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Article

Present status of traditional fish drying activities and women participation in Chalan Beel area of Natore and Pabna district in Bangladesh

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Abstract: This study focuses mainly on the traditional fish drying activities and role of women in fish drying sector in Chalanbeel area of northern part of Bangladesh. The study covers three different drying spots of Natore and Pabna districts. A total of 13 dried fish producer, 18 male worker and 27 female workers were selected for the study. The study was conducted over a period of six month from September to February 2014. In these study areas, sun drying of fish is generally carried out on bamboo made rack. Total 21 species were gradually used for drying selected from the local fish market and directly from the fishermen of Chalanbeel. The amount of salt used in fish drying ranges 2-4kg/40 kg fish. The dried fishes were bagged into a plastic and jute bags. The dried fish producers usually sell their products weekly from their storage. The lowest price of dried fish is 300-400 Tk./ kg for Punti and highest is 800 Tk./kg for Boal. The monthly production of the study areas ranges 1.8-4.00 mt. However, women play a significant role in dry fish processing. The paper points out that the sample women are involved in different income generating activities like drying, sorting and grading, cleaning and salting and monthly income derived from those activities vary in peak and lean season. The paper also identifies that the highest 51.85% women were found in 25-40 years age groups and the lowest 7.41% was found in 50-70 years age group and also 40.74% was found in 10-25 years age group which were (children) involved in drying activities instead of spending time in school. In the study areas 55.56% women were married, 40.74% were unmarried and 3.70% were widow. The highest percentage of family type (59.26%) was found as nuclear and the joint family was 40.74%. The educational status of women in drying point was 40.74% illiterate, 37.04% had education up to primary level 11.11% capable of sign only and 11.11% reach up to secondary level. Most of the respondents live in kacha house.59.26% of housing condition were kacha, 22.22% were semi-pucca and 18.52% were pucca. 33.33% people used own-tube well and 59.26% people used others-tube well for drinking water and household purposes while 7.41% used kua. From the study, it was found that 70.37% respondents had electricity connection and 29.63% had no electricity connection. In study areas, 59.26% respondents use defected semipucca, 29.63% respondents use kacha and 11.11% respondents use pucca sanitary latrine. In both study area, 100% of interviewed respondents were Muslim with no other religious person.

Keywords: fish processing; dry fish; household; salting; women participation

1. Introduction

In Bangladesh fish is the most important sources of animal protein in our daily diet as 58% of the animal protein supply comes from fisheries sources (DoF, 2015). Not only for the economy of Bangladesh, contribution of fisheries in earning foreign exchange is 2.01% whereas 3.69% to GDP and 22.60% to agriculture of Bangladesh. (DoF, 2015). In Bangladesh fish harvesting is mostly seasonal and each of the catch fish reaches to its pick during late spring and early summer. Due to lack of adequate transport, storage and preservation facilities, every

year a huge amount of fish cannot be utilized properly. It has been estimated that 10% by weight of the world fish catch is lost by poor handling, processing, storage and distribution (Aazm, 2002). Drying is one of the most important methods of fish preservation in Bangladesh which is regarded as a traditional and primitive preservation method of fish. In 2013-14 Bangladesh exports 2634 mt. dry fish value of taka 29.67 core (DoF, 2015). The process of drying fish mainly performed by the households in the fishing communities. In Bangladesh, sun drying is the most widely used method of fish preservation. This method is also considered as the least expensive method of preservation. Drying involves removal of water content from the fish body. This is usually done in the open air using solar energy to evaporate the water content of the fish and natural air carried away the evaporated water from the fish body. Dried fish mainly come from two sources and these are marine dried fish and freshwater dried fish.A wide source of freshwater dried fish is Chalanbeel spreading over the districts of Naogaon, Natore, Pabna, Sirajgonj and Bogra. The beel fisheries alone contribute 5.85% of the total annual catch. The total production of fish from this beel area was 88911 mt.(DoF, 2015).Chalanbeel is the largest beel of the country and comprises a series of depressions interconnected by various channels to form more or less one continuous sheet of water in the rainy season. The beel extends over four adjacent districts, Rajshahi, Pabna, Sirajganj and Natore. The major parts of it cover an extensive area of Raiganjupazila of Sirajganj district and Chatmoharupazila of Pabna district. It lies between Singraupazila (natore district) and the north bank of Gumaniriver. During the dry season, the greater part of the beel dries up, leaving a water basin of about 25.9 to 31.08 sq km, which may be called its 'core'. It remains a collection of shallow sheets of water connected with each other by very tortuous channels.

