate their untapped potential. This pool of youth population is a decisive factor in determining our nation's destiny. Youth are therefore, becoming victims and offenders of violence in societies they live in. This is the reason why

youth are considered both a source of concern and a beacon of hope and positive thinking.

Age is considered as the determining characteristics in the definition of youth by various agencies. In 2003, National Youth Policy (NYP) defined the term youth for persons falling in the age group of 13-35. However, they later modified it for those within the age group of 15-29 years. Government of India (GoI) officially defines youth as persons between the ages of 13-35 and it also varies depending on the programme. In our country youth constitute a numerically dominant potential, resourceful and also adventurous segment of the population. More than 50.00 per cent of India's current population is below the age of 25 years and over 65.00 per cent below the age of 35 years. Majority of them live in rural areas. The population in the age group of 15-34 years increased from 351 million in 2001 to 430 million in 2011. Current predictions suggest a steady increase in the youth population to 464 million by 2021. By 2020, India set to become the world's youngest country with 64.00 per cent of its population in the working age group (Indian census, 2011). As per India's Census of 2011, youth (15-24 years) in India constitute one-fifth of India's total population (Youth in India, 2017).

Youth unemployment is one of the major problems affecting developing countries. One of the reasons behind this problem is the lack of basic education. UNICEF reported that youth unemployment is compounded by the fact that large portion of the population in developing countries tends to be youth (Njeru et al., 2015). A substantial difference has been increasing continuously from the level of 30.6% in the year 1971 to 34.8% in the year 2011 (Youth in India, 2017). It is disturbing to note that youth are losing interest and confidence in agriculture and allied activities; hence they are not willingly involved in agricultural and allied activities. Most of the rural youth do not foresee a prosperous future for themselves in the fishing sector mainly because of the lack of profitability and also the lack of infrastructure and facilities in rural areas. The young generation

perceive fishing as an occupation for the old, illiterate and poor rural people. As a result, the opportunities for fisheries-led growth among the youth are reduced leaving fishing in the hands of ageing rural population and consequently leading to low productivity (Njeru et al., 2015). The youth that ought to carry out with fishing in rural areas are now moving to urban areas in search of white collar job. Rather than contributing to the development of fishing sector, they are increasing the population of the urban society and therefore putting more barriers to the development of fishing sector (Felicia et al., 2016). This rural-urban migration has thus resulted in scarce formal employment opportunities due to high population in urban centres, consequently resulting in desperation among the youth. This has led to youth indulging in crimes and violence and is therefore a multi-level problem that requires a good coordination and in-depth thinking on how to attract youth into the fishing or other agricultural allied activities (Njeru et al., 2015).

Fisheries is an important sector of many nations of the world from the standpoint of income and employment generation. Fishing plays an important role in supporting livelihood worldwide and also form an important source of diet for over one billion people. Millions of people around the world depend on fisheries and aquaculture sectors for income and livelihood. The recent obtained statistics indicate that 59.6 million people were engaged in the primary sector of capture fisheries and aquaculture in 2016, with 19.3 million people engaged in aquaculture and 40.3 million engaged in fisheries. Fisheries sector plays an important role in the Indian economy by contributing to national income, employment and foreign exchange (SOFIA, 2018). As per estimates of Central Statistics Office (CSO), the share of agriculture and allied sectors (including agriculture, livestock, forestry and fishery) was 15.35% of the Gross Value Added during 2015-16. Foreign exchange earnings to the tune of 140 billion US dollars (2016) from the export of fish and fish products justifies the importance of the sector on the country's economy and livelihood security (Shireesha, 2016).

In India, about 65% of the people still depend on agriculture for their

livelihood and employment source, which includes fisheries as one of its components. Fishing as an occupation is being practised in India since time immemorial and has been regarded as a supplementary enterprise of the fishermen community on the subsistence level with little external input. Fisheries sector, however, has strategic role food security, international trade and employment generation. With the changing consumption pattern, emerging market forces and technological developments, it has assumed added importance in India and is undergoing a rapid transformation (Mruthyunjaya, 2004). The robustness of the sector can be visualized by the 11-fold increase that India achieved in fish production and in just six decades, i.e., from 0.75 million tonnes (during 1950-51) to 9.6 million tonnes (during 2012-13). This resulted in an unparalleled average annual growth rate of over 4.5 per cent over the years which has placed the country on the forefront of global fish production, only after China. Fisheries sector occupies an important place in the socio-economic development of the country as it contributes to 1.01% of total GDP and 5.15% of agricultural GDP (NFDB, 2016).

Fisheries form an important component of the economy of J&K which along with agriculture, contribute significantly 23% to its Gross State Domestic Product (GSDP) (Qureshi and Krishnan, 2015). Besides being an important allied activity to agriculture, it contributes significantly to the agricultural economy and also generates self-employment. Fisheries in Jammu and Kashmir has the potential to grow exponentially as the state is bestowed with a network of both cold and warm water streams, perennial rivers, lakes, reservoirs, sars and about 250 high altitude lakes spread over an area of 40 thousand hectares. There is immense scope to promote all types of fisheries in view of State's varied agro climatic conditions. The total fishermen population in the State is presently estimated at 93000. The 27781 Km length of rivers/streams facilitates farming of more than 40 million tonnes of fish. As against this, the State has only 0.07 lac hectares under reservoir area. There is a big gap between the demand and supply

of fish. Fish is a valuable element of diet of the local people throughout the year. There is also a demand for fish from the defence personnel and tourists. There are 1248 lakes including water bodies which give an indication of the potential for fisheries in the State (Economic Survey J&K, 2016). Among all the lakes of Kashmir, Wular lake has a distinct status and position. It is known as Asia's largest freshwater lakes. It provides fish, water chestnuts (*Trapa natatus*), lotus (*Nelumbo rucifera*) rhizomes, fodder, water, etc. It sustains the livelihood of a large section of population. According to a study by Wetland International, 32,000 families including 2,300 fisher households living on Wular's shores depend on it for livelihood. But with the water bodies shrinking in size due to encroachment and in depth due to siltation, their livelihoods are at stake. The fishing and other rural communities that have traditionally depended on lakes are now struggling to earn living from them. The youth complaint about the dwindling fishes in the lakes and are not able to catch as much as their parents did and therefore diversifying their source of income and livelihood (Parvaiz, 2017).

### **Scope of the study**

Fisheries besides being an important allied activity to agriculture, contributes significantly to the agricultural economy and also generates self-employment. However, fishing occupation is generally considered as the low prestige profession and is mainly practiced by the retracted communities of the society. The main factor that influences this profession is the socio-economic conditions of the fishermen community. The youth of these communities do not foresee a prosperous future for themselves in the fishing sector and instead of being self-employed in this occupation, they engage themselves in the less paid jobs. The youth have immense potential which, if properly utilized, can be of great use for fisheries development. To engage youth of these communities in fishing, it is essential to inculcate favourable attitude in them for this profession. In this context, the present study is an attempt to analyse the socio economic profile of youth and know the attitude of youth towards fishing occupation.

Further, the study would also throw light on the constraints that play adverse role in forming favourable attitude among the youth towards fishing as an occupation. Such information in turn would help in addressing the constraints faced by youth in this occupation in order to retain their interest in fishing occupation and would also help to develop strategies for fisheries development in such a way that the potential of youth of these communities can be utilised in a more productive way. Therefore, the present study entitled, 'A study on attitude of youth of fishing communities towards fishing as an occupation' was accomplished with the following objectives:

1. To analyse the socio-economic characteristics of the youth of fishing communities.
2. To study the attitude of youth towards fishing as an occupation.
3. To identify the factors constraining youth involvement in fishing occupation.

## Chapter 2

### REVIEW OF LITERATURE

A thorough review of literature on the topic under study would provide a deep insight into the subject which is inevitable for rigorously performing the research study. Review of literature helps to acquire broad and general background in the given field. An acquaintance with earlier pertinent studies has been felt necessary to develop good understanding to the research study and to formulate appropriate research methodology. The systematic presentation of the relevant aspects drawn from various literatures not only provide strong base for the empirical investigation but also facilitate to arrive at a proper understanding of the different components of the problem under study. This chapter presents the findings of the past research work related to present study by viewing the research journals, articles, thesis and records in order to put up to date information, under the following sub-heads:

- 2.1 Socio-economic characteristics of youth of fishing communities.
- 2.2 Attitude of youth towards fishing occupation.
- 2.3 Factors constraining youth involvement in fishing occupation.
- 2.4 Relation between independent and dependent variables.

#### **2.1 Socio-economic characteristics of youth of fishing communities:**

Uddin et al. (2008), studied the socio-economic characteristics of coastal rural youth and found that maximum (48.35%) of the respondents belonged to older youth group (29-35). Among the respondents, 53.84% of the coastal rural youth had completed their secondary schooling. 58.24% of the coastal youth had medium size family and majority (43.995%) were small farmers and maximum (51.64%) of the youth had medium annual income (51000-120000).

D'Silva et al. (2010), studied socio-demography factors that influence youth attitude towards contract farming and revealed large majority of the

respondents (70.8%) are female. Result gained is parallel with the current situation in Malaysia's higher learning institutions where females constitute the larger number of future graduates compared to male students. A total of 90.0% respondents were Malay while slightly more than two fifth of the respondents (40.2%) age between 20-21 years. A large majority of the respondents are taking degree course (75.0%) and their family has no agriculture background (75.5%). Based on the data gained, it was found that almost one third of the respondents (31.8%) spent RM300-RM400 a month. A total of 50.0% of the respondents take agriculture course compared to only 25.0% for economy and other courses. More than half of the respondents (59.5%) live in urban area and have received no information regarding contract farming.

Bordoloi et al. (2012), studied the socio-economic status of the fisher folk and found that that total number of population of the village was 210 with 61.90% (literate) and 38.1% (Illiterate). Among the literate population, 51.53% had qualification up to primary, 33.84% up to middle school, 11.53% up to matriculation and only 3.07% of the fisherman were found to have higher qualification. The peoples were involved in different services such as agriculture (23.81%), fishing (28.1%), business (19.52%), service (15.24%) and labour (13.33%). About 90% people lived in the kaccha house and remaining (10%) in pukka house. The per month income was found to be lowest (Rs,500-1000) in the age of 20-30 and highest (1500-4000) in the age of 50-60 group. The overall fish production of the beel was 1757 kg/yr.

Kgosiemang and Oladele (2012), revealed that 33 per cent of farmers range from 50 to 60 years, 41 per cent of farmers obtained primary education, 46 per cent of the farmers have a family size of between 6 to 10 people and 60 per cent of farmers had monthly income of less than Rs.5000.

Jaswal (2014), in his study found that majority (68.2%) of the fishermen respondents were in age group 25-50 years, 90.8% of the respondents were male while as only 9.2% were females. The marital status showed that maximum

(93.4%) of the respondents were married, 76% had nuclear families, majority (64.2%) had 3-4 members in family. The study also revealed that highest number (51%) of fishermen belonged to schedule caste. The educational qualification showed that 54% of the fishermen were educated below matric level. The study also showed that 100 per cent of the fishermen lived in rural area and 54.8% lived in pucca houses. The annual income of maximum (51.4%) of fishermen was Rs.25000-50000 and also found that majority of fishermen observe more than 201 days in a year. The study also revealed that some fishermen sold their fish co-operative societies and others through contractors.

Das et al. (2015), assessed the livelihood of the fishermen community in the and the study revealed that the fishermen of the study area belong to poor and underprivileged class. They found that the fishermen of the area could not improve their socio economic condition by fishing profession as the income from fishing sector was continuously reducing. So, they are shifted to other sources.

Kalita and Deka (2015), studied socio-economic conditions and livelihood status of Fishers around the landing sites of Motapung-Maguri Beel of Tinsuka District of Assam and the study revealed the very miserable conditions of fishers. The study also found that the majority of the fishers in the area were illiterate and the poor conditions of most of the fishers was assumed to be due to high family size, scarcity of alternate employment opportunities, low education, no nearby market for selling fishes, non-availability of own fishing nets and also found that that about 22.5% of the farmers depend on fishing alone for their livelihood where as 47.83% of the respondents working as labour in sand and stone mining business from Beki river. Working as a labour (sand and stone mining business) were found to be the most common alternative option for fishermen of Beki riverine area.

Preethi (2015), in her study indicated that 39.0 of farm youth had high perception about agriculture in irrigated area while it was 13.0 per cent in rainfed area. a great majority (75.0%) were found in above 25 years' age group and one

fourth (25.00%) were found in the age of below 25 years, majority 78.5 per cent of farm youth had nuclear type family and the remaining 21.5 per cent of the farm youth had joint family, 47.5 per cent of farm youth had middle school to high school Education whereas, 29.5 per cent had up to primary education and 23.0 per cent had PUC and Graduation education level. Majority of the farm youth (37.0%) had higher aspiration in irrigated area while most of the farm youth (55.0%) in rainfed area had medium level of aspiration. Regarding participation, majority of farm youth in irrigated area (43.0%) had high level of participation compared to 20.0 per cent in rainfed area.

Ram et al. (2015), assessed the socio-economics of fishermen community and found that medium size families were dominated (48.89%) followed by large (26.67%) while very large families were only 6.66%. Most of the members of fishermen families (44.44%) were under the age group of 15-34. 89.7% children were attending government schools while, 10.3% were in private schools. The literacy rate was found to be higher (30.68%) and most attended middle school level and 0.5% were graduates. Major religions include Hinduism (54.9%), Christianity (37.3%) and Islam (7.8%). The maximum number of settlers were from Andhra Pradesh (48.3%) followed by Tamil Nadu (38.3%), while the settlers from Kerala (8.4%) and Jharkhand (5%) were the least. Most of the families were found to be residing in semi-pucca (asbestos) houses (73.1%) and fewer families (7.7%) were living in kutcha (thatched) houses. About 36.17% of the members earn between Rs, 3001-4000/-per month and 12.77% between Rs.4001-5000/-per month.

Jayapuria (2015), revealed in the study that majority (52.59%) of the youth were from middle age group (24-29), 42.50% of them belonged to Other Backward Class (OBC). The study also revealed that maximum (53.33%) of the respondents had joint family, 44.17% had medium size of the family, and most of them (20.83%) were educated up to high school. The marital status showed that maximum (58.33%) were unmarried and 44.17% of the youth had medium level

of farming experience, 28.33% of them had small size if land holding and the annual income of majority (48.84%) was high.

Kalita et al. (2015), studied the socio-economic status of fishermen and found that the illiteracy was one of the major problem of the studied area as about 72.10% respondents were found to be illiterate. Here, fishing business was totally male dominated (97.10%) and maximum (90.22%) fishermen had married. About 49.28% of total respondents were found to belong under the age group between 31-40 years. About 52.17% respondents working as farmer for other earning apart from fishing.

Adelodun et al. (2016), analyzed the socio-economic characteristics of youth and revealed that most (71.67%) of the respondent were male. The study also revealed that majority (66.7%) of the youth were single. Majority (61.7%) of them had tertiary education and it was also found that most (63.3%) of them had other sources (other than farming) as their main source of income.

Adesina and Favour (2016), studied the determinants of participation in youth in agriculture programme and while assessing the socio-economic profile of youth found that age of the respondents ranged between 20 and 39 years, with a mean of 32.0 years, 35.2% of the respondents were between 30 and 34 years, 32.6% were between 35 and 39 years. They also found that the larger percentage of respondents (60.2%) were married. The household size of respondents ranges between 1 and 10 persons. Having a mean of 4 persons, household size between 1 and 3 persons constituted a larger percentage (47.7%). The mean farm size of respondents was 5.75 hectares; about 65.5% of participants had farm size between 1 and 5 hectares.

Hussain et al. (2016), studied the socio-economic status of fishermen and found that half of the respondents belong to the age group 41-50 years and found illiteracy as one of the major problems of the area.

Karuppusamy and Subramanian (2016), studied the socio-economic conditions and financial status of Fishermen and found that that majority of fishermen were found to be practicing Hinduism. No fisherman was found belonging to OC or other community. Average age of farmers in the present study was found to be 26 years to 40 years, followed by 41 years to 60 years of age group. Majority of the respondents had up to Rs.3,00,000 as their total asset value and very few fisher men had more than Rs.10,00,000.

Parashar et al. (2016), assessed the socio-economic status of fishermen communities and found that income pattern of fishermen is not enough for their annual expenditure which affects their lifestyle and forcing them to change their traditional source of income and depending on other sources of income for their livelihood activities.

Mohite and Samant (2017), conducted Socio Impact Assessment (SIA) study on traditional fishermen communities and found that the fish catch and fish diversity had decreased considerably from last few decades. The study also revealed the socio economic status of the traditional fishermen communities being entirely dependent on health of river, their occupation has declined and thus many had to shift to other petty jobs for subsistence.

Prabhavati and Krishna (2017), studied the socio-economic conditions of fishermen communities and the results indicated that the living conditions are very miserable. In most of the families, there are more than four members and among them majority are illiterate. Their dietary requirement is not at all up to the mark, as they do not consume required nutritious food, in turn their physical capacity does not allow them for frequent and regular fish catch. In addition, 86% of people usually get addicted to drinking and smoking habits (liquor and tobacco). They do not have proper drinking water facility.

Chachere et al. (2018), in their study revealed that the majority of rural youths i.e. 52.50 per cent of respondents were having senior college level of

education, 76.25 per cent of respondents had low level of family income up to 1,00,000. However, the observation also showed that most of the respondents i.e. 45.00 per cent possessed small size of land holding (1.01 to 2.0 ha) and 63.75 per cent of respondents had medium social participation.

Sakiluzzamam (2018), revealed in their study that among the respondent youths more than half (58.8%) of them were middle aged youth followed by a quarter (26.2%) elder youth. It was also found that less than half (42%) of the respondents had secondary education followed by 35.0 per cent having primary education. that 7 per cent of the respondents had either higher secondary level of education or graduation, the same portion (7%) of the respondent was illiterate and another 9 per cent could sign only. More than half (57.5%) of the rural youth belongs to medium size family farm category followed by a little large than a quarter (26%) were from small land holder farm families. Findings also revealed that the mean annual family income of the rural youth was 85.29 thousand BDT.

Tripathi et al. (2018), studied the socio-economic profile of youth and found that most of the respondents were in age group of 21-29 years. Majority (65%) of them had qualification up to Inter level and agriculture farming as their main family occupation (75.56%). Regarding marital status, the results showed that 62.22 per cent respondents were single and Family land holding size was almost evenly distributed among the various categories. Majority belonged to small and marginal farmers' category and about 23% were landless. About 70 per cent of the respondents were having more than 3 animals. The study indicated that 41.48% were students having involvement in one or the other way in agriculture comprising crop farming, animal husbandry and other associated activities while 18.5% were unemployed and living with their parents in search of job or admissions for higher education.

## **2.2 Attitude of youth towards fishing occupation**

Hiremath (2000), reported that 61.67 per cent of the youth had

unfavourable attitude, followed by 36.67 per cent with favourable attitude and only 1.66 per cent had neutral attitude towards agriculture.

Manohari (2001), in her study reported that more than half of the primitive tribal groups (58.75%) possessed favourable attitude towards agricultural technology followed by highly favourable attitude (26.25%), only 10.00 per cent of them belong to neutral attitude category and meagre per cent of them (5.00%) had less favourable attitude.

Sangamesh (2006), found that majority (63.33%) had favourable attitude in rainfed tract and 15.00 per cent of them had more favourable attitude towards agriculture. Similarly, in irrigated tract, majority (66.66%) of the respondents had favourable attitude and 20.00 per cent of them had favourable attitude towards agriculture.

Bhanu (2007), found in their study that a majority of the rural youth (72.50%) had favourable attitude regarding agriculture and rural development activities.

Uddin et al. (2008), revealed that majority (71.43%) of the coastal rural youth showed moderately favourable attitude, followed by (17.58%) of them having favourable attitude whereas only 10.99% of them were having unfavourable attitude towards some selected agricultural technologies.

Adefalu et al. (2009), examined the constraints to rural youth involvement in agricultural production and found that the major constraints hindering youth participation in agriculture were identified as inadequate credit facility, lack of agricultural insurance, poor returns to agricultural investment, lack of basic farming knowledge and lack of access to tractors and other farm inputs.

Abdullahi et al. (2010), studied the characteristics and attributes of rural youth towards family farming and found that majority of respondents had moderately favourable attitude towards family farming and few respondents had favourable attitude towards family farming.

Aphunu and Akpobasa (2010), stated that 69.9 per cent of the respondents had less favourable attitude, followed by 30.4 per cent had favourable attitude regarding agricultural participation in the study area.

Aphunu and Atoma (2010), showed that majority (2010) of the respondents perceived agricultural activities negatively, while only 30.70 per cent expressed positive attitude towards agriculture in the study area.

D'Silva et al. (2010), studied Socio-Demographic factors that influence youth attitude towards contract farming and revealed that majority (69.4%) of the youth had highly favourable attitude, followed by 29.8% having moderate attitude and only 0.8% having less favourable attitude towards contract farming.

Abu et al. (2011), studied socio-demographic factors affecting attitude towards information and communication technology usage and the study confirmed that the factors of period of using a computer in a week, period of using internet in a week and income per month have a positive and significant relationship with attitude towards ICT usage.

Manish et al. (2011), reported that majority (75.50%) of the agricultural graduates had most favourable attitude towards agri-clinic and agribusiness centers and 14.54% of them had most unfavourable attitude whereas only 10.00% were undecided.

Thilagam (2012), inferred that majority of the entrepreneurs (51.33%) had moderate level of favourable attitude towards agribusiness, followed by 28.67% with highly favourable attitude and 20.00% with low level of favourable attitude towards agribusiness.

Angaitkar et al. (2013), observed that majority (61.65%) of the rural youth had favourable attitude, followed by 22.50% having unfavourable attitude and 15.83% of them had highly favourable attitude towards agriculture as a profession.

Anamika and Ravichandran (2014), studied the attitude of rural youth towards nearly three fourth (72.45%) of the rural youth possessed less favourable to moderately favourable attitude towards agriculture. Only one fourth (27.50%) of the respondents were found to hold a highly favourable attitude.

Kitturmath et al. (2014), observed that majority (70.83%) of the respondents had favourable attitude towards, followed by 15.00% with less favourable attitude and the remaining 14.17% of them had more favourable attitude towards rural development activities.

Kimaro et al. (2015), observed that (74.5%) rural youth who participated in agricultural activities had favourable attitude towards agriculture.

Olaoye et al. (2015), assessed the attitude of youth towards fish and found that half of the respondents agreed that fish production activity was hard and stressful as it requires large capital and half of the respondents had favourable disposition to fish production.

Adesina and Favour (2016), studied the determinants of participation in Youth-in Agriculture Programme and revealed that 68.0% of respondents had favourable attitude towards the programme while 32.0% had unfavourable attitude to the programme.

Gangwar and Kameswari (2016), studied the attitude of rural youth towards agriculture as a means of livelihood and found that majority of the respondents had neutral attitude towards agriculture, followed by some respondents having positive attitude and only few respondents had negative attitude.

Singh and Kahlon (2016), found that the youth did not want to adopt traditional occupation such as agriculture and allied activities, the pushing factors being the divisions of land holdings, and decreasing earning from the sector. The study also revealed that in order to fulfill their aspirations the rural youth chose the way to settle abroad which is a major trend among Punjabi rural youth.

Shireesha et al. (2016), conducted a critical analysis of youth attitude towards fishing and the results showed that one third (33.75%) of the total youth had neutral attitude towards farming followed by moderately favourable (23.75%) and moderately unfavourable (18.75%) attitude towards farming, whereas only 10.83 and 12.92 per cent of them had highly unfavourable and highly favourable attitude towards farming respectively.

Pakhmode et al. (2017), studied attitude of rural youth towards farming as a major occupation and revealed that rural youths had less favourable attitude towards farming as a major occupation. The rural youths faced constraints such as lack of motivation from friends and family followed by high cost of inputs.

Tripathi et al. (2018), measured the attitude of rural youth towards farming and revealed that 75.19% of rural youth had moderately favourable attitude towards farming, followed by 18.89 having highly favourable attitude and 5.93% with less favourable attitude towards farming.

### **2.3 Factors constraining youth involvement in fishing occupation**

Hiremath (2000), reported that majority of the rural youth (84.1%) expressed finance as their problem, followed by 61.67% who expressed under-employment as their problem. Among agricultural problems, 44.17% and 40.83% of the youth expressed high cost of agricultural inputs and low prices of agricultural produce as their problem respectively.

