



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Landing centers and availability of fish species in fish markets of Mymensingh town

K. J. Chandra, S. S. Basak and M. Hasan

Department of Aquaculture, Bangladesh Agricultural University, Mymensingh-2202, Bangladesh
Email: kirtunijachandra@yahoo.com

Abstract

An investigation was carried out on fish landing centers, fish markets and fish fauna of the Mymensingh town to overview the location of the fish landing/entering centers, the source of supply and availability of fisheries organisms in Mymensingh town. The investigation was conducted from October 2009 to September 2010 in sixteen landing centers and markets of Mymensingh town. Among a total of 122 species of fishes were available of which, 113 were finfish and 9 were shellfish. Out of 113 finfish, 85 were freshwater fish species, 14 were exotic species, 14 were marine species, 7 were prawn /shrimps and 2 were mud crab and tortoise. Different types of freshwater fish, marine fish, crustacean and dry fish were found in Mymensingh town. The most abundant freshwater fish species were *Catla catla*, *Labeo rohita*, *Clarias batrachus*, *Cirrhinus cirrhosus*, *Channa punctatus*. Among the marine fishes *Lates calcarifer*, *Euthynnus affinis* and *Mugil cephalus* were recorded. The shellfishes, *Macrobrachium rosenbergii* and *Penaeus monodon* were most abundant. Significant amount of carps were imported from inside and outside of the districts. Besides the carps, small quantities of other fish, e.g. hilsha, catfish, tilapia, small indigenous fish, prawn and shrimp and other fish including marine can be seen in the fish landing centers and fish markets in Mymensingh town. Trains, buses, trucks and pickups were used as transport of fish to the landing centers from outside of Mymensingh town. Virtually most of the fish (84.6 %) were brought from different areas of the district and adjacent district like Netrokona, Jamalpur, Gazipur and Kishoreganj. The rest (15.4 %) were brought from external source in Mechhua bazar, Natun bazar, Sankipara bazar, Charpara bazar and Kathgola bazar. Main source of the fishes were different ponds, haors, beels and rivers of Mymensingh and adjacent districts.

Keywords: Landing centers, Fish markets, Fish species, Mymensingh town

Introduction

Mymensingh is the biggest town of greater Mymensingh. A number of fish markets and fish landing centers are situated around the town. Fishes from different localities are regularly coming to the town through different transport systems for consumption of the town dwellers and other people. Some marine fishes and prawns are also regularly landing in this town. Information on these aspects of Mymensingh town is scarce. Therefore, it is essential to know the landing or entering of fish and availability of species in Mymensingh town.

The inland aquatic habitats of Bangladesh are rich in faunal diversity containing at least 265 species of finfish, 63 species of prawn, and several species of turtles, tortoises, freshwater mussels and other living aquatic organisms (Rahman, 2005). Bangladesh is also rich in marine fishes having 475 marine finfish species (DoF, 2001). As Mymensingh town is the biggest market of fishes for the consumers, almost all varieties of fishes, both inland (fresh and brackish) and marine water fish species are available in the fish landing centers of Mymensingh town coming from different areas of the country.

Fish landing center is the place where different types of fresh and fisheries commodities are accumulated from different sources of water bodies, such as river, beel, pond, gher, estuaries and sea, and these fishes are transferred from here to local markets via different intermediaries and channels (Ali *et al.*, 2004). Fish landing center plays a vital role in quick and smooth disposal of fresh fish and in this regard the fish landing centers of Mymensingh town may be the point of observation to survey the availability of fish species.

Mymensingh region is recognized as the fisheries zone of our country. Many varieties of fish species are available in the fish landing centers of Mymensingh town. Both inland and marine fish species are found in the landing centers of Mymensingh town. But up to now no work has been done on this aspect of this town. The present work was therefore undertaken to know the availability of species in fish landing centers and markets which give a rough knowledge about fish fauna available in this region. It also helps to show the real picture of species abundance of an area and to take the necessary measures if required.

Materials and Methods

Selection of the study area

There are many markets in and around Mymensingh town among which 16 fish markets and five important fish landing centers were selected for this study. The study area includes Mymensingh town among them; Mechhua bazar, Natun bazar, Sankipara bazar, Charpara bazar, Kathgula bazar, Railway market, Bow bazar, Gudara-ghat, Kashor, Poursova market, Keshtapur, Kachijhuli fish market and K.R. market, Shesmor, Sutiakhali and Keyotkhali fish market of BAU area.