Women are important productive workers in the economy making up about one-third of the labour force. More than 14 lacs women along with 1.78 Crore people involved in fisheries sector and earn their livelihood which is more than 11% of total number of population. In fisheries sector only 10% are women which is 1% of total number of population. Several studies show that more than 80% of women workers are involved in fish processing plant (DoF, 2015). Traditionally, the work of women is mostly confined to the homestead due to cultural, religious and social restrictions. Female members depend upon the earning of men. Therefore, almost all economic decision is ordinarily taken by men. In rural areas role of women has always been supplementary although they contribute substantially to the family. women play an important role in the fisheries sector in terms of their involvement in fishery related activities viz., fish drying, sorting, grading, fish packing etc. Their role encompasses social and economic responsibilities, both within and outside the family. The most important role of women in fisheries sector is at the processing and marketing stages. In some countries, women have become important entrepreneurs in fish processing. In fact, most fish processing is performed by women, either in their own cottage-level industries or as wage labourers in the large-scale processing industry. Women involvement is increased in processing sector because the manual dexterity required in processing of fish like sorting, grading, peeling, gutting, slicing etc. Persistent poverty and deteriorating economic conditions have forced many women from poor rural households to work outside their homes who ventured into varied economic activities while at the same time continuing to perform their traditional household duties. Thus this research focuses on drying and processing techniques and highlighting women's contribution in processing dry fish at chalanbeel area.

2. Materials and Methods

Appropriate methodology makes a research scientific and fruitful. The method of data collection depends upon the nature, aims and objectives of the study under taken. For this reason survey method is used to collect data.

2.1. Selection of the study area

Beel is an important water resource of Bangladesh. Based on the traditional fish drying activities and availability of fishes Singra under Natore district, Bhangura and Chatmohar Upazila under Pabna District were considered for this study. These study areas cover a large water bodies named chalanbeel is an important water resources in the North West region of Bangladesh and it is the biggest beel of the country. It produces a huge amount of different types of freshwater fishes. The study was conducted for a period of 6 months, September, 2014 to February, 2015. Frequent field visits and interviews of the dry fish producers and workers were made to collect necessary data on fish drying.

2.2. Selection of the target group

To examine the objectives of the study, dry fish producer and both female and male workers involved in fish drying activities in the study area were selected as target group. A total of 13 dried fish producer, 18 male

workers and 27 female workers were selected for questionnaire interviews in the study areas. The questionnaire interviews taken through simple random sampling methods.

2.3. Data collection method

A survey method was done over the study areas for exact information to fulfilment the research work. A survey was conducted on the source of raw materials, price and processing of dried fish, women participation in drying activities etc. using questionnaires interviews among the cross section of people including fish drying professionals. Data collection method can be divided into 5 steps; these are (i) questionnaire interviews (ii) Focus group discussion,(iii) cross check interviews with key informants,(iv) eye observation and (v) photography.

3. Results

3.1. Fish drying yard

In every drying yard sun drying was carried out in the open air using the energy of the sun to evaporate the water and air current to carry away the vapour. In study areas it was observed that most of the drying yard was low land area and has a well-marked territory called "Khola". The land was rented by leasing system. Sun drying was generally carried out on rack made of bamboo splits and poles, sometimes fishing net directly on earth used for sun drying. Average length of rack was 20ft and average width was 3.83ft.