Bhanu (2007), revealed that 100 per cent of the respondents expressed the constraints for participation in rural developmental activities like ‘rural developmental activities are risky and time consuming’ and ‘no recognition or awards for participation’, followed by ‘most of the rural developmental activities are beneficial to few people and not for all’ and ‘groups/conflicts among people in the village’ were the important constraints faced by respondents for participating in rural developmental activities.

Adefalu et al. (2009), studied the constraints to youths' involvement in agricultural production in Kwara State in Nigeria and found the major constraints that hinder youth participation in agriculture were, inadequate credit facility, lack of agricultural insurance, poor returns to agricultural investment, lack of basic farming knowledge and lack of farm inputs. The study also revealed the high preference of youth for non-agricultural based professions.

Aphunu and Akpobbasa (2010), found that, lack of incentives from government (mean=2.30), insufficient land (mean=2.12), lack of infrastructure in the rural areas (2.10) and inadequate training and extension services (mean=2.02) were perceived as serious constraints hindering youth's involvement in agricultural production activities.

Akpan (2010), expressed the constraints to rural youth's involvement in agriculture by using mean scores and ranked them accordingly. Inadequate credit facility was the major constraint (mean=2.288), followed by poor returns to investment (mean=2.66), no agricultural insurance (mean=2.66), poor basic farming knowledge (mean=2.56), insufficient access to tractors and other farm inputs (mean=2.48), no ready market (mean=2.35), it is energy sapping (mean=2.33), people perception (mean=2.28), insufficient initial capital (mean=2.15), farmers are not respected (mean=2.10), non-lucrative-ness of agriculture (mean=2.03), continuous poor harvest (mean=1.94), poor storage facilities (mean=1.93), soil degradation (mean 0.65).

Satapathy and Mishra (2011), indicated that, market demand (mean=2.62) as one of the major environmental factors affecting agribusiness, followed by labour (mean=2.35), credit facilities (mean=2.27), preference of consumer (mean=2.25), technical support (mean=2.10), training (mean=2.07), storage facilities (mean=1.96), market strategy (mean=1.87), availability of substitute (mean=1.81) and insurance (mean=1.77) as other constraints affecting agribusiness.

Donye et al. (2012), witnessed that more than one-fifth (22.22%) of the respondents had limited access to credit facilities. About 21.11% of them had market accessibility problem, followed by storage facility (14.44%), problems of pests and diseases (11.11%), poor transportation system (8.11%), inadequate extension services (6.89%), high cost of local input (5.56%), lack of modern implements (4.44%) and finally government policies (3.33%) were faced by youth in yum production.

Chikezie et al. (2012), revealed in their study that the major constraints reported by the respondents were low capital outlay, farmers not given respect, and inadequate land. These rank first (66.6 per cent respectively). Other problems were poor infrastructure (53.33%), energy sapping (33.3%), non-lucrative nature of agriculture in the study area (37.5), and no agricultural insurance (50%).

Arowolo et al. (2013), stated that 45.30 per cent of the youth could not give any reasons for their non-involvement in cattle rearing. However, the reasons given by remaining 54.70 per cent included (i) inadequacy or non-availability of forage or grasses for the cattle (19.30%), (ii) initial capital affordability is adequate (15.30%), (iii) veterinary needs and care (8.00%), (iv) land acquisition problem (7.50%), (v) problems of pests and diseases and (vi) sales (2.00%).

Angaitkar et al. (2013), revealed that majority of youths (86.66%) had problem of lower price of farm produce, 82.5 per cent youths had problem of lack of irrigation water for cultivation, 75.83 per cent youths had problem of lack of hybrid seeds for sowing, 70.00 per cent had problem of lack of training about improved farm technology, 61.66 per cent youths faced problem like transportation also 60.83 per cent faced problem of lack of labours for farm operation and 55.83 per cent youths had problem of lack of availability of pure seeds and fertilizers.

Lyocks et al. (2013), identified factors that have hitherto hindered youth participation in agriculture. Most prominent among these were inadequate

incentives (39.70%). Inadequate training and extension services (28.90%) ranked 2<sup>nd</sup> on the list, followed by inadequate, poor and inefficient infrastructure (21.50%) and insufficient land (4.10%) while as 5.80% of them quoted other minor problems.

Viswanatha et al. (2014), revealed that, scarcity of labour (74.16%), inadequate and untimely supply of fertilizers and plant protection chemicals (69.16%), lack of required finance (67.50%), inadequate and untimely supply of seeds (56.66%) were majority of problems. Half (50.00%) of the rural youth expressed the problem of getting low price for crop produce, less than half of them had the problem of marketing facilities (48.33%), farther distance of market (42.50%), lack of transport facilities (42.50%), lack of irrigation facilities (40.83%), lack of storage facilities (38.33%) and high cost of production (32.50%).

Jawale and Ghulghule (2015), witnessed that, all the kesar mango growers (100%) expressed the major constraints in production as effect of heavy rains, winds and storms during flowering and fruit setting time. Majority (85%) of kesar mango growers expressed problem of labour with high wage rate. Irregular electricity supply was important constraint expressed by 83.33% of kesar mango growers. The other constraints in mango production expressed by the farmers were non-availability of quality grafts (80%), high cost of inputs (76.67%), high incidence of pest and diseases (70%) and lack of storage facilities near production area (66.67%). Some of the farmers have also faced lack of technical guidance (58.33%), unavailability of margin money at the time of establishment (51.67%) and inadequate irrigation facilities (43.33%).

Olaoye et al. (2015), revealed that majority (78.3%) of the respondents strongly agreed that inadequate capital affects fish production. This situation was further aggravated by the unwillingness of financial institutions to grant loans to the farmers. Other constraints being faced includes land problem (63.3%), unavailable/poor quality fish feed (70.0%) and poor quality fish seed (61.7%).

These were strongly agreed upon by respondents as personal constraints being faced in fish production.

Patel and Chauhan (2015), reported that, the constraints were two fold *viz.*, related to crop production technology and soil and water conservation technology. The constraints related to crop production technologies were concerned, it is clearly observed that, lack of knowledge about recommended crop production technology (85.00%) was the main constraint expressed by the beneficiary farmers, followed by low market price of agricultural products (83.33%), lack of technical guidance (76.66%), lack of finance to purchase inputs (74.16%), high cost of farm inputs (73.33%), lack of communication facilities (70.83%), lack of timely and appropriate extension services (58.33%), risk in adoption of new technology (57.50%), high rate of labour and unavailability of sufficient labour in time (50.00%), high rate of electricity (46.66%), irregular supply of electricity (45.83%) and lack of transport facility (29.16%) were the important constraints expressed by the beneficiary farmers. Among soil and water conservation technology, the constraints *viz.*, less subsidy (72.50%) was the main constraint expressed by the beneficiary farmers, followed by lack of knowledge about soil and water conservation technology (68.33%), construction of field bund is costly (66.66%), lack of technical guidance (58.33%), lack of finance (53.33%), timely sowing is not possible (51.66%), land leveling is costly (45.83%) and lack of timely and appropriate extension services (29.16%) were the important constraints expressed by the tribal farmers.

Preethi (2015), found that scarcity of labour, electricity problem, lack of credit facilities and lack of timely supply of seeds and fertilizers were the common major problems faced by farm youth of both irrigated and rainfed areas.

Adelodun et al. (2016), in their study found some factors which were responsible for less involvement of youth in fish production. The study revealed that inadequate capital for land acquisition, high cost of quality fish feed and lack of credit facilities as major constraints hindering the participation of youth in fish

production. The factors such as parental restriction, peer group and spouse restriction were not much of a hindrance to their participation.

Adesina and Favour (2016), studied the constraints to participation in Youth-In-agriculture Programme and found that inadequate training facilities were the most severe constraint, followed by, inadequate credit facilities, while as inadequate extension service was third in order of severity.

Radhakrishna and Arunachalan (2017), studied the constraints perceived by the rural youth towards participation in rural development activities in Tamil Nadu and found that most of the respondents expressed more conflicts among the people in the village, lacks of higher educational facilities, lack of business opportunities and related experience as their key constraints towards participation in rural development activities.

#### **2.4 Association between independent and dependent variables**

Bhanu (2007), in his study found the significant relationship between dependent variables like educational aspiration, occupational aspiration and enterprise aspiration of rural youth with independent variables like education, mass media utilization, annual income, economic motivation at one per cent of probability. Positive and significant relationship was also observed between dependent variable like general aspiration of rural youth and independent variables like extension contact and achievement at 5 per cent level of probability. Negative and significant relationship was observed between educational aspiration of rural youth and age at one per cent level of probability. There was positive and significant relationship between enterprise aspiration and extension agency contact at 5 per cent level of probability.

Mourya et al. (2007), found that age, caste, type of family, size of family, marital status, farming experience, social participation, annual income, source of information, contact with extension agent, risk orientation and economic motivation has significant associated with constraints analysis regarding

participation of rural youth in agricultural activities while size of land holding found to be not significant.

Uddin et al. (2008), revealed that, education, innovativeness and agricultural knowledge of the coastal rural youth had positive and significant relationship with their attitude towards selected modern agricultural technologies. On the other hand, age, family size, family farm size, family annual income, aspiration, extension media contact and time spend in agricultural activities had no significant relationship with their attitude.

Angba et al. (2009), studied effect of socio-economic characteristics of rural youth on their attitude towards participation in community development projects in Rivers state, Nigeria and revealed that some relationships exist significantly between socio-demographic characteristics such as gender, age, occupation, educational level and the attitude of youth towards community development projects.

Aphunu and Atoma (2010), showed that, attitude of youth towards agriculture correlated positively and significantly with involvement in agricultural production activities. The significant relationship can be attributed to number of factors such as institutional deficiencies (dearth of infrastructures in rural areas, lack of government support to encourage agriculture, etc.,) rural-urban migration tendencies, emerging new livelihood interest of youth, generally perceived low and different reward or feedback of agriculture as a source of livelihood.

Mosae and Ommani (2011), revealed that there was a positively significant relation between independent variables (income, social participation, arable land system) and rural youth's attitude towards agricultural occupation.

Mohan and Reddy (2012), reported that type of family and achievement motivation were found to be positively significant with the attitude of agricultural graduates towards pursuing self-employment in agriculture.

Rashid and Gao (2012), examined the determinants of rural youth's attitude and involvement in Bangladesh Politics and found that family size, agricultural knowledge, organizational participation and communication exposure were significantly correlated with political attitude of rural youth whereas, age, organizational participation, communication exposure, perceived prevalence of leadership traits and political attitude had positive significant correlation with involvement in politics.

Angaitkar et al. (2013), stated that there was significant association between socio-economic and psychological characteristics (age, education, farming experience, annual income, involvement in decision making, cosmopolitaness, economic motivation, scientific motivation and risk preference) of rural youth with their attitude level while choosing agriculture as a profession.

Anamika and Ravichandran (2014), in their study revealed that the variables, involvement in farming, income expectancy, comfort expectancy, stimulation expectancy occupational status and affiliation expectancy showed positive and significant relationships whereas age, education, non-farm skill, proximity to towns/cities, prior migration experience, economic motivation, risk orientation self-reliance and self-confidence. However, variables such as farm size, farm skill and achievement motivation depicted their no-significant relationship with the dependent variables.

Ummunakwe et al. (2014), reported that there was a significant and positive effect of marital status, innovativeness, extension contact and mass media exposure on rural youth involvement in agricultural income generating activities. There was a significant and negative influence of respondents' education on rural youth involvement in agricultural income generating activities.

Viswanatha et al. (2014) witnessed that, education, land holding, annual income, mass media utilization, extension participation and innovativeness of rural youth was having positive and significant relationship at one per cent level.

Family type and risk orientation had no significant relationship with their aspirations in agriculture.

Bello et al. (2015), studied attitudes of rural youth towards agriculture as an occupation and revealed that cost and production positively affected the youth attitudes and their decision towards agriculture. The study also revealed that age and marital status did not significantly affected the attitude of respondents towards the cause of leaving agricultural work while educational level significantly affected the attitudes of youth towards agriculture.

Preethi (2015), revealed from the study that education, landholdings, risk orientation, innovative proneness, social participation, mass media use, extension contact, cosmopolitaness, training received and farm scientist contact were significantly influencing and contributing to perception, aspiration and participation of farm youth in agriculture.

Ummunakwe and Adedamola (2015), found that marital status and family type were positively related to participation in livelihood activities among rural youth. Their educational level had non-significant relationship with their involvement in livelihood activities.

Shireesha et al. (2016), studied the correlation of profile and attitude of youth towards farming and found that education, exposure to training, annual income, mass media exposure, decision-making ability, innovativeness, scientific orientation, management, achievement motivation, economic orientation and risk orientation of youth in farming were positively significant with their attitude while as, the variables like marital status, family type, farm size, material possession and extension contact were non-significantly related to attitude. On the other hand, the variables such as age and farming experience were negatively correlated with their attitude towards farming.

Chachere et al. (2018), in their study found that achievement motivation, economic motivation, risk orientation, extension contact, urban orientation found

the positive and significant level of probability 0.01 with attitude level. The variable viz. family income, family land holding, field of interest found positive and significant at 0.05 level of probability with attitude index. The variables education and social participation have shown non-significant relationship with attitude level.

Sakiluzzamam et al. (2018), in their study that out of eleven socio-economic characteristics of the respondents, eight characteristics such as education, family farm size, annual family income, credit support, cosmopolitaness, use of communication media, organizational participation and training received had positive and significant relationship with rural youth extent of participation in commercial agriculture. However, age, agricultural knowledge and innovativeness of the respondent rural youth did not show significant relationship with their extent of participation in commercial agriculture.

Tripathi et al. (2018), studied the relationship between socio-personal and socio-economic profile of youth with their attitude towards farming and found the positive and significant relation of age, family size, land holding and livestock holding with their attitude towards fishing while as the variable such as education had negative and significant relation with their attitude towards farming.

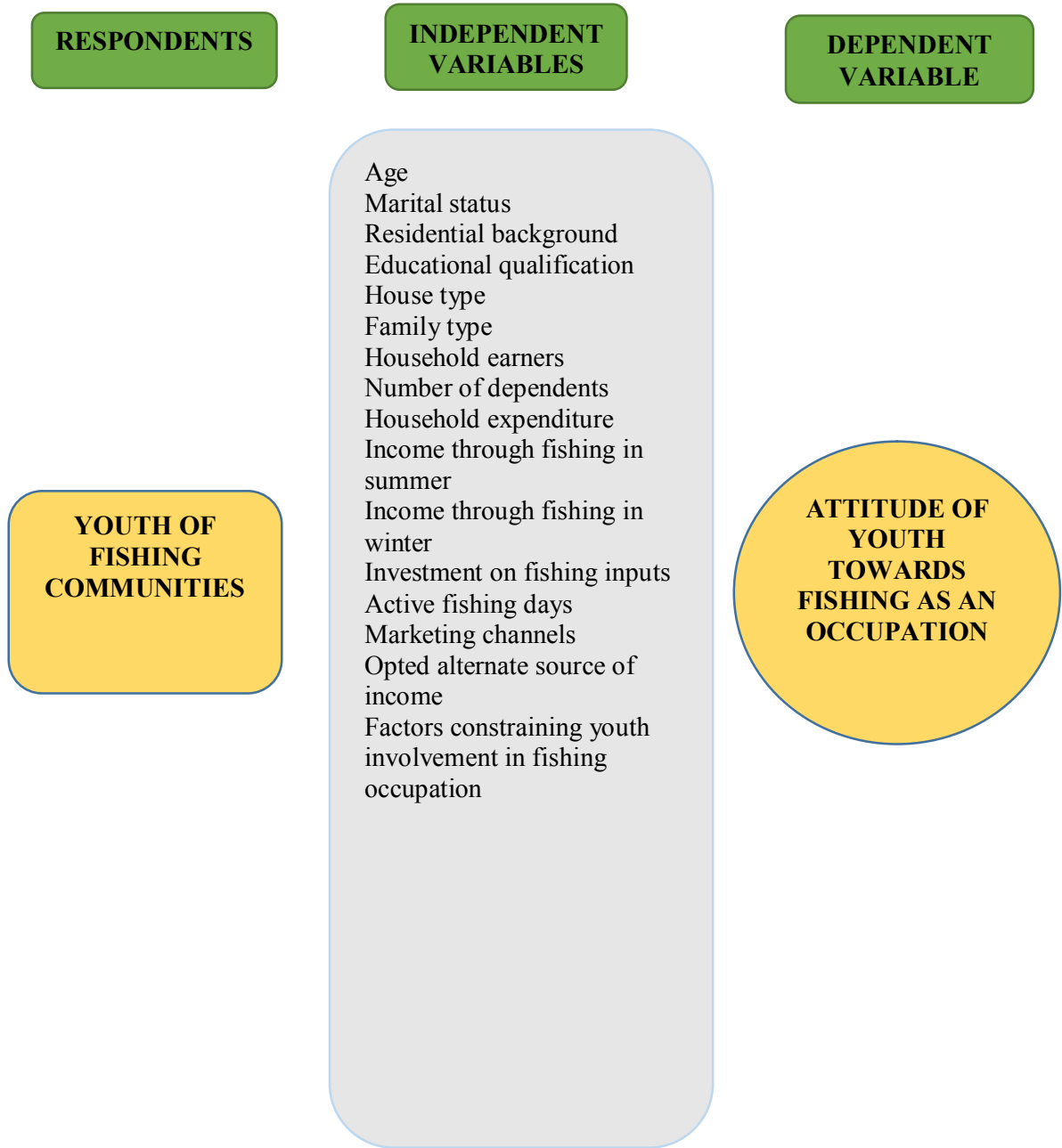
## **2.5 Conceptual model of the study**

Conceptual model is a diagrammatic representation of outlining the dominant elements of a system and their interrelationships with respect to a criterion variable. Conceptual model is formulated based on experience and in the present study, review of related studies was also formed as the basis for the conceptual model. The variables included in the study were grouped into independent and dependent variable.

The independent variables are conceived as those variables those precede the others in the order of time and which are theoretically expected to lead or to be followed by certain other variables. In the present study factors related to profile

characteristics of youth and constraints faced by the youth in fishing occupation were considered as independent variables.

The dependent variable is that variable, which follows the independent variables in time. Attitude of youth towards fishing as an occupation was the dependent variable in the present study. It is clear from the conceptual model that, attitude of youth towards fishing occupation was the function of selected independent variables. Based on the review of relevant literature and in consultation with the experts, sixteen independent variables were selected.



**Fig. 1: Conceptual model of the study**

## **Chapter 3**

### **MATERIALS AND METHODS**

This chapter deals with the methods and procedures which are used in the present study entitled, “A study on the Attitude of youth of fishing communities towards fishing as an occupation”. The different steps that were undertaken are listed below

#### 3.1 Sampling techniques used

- a) Location of the study
- b) Research design
- c) Sampling method

3.2 Selection of variables, their definitions, measurements, scoring procedure and categorization.

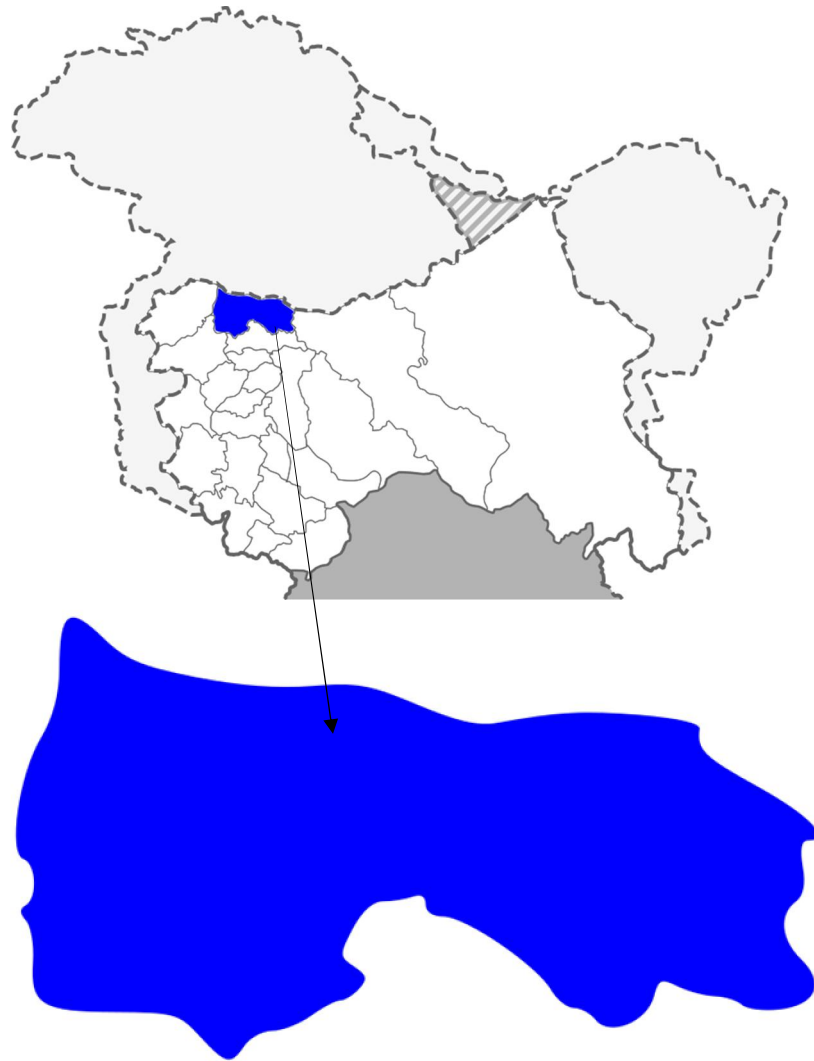
3.3 Development of instrument for data collection, Pre-testing of schedule and methods of data collection.

3.4 Processing and statistical analysis of data.

#### **3.1 Sampling techniques used**

##### **3.1.1 Location of the study area**

The present study was conducted in the Bandipora district of Jammu and Kashmir. The topography of the district represents a mix of beautiful mountains and streams offering tremendous potential for developing scenic and adventure tourism. The district is surrounded by Himalayan Mountains having Kargil district on north, Kupwara in west, Baramullah in south and Ganderbal in east. The district has a population of 457842 and agriculture is the mainstay of the majority of the people in the district. Manufacturing of carpets, embroidery, dairy and fishing are some important economic activities in the village. The district is bestowed with vast water resources which exist in the form of glaciers, high



**Plate 1: Map of study area (District Bandipora)**

altitude lakes, Nallahs, Springs, Water logged bodies, sars etc. These water resources possess huge potential for the development of fish and fisheries. About 2256 Fishermen are registered with the department in district Bandipora who derive their livelihood from these water resources. Almost 1800-2500 tonnes of fish are captured from these water resources by the Fishers to make these available for human consumption. Wular lake is spread through the heart of the district serving as attraction for tourists and source of livelihood for people living on peripheries. About 65% fish production comes from famous Wular lake alone which is regarded as the Fish Bowl and it sustains livelihood of large section of population of valley. It provides fish, water chestnuts (*Trapa natatus*), lotus (*Nelumbo rucifera*) rhizomes, fodder, water, etc., According to a study by Wetland International, 32,000 families including 2,300 fisher households living on Wular's shores depend on it for livelihood. More than 30,000 people are directly involved in fishing, 14,000 of them with registered licenses.

### **3.1.2 Research design**

Based on the objectives of the study, ex post facto research design was followed in the present investigation. Ex post facto research design is a systematic empirical enquiry in which the dependent variables have not been directly manipulated because they have already occurred or they are inherently not manipulated. Ex post facto studies can be devised to identify behavioral phenomenon and to explore conditions under which a phenomenon occurs (Kerlinger, 1973). Keeping in view of the type of variables under consideration, size of respondents and phenomenon to be studied, the ex post facto research design was selected as an appropriate research design to investigate the variables influencing the attitude of youth towards fishing.

### **3.1.3 Sampling method**

#### **3.1.3a Selection of Villages**

Department of fisheries has divided district Bandipora into two divisions



**Plate 2 : Data collection from the respondents of village Lankrashpora**



**Plate 3: Data collection from the respondents of village Ashtingoo**



**Plate 4: Data collection from the respondents of village Kulhama**



**Plate 5: Data collection from the respondents of village Paribal**

(i) Bandipora (ii) Sumbal. Bandipora has further been divided into three beats Zurimanz, Laharwalpora and Kulhama. Zurimanz includes Ashtingoo ghat, Aloosa Ghat, Kehnoosa Ghat, Paribal. Kulhama is further divided into three fishing beats Kulhama, S. K payem, Lankreshpora. Sumbal division has also been divided into three beats Sumbal, Hajin and kaniyari. Sumbal includes Mukdamyari and Banyari.