Landing centers studied

Almost all of the fish landing centers in the study area were surveyed. Although some fish are landed in all the markets still five landing centers are identified in main town such as Mechhua bazar fish landing center, Sankipara bazar, Natun Bazar, Charpara bazar and Kathgula bazar in Mymensingh.

Selection of samples

Total sample size of the study was 120 of which 80 were fish traders, 15 Aratdar and 25 were fish farmer. The traders dealing with fish trading were categorized into three groups, namely Bepari, Aratdar and Retailer.

Preparation of interview schedules

Three different types of interview schedules had been carefully prepared (one for Retailer and two for Aratdar and Bepari).

Period of data collection

For the study the data were collected during the months of October 2009 to September 2010.

Visit of landing center and market and collection of data

Several visits were made in each of the landing centers and fish markets of Mymensingh town. As the supply of the fishes varied with seasons collection of data were made in different seasons *i.e.* throughout the year by repeated visits in the landing centers and markets.

Target group

Fish traders (retailers): For questionnaire survey 80 fish traders were selected from these markets. Interviews were conducted at times convenient to the traders (retailer) at the market.

Fish traders (Aratdar): Aratdars were the biggest fish traders in the marketing channel but were limited in number.

Questionnaire survey and focus group discussion (FGD): For questionnaire interviews, simple random sampling method was followed for 2 aratders and 3 retailers in each study sites per survey.

Results and Discussion

Fish landing center plays a vital role in quick and smooth disposal of fresh fish and in this regard the fish landing centers of Mymensingh town may be the point of observation to survey the status of fish, source of fish and dry fish availability. There are 19 fish markets in Mymensingh town. Among them 16 fish markets and five important fish landing center were visited. A good number of freshwater (99) fish species, marine (14) fish species were available to Mymensingh town from different places of the country. However, freshwater fishes were mainly coming from different types of water bodies (river, haor, beel, pond etc.) of greater Mymensingh, marine fishes were coming from Chittagong and Cox's Bazar. List of freshwater, marine and dried fishes with their sources of supply are presented in Table 1, 2, 3.

Table 1. List of freshwater fish and sources of supply observed in the fish landing centers of Mymensingh town during October 2009 to September 2010

Fish Landing centers and fish markets	Freshwater fish	Sources of freshwater fish in markets
Mechhua bazar fish landing center	Baim, Guchi Baim, Muni, Khalisha/Khailsha, Koi,	Sadar Upazila, Trisal, Sutiakhali, Bhaluka, Muktagachha (Satatorasi bazar), Phulpur, Fulbaria, Churkhai, Netrokona, Gouripur, Mohanganj, Purbadhala, Khaliajuri,
Natun bazar fish landing center	Ek Thota, Bheda/Meni, Chanda, Shol, Gajar/	Durgapur, Kendua, Kolmakanda, Barhatta, Atpara, Kishoreganj, Bhairab (Kuliarchar),
Sankipara bazar fish landing center	Gajal, Taki / Lata, Telo taki / Cheng, Ragha, Kaikka, Shing, Magur, Pangas, Thai pangas, Gharua, Poa, Kajuli, Bacha, Ghaura, Tengra, Golsha tengra, Bujuri-tengra, Ayre, Rita, Gutum, Gutum Puiya, Rani, Rui, Catla, Mrigal, Bhargon bata, Sarpunti, Chola punti, Chalapunti, Tit punti, Jat punti, Mola punti, Bashpata, Mola, Dhela, Khoira, Dankina, Fulchela, Chela,	Tarail, Khulna, Satkhira, Dhaka, Jatrabari, Gajipur, Jamalpur, Jhinedah, Chittagong, Jessore, Bogra and also from India and Myanmar.
Charpara fish landing center		River Old Brahmaputra, Jhunai, Aiman, Gharata Nadi, Sutia, Narasunda, Bothi, Nitai, Haf Mora, Kongsho, Jaira River, Khaira river, Silai, Kharmeni. Rangshagang, Gangina, Dhala, Mogra, Teorkhali, Jumuna, Khiru, Nageshwari, Banar, Bajua. Piyain, Shomeshwari, Kachamathia, Pankura, Mahadeva, Dhanu, Baulai, Shirkhali, Chellakhali, Bhugi.
Railway fish market		Beel Forfora Beel, Koray Beel, Rajdhola Beel, Sagar Dighi Beel, Chechra Beel, Sanni Beel, Dubachechua Beel, Charia Beel, Kailine Beel, Sinnibeel, Dolai Beel, Chora Beel, Borbila Beel.
Kashar fish market		Haor Kolimar, Habibpur Haor, Maker Haor, Makalkandi Haor, Etna Haor, Kawadighi Haor, Khaliaghuri Haor, Sonir Haor, Oail Haor, Alir Haor, Kanglar Haor, Balai Haor, Banka Haor, Maker Haor, Ghulduba Haor, Matia Haor, Dubriar Haor, Chayer Haor.
Keyotkhali fish market		
Seshmor fish Market		
Bow bazar		
Pourasova market		
Kachijhuli market		
K.R. market		