3.2. Utensil used for fish drying

For carrying both raw and final products, cleaning, dressing, sorting, salting, storing of final products various utensils were used in these drying points such as aluminium pot, bamboo basket covered with polythene, cemented pot, aluminium bucket, large bamboo basket called “chari”, polythene sheet, bag either jute made or nylon made, bamboo made mat called "chatai" etc. For spreading on rack bamboo made structure called "hanta" was used at drying areas.

3.3. People involved

To operate the fish drying activities two categories of man power were engaged in fish drying- first was producers who can operate total activities, invest money, collect raw materials and lastly sale the product and second was the labour of both sex. It was found that usually in study areas 3-5 labours needed to conduct drying operation. But in the peak season 10-25 labours were engaged. Though the wages are different at each point, the people who involved in fish drying activities as a labour get wages along with meal. The labour charge paid daily or monthly.

3.4. Season and time of fish drying

The season of fish drying was year round but mainly September to February. Winter was the peak season (October-December) for drying fish as sufficient sunlight was available throughout the day. It was found that almost all dry fish producer of the study area spend around 9-10 hrs. in fish drying if sufficient fishes are available.

3.5. Species used in sun drying

Varieties of fishes were being used for sun drying in the study areas. For commercial sun drying, species selection depends on both availability of raw fish and market demand of dried fish. There were many number of fish used for traditional sun drying are show in Table 1.

Table 1. Species used for sun drying in study area.

Sl. No.	Fish Name (Local)	Scientific Name
01	Punti	*Puntius* sp.
02	Chanda	*Chanda* sp.
03	Colisa	*Colisa* sp.
04	Moa, Mola	*Amblypharyngodon mola*
05	Guchi	*Mastacembelus pancalus*
06	Darkina	*Esomus danricus*
07	Chapila, Khoira	*Gudusia chapra*
08	Taki, Saitan	*Channa punctata*
09	Kakila	*Xenentodon cancila*
10	Tengra	*Mystus vittatus*
11	Tara baim	*Macrognathus aculeatus*
12	Bele, Baila	*Glossogobius giuris*
13	Boal	*Wallago attu*
14	Batashi	*Pseudeutropius antherinoides*
15	Icha, Chingri	*Macrobrachium sp.*
16	Silver carp	*Hypophthalmicthys molitrix*

3.6. Method of traditional sun drying

The traditional fish drying process was completed in some steps. The following steps normally followed in commercial fish drying.

3.6.1. Collection of raw fish

Most of the dry fish producers collect raw fishes from local fish market and directly from the fishermen of Chalanbeel. Raw fishes were collected from local fish market by open auction. Fishes were transported from landing centres and markets to fish drying points was done by mostly mechanized and non-mechanized van, rickshaw, votvoti, cycle or by head load or shoulder load of the labours.

3.6.2. Dressing and washing

At every study area, only large fishes such as boal, soal, tilapia were dressed such as scaling, splitting, gutting and then washed with water otherwise both small and large fishes are washed with beel water as there was no good water supply sources in drying areas. Few dry fish farmer used pond water for this purpose. They use bamboo basket keeping the fish during washing.

3.6.3. Salting

Salt protect the dry fish form spoilage and ensure long time preservation. Atstudy area salting was done in the bamboo basket (chari) and on the polythene sheets. The average rate of mixing salt in the study areas was found as 66.75gm/ kg fish.

3.6.4. Drying under the sun

All the fishes were dried under the sun on bamboo made rack high from the earth. These racks are called "coir" in local language. A bamboo splits made mat or nylon net is used on the rack over which raw fishes were spread for drying. In some places fishes were spread on fishing seine nets directly on earth. It is also observed that in some places net was used for covering the fish to protect them from dust and insects.

3.6.5. Drying duration

Drying duration extremely varied with weather conditions like available sunlight, temperature, relative humidity, wind flow, raining status etc. In the surveyed areas, at normal weather condition (enough sun light, temperature, humidity and no rain) drying duration recorded at each area to be varied from 2-10 days, depending on the size of the raw fishes.