Thus, multi-stage random sampling technique was used for the selection of fishing villages. At first stage, out of the two divisions, Bandipora division was selected. At the second stage, out of three beats, two beats Zurimanz and Kulhama were selected. At the last stage, two fishing ghats Ashtingoo ghat and Paribal were selected from zurimanz beat and two villages Kulhama and Lankreshpora were selected from Kulhama beat respectively and thus constituting total of four villages for study.

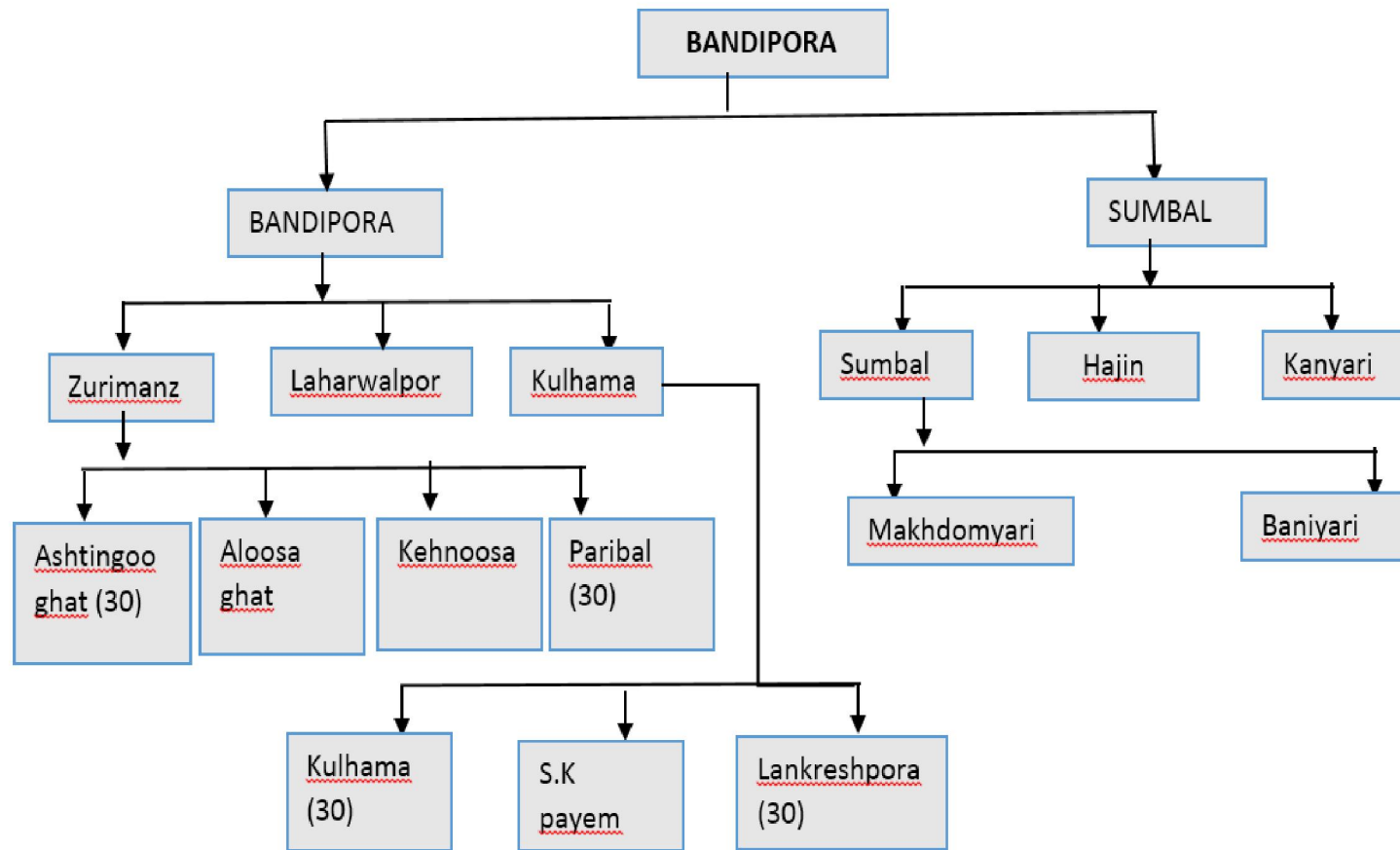
### 3.1.3b Selection of respondents

From each of the four selected villages, 30 youth were selected randomly, thus constituting to a total of 120 respondents.

## 3.2 Selection of variables, definitions, and their measurements, scoring procedure and categorization

### 3.2.1 Variables and their measurements

| S. No. | Variables                             | Measurement                           |
|--------|---------------------------------------|---------------------------------------|
| A      | Independent variables                 |                                       |
| I      | <b>Socio economic characteristics</b> |                                       |
| 1      | Age                                   | Scale used by Jayapuriya in his study |
| 2      | Marital status                        | Schedule developed                    |
| 3      | Educational qualification             | Schedule developed                    |



**Fig. 2: Sampling procedure followed for selection of respondents**

|           |  |  |
|-----------|--|--|
| 4         | Residential background   | Schedule developed                         |
| 5         | Type of House  | Schedule developed                         |
| 6         | Type Family  | Schedule developed                         |
| 7         | Number of household earners  | Schedule developed                         |
| 8         | Number of dependents   | Schedule developed                         |
| 9         | Monthly expenditure on household   | Schedule developed                         |
| 10        | Monthly income through fishing in summer                                   | Schedule developed                         |
| 11        | Monthly income through fishing in winter                                   | Schedule developed                         |
| 12        | Investment on fishing inputs   | Schedule developed                         |
| 13        | Active fishing days/year   | Schedule developed                         |
| 14        | Marketing channel  | Schedule developed                         |
| 15        | Opted alternate source of income   | Schedule developed                         |
| <b>II</b> | <b>III Factors constraining youth involvement in fishing</b>               | Index developed using 5-point Likert Scale |
| <b>B</b>  | <b>Dependent Variable</b>  |  |
| <b>I</b>  | <b>Attitude of youth of fishing Communities towards Fishing occupation</b> | Index developed using 5-point Likert Scale |

### 3.2.2 Operational definition of independent variables

#### 3.2.2a Socio-economic characteristics of youth

##### 1. Age

It refers to the actual age of the respondents completed, i.e. chronological age of the respondents. The actual age was recorded as told by the respondents at

the time of interview. Respondents already had age limit 18-35 years. Here in this study age was categorized into three groups: young, middle and adult.

| S. No. | Categories       | Scores |
|--------|------------------|--------|
| 01.    | Young (18-23yrs) | 1      |
| 02.    | Middle (24-29)   | 2      |
| 03.    | Adult (30-35)    | 3      |

## 2. Marital status

On the basis of marital status respondents were grouped into two categories unmarried and married.

| S. No. | Categories | Scores |
|--------|------------|--------|
| 01.    | Married    | 1      |
| 02.    | Unmarried  | 2      |

## 3. Education qualification

It refers to the ability or inability of an individual to read and write and his formal education attained and categories formulated as follows:

| S. No. | Categories        | Scores |
|--------|-------------------|--------|
| 01.    | Illiterate        | 1      |
| 02.    | Under matriculate | 2      |
| 03.    | Under graduate    | 3      |
| 04.    | Any other         | 4      |

## 4. House type

The type of house they live in included whether they live in a pucca house or kachha house which referred to their economic conditions.

| S. No. | Categories | Scores |
|--------|------------|--------|
| 01.    | Pucca      | 1      |
| 02.    | Kachha     | 2      |

### 5. Residential background

On the basis of the geographical area they live in, following categories were made.

| S. No. | Categories | Scores |
|--------|------------|--------|
| 01.    | Rural      | 1      |
| 02.    | Urban      | 2      |

### 6. Type of family

The type of family included whether it is a joint or a nuclear family.

**Nuclear family:** This includes the families limited to husband, wife and their children.

**Joint family:** This includes the families who were having a great number of members living together and where individual earning and common mode of cooking were pooled together to run the family by family head.

| S. No. | Categories     | Scores |
|--------|----------------|--------|
| 01.    | Nuclear family | 1      |
| 02.    | Joint family   | 2      |

### 7. Household earners

It refers to the number of members in the family who earn money for the household. On the basis of number of earners, following categories were made:

| <b>S. No.</b> | <b>Categories</b> | <b>Scores</b> |
|---------------|-------------------|---------------|
| 01.           | 1                 | 1             |
| 02.           | 2                 | 2             |
| 03.           | 3                 | 3             |

#### **8. Number of dependents**

On the basis of number of dependents, following categories were made:

| <b>S. No.</b> | <b>Categories</b> | <b>Scores</b> |
|---------------|-------------------|---------------|
| 01.           | Less than 3       | 1             |
| 02.           | 3-6               | 2             |
| 03.           | Above 6           | 3             |

#### **9. Household expenditure**

It refers to the amount of expenditure made by households to meet their everyday needs such as food, clothing, transport, etc. On that basis, following categories were made:

| <b>S. No.</b> | <b>Categories</b> | <b>Scores</b> |
|---------------|-------------------|---------------|
| 01.           | Less than 3000    | 1             |
| 02.           | 3000-4000         | 2             |
| 03.           | Above 4000        | 3             |

#### **10. Investment of fishing inputs**

It refers to the expenses on fishing activities and gear and crafts used. Following categories were made:

| <b>S. No.</b> | <b>Categories</b> | <b>Scores</b> |
|---------------|-------------------|---------------|
| 01.           | Less than 10000   | 1             |
| 02.           | 10000-20000       | 2             |
| 03.           | Above 20000       | 3             |

### **11. Active fishing days**

This refers to the number of days on which fishing activities were carried out. On this basis, following categories were made:

| <b>S. No.</b> | <b>Categories</b> | <b>Scores</b> |
|---------------|-------------------|---------------|
| 01.           | Less than 200     | 1             |
| 02.           | 200-300           | 2             |
| 03.           | Above 300         | 3             |

### **12. Monthly income through fishing in summer**

It refers to the total income of the respondents obtained from fishing occupation in summer season when the catch is good. On this basis, categories were made as:

| <b>S. No.</b> | <b>Categories</b>     | <b>Scores</b> |
|---------------|-----------------------|---------------|
| 01.           | Low (less than 10000) | 1             |
| 02.           | Medium (10000-20000)  | 2             |
| 03.           | High (above 20000)    | 3             |

### **13. Monthly income through fishing in winter**

It refers to the total income of the respondents through fishing occupation in winter season when the catch is less in the lake.

| S. No. | Categories           | Scores |
|--------|----------------------|--------|
| 01.    | Low (less than 5000) | 1      |
| 02.    | Medium (5000-10000)  | 2      |
| 03.    | High (above 10000)   | 3      |

#### 14. Marketing channels

This refers to the method of selling their catch. The respondents were classified into four groups:

| S. No. | Categories                     | Scores |
|--------|--------------------------------|--------|
| 01.    | Selling through contractor     | 1      |
| 02.    | Selling direct to local market | 2      |
| 03.    | Door to door selling           | 3      |
| 04.    | Any other                      | 4      |

#### 15. Opted alternate source of income

On the basis of whether the respondents have opted the alternate source of income or not, following categories were made:

| S. No. | Categories | Scores |
|--------|------------|--------|
| 1      | Yes        | 1      |
| 2      | No         | 2      |

#### 3.2.2b Factors constraining youth involvement in fishing occupation

In the present study, the factors that constrain youth participation in fishing occupation were collected on five-point Likert scale as Strongly agree, Agree, Undecided, Disagree and Strongly disagree and were given scores 5, 4, 3,

2 and 1 respectively. The scale consisted of 21 statements about the constraints they face in the occupation.

### 3.2.3 Operational definition of Dependent variable

Attitude can be defined as “a tendency to respond positively or negatively towards a certain idea, object, person or situation. Attitude influences an individual’s choice of action and responses to stimuli. In the present study, attitude of youth of fishing communities towards fishing as an occupation is operationalized as the degree of postiveness or negativeness of youth towards fishing occupation. Attitude scale developed and followed by Joy Mathews and Nagi Reddy (1989) and as followed by Prasad (2002) was used with little modifications. For the study, responses were collected on five-point continuum as Strongly agree, Agree, Undecided, Disagree and Strongly disagree and were given 5,4,3,2 and 1 scores respectively for the statements. There were sixteen statements of this scale, out of which 9 statements were positive and rest of the 7 statements were negative.

For the statement wise analysis of the attitude, the statements were presented as per their mean and rank order of high favourableness to low favourableness.

#### 3.2.3a Scale used for measuring attitude of youth towards fishing as an occupation

| S. No. | Statements   | SD | D | UD | A | SA |
|--------|--|----|---|----|---|----|
| 01     | Fishing can provide sustainable livelihood to youth  |    |   |    |   |    |
| 02     | I feel proud to engage in fishing occupation         |    |   |    |   |    |
| 03     | Fishing is more profitable than any other occupation |    |   |    |   |    |

|    |  |  |  |  |  |  |
|----|--|--|--|--|--|--|
| 04 | I prefer fishing as an occupation  |  |  |  |  |  |
| 05 | Villages can't prosper unless youth adopt fishing occupation                                     |  |  |  |  |  |
| 06 | I feel sorry for those who abandoned fishing occupation  |  |  |  |  |  |
| 07 | This occupation leads to increase in standard of living  |  |  |  |  |  |
| 08 | This occupation leads to economic upliftment of fishers  |  |  |  |  |  |
| 09 | I prefer to be fisher than an employee   |  |  |  |  |  |
| 10 | Fishing is considered for old man's job*   |  |  |  |  |  |
| 11 | Fishing is more stressful job*   |  |  |  |  |  |
| 12 | I avoid fishing as it is a tedious job*  |  |  |  |  |  |
| 13 | It is better to do job with less salary than to adopt fishing as occupation*                     |  |  |  |  |  |
| 14 | It is better for a family to hold diversified occupation rather than to be dependent on fishing* |  |  |  |  |  |
| 15 | I will not encourage my children to be in this profession*                                       |  |  |  |  |  |
| 16 | Fishing is not viewed as respectful profession in society*                                       |  |  |  |  |  |

\*Negative statements

### **3.2.3b Scale used to measure level of attitude of youth towards fishing as an occupation**

To analyze the level of attitude of youth towards fishing occupation, the total score of the respondents on the scale was obtained by summing up the scores of all the statements in the scale. The possible minimum and maximum score was

16 and 80. The respondents were grouped into following three categories based on the scores obtained by each of them duly following mean and standard deviation.

| <b>S.No.</b> | <b>Category</b>       | <b>Score range</b>      |
|--------------|-----------------------|-------------------------|
| 01           | Less favourable       | Less than (Mean-SD)     |
| 02           | Moderately favourable | Between (Mean $\pm$ SD) |
| 03           | Highly Favourable     | More than (Mean + SD)   |

### **3.3 Development of instrument for data collection, Pre testing of schedule and methods of data collection**

#### **3.3.1 Development of instrument for data collection**

An interview schedule was designed on the basis of objectives and variables under study. Interview of the respondents was conducted into following parts:

- i. The first part of the schedule comprised of the questions related to the socio-economic information of the respondents.
- ii. The second part of the schedule included the questions related to specific information about their attitude towards fishing occupation.
- iii. The third part of the schedule consisted of the factors that constrain their involvement in fishing occupation.

#### **3.3.2 Pre-testing of the schedule**

The pre testing of the schedule was done in the selected villages of Bandipora district. Necessary corrections and modifications were done to ensure that the questions in the schedule were clear and unambiguous as per objectives and purpose of the study. Then the task of data collection was commenced.

### **3.3.3 Methods of data collection**

The data was collected by administering the structured interview schedule to the respondents. The questions were asked in local language *i.e.* Kashmiri. The youth in fishing were personally interviewed which helped in getting first-hand information and gave an opportunity to observe the respondents personally. The response of each respondent was recorded in the interview schedule with due care. Every effort was made to check and cross check the data collected from all the sample respondents. Friendly atmosphere was maintained during the interview to see that the respondents were at ease and expressed their opinions freely, fairly and frankly.

### **3.4 Processing and statistical analysis of data**

During the investigation, the data collected was tabulated into the coding sheet and then appropriate analysis of data was made according to objectives. The following statistical techniques were used in the study.

- a) Frequency
- b) Percentage
- c) Mean
- d) Standard deviation
- e) Correlation
- f) Regression analysis

Analysis of data was carried out with the software named as SPSS.

## Chapter 4

### EXPERIMENTAL FINDINGS

This chapter deals with the analysis and interpretation of collected data, which were collected from a sample of 120 youth with reference to study on Attitude of youth towards fishing as an occupation through pre-tested structured interview schedule. Calculations were made on percentage basis, mean, standard deviation and correlation, multiple linear regression was also applied. In the light of the objectives, the data was collected, processed and analyzed. The major findings emerged out of the present study have been suitably categorized, presented and discussed under following sub-headings:

#### 4.1 Independent variables

4.1.1 Socio-economic characteristics of the youth of fishing communities.

4.1.2 The factors that constrain youth involvement in fishing occupation.

#### 4.2 Dependent variable

4.2.1 The attitude of youth towards fishing as an occupation.

#### 4.3 Association between independent and dependent variables

### **4.1 Independent variables**

#### **4.1.1 Socio-economic characteristics of youth**

The variables selected and studied as independent variables were age, marital status, educational qualification, residential background, type of family, house type, household earners, number of dependents, household expenditure, investment on fishing inputs, active fishing days, income through fishing in summer, income through fishing in winter, marketing channel and opted alternate source of income are presented here:

#### 4.1.1a Age

The data of the Table 4.1 revealed that out of the 120 youth, majority (43.3%) were middle youth, 31.6 per cent belonged to adult youth category and minimum (25.5%) were adult youth in the study area.

**Table 4.1: Distribution of youth according to their age**

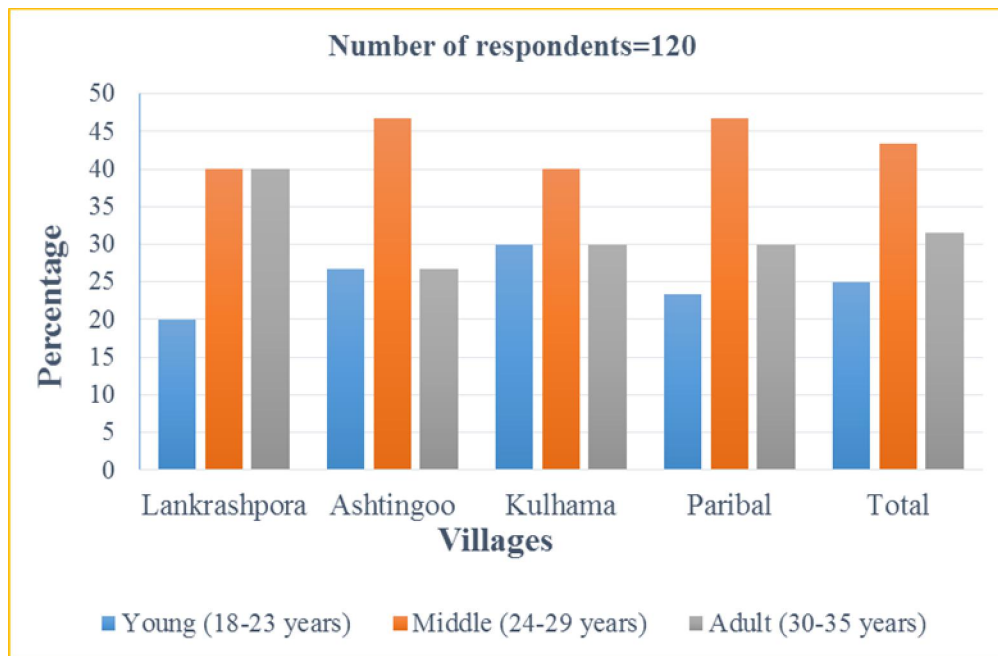
| Age (years)    | Lankrashpora |              | Ashtingoo |            | Kulhama   |            | Paribal   |            | Study Area |            |
|----------------|--------------|--------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                | No.          | %            | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Young (18-23)  | 6            | 20.0         | 8         | 26.7       | 9         | 30.0       | 7         | 23.3       | 30         | 25.0       |
| Middle (24-29) | 12           | 40.0         | 14        | 46.7       | 12        | 40.0       | 14        | 46.7       | 52         | 43.4       |
| Adult (30-35)  | 12           | 40.0         | 8         | 26.7       | 9         | 30.0       | 9         | 30.0       | 38         | 31.6       |
| <b>Total</b>   | <b>30</b>    | <b>100.0</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four fishing villages, out of 30 respondents from each village, Kulhama village had maximum youth (30.0%) of young age group followed by Ashtingoo, Paribal and Lankrashpora with the values of 26.7%, 23.3% and 20.0% respectively. The maximum youth (46.7%) of middle age group belonged to Paribal and Ashtingoo followed by Lankrashpora and Kulhama both having value of 40.0%. However, the maximum youth (40.0%) of adult group belonged to Lankrashpora, followed by Kulhama and Paribal both with value of 30.0% and Ashtingoo with 26.7%.

#### 4.1.1b Marital status

The data presented in the Table 4.2 revealed that out of 120 respondents, 56.7 per cent were married and 43.3 per cent were unmarried in the study area.

Out of each of 30 selected respondents from four villages, maximum (60.0%) of the married youth belonged to Lankrashpora, Kulhama and Paribal followed by Ashtingoo (46.7%) while as maximum (53.3%) unmarried youth



**Fig. 3: Distribution of respondents according to their age**

were from Ashtingoo followed by Lankrashpora, Kulhama and Paribal with the value of 40.0% in all the three villages.

**Table 4.2: Distribution of youth according to their marital status**

| Marital status | Lankrashpora |              | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|----------------|--------------|--------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                | No.          | %            | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Married        | 18           | 60.0         | 14        | 46.7       | 18        | 60.0       | 18        | 60.0       | 68         | 56.7       |
| Unmarried      | 12           | 40.0         | 16        | 53.3       | 12        | 40.0       | 12        | 40.0       | 52         | 43.3       |
| <b>Total</b>   | <b>30</b>    | <b>100.0</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

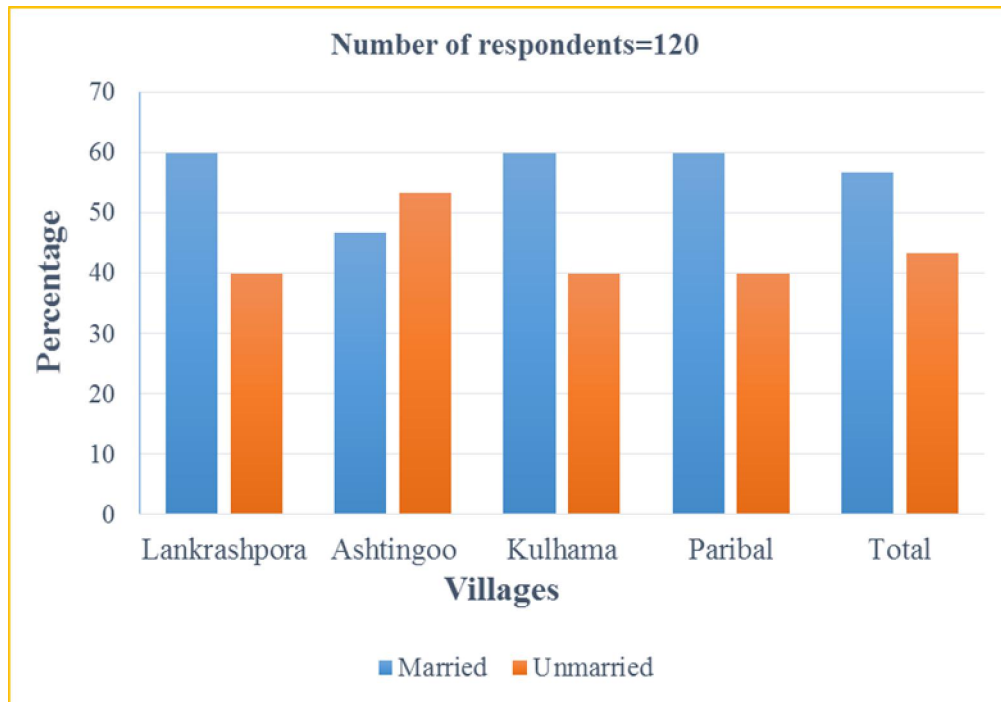
#### 4.1.1c Educational qualification

The data presented in the Table 4.3 revealed that out of 120 respondents 53.4 per cent of the youth had education upto matric and 46.6 per cent of the youth were illiterate while as none of them had qualification of graduation or above in the study area.

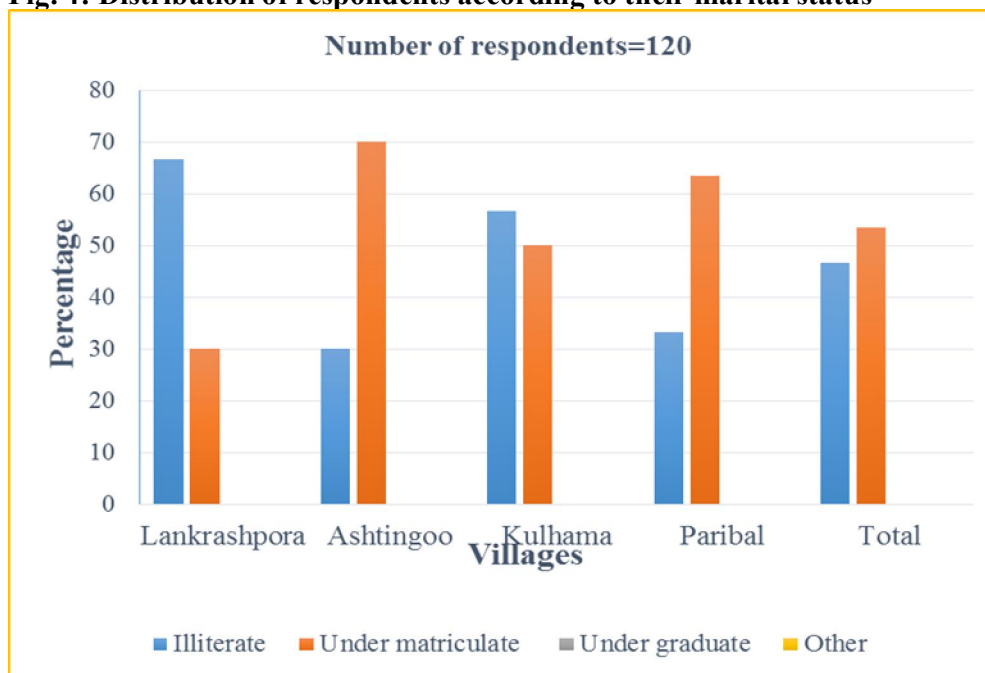
**Table 4.3: Distribution of youth according to their education**

| Educational qualification | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|---------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                           | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Illiterate                | 20           | 66.7       | 9         | 30.0       | 17        | 56.7       | 10        | 33.3       | 56         | 46.6       |
| Under-matriculate         | 9            | 30.0       | 21        | 70.0       | 15        | 50.0       | 19        | 63.4       | 64         | 53.4       |
| Undergraduate             | 0            | 0          | 0         | 0.0        | 0         | 0          | 0         | 0.0        | 0          | 0.0        |
| Other                     | 0            | 0.0        | 0         | 0          | 0         | 0          | 0         | 0          | 0          | 0.0        |
| <b>Total</b>              | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages, maximum of the illiterate youth (66.7%) were from lankrashpora followed by Kulhama (56.7%), Paribal (33.3%) and Ashtingoo



**Fig. 4: Distribution of respondents according to their marital status**



**Fig. 5: Distribution of respondents according to their educational qualification**

(30.0%). The maximum of under matriculate youth (70.0%) belonged to Ashtingoo followed by Paribal, Kulhama and Lankrashpora with the values of 63.4, 50.0 and 30.0% respectively and none of the respondents had under graduate or above qualification.

#### 4.1.1d Residential background

The data presented in the Table 4.4 revealed that among the four villages all the respondents (100%) belonged to the rural background.

**Table 4.4: Distribution of youth on the basis of residential background**

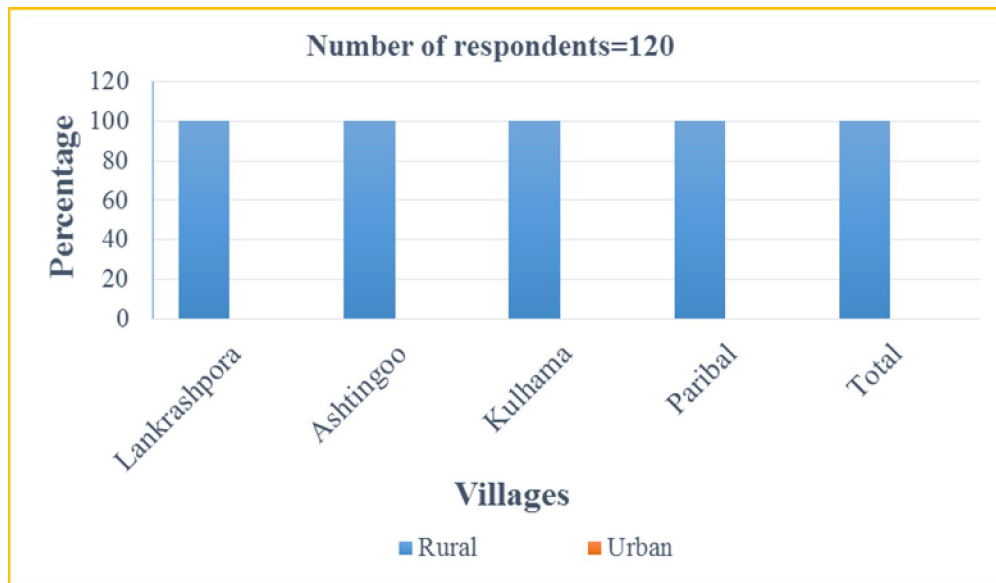
| Residential background | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall   |            |
|------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
|                        | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.       | %          |
| Rural                  | 30           | 100        | 30        | 100        | 30        | 100        | 30        | 100        | 120       | 100        |
| Urban                  | 0            | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0         | 0          |
| <b>Total</b>           | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> |

#### 4.1.1e Type of house

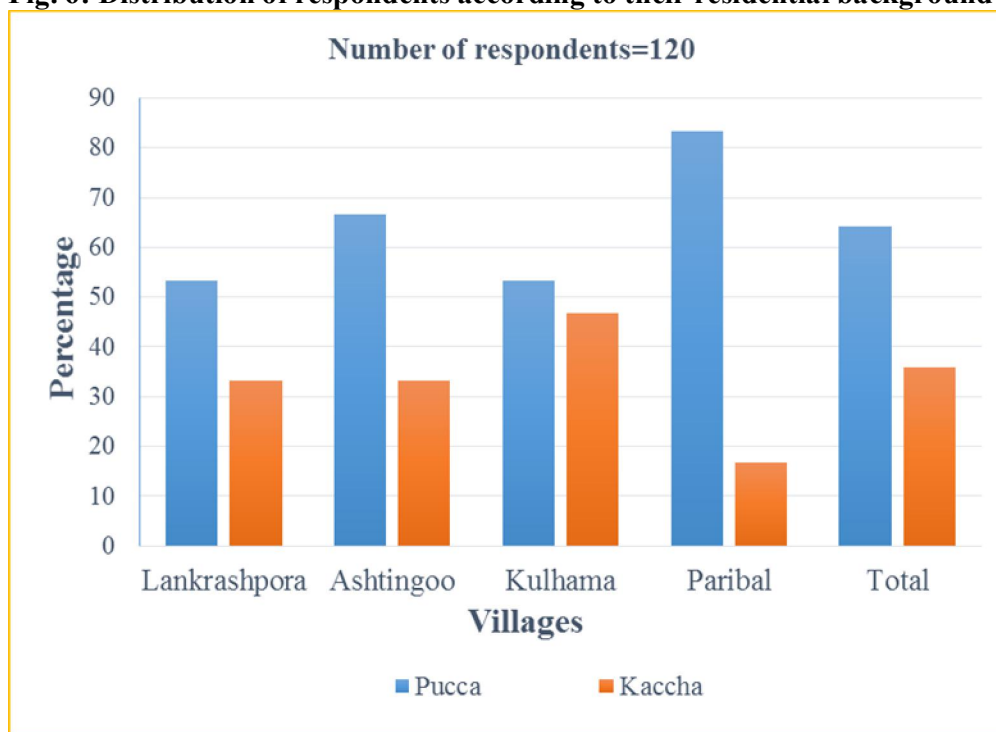
The data in the Table 4.5 revealed that out of 120 respondents 64.2 per cent of the youth lived in pucca house while as 35.8 per cent of the youth lived in the kachha house in the area.

**Table 4.5: Distribution of youth on the basis of type of house**

| House type   | Lankrashpora |            | Ashtingoo |            | Kulhama    |            | Paribal   |            | Overall    |            |
|--------------|--------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
|              | No.          | %          | No.       | %          | No.        | %          | No.       | %          | No.        | %          |
| Pucca house  | 16           | 53.3       | 20        | 66.7       | 16         | 53.3       | 25        | 83.3       | 77         | 64.2       |
| Kaccha house | 14           | 46.7       | 10        | 33.3       | 14         | 46.7       | 5         | 16.7       | 43         | 35.8       |
| <b>Total</b> | <b>301</b>   | <b>100</b> | <b>30</b> | <b>100</b> | <b>301</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |



**Fig. 6: Distribution of respondents according to their residential background**



**Fig. 7: Distribution of respondents according to their house their house type**

Among the four villages, maximum (83.3%) of the youth having pucca house belonged to Paribal village followed by Ashtingoo, Lankrashpora and Kulhama having values of 66.7, 53.3 and 53.3% respectively, while as the maximum youth (46.7%) living in kaccha house were from Lankrashpora and Kulhama followed by Ashtingoo (33.3) and Paribal (16.7%).

#### 4.1.1f Type of family

The data presented in the Table 4.6 revealed that out of 120 respondents 63.4 per cent of the respondents belonged to the nuclear family while as 36.6 per cent of the respondents belonged to the joint family.

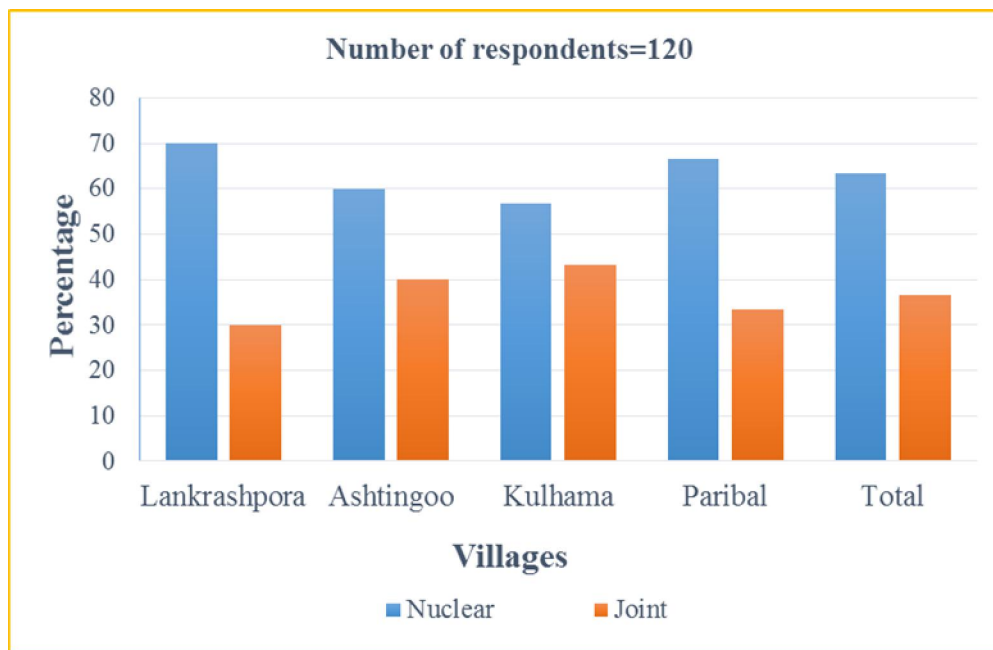
**Table 4.6: Distribution of youth on the basis of type of family**

| Family type  | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Study area |            |
|--------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|              | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Nuclear      | 21           | 70.0       | 18        | 60.0       | 17        | 56.7       | 20        | 66.7       | 76         | 63.4       |
| Joint        | 29           | 30.0       | 12        | 40.0       | 13        | 43.3       | 10        | 33.3       | 44         | 36.6       |
| <b>Total</b> | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages, Lankrashpora village had maximum (70.0%) number of youth with nuclear family followed by Paribal, Ashtingoo and Kulhama with the values of 66.7, 60.0 and 56.7% respectively, while as maximum youth (43.3%) with joint family were from Kulhama followed by Ashtingoo (40.0%), Paribal (33.3%) and Lankrashpora (30.0%).

#### 4.1.1g Number of earners

The data in the Table 4.7 referred that out of 120 respondents 54.2 per cent had one earner in the family, 42.5 per cent of the youth had two earners in the family and only 3.3 per cent had three earners in the family.



**Fig. 8: Distribution of respondents according to their family type**

**Table 4.7: Distribution of respondents on the basis of number of earners in the family**

| No. of earners | Lankrashpora |            | Ashtingoo |            | Kulhama    |           | Paribal    |            | Study area |            |
|----------------|--------------|------------|-----------|------------|------------|-----------|------------|------------|------------|------------|
|                | No.          | %          | No.       | %          | No.        | %         | No.        | %          | No.        | %          |
| One earner     | 16           | 53.3       | 16        | 53.3       | 19         | 63.3      | 14         | 46.6       | 65         | 54.2       |
| Two earners    | 11           | 36.6       | 14        | 46.6       | 11         | 36.6      | 15         | 50.0       | 51         | 42.5       |
| Three earners  | 3            | 10.0       | 0         | 0          | 0          | 0         | 1          | 3.33       | 4          | 3.3        |
| <b>Total</b>   | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>100</b> | <b>30</b>  | <b>100</b> |

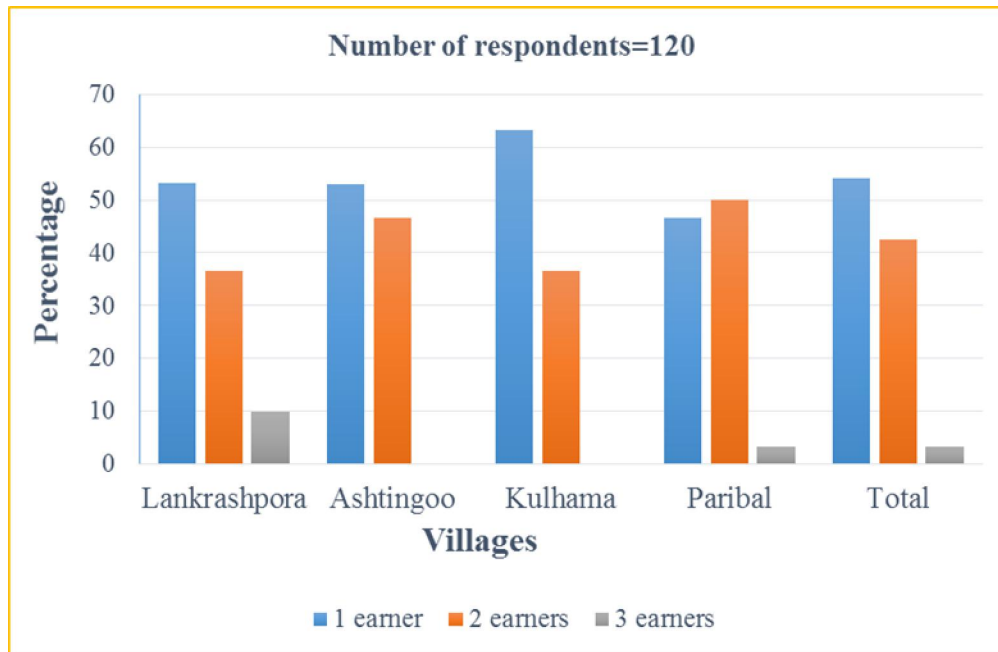
Among the four villages the maximum (53.3%) number of youth with 1 earner in the family was found in Kulham, followed by Ashtingoo and Lankrashpora with value of 53.3%, and Paribal with the value of 46.6%. The maximum (63.3%) youth with 2 earners in the family were found in Paribal (50.0%), followed by Ashtingoo (46.6%), and Lankrashpora and Kulhama both with the value of 36.6%. The maximum (10.0%) youth with 3 earners were found in Lankrashpora followed by Paribal (3.33) only.

#### 4.1.1h Number of dependents

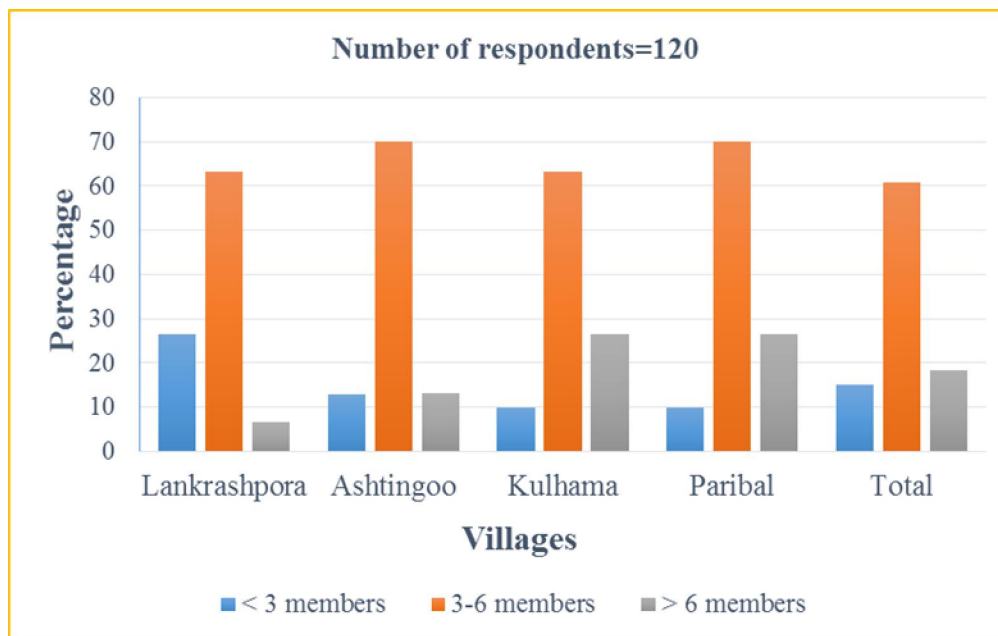
The data presented in the Table 4.8 referred that out of 120 respondents 66.7 per cent of the youth had 3-6 dependents in their family, 18.3 per cent of the youth had above 6 dependents while as minimum (15%) of the youth had less than 3 dependents.

**Table 4.8: Distribution of respondents on the basis of number of dependents in the family**

| No. of dependents   | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|---------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                     | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 3 members | 8            | 26.6       | 4         | 13.3       | 3         | 10         | 3         | 10         | 18         | 15         |
| 3-6 members         | 19           | 63.3       | 21        | 70         | 19        | 63.3       | 21        | 70         | 80         | 66.7       |
| Above 6 members     | 2            | 6.6        | 4         | 13.3       | 8         | 26.6       | 8         | 26.6       | 22         | 18.3       |
| <b>Total</b>        | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |



**Fig. 9: Distribution of respondents according to the number of earners in the family**



**Fig. 10: Distribution of respondents according to the number of dependents in the family**

Among the four villages, Lankrashpora had maximum (26.6%) number of youth having less than 3 dependents in the family followed by Ashtingoo, Kulhama and Paribal with the values of 13.3, 10 and 10% respectively. However, maximum youth (70.0%) with dependents between 4 to 6 were from Paribal and Ashtingoo followed by Lankrashpora and Kulhama with value of 63.3% in both the villages.

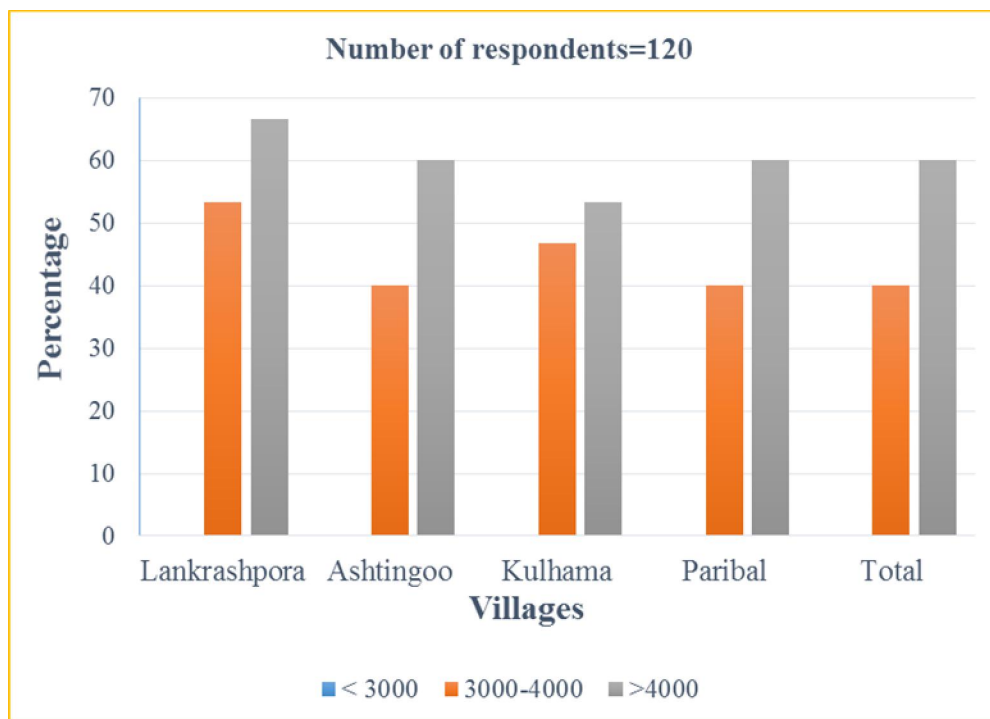
#### 4.1.1i Household expenditure

The data presented in the Table 4.9 referred that out of 120 respondents 60.0 per cent of the youth had above 4000 rupees monthly expenditure on household and 40.0 per cent of the youth had 3000-4000 rupees monthly expenditure with none of the respondents having less than 3000 rupees household expenditure.

**Table 4.9: Distribution of respondents on the basis of household expenditure**

| Household expenditure | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|-----------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                       | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 3000        | 0            | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0          | 0          |
| 3000-4000             | 10           | 33.3       | 12        | 40.0       | 14        | 46.7       | 12        | 40.0       | 48         | 40.0       |
| Above 4000            | 20           | 66.6       | 18        | 60.0       | 16        | 53.3       | 18        | 60.0       | 72         | 60.0       |
| <b>Total</b>          | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages the maximum (46.7%) youth having household expenditure between 3000-4000 rupees belonged to Kulhama followed by, Ashtingoo and Paribal both with the value of 40.0% followed by Lankrashpora with 33.3%. However, maximum (66.6%) youth with household expenditure above 4000 rupees were from Lankrashpora followed by Ashtingoo and Paribal with the value of 60.0% and Kulhama (53.3%).



**Fig. 11: Distribution of respondents according to the household expenditure**

#### 4.1.1j Investment on fishing inputs

The data in the Table 4.10 showed that out of 120, majority (64.3%) of the youth invested 10000-20000 rupees per year on fishing inputs and 26.6 per cent of the youth invested more than 20000 rupees on the same while as minimum (9.1%) had less than 10000 rupees investment on fishing inputs.