3.6.6. Sorting

Sorting of fish according to size was good before drying but in surveyed areas sorting was done after drying the fish according to species and size. Sorting was done in the drying yard. Both male and female but widely female

workers were involved in sorting of fish. Dry fish producers also hire female workers for sorting of fish in Sayedpur.

3.6.7. Packaging

After sorting, the dried fishes were bagged into a plastic and Jute bag for easy handling. Sometimes bamboo baskets were also used for packaging. The size of bag varied with the quantity of the products to be stored. It is surveyed that each study point one jute bag carried 160-200 kg dried fish.

3.6.8. Storage of dried fish

Storage of dried fish were found to be performed in a tent made of thin plastic sheet and bamboo splits or made of straw is usually found in the drying yards. Packed dried fishes were kept into these tents for temporary storage until marketing or selling to the local vendors.

3.6.9. Transportation of dried fish

Almost all the dried fishes of surveyed areas were transported to the whole sale market of Sayedpur and Sirajgong. They were transported from the drying yard to the whole sale markets by trucks, train etc. from study areas.

3.6.10. Selling of the dried fish

The dried fish producers usually sell their products weekly from their storage. They sell their products through aratdars who store the products in godown and charged for the storage. The method of selling was open auction and nigotiation. The highest price per kg of dried fish was found as 700-800 Tk. (Shoal, Boal and Batashi) and the lowest was found as 90-150Tk. (Punti).

3.6.11. Production of dried fish

There were no available data on the total production of dry fish in the study area. The interviewer of the study areas informed that the average annual production was ranged from13.40-14.64 m.ton. dried fish each year in the study areas. The average of net profit of dry fish producers were estimated at 25027.78Tk. /season. The average of net profit of dry fish producers in peak season was 40600Tk./season. The average of net profit in off season was estimated at 9455.56 Tk./season.

3.7. Livelihood pattern of fishermen

The age distribution,marital status,family type and size have an important influence on labour.The knowladge of these social criteria about women respondent involved in drying activities is necessary for estimating potential productive human resources.Literacy level can play a vital role in efficient operation of fish drying activities because educated persons can have better access to the relevant technical information as well as made national economic decisions. Earning and education are linked with one's social status and earning potential.

It was evident from Table 2 that the highest 51.85%was found in 25-40 years age groups, it shows that this was the age when one can exert her skill, talent and seems to be motivated to face any challenges and the lowest 7.41% was found in 50-70 years age group and also 40.74%was found in 10-25 years age group which were (children) involved in drying activities instead of spending time in school. In the study areas most of the women were married. In the study areas 55.56% women were married, 40.74% were unmarried and 3.70% were widow. The family provides economic support for its members. The highest percentage of family type (59.26%) was found as nuclear and the joint family was 40.74%.The educational status of women in drying point was 40.74% illiterate, 37.04% had education up to primary level 11.11% capable of sign only and 11.11% reach up to secondary level.

Table 2. Age group, family and educational condition of fishermen.

Item	Variable	Frequency	Percentage (%)
Age group	10-25	11	40.74
	25-40	14	51.85
	40-55	0	0
	55-70	2	7.41
Marital status	Unmarried	11	40.74
	Married	15	55.56
	Widow	1	3.70
Family size	2-4	8	29.63
	5-6	7	25.93
	7-8	6	22.22
	9-12	6	22.22
Family type	Nuclear	16	59.26
	Joint	11	40.74
Educational status	Illiterate	11	40.74
	Sign only	3	11.11
	Primary	10	37.04
	Secondary	3	11.11

Table 3. Livelihood pattern of fishermen.