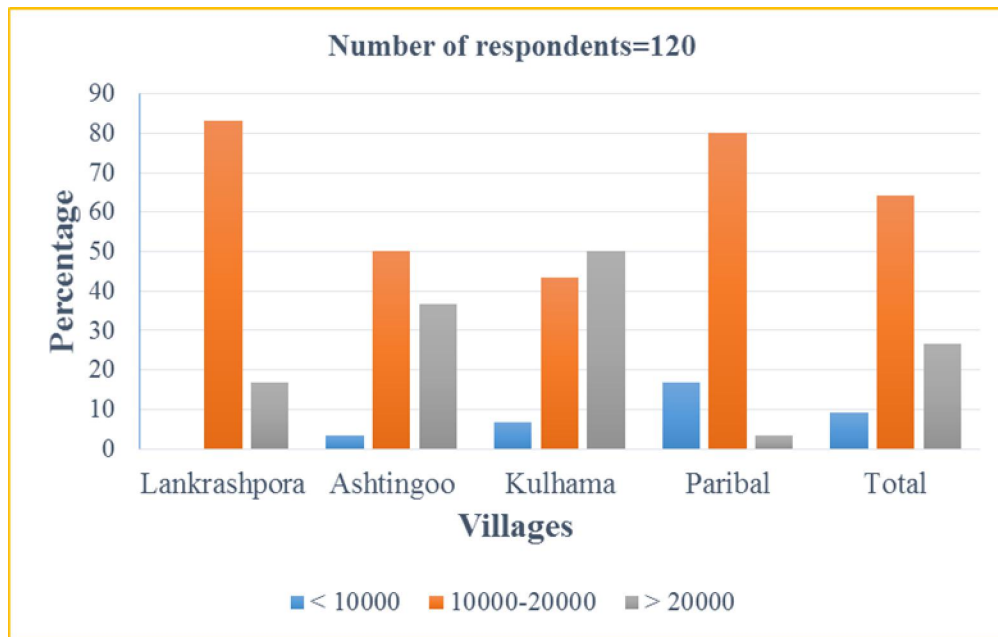
**Table 4.10: Distribution of respondents on the basis of investment on fishing inputs**

| Investment on fishing inputs | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|------------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                              | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 10000              | 0            | 0          | 4         | 13.3       | 2         | 6.7        | 5         | 16.7       | 11         | 9.1        |
| 10000-20000                  | 25           | 83.3       | 15        | 50.0       | 13        | 43.3       | 24        | 80.0       | 77         | 64.3       |
| Above 20000                  | 5            | 16.7       | 11        | 36.7       | 15        | 50.0       | 1         | 3.3        | 32         | 26.6       |
| <b>Total</b>                 | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages the maximum youth investing less than 10000 rupees on fishing inputs were from Paribal (16.7%) followed by Ashtingoo (13.3%) and Kulhama (6.7%). The maximum (83.3%) youth investing between 10000-20000 rupees were from Lankrashpora, followed by Paribal, Ashtingoo and Kulhama with the values of 80.0, 50.0 and 43.3%. However, maximum number of youth investing on fishing inputs above 20000 were from Kulhama (50.0%) followed by Ashtingoo (36.7%), Lankrashpora (16.7%) and Paribal (3.3%).

#### 4.1.1k Active fishing days

The data presented in the Table 4.11 indicated that out of 120 respondents, 52.5 per cent of the youth observed 200 to 300 active days of fishing and, followed by 27.5% observing less than 200 days of active fishing days while



**Fig. 12: Distribution of respondents on the basis of investment on fishing inputs**

as only 20 per cent of the youth observed more than 300 active fishing days in a year.

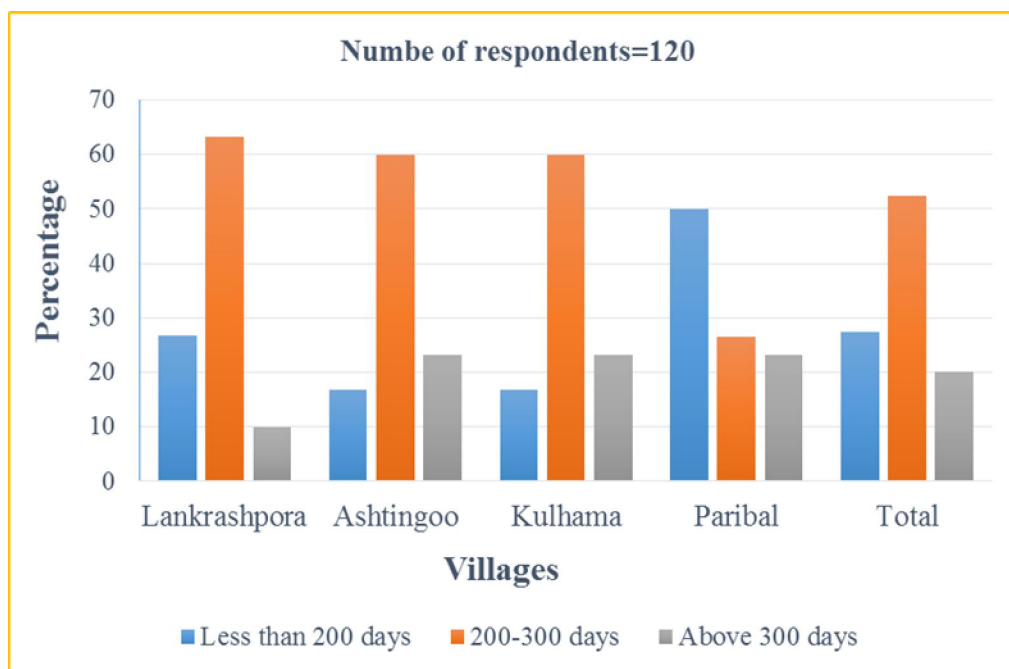
**Table 4.11: Distribution of respondents on the basis of active fishing days**

| Active fishing days | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|---------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                     | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 200 days  | 8            | 26.7       | 5         | 16.7       | 5         | 16.7       | 15        | 50.0       | 33         | 27.5       |
| 200-300 days        | 19           | 63.3       | 18        | 60.0       | 18        | 60.0       | 8         | 26.6       | 63         | 52.5       |
| Above 300 days      | 3            | 10.0       | 7         | 23.3       | 7         | 23.0       | 7         | 23.3       | 24         | 20         |
| <b>Total</b>        | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages maximum (50.0%) number of youth who observe less than 200 days of active fishing in a year belonged to Paribal followed by Lankrashpora (26.7%), Ashtingoo (16.7%) and Kulhama (16.7%). The maximum number of youth observing 200 to 300 active fishing days in a year belonged to Lankrashpora (63.3%) followed by Ashtingoo and of Kulhama both having the values of 60.0% and Paribal with the value of 26.6%. However, the maximum number of youth observing more than 300 days of active fishing days were from Ashtingoo and Paribal with the value of 23.3%, followed by Kulhama (23.0%) and Lankrashpora (10.0%).

#### **4.1.1(i) Monthly income through fishing in summer**

The data presented in the Table 4.12 revealed that out of 120 respondents 84.1 per cent of the youth's monthly income through fishing occupation in summer season was 10000-20000 while 15.8 per cent of the youth's monthly income through same was less than 10000 and none of the respondents had above 10000 monthly income through fishing in summer season.



**Fig. 13: Distribution of respondents on the basis of active fishing days observed**

**Table 4.12: Distribution of respondents on the basis of income through fishing in summer season**

| Monthly income through fishing in summer | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|--|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|  | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 10000                          | 4            | 13.3       | 3         | 10.0       | 6         | 20.0       | 6         | 20.0       | 19         | 15.8       |
| 10000-20000                              | 26           | 86.6       | 27        | 90.0       | 24        | 80.0       | 24        | 80.0       | 101        | 84.2       |
| Above 20000                              | 0            | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0          | 0          |
| <b>Total</b>                             | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

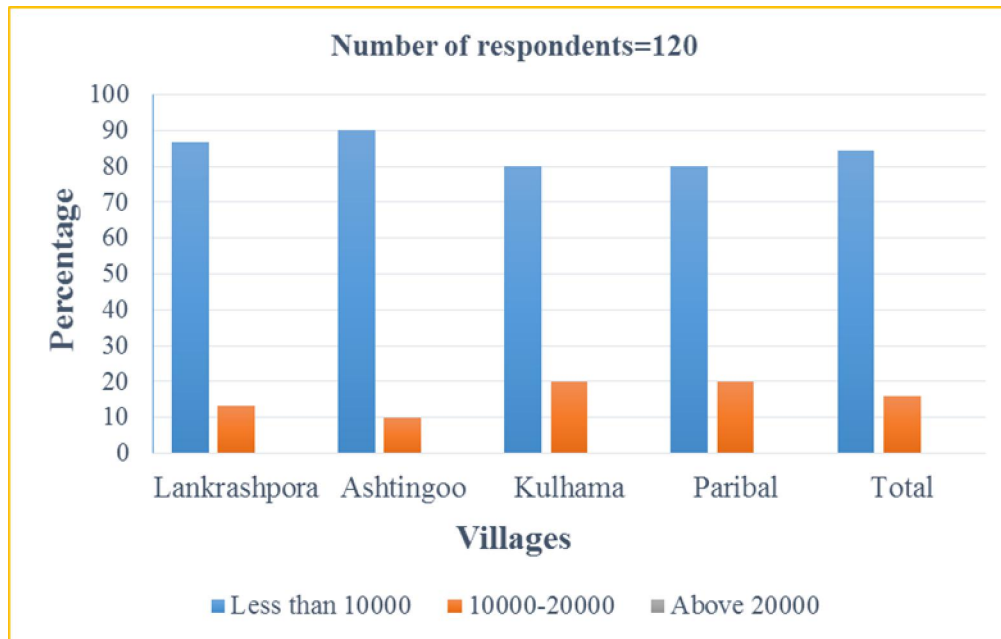
Among the four villages the maximum (90.0%) number of youth earning 10000-20000 rupees through fishing activities in summer belonged to Ashtingoo followed by Lankrashpora (86.6%) and Kulhama and Paribal with value of 80.0%. However, maximum (20.0%) youth earning less than 10000 through fishing were found in Kulhama and Paribal followed by Lankrashpora (13.3%) and Ashtingoo (10.0%) and none of them had above 20000 monthly income.

#### **4.1.1(m) Monthly income through fishing in winter**

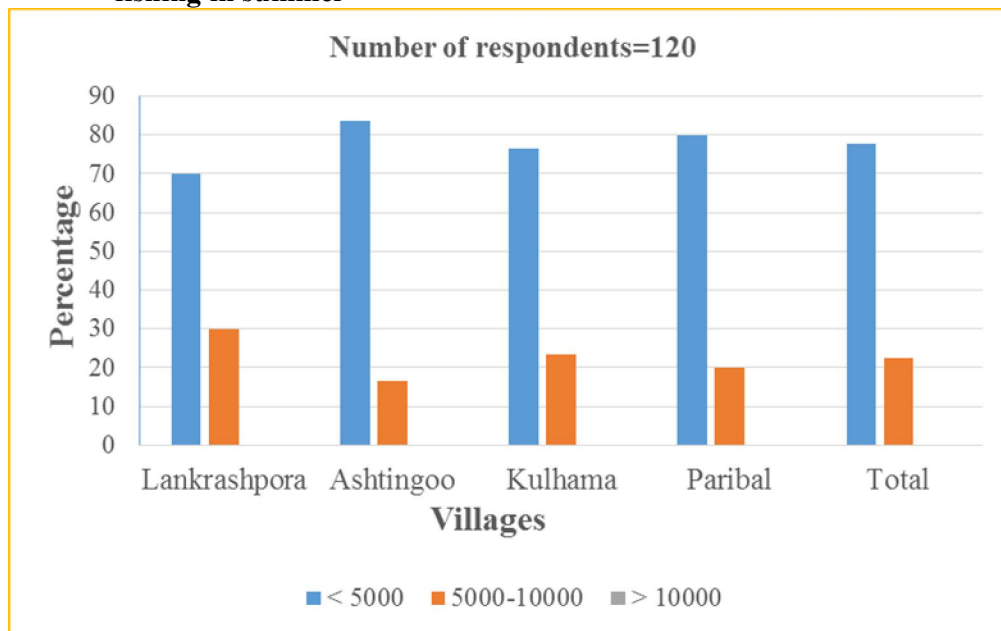
The data presented in the Table 4.13 revealed that out of 120 respondents 77.5 per cent of the youth's monthly income through fishing in winter season was less than 5000 rupees and 22.3 per cent of the youth's monthly income was 5000-10000 rupees while none of the respondent's monthly income through the same was more than 10000.

**Table 4.13: Distribution of respondents on the basis of income through fishing in winter**

| Monthly income through fishing in winter | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|--|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|  | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less than 5000                           | 21           | 70         | 25        | 83.3       | 23        | 76.6       | 24        | 80         | 93         | 77.7       |
| 5000-10000                               | 9            | 30         | 5         | 16.6       | 7         | 23.3       | 6         | 20.0       | 27         | 22.3       |
| Above 10000                              | 0            | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0          | 0          |
| <b>Total</b>                             | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |



**Fig. 14: Distribution of respondents on the basis of monthly income through fishing in summer**



**Fig. 15: Distribution of respondents according to the monthly income through fishing in winter**

Among the four villages, Ashtingoo village had maximum (83.3%) youth earning less than 5000 rupees through fishing in winter followed by Paribal (80.0%), Kulhama (76.6%) and Lankrashpora (70.0%). However, maximum (30.0%) youth earning 5000 to 10000 rupees through fishing in winter belonged to Lankrashpora, followed by Kulhama (23.3%), Paribal (20.0%) and Ashtingoo (16.0%).

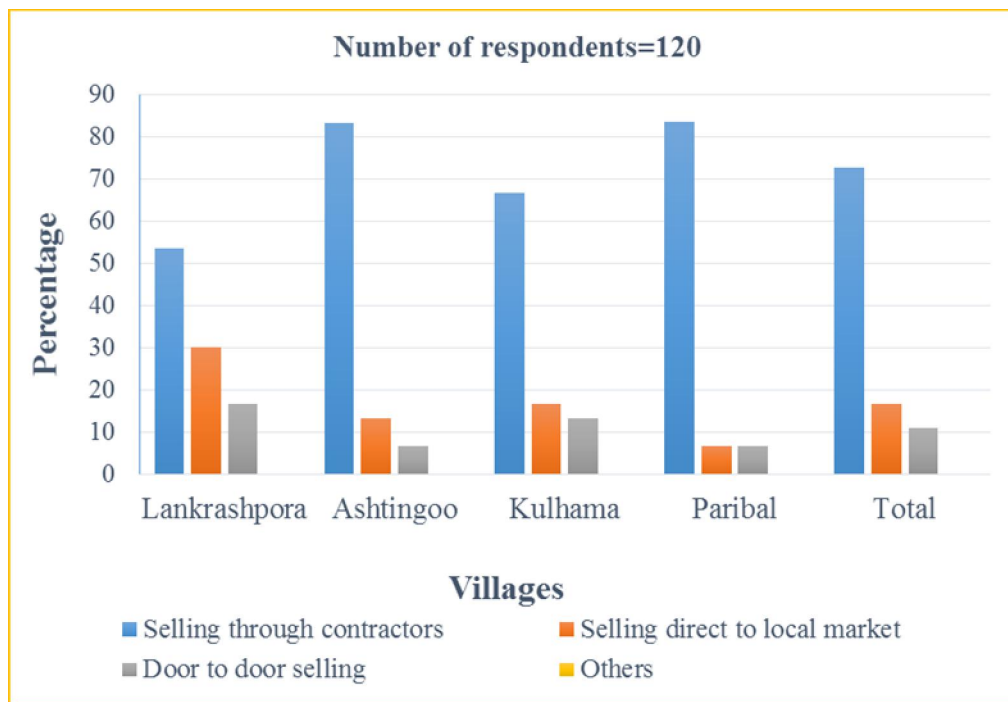
#### 4.1.1(n) Marketing channel

The data in the Table 4.14 revealed that out of 120 respondents 72.6 per cent of the youth sold their catch through contractors, 16.6 per cent of the youth sold their catch directly in the local market and 10.8 per cent of the youth sold their catch by going directly to customer's house while none of the youth had adopted any other marketing channel for selling their catch.

**Table 4.14: Distribution on the basis of marketing channel**

| Marketing channels             | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|--------------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                                | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Selling through contractor     | 16           | 53.5       | 25        | 83.3       | 20        | 66.7       | 26        | 83.6       | 87         | 72.6       |
| Selling direct in local market | 9            | 30.0       | 4         | 13.3       | 5         | 16.7       | 2         | 6.7        | 20         | 16.6       |
| Door to door selling           | 5            | 16.6       | 1         | 3.4        | 5         | 16.6       | 2         | 6.6        | 13         | 10.8       |
| Others                         | 0            | 0          | 0         | 0          | 0         | 0          | 0         | 0          | 0          | 0          |
| <b>Total</b>                   | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

Among the four villages, the maximum youth (83.3%) who sell their catch through contractors belonged to Ashtingoo (83.3%) and Paribal (83.6%), followed by Kulhama and Lankrashpora with the values of 66.7 and 53.5% respectively. The maximum youth who sell their catch direct to the local market



**Fig. 16: Distribution of respondents according to the marketing channel used for selling the catch**

belonged to Lankrashpora (30.0%) followed by Kulhama (16.7%), Astingoo (13.3%) and Paribal (6.7%). However, maximum youth (16.6%) selling their catch by going door to door were from Lankrashpora and Kulhama, with the value of 16.6%, followed by Paribal and Ashtingoo with the values of 6.6% and 3.4% respectively.

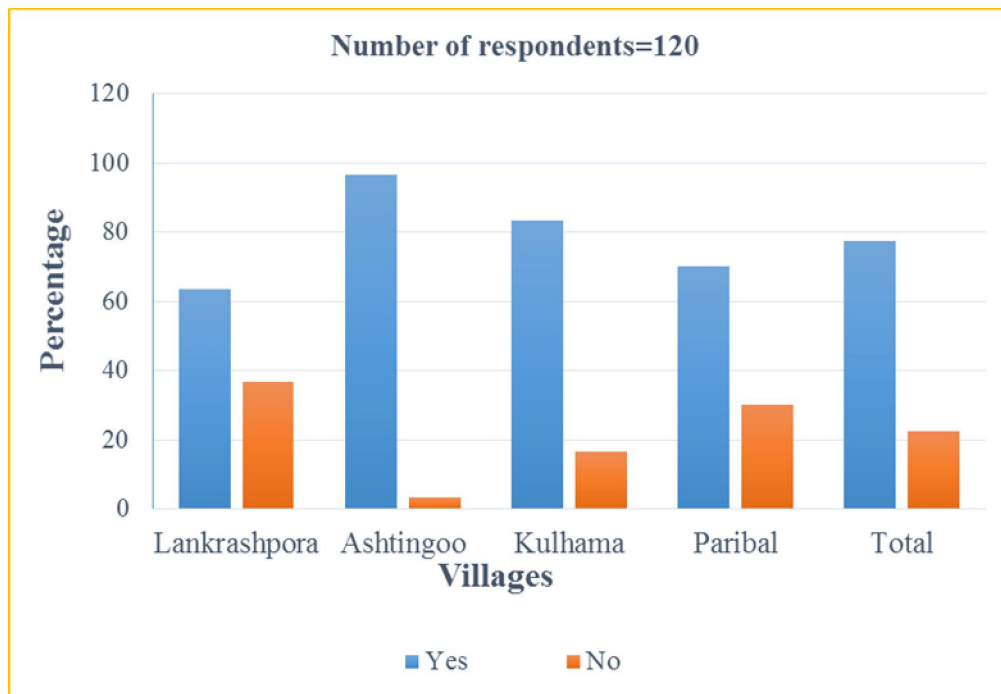
#### 4.1.1(o) Opted alternate source of income

The data presented in the Table 4.15 indicated that out of 120 respondents 77.5 per cent of the youth had alternate source of income besides fishing occupation while 22.5 per cent of the youth depend completely on fishing occupation.

**Table 4.15: Distribution on the basis of opted of alternate source of income**

| Opted alternate source of income | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Study area |            |
|----------------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                                  | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Yes                              | 19           | 63.3       | 29        | 96.7       | 25        | 83.3       | 20        | 70.0       | 93         | 77.5       |
| No                               | 11           | 36.7       | 1         | 3.3        | 5         | 16.7       | 10        | 30.0       | 27         | 22.5       |
| <b>Total</b>                     | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

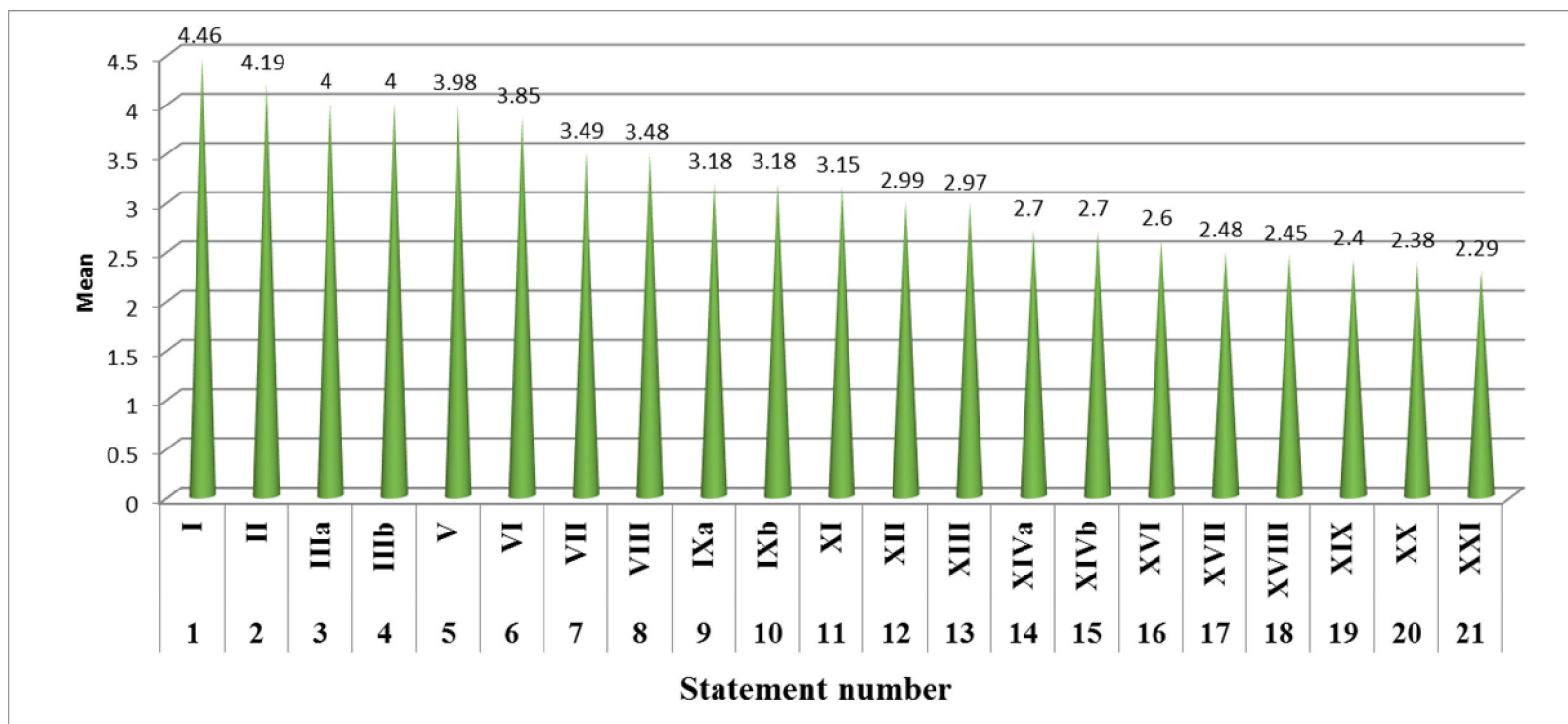
Among the four villages, Ashtingoo had 96.7% youth who had opted alternate source of income, followed by Kulhama where 83.3% had opted alternate source of income, Paribal with 70% and Lankreshpora (63.3%). However, the village Lankrashpora had majority (36.7%) of youth who had not opted alternate source of income, followed by Paribal with 30.0%, Kulhama had 16.7% youth having not opted alternate source and only 3.3% in Ashtingoo.