Item	Variable	Frequency	Percentage (%)
Housing condition	Kacha	16	59.26
	Semi-Pucca	6	22.22
	Pucca	5	18.52
Source of drinking Water	Own tubewell	9	33.33
	Others tubewell	16	59.26
	Ring (Kua)	2	7.41
Electricity facility	Present	19	70.37
	Absent	8	29.63
Latrine	Kacha	8	29.63
	Semi-pucca	16	59.26
	Pucca	3	11.11
Religious status	Muslim	27	100

In Table 3, it shows that most of the respondents live in kacha house.59.26% of housing condition werekacha, 22.22% were semi-pucca and 18.52% were pucca.33.33% people used own-tube well and 59.26%people used others-tubewell for drinking water and household purposes while 7.41% used kua. From the study, it was found that 70.37%respondents had electricity connection and 29.63% had no electricity connection. In study areas, 59.26% respondents use defected semipucca, 29.63%respondents usekacha and 11.11%respondents use pucca sanitary latrine. The sanitation condition was not satisfactory in those study areas. Religion plays an important role in the social life of people of the study areas. In both study area, 100% of interviewed respondents were Muslim with no other religious persons.

3.8. Women participation in fish drying

Women play a significant role in the dry fish process. In this connection the researcher was interested to know about all possible activities done by the women workers in producing dry fish. It has been reported that huge numbers of women workers are engaged in different types of activities in producing dry fish that given bellow-

3.8.1. Sorting and grading

Sorting was the mentionable activities done by the women workers in the study areas. It has been observed that dried fishes are graded on the bases of species, size freshness and dressing facilities. Big sized, dressed fresh dried fishes have high market price. Sorting and grading were mainly done by women.

3.8.2. Dressing

Women workers mainly did this activity in the study areas. They cut the fishes, remove scale, fin, and viscera, split them and wash them with water. Mainly big sized fishes are dressed in the study area.

3.8.3. Cleaning
Fishes were bought from market for drying then lots of dirt, clay and things are mixed with the fishes which were cleaned by the women workers and female family members of the dried fish producers. They clean the fishes before sorting and drying under the sun.

3.8.4. Salting
Salting was an indispensable function of fish drying. Once the Fishes were cleaned, sorted and graded then they are mixed with salt before drying. The women workers conduct this function in a short range.

3.8.5. Drying
Drying was the key activity in the dry fish industry which is usually done either by the female workers or by the wives and children of the dried fish producers. It has been stated by the sample respondents that they dry fishes on the roof or in the yard of their house for their own consumption. But for business purpose they help male worker for drying fish on the rack.

3.8.6. Transportation
Women workers carry raw fish from cleaning place to drying rack and carried dried fish from rack to store house.

3.8.7. Storing
Women workers also help men in storing the product.

3.8.8. Packaging
It was the tusk of wrapping and folding materials to protect the goods from the surrounding. It has been observed that women workers help meal workers in packaging. They collect the dried product from during rack, fill the sack with dried fish and help men to stitch the sack.

3.9. Secondary income generating activity (IGA) of women
Since drying sector did not provide them adequate support for their livelihood, they were engaged in IGA for getting partial support such as weaving, dairy, yard farming, bamboo work, day labour, maid, house wife etc (Tables 4, 5, 6 and Figure 1).

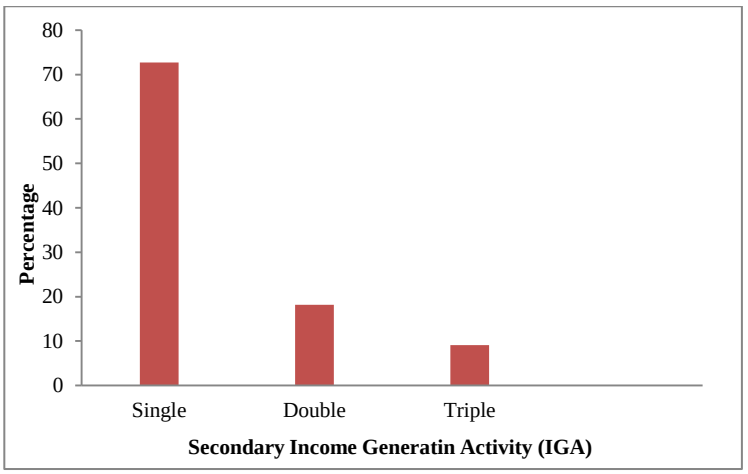

Figure 1. Secondary Income Generating Activity (IGA).

Table 4. Secondary income generating activity (IGA) of women involved in drying.

Drying point	No. of workers	Secondary income generating activity (IGA)						
		W	D	Y	B	DL	M	HW
Bhangura	1	✓	-	-	-	-	-	-
	2	-	✓	-	-	-	-	-
	3	✓	✓	-	-	-	-	-
	4	-	-	-	-	✓	✓	-
	5	✓	✓	-	-	-	-	-
	6	-	-	-	-	✓	✓	-
	7	✓	-	-	-	✓	✓	-
	8	✓	✓	-	-	✓	-	-
	9	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	✓
	11	-	-	-	-	-	-	✓
Singra	12	-	✓	✓	-	-	-	-
	13	-	✓	-	✓	-	-	-
	14	-	-	✓	-	-	-	-
	15	-	-	✓	-	-	-	-
	15	-	✓	✓	✓	-	-	-
	17	-	-	-	✓	-	-	-
	18	-	-	-	-	-	✓	-
	19	-	-	-	-	-	-	✓
	20	-	-	-	-	-	-	✓
	10	-	-	-	-	-	-	✓
	21	-	-	-	-	-	-	✓

Note : W= Weaving**, D=** Dairy**, Y=** Yard farming**, B=** Bamboo work**, DL=** Day labour**, M=** Maid**, HW=** House wife**.**

Table 5. Number of IGA performed by women workers.

Number of IGA	Frequency	Percentage (%)
Single	13	59.095
Double	6	27.28
Triple	3	13.64
Total	21	100

Table 6. Women perform activities in fish drying in study area.

Activities	Frequency	Percentage (%)
Shorting and grading	22	81.32
Dressing	8	57.14
Cleaning	11	78.57
Salting	4	28.57
Drying	10	71.43
Transportation	11	40.11
Storing	9	64.29
Packaging	9	29.12

3.10. Working hours and wage structure

Wage is the monetary value of labour. In both study areas, wage is calculated based on per day working hours. The amount of wage is very poor and frustrating as well. Working hours and wage rates of the respondents ware 10 hours and 100 taka respectively.

4. Discussion

In the present study it was observed that the fishes were mainly dried o the bank of beel areas and beside the road in the study areas. In this open place sufficient sun light and wind were available which was suitable for drying. It was observed that most of the fish drying points have a well-marked territory, fenced by bamboo with elevated bamboo racks, poles and bars where the fish was dried. The bamboo marked territory was called

"khola". Fish drying generally starts in September and end in February. Peak season of fish drying was observed September-November in the study area. Fish drying was done in few steps such as washing sorting, dressing, salting, drying under the sunlight, packaging etc. Most of the dry fish producers found to use salt before drying in all the study areas. The result of this investigation revealed that salting gives extra weight and desired flavour as observed. The rate of mixing salt was found as 1kg salt for 10kg of fishes. The entire dry fish producers used non-brand commercial salt to minimize their cost. The hygiene and sanitation condition of the fish drying spots were very poor. Therewas no system to protect dried fish from flies as the semi-dried fishes were prone to the attack blowfly larvae though in some places net was used for covering the fish to protect them from dust and insects. The investigation found that after completing the drying, all the dried fish were packed at jute sacks, plastic sacks and bamboo baskets and polythene sheets were used for storage. Usually 5-9 male labours and 2-4 female labours are needed. The labors require mainly for drying operation. In the peak period of drying it was found that 20-25 labours were engaged for full time. The labour charge was daily or monthly paid as Tk. 150-225/day along with meal for male and daily paid as Tk. 70-100/day without meal for female. For fish drying, use only the sunlight as the heating source. No oven or heating instruments were used at all in the studied fish drying points. The dressed fish were just placed over bamboo platforms or net on earth under the sun. For dressing purpose some sharp knives (locally called boti), plastic and bamboo baskets were used for washing. Most of the fish for drying purposes were collected from the local fish landing canter while small amount from the middlemen or broker. Fish were transported to drying places with or without ice. Transportation of raw fish from fish larding centres to fish drying points was mainly done by non-mechanized van, rickshaw, and bicycle or by head load or shoulder load of the labours. Price of raw fishes varied according to their species, size, supply of fishes etc. Price of the raw fishes differed depending on the fishing season of different species. Sometimes during peak season, some species of fishes are highly abundant, the fishers face problem to sale and they handover the fish at a lower price. Damage can be heavy where salt is not used and when drying condition is poor. During winter when heavy fog covers the sun for long time damage the fish. The price of dried fish was comparatively higher than the salted dried fish. The highest price per kg of dried fish was found as 700-800 Tk. (Shoal, Boal and Batashi) and the lowest was found as90-150Tk. (Punti).