**Fig. 17: Distribution of respondents as per alternate source of income opted**

#### **4.1.2 Factors constraining youth involvement in fishing occupation**

To calculate the factors that constrain youth involvement in fishing occupation, the responses obtained were analyzed and their overall mean and ranks are represented in the Table 4.16. The calculated data referred that the respondents face highest constraint in this occupation as the profession being disrespectful with rank I (mean 4.46), followed by another constraint being less catch available with rank II (mean 4.19), lack of technical trainings and schemes for fishermen with rank III (mean 4), fishing occupation having irregular source of income with rank V (mean 3.98), unavailability of suitable market with rank VI (mean 3.85), this occupation being time consuming with rank VII (mean 3.49), fishing being tedious job with rank VIII (mean 3.48), fishing requires more efforts than with less output and high cost of transport with rank IX (mean 3.18), fluctuation in price of catch with rank XI (mean 3.15), inadequate storage facilities with rank XII (mean 2.99), curing facilities not available having rank XIII (mean 2.97), low price offered by buyers with rank XIV (mean 2.76), inadequate transport facility with rank XV (mean 2.7), problems with state fisheries department with rank XVI (mean 2.6), inadequate demand having rank XVII (mean 2.48), conflicts with other fishers with rank XVIII (mean 2.45), exploitation by middlemen with rank XIX (mean 2.40), parental restriction with XX rank (mean 2.38), and last rank being of delay in payment by middlemen with rank XXI and mean 2.29.

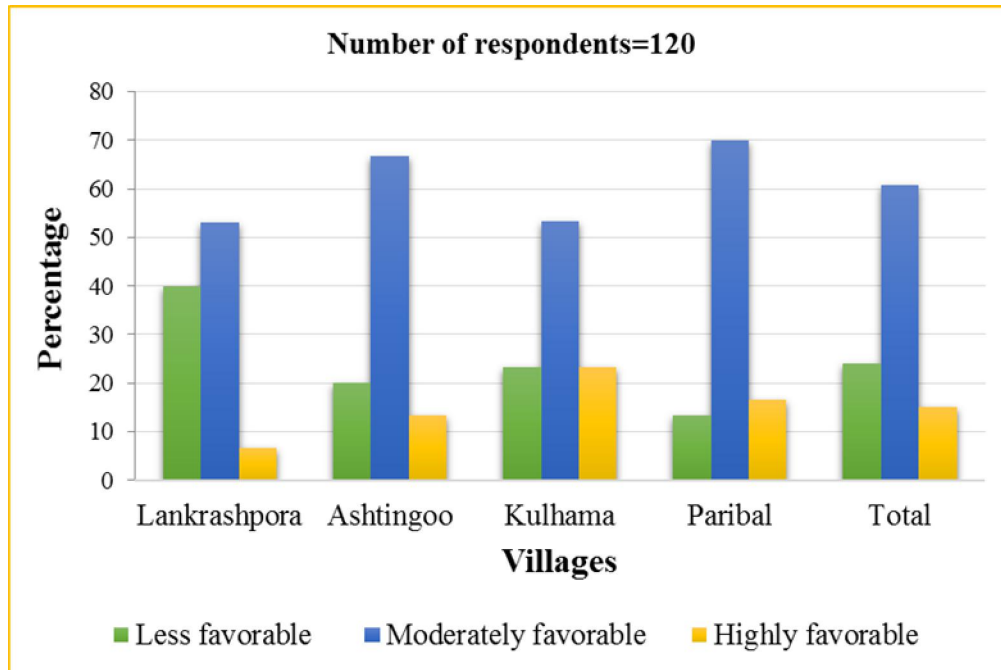


**Fig. 18: Factors constraining youth involvement in fishing occupation according to mean and rank obtained**

1. Disrespectful profession 2. Less catch 3. Lack of technical trainings 4. Unawareness about schemes  
 5. Irregular source of income 6. Suitable market not available 7. Time consuming job 8. Tedious job  
 9. High cost of transport 10. It requires more efforts with less inputs 11. Fluctuation in price  
 12. Fluctuation in price 13. Curing facilities not available 14. Low price offered by buyers  
 15. Inadequate transport facilities 16. Problems with state fisheries dept. 17. Conflicts with other fishers  
 18. Inadequate demand 19. Exploitation by contractors 20. Parental restriction 21. Delay in payment by contractors

**Table 4.16: Factors constraining youth involvement in fishing occupation**

| Constraints                               | Lankrashpora |      | Ashtingoo |      | Kulhama |      | Pariba |      | Overall |      | Rank             |
|---|--------------|------|-----------|------|---------|------|--------|------|---------|------|------------------|
|   | Mean         | S.D  | Mean      | S.D  | Mean    | S.D  | Mean   | S.D  | Mean    | S.D  |                  |
| Exploitation by middle men                | 2.56         | 0.67 | 2.6       | 0.63 | 2.3     | 0.47 | 2.16   | 0.37 | 2.40    | 0.57 | XIX              |
| Delay in payment by middle men            | 2.56         | 0.67 | 2.16      | 0.37 | 2.3     | 0.47 | 2.16   | 0.37 | 2.29    | 0.51 | XXI              |
| Problems with state fisheries dept.       | 2.6          | 0.49 | 2.46      | 0.50 | 2.6     | 0.49 | 2.76   | 0.43 | 2.60    | 0.49 | XVI              |
| Conflicts with other fishers              | 2            | 0    | 2.16      | 0.37 | 2       | 0    | 2.16   | 0.37 | 2.45    | 0.27 | XVIII            |
| Inadequate transport facility             | 2.6          | 0.60 | 2.8       | 0.40 | 2.6     | 0.47 | 2.8    | 0.43 | 2.7     | 0.48 | XV               |
| High cost of transport                    | 3.26         | 0.63 | 3.16      | 0.37 | 3.3     | 0.47 | 3.0    | 0.36 | 3.18    | 0.48 | IX <sup>b</sup>  |
| Fluctuations in price                     | 3.13         | 1.00 | 2.8       | 0.89 | 3.2     | 0.98 | 3.5    | 0.86 | 3.15    | 0.95 | XI               |
| Inadequate demand                         | 2.33         | 0.75 | 2.43      | 0.62 | 2.66    | 0.71 | 2.5    | 0.68 | 2.48    | 0.69 | XVII             |
| Low price offered by buyers               | 2.4          | 0.81 | 2.8       | 0.69 | 3.06    | 0.63 | 2.8    | 0.76 | 2.76    | 0.76 | XIV              |
| Suitable market not available             | 3.5          | 0.89 | 3.9       | 0.40 | 4       | 0    | 4      | 0.26 | 3.85    | 0.53 | VI               |
| In adequate storage facilities            | 3            | 0    | 3.06      | 0.25 | 2.9     | 0.18 | 3.03   | 0.18 | 2.99    | 0.18 | XII              |
| Curing facilities not available           | 3            | 0    | 3         | 0    | 2.9     | 0.18 | 3      | 0    | 2.97    | 0.09 | XIII             |
| Less catch                                | 4.5          | 0.50 | 4.1       | 0.48 | 4.1     | 0.30 | 4.06   | 0.36 | 4.19    | 0.46 | II               |
| It is a tedious job                       | 3.26         | 0.98 | 4.0       | 0.25 | 3.26    | 0.98 | 3.43   | 0.97 | 3.48    | 0.90 | VIII             |
| It is a time consuming job                | 3.13         | 1.00 | 4.0       | 0.18 | 3.13    | 1.00 | 3.73   | 0.69 | 3.49    | 0.87 | VII              |
| It requires more efforts with less output | 3            | 1.01 | 3.36      | 0.99 | 3.33    | 0.95 | 3.06   | 1.01 | 3.18    | 0.99 | IX <sup>a</sup>  |
| It is the irregular source of income      | 4            | 0    | 4.03      | 0.18 | 4       | 0    | 3.9    | 0.4  | 3.98    | 0.22 | V                |
| It is considered as disrespectful job     | 4.53         | 0.50 | 4.5       | 0.50 | 4.4     | 0.50 | 4.4    | 0.49 | 4.46    | 0.50 | I                |
| Lack of technical trainings               | 4            | 0    | 4.03      | 0.18 | 4       | 0    | 4      | 0    | 4       | 0.09 | III <sup>a</sup> |
| Unawareness about the schemes available   | 4            | 0    | 4         | 0    | 4       | 0    | 4      | 0    | 4       | 0    | III <sup>b</sup> |
| Parental restriction                      | 2.33         | 0.75 | 2.63      | 0.92 | 2.26    | 0.69 | 2.3    | 0.75 | 2.38    | 0.79 | XX               |



**Fig. 19: Distribution of respondents according to their level of attitude towards fishing as an occupation**

## **4.2 Dependent variable**

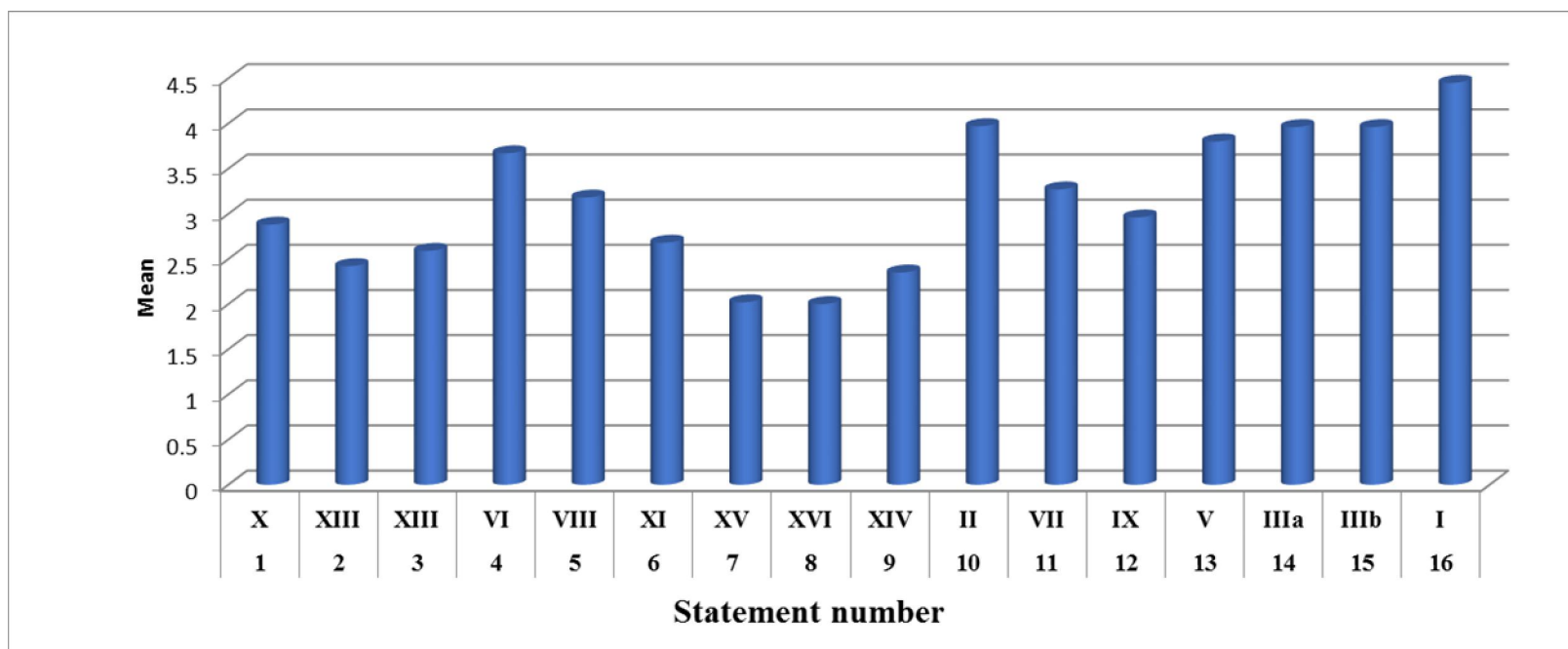
### **4.2.1 Attitude of youth of fishing communities towards fishing as occupation**

Attitude of youth towards fishing occupation was measured with the help of five point Likert scale developed for the study. The final scale selected with 16 statements were administered to 120 sampled youth in fishing. They were requested to give responses to each statement in terms of their own degree of agreement or disagreement on a five-point continuum. Each statement of scale was provided with five-point continuum viz., Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and Strongly Disagree (SD) with scores of 5,4,3,2 and 1 respectively. The total score of the respondents on the scale was obtained by summing up the scores of all the statements in the scale. The possible minimum and maximum score was 16 and 80. The respondents were grouped into following categories based on the scores obtained by each of them duly following mean and standard deviation.

#### **4.2.1(a) Level of attitude of youth towards fishing as an occupation**

The data presented in the Table 4.17 related to attitude of youth towards fishing occupation revealed that out of 120 respondents, majority of the respondents (60.8%) had moderately favourable attitude towards fishing occupation, followed by 24.1% having less favourable attitude and 15.0% were having highly favourable attitude towards fishing occupation.

Among the four villages maximum respondents having less favourable attitude towards fishing occupation belonged to Lankrashpora (40.0%) followed by Kulhama (23.3%) Ashtingoo (20.0%) and Paribal (13.3%). The majority of the respondents having moderately favourable attitude belonged to Paribal (70.0%) followed by Ashtingoo (66.6%), Lankrashpora and Kulhama with the value of 53.3% while as the maximum respondents (23.3%) having highly favourable attitude were from Kulhama followed by Paribal, Ashtingoo and lankrashpora with the values of 16.6, 13.3 and 6.66% respectively.



**Fig. 20: Mean and rank wise distribution of statements showing attitude of youth towards fishing as an occupation**

1. Fishing can provide sustainable livelihood to youth    2. I feel proud to engage in fishing occupation  
 3. Fishing is more profitable than any other occupation    4. I prefer fishing as an occupation  
 5. Villages can't prosper unless youth adopt fishing occupation    6. I feel sorry for those who abandon fishing occupation  
 7. This occupation leads to increase in standard of living    8. This occupation leads to economic up-liftment of fishers    9. I prefer to be fisher than an employee  
 10. Fishing is considered for old man's job\*    11. Fishing is more stressful job\*    12. I avoid fishing as it is a tedious job\*    13. It is better to do job with less salary than to adopt fishing as occupation\*  
 14. It is better for a family to hold diversified occupation rather than to be dependent on fishing\*  
 15. I will not encourage my children to be in this profession\*    16. Fishing is not viewed as respectful profession in society\*

\* negative statements

**Table 4.17: Distribution on the basis of level of attitude towards fishing occupation**

| Level of attitude                    | Lankrashpora |            | Ashtingoo |            | Kulhama   |            | Paribal   |            | Overall    |            |
|--------------------------------------|--------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|------------|
|                                      | No.          | %          | No.       | %          | No.       | %          | No.       | %          | No.        | %          |
| Less favourable (upto 46 scores)     | 12           | 40.0       | 6         | 20         | 7         | 23.3       | 4         | 13.3       | 29         | 24.1       |
| Moderately favourable (47-55 scores) | 16           | 53.3       | 20        | 66.6       | 16        | 53.3       | 21        | 70.0       | 73         | 60.8       |
| Highly favourable (Above 56 scores)  | 2            | 6.66       | 4         | 13.3       | 7         | 23.3       | 5         | 16.6       | 18         | 15.0       |
| <b>Total</b>                         | <b>30</b>    | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>30</b> | <b>100</b> | <b>120</b> | <b>100</b> |

**4.2.1(b) Statement wise analysis of attitude of youth towards fishing as an occupation**

For the statement wise analysis of the Attitude of youth towards fishing occupation, the data was analyzed and their mean and ranks are presented in the Table 4.18. The calculated data referred that the statement ‘fishing is not viewed as respectful profession in society’ had obtained the rank I with mean 4.45, followed by ‘fishing is considered as old man’s job with rank II (mean=3.97), the statements ‘I will not encourage my children to be in this profession’ and ‘It is better for a family to hold diversified occupation rather than to be dependent on fishing’ with rank III<sup>a</sup> and III<sup>b</sup> respectively both with mean=3.96, ‘It is better to do job with less salary than to adopt fishing as occupation’ with rank V (mean=3.80), ‘I prefer fishing as an occupation’ with rank VI (mean=3.67), the statement, ‘Fishing is more stressful job’ with rank VII (mean=3.27), ‘Villages can’t prosper unless youth adopt fishing occupation’ with rank VIII (mean=3.18), ‘I avoid fishing as it is a tedious job’ with rank IX (mean=2.96), ‘Fishing can provide sustainable livelihood to youth’ with rank X (mean=2.88), ‘I feel sorry for those who abandoned fishing occupation’ with rank XI (mean=2.68), ‘Fishing is more profitable than any other occupation’ with rank XII (mean=2.59), ‘I feel proud to engage in fishing occupation with rank XIII (mean=2.42), I prefer to be fisher than an employee with rank XIV (mean=2.35), This occupation leads to increase in standard of living with rank XV (mean=2.02), This occupation leads to economic up-liftment of fishers with rank XVI (mean=2.00).

**Table 4.18: Statement-wise analysis of attitude of youth towards fishing as an occupation**

| Statements  | Lankrashpora |       | Ashtingoo |      | Kulhama |      | Pariba |      | Overall |      | Rank             |
|---|--------------|-------|-----------|------|---------|------|--------|------|---------|------|------------------|
|   | Mean         | S.D   | Mean      | S.D  | Mean    | S.D  | Mean   | S.D  | Mean    | S.D  |                  |
| Fishing can provide sustainable livelihood to youth   | 2.66         | 0.95  | 2.56      | 0.97 | 3       | 1.01 | 3.3    | 0.95 | 2.88    | 1.01 | X                |
| I feel proud to engage in fishing occupation  | 2.3          | 0.46  | 2.3       | 0.80 | 2.4     | 0.62 | 2.7    | 0.83 | 2.42    | 0.70 | XIII             |
| Fishing is more profitable than any other occupation  | 2.83         | 0.98  | 2.46      | 0.89 | 2.4     | 0.81 | 2.7    | 0.95 | 2.59    | 0.92 | XII              |
| I prefer fishing as an occupation   | 3.8          | 0.61  | 3.4       | 0.89 | 3.53    | 0.86 | 3.9    | 0.36 | 3.67    | 0.73 | VI               |
| Villages can't prosper unless youth adopt fishing occupation                                    | 3.13         | 1.00  | 3         | 1.01 | 3.6     | 0.75 | 3.0    | 1.01 | 3.18    | 0.98 | VIII             |
| I feel sorry for those who abandoned fishing occupation   | 2.86         | 1.00  | 2.76      | 0.97 | 2.73    | 0.98 | 2.4    | 0.81 | 2.68    | 0.95 | XI               |
| This occupation leads to increase in standard of living   | 2.1          | 0.30  | 2         | 0    | 2       | 0    | 2      | 0    | 2.02    | 0.05 | XV               |
| This occupation leads to economic upliftment of fishers   | 2.03         | 0.018 | 2         | 0    | 2       | 0    | 2      | 0    | 2.00    | 0.09 | XVI              |
| I prefer to be fisher than an employee  | 2.66         | 0.95  | 2.3       | 0.75 | 2.26    | 0.69 | 2.2    | 0.61 | 2.35    | 0.77 | XIV              |
| Fishing is considered for old man' job  | 4            | 0     | 3.9       | 0.36 | 4       | 0    | 4      | 0    | 3.97    | 0.18 | II               |
| Fishing is more stressful job   | 3            | 1.01  | 3.5       | 0.81 | 3       | 1.01 | 3.6    | 0.81 | 3.27    | 0.95 | VII              |
| I avoid fishing as it is a tedious job  | 2.46         | 0.86  | 3.5       | 0.86 | 3       | 1.07 | 2.9    | 1.01 | 2.96    | 1.00 | IX               |
| It is better to do job with less salary than to adopt fishing as occupation                     | 3.53         | 0.86  | 3.8       | 0.50 | 4       | 0    | 3.9    | 0.36 | 3.80    | 0.55 | V                |
| It is better for a family to hold diversified occupation rather than to be dependent on fishing | 3.86         | 0.50  | 4         | 0    | 4       | 0    | 4      | 0    | 3.96    | 0.25 | III <sup>b</sup> |
| I will not encourage my children to be in this profession                                       | 3.86         | 0.50  | 4         | 0    | 4       | 0    | 4      | 0    | 3.96    | 0.25 | III <sup>a</sup> |
| Fishing is not viewed as respectful profession in society                                       | 4.5          | 0.50  | 4.5       | 0.5  | 4.3     | 0.47 | 4.5    | 0.50 | 4.45    | 0.50 | I                |

### **4.3 Association between independent and dependent variables**

#### **4.3.1 Correlation analysis of Independent variables with Dependent variable**

The data in the Table 4.19 regarding the correlation analysis of independent variables with dependent variable i.e., attitude of youth towards fishing occupation reveals that out of 16 variables, one variable, active fishing days had significant and positive relation with attitude of youth towards fishing occupation at 0.01 level of probability while as one variable namely income through fishing in summer had significant and positive relation with attitude of youth towards fishing occupation at 0.05 level of probability. The seven variables namely educational qualification, marital status, age, family type, household earners, investment on fishing inputs and factors constraining youth involvement in fishing had significant but negative relation with attitude of youth towards fishing occupation at 0.01 level of probability. The remaining variables viz., house type, number of dependents, household expenditure, income through fishing in winter, marketing channel, opted alternate source of income and residential background had non-significant relation with attitude of youth towards fishing occupation.

#### **4.3.2 Multiple regression analysis of Independent variables with Dependent variable**

The multiple regression analysis was carried out to know the extent of contribution of independent variables to dependent variable (attitude of youth towards fishing occupation) and the results attained were that out of 16 independent variables, only 9 variables had contributed significantly towards attitude of youth towards fishing. As evident from “t” value of the variables, it can be inferred that attitude of youth could be increased by 1.09, 2.281 and 0.342 units if one unit could be brought in number of earners, active fishing days, and marketing channels respectively if other variables kept constant. However, if there is on unit increase in age, marital status, educational qualification, family type, investment on fishing inputs and factors constraining youth involvement in fishing

there would be 0.611, 1.123, 1.184, 2.593, 1.458 and 0.147 units decrease respectively in the attitude of youth towards fishing occupation. The remaining variables had not contributed significantly towards variability in attitude. The  $R^2$  value of 0.954 indicated that all the 16 variables had contributed to the tune of 95.4 per cent of variation in attitude of youth.

**Table 4.19: Correlation analysis of dependent variable (attitude of youth towards fishing occupation) with independent variables**

| S. No. | Independent variables                             | Correlation coefficient 'r' |
|--------|---|-----------------------------|
| 1      | Age   | -0.757**                    |
| 2      | Marital status                                    | -0.376**                    |
| 3      | Educational qualification                         | -0.486**                    |
| 4      | Residential background                            | 0                           |
| 5      | House type  | 0.173 <sup>NS</sup>         |
| 6      | Family type                                       | -0.787**                    |
| 7      | Household earners                                 | -0.488**                    |
| 8      | No. of dependents                                 | -0.004 <sup>NS</sup>        |
| 9      | Household expenditure                             | -0.167 <sup>NS</sup>        |
| 10     | Investment on fishing inputs                      | -0.584**                    |
| 11     | Active fishing days                               | 0.845**                     |
| 12     | Income through fishing in summer                  | 0.183*                      |
| 13     | Income through fishing in winter                  | 0.028 <sup>NS</sup>         |
| 14     | Marketing channels                                | -0.084 <sup>NS</sup>        |
| 15     | Opted alternate source of income                  | -0.023 <sup>NS</sup>        |
| 16     | Factors constraining youth involvement in fishing | -0.770**                    |

\*\*correlation is significant at 0.01 level (2-tailed)

\*correlation is significant at 0.05 level (2-tailed)

**Table 4.20: Multiple regression of independent variables with dependent variable (attitude of youth towards fishing as an occupation)**

| S. No. | Model (Independent variables)                     | Regression coefficient "b" value | "t" value |
|--------|---|----------------------------------|-----------|
| 1      | Age   | -0.611*                          | -2.190    |
| 2      | Marital status                                    | -1.123*                          | -4.054    |
| 3      | Education qualification                           | -1.184*                          | -3.673    |
| 4      | Residential background                            | 0                                | 0         |
| 5      | House type  | -0.409                           | -1.797    |
| 6      | Family type                                       | -2.593*                          | -5.824    |
| 7      | No. of earners                                    | 1.09*                            | 4.274     |
| 8      | No. of dependents                                 | 0.00                             | -0.010    |
| 9      | Household expenditure                             | -0.100                           | -0.467    |
| 10     | Investment on fishing inputs                      | -1.458*                          | -5.15     |
| 11     | Active fishing days                               | 2.281*                           | 8.00      |
| 12     | Income through fishing in summer                  | 0.132                            | -1.02     |
| 13     | Income through fishing in winter                  | -0.315                           | -1.536    |
| 14     | Marketing channel                                 | 0.342*                           | 2.05      |
| 15     | Opted alternate source of income                  | 0.768                            | 0.468     |
| 16     | Factors constraining youth involvement in fishing | -0.147*                          | -2.875    |

\*Significant at 0.05 level

N= 120

R<sup>2</sup>=0.954

F= 91.150

## Chapter 5

### DISCUSSION

The main findings of the investigation have been discussed and presented under the following sub-heads:

- 5.1 Socio-personal and economical characteristics of youth.
- 5.2 Factors constraining youth involvement in fishing occupation.
- 5.3 Attitude of youth towards fishing as an occupation.
- 5.4 Association between independent and dependent variables.
  - 5.4.1 Correlation analysis
  - 5.4.2 Regression analysis

#### **5.1 Socio-economic characteristics of youth**

##### **5.1.1 Age**

Age is an important factor as it reveals the maturity of an individual to take decisions for achieving his needs. The study revealed that maximum (43.4%) of the youth belonged to middle age group (24-29 years). Usually youth of this age group are enthusiastic and have more work efficiency than others and also have to support their family because of which they are forced to go for fishing activity. The remaining per cent youth might be interested in pursuing education. The findings of Tripathi et al. (2018) confirm the present findings.