Since women are often culturally forbidden from fishing, they usually have a central role in the processing and marketing of fish and derive substantial status and income for their households from these activities. The importance of women in small scale fish processing needs to be recognized. For this reason, the researcher is interested to know there condition on social and economic aspects. As a result, this study focuses on their socio-economic status to recognize their contribution to their families during the study period. In drying points of ChalanBeel area the socio-economic condition of women involved in drying activities are mostly of poor class, having not proper education, living in kacha house and landless. There is often a gender division of labour associated with small-scale drying operation. Women are usually confined on part of the drying activities such as sorting, gutting, scaling, cleaning etc. where this work will not conflict with other household duties. The present study revealed some demographic socio-economic and other related aspects of the women involved in fish drying in light of the direct and cognised solutions of the overall socio-economic problems as found in the study area and in Bangladesh as a whole.

From the questionnaire interview, It was evident that the highest 51.85%was found in 25-40 years age groups, it shows that this was the age when one can exert her skill, talent and seems to be motivated to face any challenges and the lowest 7.41% was found in 50-70 years age group and also 40.74%was found in 10-25 years age group which were (children) involved in drying activities instead of spending time in school. In the study areas most of the women were married. In the study areas 55.56% women were married, 40.74% were unmarried and 3.70% were widow. The family provides economic support for its members. The highest percentage of family type (59.26%) was found as nuclear and the joint family was 40.74% and 50%.The educational status of women in drying point was 40.74% illiterate, 37.04% had education up to primary level 11.11% capable of sign only and 11.11% reach up to secondary level.

It also shows that most of the respondents live in kacha house.59.26% of housing condition were kacha, 22.22% were semi-pucca and 18.52% were pucca.33.33% people used own-tube well and 59.26%people used others-tube well for drinking water and household purposes while 7.41% used kua. From the study, it was found that 70.37%respondents had electricity connection and 29.63% had no electricity connection. In study areas, 59.26% respondents use defected semipucca,29.63%respondents use kacha and 11.11%respondents use pucca sanitary latrine. The sanitation condition was not satisfactory in those study areas. Religion plays an important role in the social life of people of the study areas. In both study area, 100% of interviewed respondents were Muslim with no other religious persons. In both study areas, women are involved in secondary income generating activities besides drying activities. In drying occupation wages of women workers are very

unsatisfactory and they are victim of gender discrimination though most of them perform almost all type of drying activities.

5. Conclusions

Traditional fish drying activities creates employment opportunities and supplying animal protein to the people and playing a vital role in the development of dry fish producer's and worker's (men and women) socio-economic condition. Women are important productive workers in the economy making up about one-third of the labour force. It is observed that at most of the drying yard sun drying is carried out in an unhygienic condition. If modified drying processes are followed with maintaining the proper hygiene and sanitation, the produced dried fishes will get higher price. The quality and safety of dried fish product is highly desirable to the health conscious people On the other hand women workers faced various problems in there working sector such as lack of social security, sanitation, education, early marriage, lack of suitable working environment and gender discrimination etc. To overcome these problems Awareness should be developed, Sanitation and public health rules should be practiced, suitable working environment should be provided for women and most importantly gender discrimination should be prohibited.

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Conflict of interest

None to declare.

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