##### **5.1.2 Marital status**

Marriage provides social approval to start family life. The study revealed that majority (56.7%) of the youth were married which showed that the youth of middle age were capable of shouldering family responsibilities. The remaining per cent of youth might be pursuing higher education or might be too young to get married. The findings of Jaswal (2014) confirm the present findings.

### **5.1.3 Educational qualification**

Education is one of the important factors that influence the knowledge of individuals. The present study showed that maximum (53.4%) of the youth had qualification up to matriculation. This shows their desire to pursue education but due to unawareness regarding importance of education, poverty, inadequate school facilities in the villages none had acquired higher education. The similar findings were revealed by Tripathi (2018).

### **5.1.4 Residential background**

The study revealed that all the respondents belonged to rural area as the study was conducted in the village belonging to rural geographical area. These communities are usually less cosmopolite, isolated, ignored and unaware about the developmental schemes. Jaswal (2014) had found the similar findings in the study.

### **5.1.5 Type of house**

The type of house shows the socio-economic condition of youth. The study showed that majority (64.2%) of the youth lived in pucca house that revealed the fact that they might have enough income to afford having a pucca house. The similar findings were observed by Jaswal (2014).

### **5.1.6 Type of family**

Data pertaining to family type represent that majority of youth (63.4%) had nuclear family. People prefer to live in nuclear families as it becomes easy for them to shoulder the responsibilities of less number of members as compared to joint families where the number of family members is large. The reason for youth having nuclear family is probably due to their ability to take own decision and the concept of joint family type approach is slowly eroding in the villages. Also, the present trend is towards having nuclear family, to live separately with wife and children. The finding of this study are supported by the results of study conducted by Preethi (2015).

### **5.1.7 Number of earners**

The study showed that majority of the families (54.2%) had only one earner in the family as they had nuclear type of family and therefore husband being the head of the family was the only earner and wife was supposed to take care of household responsibilities. There were also some families where wife was selling the catch in the local market.

### **5.1.8 Number of dependents**

The study showed that maximum of the youth (66.7%) had 3 to 6 dependents in the family who did nothing to earn money and depended on income of other members for their living. These included the women folk in the family and the school going children.

### **5.1.9 Household expenditure**

The study revealed that majority of the youth (60%) on an average had monthly household expenditure of above 4000 rupees which included the daily basic needs such as food, electricity bill, school fees of their children, etc.

### **5.1.10 Investment on fishing inputs**

The study showed that maximum of youth (64.3%) invest 10000 to 20000 rupees on construction or repair of fishing inputs such as gear and crafts, license, etc., per year.

### **5.1.11 Income earned through fishing in summer**

The study revealed that maximum youth (84.2%) earn 10000-2000 rupees per month by selling their catch in summer season which is the favourable season for fishing when they catch about 9-10 kg of fish per day as in this season the catch availability is good comparatively due to high water level in the Wular which otherwise has less water level in the remaining part of year but at the same time price per kg is less.

#### **5.1.12 Income earned through fishing in winter**

The study revealed that majority of youth (77.7%) earn less than 5000 rupees per month by selling their catch in winter which is witnessed as lean season for fishing as they catch only 2-3 kg of catch per day which is due to less catch available in the particular season due to low water level in the lake. This long duration of lean season force the youth to shift to alternate source of income.

#### **5.1.13 Active fishing days**

The study revealed that majority (52.5%) of youth observe 200 to 300 active fishing days in a year. They youth agreed that they go for fishing regularly but many times have to return without catch. There are also days when no fishing activity is carried out by them such as on every Fridays. Almost similar results were observed by Jaswal (2014) in his study where he found that majority of fishermen observe more than 201 days in a year.

#### **5.1.14 Marketing channels**

The fish marketing channel or system varies from state to state and is often dominated by middlemen and wholesalers because it is not possible for the fishermen to undertake quick transportation and sale of fish in fresh conditions in distant markets. The study revealed that majority (72.6%) of youth sell their catch through contractors which may be because of unavailability of suitable market for selling their catch. Another major reason being the hassle free credit provided by contractors to fishers as and when needed and the credit is re-paid by the fisher by selling fish to them at pre-determined price. Almost similar results were found by Jaswal (2014) in his study where he found that some fishermen sold their fish co-operative societies and others through contractors.

#### **5.1.15 Opted alternate source of income**

The study shows that out of 120 respondents 77.5% had opted the alternate source of income as the fishing alone does not help them fulfil their household needs and thus are forced to work either as casual labours, or extracting

sand from lake or although the income is not enough to meet their needs but may help to support the family to some extent. Their engagement in alternate source was found to maximum during winter season when catch is less due to low water level in the lake. The findings were almost similar to the findings of Kalita et al. (2015) where they found that about 22.5% of the farmers depend on fishing alone for their livelihood where as 47.83% of the respondents working as labour in sand and stone mining business from Beki river. Working as a labour (sand and stone mining business) were found to be the most common alternative option for fishermen of Beki riverine area.

## **5.2 Factors constraining youth involvement in fishing occupation**

In this objective, the problems faced by youth in fishing occupation were observed and depicted as below:

The table explicitly depicted that problems were ranked based on the order of highest mean score obtained. Among the problems, “this occupation being disrespectful profession in the society” with mean score (4.46) was ranked first and the “less catch available” with mean score (4.19) ranked second and “lack of technical trainings” and “unawareness about the schemes available” with mean score (4) ranked III<sup>a</sup> and III<sup>b</sup> respectively. These were followed by “this profession being irregular source of income” with mean score (3.98) ranked fifth and “unavailability of suitable market” with mean score (3.85) ranked sixth and “this occupation is time consuming” with mean score (3.49) ranked seventh and “this profession is tedious” with mean score (3.48) ranked eight which was followed by “fishing requires more efforts with less output” and high cost of transport both with mean score (3.18) were ranked IX<sup>a</sup> and IX<sup>b</sup> respectively. The other constraints such as “fluctuation in price of catch” with mean score (3.15) was ranked eleventh and “inadequate storage facilities” with mean score (2.99) ranked twelfth and “unavailability of curing facilities” with mean score (2.97) ranked thirteenth and “low price offered by buyers” with mean score (2.76) ranked fourteenth and “inadequate transport facility” with mean score (2.7) ranked

fifteenth and “problems with state fisheries department” with mean score (2.60) ranked sixteenth and “inadequate demand” having mean score (2.48) ranked seventeenth and “conflicts with other fishers” with mean score (2.45) ranked eighteenth and “exploitation by middlemen” with mean score (2.40) ranked nineteenth and the last but not the least constraint which was “parental restriction” having mean score (2.38) was ranked Twentieth. Almost similar constraints were found by Satapathy and Mishra (2011) in their study.

The constraints with ranks up to eleventh were found to have profound influence on the attitude of youth towards fishing occupation. One of the major constraint that the youth face is their profession being viewed as disrespectful in the society which creates a negative impact on their attitude towards this profession. This was followed by another constraint which was less catch available which is because the Wular, which is the major source of their livelihood is plagued by a number of problems such as encroachments, anthropogenic pressure, sewage disposal, weed infestation, deteriorating water quality, etc., Also, lack of technical trainings and unawareness about the various schemes available for fishermen influence their attitude negatively. It was also found that for the youth this occupation is the irregular source of income as they witness many days when they get no catch and do not have a suitable market to sell their catch. They also find this occupation as time consuming as they need to stay out for day long and requires more efforts with less output. Also, they complained about the fluctuation in price of catch, as they may get good rates for their catch in some season and in another get very low rates for the same.

The constraints with ranks above eleventh do not have much influence on attitude of youth because due to unavailability of storage or curing facilities, at the time of plenty availability of catch, they catch only that much of catch that they can sell to avoid wastage of catch. Also, since majority of the youth sell their catch through middlemen, they do not have to deal with buyers directly and get reasonable price for their catch though not satisfactory to their efforts. Similarly,

some youth sell their catch directly in the local market or go door to door to sell their catch they do not face much problems in transportation. It was also found in the study that the youth do not encounter any problems with state fisheries department or with other fishers in the village. They do not witness inadequate demand also because they do not depend much on customers for selling their catch as most of them sell their catch through contractors. In addition, their parents want them to continue this occupation because of lack of other jobs and as to continue their tradition.

### **5.3 Attitude of youth towards fishing as an occupation**

Attitude can be defined as “a predisposition or a tendency to respond positively or negatively towards a certain idea, object, person or situation. It influences an individual’s choice of action and responses to stimuli. Attitude is the prime cause for the growth of an individual and will have great impact on the way we think, we perceive and the way we do the things. It is the determining factor for the success or failure of any vibrant endeavour. As fisheries sector is the predominant avenue for the growth and development of a state or the country on the whole, it becomes mandatory to strengthen the fishing profession through potential and dynamic youth of the sector. While their contribution towards attaining security of fisheries sector cannot be under estimated, their lukewarm attitude towards fishing occupation is a primary concern of challenge to the future of fisheries in India. The attitude of youth towards fishing is the important concern to design deliberate strategies for retaining youth in this occupation.

#### **5.3.1 Level of attitude of youth towards fishing as an occupation**

It is apparent from the study that majority of the youth (60.8%) had moderately favourable attitude towards fishing occupation. It is followed by less favourable attitude (24.1%) and highly favourable attitude (15.0%). This study confirms the work of Manohari (2001), Bhanu (2007), Gangwar and Kameswari (2016) and Kimaro et al. (2015).

### **5.3.2 Statement wise analysis of Attitude of youth towards fishing as an occupation**

The attitudinal disposition of youth towards farming was clearly explained by analyzing each statement in terms of its favourableness or unfavourableness by the youth in farming and the same was presented in the Table 18.

All the 16 statements in the scale were presented in this table as per their rank orders of high favourableness to low favourableness as felt by the youth in farming.

It is clear from the table that the statement ‘fishing is not viewed as respectful profession in society’ had obtained the rank I with mean 4.45 and the possible reason for this may be that these communities are the backward, isolated from the other communities and also because of poor hygiene in these communities.

The mean score (3.97) of the statement ‘Fishing is considered for old man’ job with rank II revealed that majority of the youth feel that the fishing is for old people as they do not find this profession profitable and attractive for youth.

It can be observed from the table that two statements viz., ‘I will not encourage my children to be in this profession’ and ‘It is better for a family to hold diversified occupation rather than to be dependent on fishing’ had obtained mean score (3.96) and ranks III<sup>a</sup> and III<sup>b</sup> respectively, which was found to be the matter of concern as the new generation if motivated towards fishing can bring positive changes in this profession and diversify their livelihood rather than depending on fishing as this occupation does not provide good income alone.

It is noticeable from the table the statement, ‘It is better to do job with less salary than to adopt fishing as occupation’ had obtained mean score (3.80) and rank V which shows that majority of the youth did not want to depend on

fishing for their livelihood and were willing to go for less paid job because of the non-profitability of this profession.

The statement, 'I prefer fishing as an occupation' had obtained the mean score (3.67) and rank VI which showed that some youth were willing to carry out fishing which may be because they want to continue their traditional profession of fishing.

The statement, 'Fishing is more stressful job' with mean score 3.27 and rank VII showed that slight majority of the youth consider fishing as stressful because of this occupation being irregular source of income.

It was observed that the statement, 'Villages can't prosper unless youth adopt fishing occupation' had obtained mean score 3.18 and rank VIII which may be because of the reason that they also feel that youth are the important segment of the society and contribute towards the development of the community.

The statement 'I avoid fishing as it is a tedious job' with mean score 2.96 and rank IX showed that slight majority of the youth avoid this occupation as it is tedious and requires more efforts.

The statements viz., 'Fishing can provide sustainable livelihood to youth' (mean=2.88), 'I feel sorry for those who abandoned fishing occupation' (mean=2.68), 'Fishing is more profitable than any other occupation' (mean=2.59), 'I feel proud to engage in fishing occupation' (mean=2.42), 'I prefer to be fisher than an employee' (mean=2.35), 'This occupation leads to increase in standard of living' (2.02) and 'This occupation leads to economic upliftment of fishers' (mean=2.00) and ranks X, XI, XII, XIII, XIV, XV and XVI respectively showed that these statements were found favourable by some respondents only.

Therefore, it shows that if youth are provided with profitable schemes, technical trainings in various fields of concern and awareness programs, can help in retaining their interest in this profession.

## **5.4 Association between Independent and Dependent variables**

### **5.4.1 Correlation analysis between Independent and Dependent variables**

It could be observed from the results that out of 16 variables, 9 variables were found to have significant relationship with the dependent variable. Out of these, 1 independent variable such as income through fishing in summer ( $r=0.183$ ) had positive and significant relation with attitude of youth towards fishing occupation at 0.05 level of significance while as 1 independent variables and active fishing days (0.845) had positive and significant relation with dependent variable at 0.01 level of significance. The 7 independent variable such as age (-0.757), educational qualification ( $r=-0.486$ ), marital status (-0.376), family type (-0.787), household earners (-0.488), investment on fishing inputs( $r=-0.584$ ), and factors constraining youth involvement in fishing( $r=-0.770$ ) had negative and significant relation with dependent variable at 0.01 level of significance. The remaining variables viz., house type ( $r=0.173$ ), number of dependents ( $r=-0.004$ ), household expenditure (-0.167), income through fishing in winter (0.028), marketing channel ( $r=-0.084$ ), residential background ( $r=0$ ) and opted alternate source of income ( $r=-0.023$ ) had non-significant relation with attitude of youth towards fishing occupation.

#### **5.4.1(a) Age and attitude of youth towards fishing occupation**

Age of the youth and attitude of youth towards fishing occupation are negatively correlated which might be because of the reason that young youth new to the profession do not find much problems at early stages while as old age group of youth being in this profession for long does not find any improvement or advancement in the sector and find the occupation less profitable with passing years which creates a negative impact on them regarding the occupation. The similar findings were found by Shireesha et al. (2016).

#### **5.4.1(b) Marital status and attitude of youth towards fishing occupation**

The marital status and attitude of youth towards fishing occupation are

negatively correlated. The reason for this relation might be the pressure of shouldering family responsibilities by the single earner and as fishing occupation does not provide with enough income to satisfy the basic needs. Therefore, they seldom carry out fishing activities. The finding was against the findings of Bello et al. (2015) where he found non-significant relation between marital status and attitude of youth.

#### **5.4.1(c) Educational qualification and attitude of youth towards fishing**

Educational qualification and attitude of youth towards fishing occupation are negatively related. This might be because of the reason that with acquiring education the youth aspire for gaining higher education and prosper in the same leaving fishing in the hands of aged people. The findings were similar to the findings of Umunakwe and Adedamola (2015).

#### **5.4.1(d) Family type and attitude of youth towards fishing occupation**

Family type and attitude of youth towards fishing occupation are negatively correlated. The possible reason for this relation may be that since maximum of the respondents had nuclear families and therefore single earner or even two earners could not shoulder the whole family by doing fishing only and thus affected their interest in fishing occupation negatively. The finding was in contrary to the finding of Shireesha et al. (2016).

#### **5.4.1(e) Household earners and attitude of youth towards fishing occupation**

The number of earners in the family and the attitude of youth towards fishing occupation are related negatively as the responsibilities of household needs are on the single individual and to meet the requirements by carrying out fishing only is not possible. Therefore, there arises a need to shift to some other sources to earn money and this creates disinterest in youth regarding fishing.

#### **5.4.1(f) Active fishing days and attitude of youth towards fishing occupation**

Active fishing days are the days when fishing activity is carried out. The

number of active days and their attitude towards fishing are positively correlated and this may be because of the reason that they observe good number of days on which fishing is carried out, although some days fetching less catch and thus more active days in a year have much influence on their attitude

**5.4.1(g) Income through fishing in summer season and attitude of youth towards fishing**

Income through fishing in summer and attitude of youth towards fishing are positively correlated. It is clear that for a unit increase in income through fishing in summer there is increase in favourable attitude of youth towards fishing. The possible reason for this relation may be that in summer season because of availability of good catch compared to other part of the year the youth get more income from fishing in this season by selling their catch and thus might think fishing as good occupation to follow.

**5.4.1(h) Investment on fishing inputs and attitude of youth towards fishing occupation**

The investment in fishing inputs such as gear, crafts, license fees, etc., and the attitude of youth towards fishing occupation are negatively correlated which may be because the cost involved in making boats or gears is high. For making or repairing the old gears and crafts, enough wood is not provided at the government depots and therefore they have to get the wood from market which is available at high rates which they could not afford. Besides, they have no insurance for their gear and crafts.

**5.4.1(i) Factors constraining youth involvement in fishing and attitude of youth towards fishing occupation**

Factors constraining youth involvement in fishing and the attitude of youth towards fishing are negative correlated which may be because of the fact that with the increasing constraints they show least interest in their profession. Therefore, in order to change their attitude towards their profession we need to address these constraints to keep them inclined towards fishing occupation.

#### 5.4.2 Multiple Regression Analysis

The multiple regression analysis was carried out to know the extent of contribution of independent variables to dependent variable (attitude of youth towards fishing occupation) and the results attained were that out of 16 independent variables, only 10 variables had contributed significantly towards attitude of youth towards fishing. As evident from “t” value of the variables, it can be inferred that attitude of youth could be increased by 1.09, 2.281, and 0.342 units if one unit could be brought in number of earners, active fishing days, and marketing channels respectively if other variables kept constant. However, if there is one unit increase in age, marital status, educational qualification, family type, investment on fishing inputs and factors constraining youth involvement in fishing there would be 0.611, 1.123, 1.184, 2.593, 1.458 and 0.147 units decrease respectively in the attitude of youth towards fishing occupation. The remaining variables had not contributed significantly towards variability in attitude. The  $R^2$  value of 0.954 indicated that all the 16 variables had contributed to the tune of 95.4 per cent of variation in attitude of youth.

It could be observed from the results of multiple regression analysis that among the ten significantly contributing variables, number of active fishing days was found to contribute much on “attitude of youth towards fishing occupation”. In general, increased number of active fishing days would enhance a favourable mind-set towards fishing.

When discussing about the other variable, number of earners would also enhance a favourable mindset towards fishing which might be because of increased income earned through these sources. Marketing channels i.e., the mode of selling their catch such as by selling through contactors might be giving them good rates for their catch and also provide them credit facilities at the time of need. As such it might have contributed to favourable attitude towards fishing. Thus all the above four variables would positively influence the attitude of youth towards fishing occupation.

The other variables such as family type and investment on fishing inputs were found to contribute unfavourable attitude towards fishing as youth having nuclear family might have independently shoulder the family responsibilities which they may be finding difficult by doing fishing. Similarly, investment on fishing inputs is negatively related to the attitude of youth towards fishing. The more they have to invest in fishing inputs the less favourable is their attitude towards fishing occupation. The variable 'age' was also found to influence attitude of youth towards fishing negatively. With increasing age of the individuals their attitude towards fishing decreases. Similarly, marital status also would also create a negative attitude in youth towards fishing. As far as educational qualification is concerned, it also affects the youth attitude negatively. The factors that act as constraints to youth involvement in fishing occupation also contribute negatively towards the attitude of youth towards fishing occupation. Thus, all the above six variables would negatively influence attitude of youth towards fishing occupation.

## Chapter 6

### SUMMARY AND CONCLUSION

The present study was conducted to study the attitude of youth of Fishing communities towards fishing as an occupation with specific objectives including the study of socio-economic profile of youth, factors affecting their interest in fishing occupation. Four fishing villages viz., Paribal, Kulhama, Ashtingoo and Lankrashpora of district Bandipora were selected by multi-stage random sampling. Twenty youth were selected randomly from each of the selected villages constituting total sample of 120 youth. Data was gathered through interview method with the help of structured pre-tested interview schedule. The findings of the investigation are summarized as:

- The present investigation revealed that majority of the respondents (60.8%) had moderately favourable attitude towards fishing occupation.
- The study regarding socio-economic profile revealed that majority of the respondents belonged to middle age group (24-29 years), were married, had qualification up to matriculation, belonged to rural area, lived in pucca house, had nuclear type of families, had only one earner in the family with 3 to 6 dependents, had monthly expenditure of above 4000 rupees, invested about 10000 to 20000 rupees on fishing inputs per year, had monthly income through fishing in summer of 10000 to 20000 rupees as this season was witnessed favourable for fishing and in winter it was found to be less than 5000 rupees which was because winter being the lean season for fishing, and out of 120 respondents only 77.5% of them had opted the alternate source of income such as labour, etc., particularly during lean season.
- The study revealed that the major constraints in developing positive

attitude of youth towards fishing occupation as this profession being viewed as disrespectful in the society. This was followed by another constraint which was less availability of catch in the Wular. Lack of technical trainings, unawareness about the schemes available for them was found to influence their attitude in negative way. It was also found that for the youth this occupation is irregular source of income as they witness many days without catch and also unavailability of suitable market causes a negative impact on their attitude towards this occupation. The study also revealed that the youth find this occupation as time consuming as they need to stay out for day long and it requires more efforts with less output. The other constraints were fluctuation in price of catch and unavailability of storage and curing facilities for their unsold catch.

- Correlation analysis of Attitude of youth towards fishing occupation with independent variables viz., income through fishing in summer, active fishing days had positive and significant relation while as the variables such as age, educational qualification, household earners, marital status, family type, investment on fishing inputs and factors constraining youth involvement in fishing had negative and significant relation. The  $R^2$  value indicated that all the independent variables had contributed to the tune of 95.4 per cent of variation in attitude of youth towards fishing occupation.
- Thus it may be concluded from the study that majority of the youth had moderately favourable attitude towards fishing as an occupation. The socio-economic characteristics of the youth showed positive as well as negative impact on their attitude towards fishing occupation. There were many factors that constrain their involvement in fishing occupation, the major constraint being this profession is viewed as disrespectful in the society. Therefore, the impact of each variables

needs to be taken into consideration during formation and implementation of developmental programs that will help youth in developing positive attitude towards fishing occupation.

## **RECOMMENDATIONS**

The information obtained from the respondents helped to find out the problems and following recommendations are intended to provide direction to decision-makers on addressing the identified problems.

- The study was confined to one district of Jammu and Kashmir with sample size of 120 respondents and the results are applicable to that area only. Hence, further research in this field may be carried out in other areas also so that generalization of results could be possible.
- Majority of respondents were educated up to matric only. It was found that there were primary schools in the study area but due to lack of high schools and poverty could not afford to continue higher studies. The Anganwadi centers need to be upgraded with efficient staff, infrastructure, etc., so that children of these communities could get basic education from early stages. The elder siblings in the family are supposed to take care of the younger siblings in the family when their parents are out for fishing and therefore, they can send their younger siblings to these centers and younger siblings could continue their studies.
- Awareness programmes about the importance of education, especially for girl education, awareness about various scholarships available for the under-privileged groups must be organized so that they can get benefited and can pursue the higher education.
- The fishing enterprise needs to be modernized. Selling dressed fish, scientific fish drying, value addition, proper packaging and establishment of fish markets with all the required facilities will help

the youth in recovering self-esteem.

- The training and awareness drives to aware the youth of these communities regarding the various entrepreneur activities they can carry out with respect to their occupation rather than just catching and selling the catch so that they can develop interest in this profession.
- They are bound to contractors for selling their catch as they provide them credit facilities. Thus, they need to be provided with awareness programs regarding different credit facilities and start-up schemes available for them so that they need not to depend on the middlemen any more.
- The youth were found to be least interested in fishing occupation because of being considered as disrespectful occupation by people of other communities. Poor hygiene in the fishing villages, obnoxious smell due to catch, selling fish on road side and many other factors make them look down upon by others. Therefore, fishers need to be trained about health and hygiene through various programmes. Some villages can be adopted under the Swachh Bharat Abhiyan so that these villages become source of inspiration for others.
- In summer, when the catch is available in surplus they catch only as much as they can sell for the day because of unavailability of efficient storage and also the demand for the catch is less at that time. Therefore, if they are equipped with improved skills and innovative technologies such as modern methods of storage, value addition of the fish, drying and smoking, etc., can help them keep the surplus catch for the lean season when the demand of the catch is high.
- Providing fishers with closed ice boxes for fish transportation will prevent them from getting ridiculed while travelling in local transport.

- The catch in the Wular lake is depleting due to the number of problems such as encroachments, soil digging, sewage disposal, weed infestation, deteriorating water quality, disposal of hospital wastes, etc., resulting in shrinking of the lake and has also resulted in the decrease of water chestnut (*Trapa natatus*) for which Wular is famous and these communities have no or very less role in the pollution of the lake. This affects the livelihood of the communities dependent on the lake and the youth therefore, shift to alternate sources of income which results in decreasing their interest in this occupation. Therefore, there arises a need for the remediation of the Wular lake which is the major source of their livelihood with the efforts of Wular Conservation and Management Authority (WUCMA) to check the disposal of garbage and harmful wastes in the lake.
- There is a need of formation of SHG's, JLG's and Cooperatives so that they can afford to take up the technological intervention provided to them as low cost technologies.

## LITERATURE CITED

- Abdullahi, Y. M., Gidado, A. S. and Jibril, S. A. 2010. Attitude of rural youth towards family farming in Dass, Bauchi state, Nigeria and the implications for Policy. *Journal of Agricultural Extension* **14**(2): 14-22.
- Abu, M. H., Abu, S. B., Mohamed, S. H. A. and Lawrence, D. J. 2011. Socio-Demographic Factors Affecting Attitude towards information and communication Technology Usage. *American Journal of Applied Sciences* **8**(6): 574
- Adefalu, L. L., Adekunle, O. A., Oladipo, F. O., Adisa, R. S. and Fatoye, A. D. 2009. Constraints to Youth's involvement in Agricultural Production in Kwara State, Nigeria. *Journal of agricultural Extension* **13**(1): 102-108.
- Adelodun, O. B., Bankole, A. F., Rafiu, R. A., Morawo, B. O. and Ajao, F. S. 2016. Assessment of youth perception towards fish farming in Ibadan Metropolis. *Research Journal of Agriculture and Environmental Management* **5**(3): 081-085.
- Adesina, T. K. and Favour, E. 2016. Determinants of Participation in Youth-In-Agriculture Programme in Ondo State, Nigeria. *Journal of Agricultural Extension* **XX**(X): 104-117.
- Akpan, S. B. 2010. Encouraging youth's involvement in agricultural production and processing. Policy note number 29. Nigeria strategy support program. *International Food Policy Research Institute*.
- Anamica, M. and Ravichandran, V. 2014. Attitude of rural youth towards farming. *Madras Agricultural Journal* **101**(1-3): 79-86.
- Angaitkar, A. G., Deshmukh, A. N. and Tale, S. G. 2013. Attitude of rural youth towards agriculture as a profession. *Bioinfolet* **10**(3B): 1006-1007.

- Angaitkar, A. G., Janjal, V. B., Barse., K. N. and Shedje, V. R. 2013. Problems faced by rural youth while choosing agriculture as their profession. *Agriculture Update* **8**(4): 685-686.
- Angba, A. O., Adesope, O. M. and Aboh, C. L. 2009. Effect of socio-economic characteristics of rural youths on their attitude towards participation in community development projects. *International NGO Journal* **4**(8): 348-351.
- Aphunu, A. and Akpobasa, B. I. O. 2010. Assessment of rural youths' attitude towards agricultural production in Sapele Local Government Area of Delta State. *The Nigerian Academic Forum* **19**(1): 1-4.
- Aphunu, A. and Atoma, C. N. 2010. Rural youths' involvement in agricultural production in Delta Central Agricultural Zone: Challenge to agricultural extension development in Delta state. *Journal of Agricultural Extension* **14**(2): 46-55.
- Arowolo, O. O., Lawal, A. M. and Ogundijo, J. I. 2013. Grass-root youth involvement in cattle rearing activities in Oyo state, South Western Nigeria. *Journal of Agricultural Extension and Rural Development* **5**(5): 100-106.
- Bello, A. R. S., Allajabou, H. A. and Baig, M. B. 2015. Attitude of Rural Youth Towards Agriculture as an occupation: A case study from Sudan. *International Journal of Development and Sustainability* **4**(4): 415-424.
- Bhanu, V. L. 2007. Study on aspirations of rural youth and their attitude towards rural development Activities in Dharwad district of Karnataka State. M. Sc. (Agri.) Thesis, University of Agricultural Science, Dharwad.
- Bordoloi, R., Abujam, S. K. S., Paswan, G., Goswami, U. C. and Biswas, S. P. 2012. Socio-economic status of the fisher folk of upper Brahmaputra River: A case study in Jankhana village of Jorhat District. *International*

*Journal of Applied Biology and Pharmaceutical Technology* **3**(4): 338-341.

Chachere, G. S., Gohad, V. V., Bhoyar, R. M. and Bhagat K. K. 2018. Attitude of rural youth towards farming as major occupation. *International Journal of Chemical Studies* **6**(4): 2789-2791.

Chikezia, N. P., Chikaire, J., Osuagwu, C. O., Ihenacho, R. A., Ejiogu-Okereke, N., Oguegbuchulam, M. N and Obi, K. U. 2012. Factors Constraining Youths Involvement in Cassava Production in Onu-Imo Local Government Area of Imo state, Nigeria. *Global Advanced Research Journal of Agricultural Science* **1**(8): 223-232.

D'Silva, J. L., Shaffril, H. A. M., Uli, J. and Samah, A. 2010. Socio-Demographic Factors that Influence Youth Attitude Towards Contract Farming. *American Journal of Applied Sciences* **7**(4): 603-608.

Das, M. R., Ray, S., Kumar, U., Begum, S. and Tarafdar, S. R. 2015. Livelihood Assessment of the Fishermen community in the South West region of Bangladesh. *Journal of Experimental Biology and Agricultural Sciences* **3**(4): 353-361.

Doney, A. O., Gwary, M. M., Nuhu, H. S. and Zhintswen, A. A. 2012. Assessment of youth involvement in Yam production in Wukari Local Government Area of Taraba state, Nigeria. *Agriculture and Biology Journal of North America* **3**(8): 311-317.

Economic Survey J&K. 2016. *Directorate of Economic and Statistics, J&K*

Felicia, W. I. Emmanuel, F. O. and Olaseinde, A. T. 2016. Assessing the future of Agriculture in hands of rural youth in Oriade Local Government Area of Osun State, Nigeria. *International Journal of Agricultural Extension* **04**(02): 105-110.

- Gangwar, R. and Kameswari, V. L. V. 2016. Attitude of rural youth towards agriculture as a means of livelihood. *Journal of Applied and Natural Sciences* **8**(2): 879-882.
- Hiremath, N. S. 2000. Participation of rural youth in farm and non-farm activities in Dharwad taluk. *M. Sc. (Agri.) Thesis*. University of Agricultural Sciences, Dharwad.
- Hussain, N., Balkhi, M. H., Bhat, T. H. and Dar, S. A. 2016. Socio-economic status of fishermen in district Srinagar of Jammu and Kashmir. *IRA-International Journal of Management and Social Sciences* **5**(1): 66-70
- Indian Census 2011. Population enumeration data. Government of India, Ministry of Home Affairs. India. [www.censusindia.gov.in](http://www.censusindia.gov.in)
- Jaswal, B. S. 2014. Fishery Industry in Himachal Pradesh-Problems and Prospects. *PhD (Commerce), Thesis*. Department of Commerce, Himachal Pradesh University, Summer Hill, Shimla.
- Jawale, S. V. and Ghulghule, J. N. 2015. Constraints and suggestions of Kesar mango production in export zone of Marathwada region. *International Journal of Commerce, Business and Management* **4**(5): 2319–2828.
- Jayapuriya, B. 2015. A study on Attitude of Rural youth regarding participation in agricultural activities of Patan Block of Jabalpur District (MP). *MSc. (Agriculture Extension), Thesis*. Department of Extension Education, College of Agriculture, Jawaharlal Nehru Krishi Vishwa Vidyalaya Jabalpur, Madhya Pradesh.
- Kalita, G. J., Sarma, P. K., Goswami, P. and Rout, S. 2015. Socio-economic status of fishermen and different fishing gear used in Beki River, Barpeta, Assam. 2015. *Journal of Entomology and Zoology Studies* **3**(1): 193-198
- Kalita, P. and Deka, P. 2015. Socio-economic conditions and livelihood status of Fisher around the landing sites of Motapung-Maguri Beel of Tinsuka

District of Assam. *International Journal of Fisheries and Aquatic Studies* **3**(2): 55-57

Karuppusamy, R. and Subraamanian, A. 2016. A study on Socio-Economic Conditions and Financial Status of Fishermen-With Special Reference to Pudhucherry and Karikkal. 2016. *Int. Journal of Management and Development Studies* **5**(6): 80-86.

Kerlinger, F. N. 1973. *Foundation of Behavioral Research*. 2nd ed. New York:

Kgosiemang, D. T. and Oladele, O. I. 2012. Factors Affecting Farmers' Participation in Agricultural Projects in Mkhondo Municipality of Mpumalanga Province, South Africa. *Journal of Human Ecology* **37**(1): 19-27.

Kimaro, J. P., Towo, N. N. and Moshi, H. B. 2015. Determinants of Rural Youth's Participation in Agricultural Activities. *International Journal of Economics, Commerce and Management* **3**(2): 1-47.

Kitturmath, M. G., Suradkar, D. D., Bharamagoudar, M. V. and Thombre, B. M. 2014. Study of demographic profile and attitude of rural youth towards rural development activities. *Trends in Bioscience* **7**: 11.

Lyocks, J. S., Lyocks, S. W. J. and Kagbu, J. H. 2013. Mobilizing youth for participation in Nigerian Agricultural Transformation Agenda: A grassroots' approach. *Journal of Agricultural Extension* **17**(2): 78-87.

Manish, K., Meenakshi, C., Suresh kumar, P. and Mishra, B. P. 2011. Attitude of agricultural graduates towards Agri-clinic and Agri-busines Centers in Arunachal Prades. *Indian Research Journal of Extension Education* **11**(1): 117-119.

Manohari, P. L. 2001. Attitude of primitive tribal groups towards improved agricultural technology. MANAGE. *Extension Research Review* **2**(1): 125-138.

- Mathews, J. and Nagireddy, K. 1989, A scale to measure the attitude of rural youth towards agriculture. *Maharashtra Journal of Extension Education* **8**(1): 203-206.
- Mohan, K. and Reddy, P. R. 2012. Attitude towards pursuing self-employment in agriculture. *Journal of Research ANGRAU* **40**(1): 69-72.
- Mohite, S. A. and Samant, J. S. 2017. Socio-economic status of fishermen communities in Panchganga river basin in Kolhapur district; Maharashtra, India. *International Journal of Environmental Sciences* **6**(8): 24-29.
- Mosae, M. and Ommani, A. 2011. Assessment of the socio-economic factors affecting rural youth attitude to occupation in agriculture. *International Journal of Agricultural Management and Development* **1**(1): 15-19.
- Mourya, N., Jain, L. and Singh, K. 2007. Constraints analysis of rural youth regarding participation in agriculture. M. Sc. (Agri.) Thesis, JNKVV, Jabalpur pp. 80.
- Mruthyunjaya. Strategies and Options for Increasing and Sustaining Fisheries and Aquaculture Production to Benefit Poor Households in India. ICAR-ICLARM Project. *National Centre for Agricultural Economics and Policy Research, New Delhi, India*
- NFBD, 2016. National Fisheries Development Board. About Indian Fisheries. <http://nfdp.gov.in/about-indian-fisheries.htm>.
- Njeru, L. K., Gichimu, B. M., Lopokoityit, M. C. and Mwangi, J. G. 2015. Influence of Kenyan youth's perception towards Agriculture and Necessary Interventions; a review. *Asian Journal of Agricultural Extension, Economics and Sociology* **5**(1): 40-45.
- Olaoye, O. J., Awotunde, J. M., Onifade, O. T., Akintayo, I. A. and Agunbiade, D. 2015. Assessment of youth attitude towards fish production in

Abeokuta metropolis, Ogun state, Nigeria. *International Journal of Agricultural Economics & Rural development* 7(1): 24-31

Pakhmode, P. S., Rathod, M. K. and Bhagat, M. C. 2017. Attitude of rural youth towards farming as a major occupation. *International Journal of Chemical Studies* 6(1): 1735-1738.

Parashar, V., Bara, S. K., Damde, D., Kumar, A and Vyas, V. 2016. Assessment of Socio-economic status of fishermen communities: a case study from a selected reach of River Narmada, India. *International Journal of Research in Fisheries and Aquaculture* 6(2): 47-59.

Parvaiz, A. 2017. As Kashmir's Wular lake Diminishes, So Do Livelihoods. <http://m.huffingtonpost.in/village-square/as-Kashmir-s-wular-lake-diminishes-so-do-livelihooda23203825>.

Patel, N. G. and Chauhan, N. M. 2015. Constraints faced and suggestions offered by tribal farmers of Navsari district of south Gujarat in watershed management through no-cost and low-cost technologies. *International Journal in Management and Social Sciences* 3(8): 166-174.

Prabhavati, K. and Krishna, P. V. 2017. Socio-economic conditions of fishermen community in some selected areas of Nizampatnam area, Guntur district andhra Pradesh, India. *International Journal of Zoology Studies* 2(5): 212-215.

Prasad, Y. V. S. 2002, A study on general knowledge of rural youth about improved agriculture, their attitude and participation in farm activities in Dharwad district of Karnataka. *M. Sc. (Agri.) Thesis*, University of Agricultural Sciences, Dharwad.

Preethi, 2015. A study on perception, aspiration and participation of farm youth in agriculture. PhD. (Agri. Extension) Thesis. University of Agriculture science, Bengaluru.

- Qureshi, W. N. and Krishnan, M. 2015. Lake Fisheries in Kashmir, A case more Done than Undone. *Economic and Political Weekly* **L**(2): 68-69.
- Radhakrishnan, P. and Arunachalam, R. 2017. Constraints Perceived by the Rural Youth towards Participation of Development Activities in Tamil Nadu. *International Journal of Education* **7**(2): 109-112.
- Ram, S. B., Kumar, R. R., Malakar, B. and Venu, S. 2015. Socio-economics of fishermen community around the Junglighat fish landing centre, South Andaman-a case study. *Journal of Research in Biology* **5**(7): 1860-1867.
- Rashid, M. M. and Gao, Q. 2012. Determinants of Rural Youth's Attitude and Involvement in Bangladesh Politics. *International Journal of Social Sciences* **2**(23): 183-193.
- Sakiluzzaman, M., Sarker, M. A., Rahman, M. Z., Hasan, M. M., Lei, B. and Mukta, M. Z. N. 2018. Determinants of Rural Youth's Participation in Commercial Agriculture: A Case Study from Southern Bangladesh. *International Journal of Economics, Commerce and Management* **VI**(4): 507-524.
- Sangamesh, P. S. 2006. A comparative profile analysis of rural youth in rainfed and irrigated tracts of Bagalkot district. M. Sc. (Ag.) Thesis. Department of Agricultural Extension Education. University of Agriculture Sciences, Dharwad.
- Satapathy, C. and Mishra, S. 2011. Agribusiness in the vision of rural youths: A study in Odisha. *Indian Journal of Extension Education* **47**(3&4): 1-5.
- Shireesha, K. 2016. Youth in Farming-An analytical study. *Phd. (Agriculture Extension). Thesis*, Department of Extension Education, S. V. agricultural College, Tirupati Acharya N. G. Ranga Agricultural University, Guntur Andhra Pradesh.

- Shireesha, K., Satyagopal, P. V., Lakshmi, T., Ravindrareddy, B. and Prasad, S. V. 2016. Correlates of Profile and Attitude of Youth Towards Farming. *International Journal of Agricultural Science and Research* 7(1): 43-52.
- Singh, B. and Kahlon, N. R. 2016. Changing Perceptions of Rural Youth in Punjab: A Sociological study in Amritsar District of Punjab. *Asia Pacific Journal of Research* I(XXXV): 46-51.
- Sofia, 2018. The State of World Fisheries and Aquaculture. FAO, Rome. Available at <http://www.fao.org/3/i9540en/I9540EN.pdf>.
- Thilagam, J. 2012. Indicators of agri entrepreneurship and evaluation of business planning and development unit-A diagnostic study. M. Sc. (Ag.) Thesis, Tamil Nadu Agricultural University, Coimbatore.
- Tripathi, H., Dixit, V. B., Singh, S and Yadav, R. 2018. Measuring the Attitude of Rural Youth Towards Farming: An Explorative study of Haryana. *Haryana Veterinarian* 57(2): 183-188.
- Uddin, M. E., Rashid, M. U. and Akanda, M. G. R. 2008. Attitude of Coastal Rural Youth towards Some Selected Modern Agricultural Technologies. *Journal of Agricultural Rural Development* 6(1&2): 133-138.
- Umunnakwe, V. C. and Adedamola, O. F. O. 2015. Socio-personal correlates of participation in livelihood activities among rural youth in Jabalpur district of Madhya Pradesh. *International Journal of Agricultural Research Innovation and Technology* 5(1): 28-35.
- Umunnakwe, V. C., Pyasi, V. K. and Pande, A. K. 2014. Factors influencing involvement in agricultural livelihood activities among rural youth in Jabalpur district of Madhya Pradesh. *International Journal of Agricultural Policy and Research* 2(8): 288-295.

Viswanatha, H., Manjunatha, B. N. and Lakshminarayana, M. T. 2014.  
Aspirations and problems of rural youth practicing agriculture. *The Mysore  
Journal of Agricultural Sciences* **48**(4): 583-588.

Youth in India, 2017. Central Statistics Office, *Ministry of Statistics and  
Programme Implementation Government of India*

**A study on Attitude of youth of fishing communities  
towards fishing as an occupation**

**INTERVIEW SCHEDULE**

**SECTION A: SOCIO-ECONOMIC STATUS OF YOUTH**

1. Name: .....
2. Age (Please specify).....
3. Marital Status:
  - a. Married ( )
  - b. Unmarried ( )
4. Educational Qualification:
  - a. Illiterate ( )
  - b. Under Matriculate ( )
  - c. Under Graduate ( )
  - d. Any other (please specify).....
5. Residential Background:
  - a. Rural ( )
  - b. Urban ( )
6. Type of house you live in:
  - a. Pucca ( )
  - b. Kachha ( )
7. Type of family:
  - a. Nuclear ( )
  - b. Joint ( )
8. No. of Household earners: .....
09. No. of dependents: .....
10. Monthly expenditure on household: .....
11. How much do you invest on fishing inputs per year? .....
12. How many active fishing days you observe in a year? .....

13. Monthly income through fishing in summer:
- a. Less than 10000 ( )
  - b. 10000-20000 ( )
  - c. Above 20000 ( )
14. Monthly income through fishing in winter:
- a. Less than 5000 ( )
  - b. 5000-10000 ( )
  - c. Above 10000 ( )
15. How do you sell your fish (Marketing channels)
- a. Selling through contractor ( )
  - b. Selling direct to local market ( )
  - c. Door to door selling ( )
  - d. Any other, specify.....
16. Have you opted alternate source of income? Yes/No
- 17.

**SECTION B: ATTITUDE OF YOUTH TOWARDS FISHING AS AN OCCUPATION**

| S. No. | Statements   | SA | A | UD | D | SD |
|--------|--|----|---|----|---|----|
| 1.     | Fishing can provide sustainable livelihood to youth            |    |   |    |   |    |
| 2.     | I feel proud to engage in fishing occupation                   |    |   |    |   |    |
| 3.     | Fishing is more profitable than any other occupation for youth |    |   |    |   |    |
| 4.     | I prefer fishing as an occupation                              |    |   |    |   |    |
| 5.     | Villages can't prosper unless youth adopt fishing occupation   |    |   |    |   |    |
| 6.     | I feel sorry for those who abandoned fishing occupation        |    |   |    |   |    |
| 7.     | This occupation leads to increase in standard of living        |    |   |    |   |    |
| 8.     | Fishing occupation leads to economic upliftment of fishers     |    |   |    |   |    |

|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 9.  | I prefer to be fisher than an employee  |  |  |  |  |  |
| 10. | Fishing is considered for old man's job by youth  |  |  |  |  |  |
| 11. | Fishing is more stressful job   |  |  |  |  |  |
| 12. | I avoid fishing as it is tedious job  |  |  |  |  |  |
| 13. | It is better to do job with less salary than to adopt fishing as occupation                     |  |  |  |  |  |
| 14. | It is better for a family to hold diversified occupation rather than to be dependent on fishing |  |  |  |  |  |
| 15. | I will not encourage my children to be in this profession                                       |  |  |  |  |  |
| 16. | Fishing is not viewed as respectful profession in society                                       |  |  |  |  |  |

18.

### SECTION C: FACTORS CONSTRAINING YOUTH INVOLVEMENT IN FISHING

| S. No. | Statements                               | Strongly Agree | Agree | Undecided | Disagree | Strong Disagree |
|--------|--|----------------|-------|-----------|----------|-----------------|
| 1.     | Problems with contractors                |                |       |           |          |                 |
|        | a. Exploitation by middlemen             |                |       |           |          |                 |
|        | b. Delay in payment by middlemen         |                |       |           |          |                 |
| 2.     | Problems with state fisheries department |                |       |           |          |                 |
| 3.     | Conflicts with other fishers             |                |       |           |          |                 |
| 4.     | 4. Problems in transportation:           |                |       |           |          |                 |
|        | a. Inadequate transport facility         |                |       |           |          |                 |
|        | b. High cost of transport                |                |       |           |          |                 |
| 5.     | Problems in marketing                    |                |       |           |          |                 |

|     |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|
|     | a. Fluctuations in price                       |  |  |  |  |  |
|     | b. Inadequate demand                           |  |  |  |  |  |
|     | c. Low price offered by buyers                 |  |  |  |  |  |
|     | d. Suitable market not available               |  |  |  |  |  |
| 6.  | Problems in preservation                       |  |  |  |  |  |
|     | a. Inadequate storage facilities               |  |  |  |  |  |
|     | b. Curing facilities not available             |  |  |  |  |  |
| 7.  | Less catch                                     |  |  |  |  |  |
| 8.  | It is a tedious job                            |  |  |  |  |  |
| 9.  | Time consuming job                             |  |  |  |  |  |
| 10. | Fishing requires more efforts with less output |  |  |  |  |  |
| 11. | Fishing is the irregular source of income      |  |  |  |  |  |
| 12. | It is considered as disrespectful job          |  |  |  |  |  |
| 13. | Lack of technical trainings                    |  |  |  |  |  |
| 14. | Unaware about schemes available for fishing    |  |  |  |  |  |
| 15. | Parental restriction                           |  |  |  |  |  |

**Sher-e-Kashmir**  
**University of Agricultural Sciences & Technology of Kashmir**  
**Faculty of Fisheries, Rangil, Ganderbal**

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**CERTIFICATE**

Certified that all the corrections/amendments as suggested by External Examiner Dr./Prof. Peerzada M. Amin, Department of Sociology, University of Kashmir during viva voce examination held on 28-11-2019 have been incorporated in the manuscript entitled “**A Study on Attitude of Youth of Fishing Communities Towards Fishing as an Occupation**” submitted by **Ms. Ishrat Aishi (Reg. No. 2017-F-62-M)**.

**(Dr. Rizwana Malik)**  
Chairperson  
Advisory Committee