Table 2. List of marine water fish and sources of supply observed in the fish landing centers of Mymensingh town during October 2009 to September 2010

Fish landing centers and fish markets	Marine fish	Sources of marine fish
Mechhua bazar fish landing center	Loitta, Phasa,	Cox's Bazar, Chittagong,
Natun bazar fish landing center	Chhuri, Bhetki, Lakhua, Lal poa,	Khulna,
Sankipara bazar fish landing center	Foli chanda,	Potuakhali,
Charpara bazar fish landing center	Tuna, Poa,	Moheskhali,
Railway fish market	Chandana ilisha,	Satkhira,
Keyotkhali fish market	Rup chanda	Dhaka
K.R. market		

Table 3. List of freshwater and marine dry fish and their sources of supply observed in the fish landing centers of Mymensingh town during October 2009 to September 2010

Fish landing centers and fish markets	Freshwater dry fish	Marine water dry fish	Sources of dry fish
Mechhua bazar fish landing center	Lata, Cheng, Ragha,	Chhri, Poa,	Mymensingh Mechwua
Natun bazar fish landing center	Kaikka, Shing,	Rup chanda,	bazar, Kalibari,
Sankipara bazar fish landing center	Magur, Pangas, Thai	Cheowa,	Kashiganj, Daponia,
Charpara bazar fish landing center	pangas, Gharua,	Tak chanda, Olua,	Charvabanipur,
Railway fish market	Kajuli, Sarputi,	Megha olua, Phasa,	Tarakanda,
Kashor fish market	Jatputi, Titputi,	Bhetki,	Shambhuganj bazaar,
Keyotkhali fish market	Goina, Dhela,	Kamila, Bhangon,	Muktagachha, Jamalpur,
Poursova fish market	Kalibaus, Foli,	Loitta, Tuna	Faridpur,
Gudaraghat fish market	Bheda, Shol,		Syedpur,
Sutiakhali bazar	Chanda, Ranga		Cox,s Bazar, Potuakhali,
K.R. market fish market	chanda, Chapila,		Khulna,
Kathgula bazar	Gura tengra, Chela,		Satkhira, Chittagong.
	Bashpata, Bacha, ,		
	Gharua, Pabda,		
	Boal, Madhupabda,		
	Boalipabda, Tengra,		
	Golsha tengra,		
	Bujuri tenra, Ayer,		
	Rita, Gutum, Puiya,		
	Rani, Rui, Catla,		
	Mola, Sarpunti,		
	Jatputi, Titpunti		

A total of 122 species of fishes were found in the fish landing centers of Mymensingh of which 113 were fin fishes and 9 were shellfishes. Among fin fishes, 85 were freshwater fish species, 14 exotic species, 14 marine fish species and 7 were prawn and shrimp species, one crab and one pond tortoise species.

Out of 122 species of fin fishes, 50 species were abundant in winter, 31 species were abundant in summer and the rest were available throughout the year. The fin fish (122) fish species belonged to 43 families were available in the study sites. All the exotic species were freshwater fish species and they were found all the year round as they were being cultured by commercial fish farmers.

There were 9 shellfishes in the landing centers of Mymensingh town market. Shellfishes were found in most of the landing centers and fish market in Mymensingh town. Different types of freshwater fish species, marine fish, crustaceans and exotic fish species and their scientific names, family, common names and local names were presented in Table 4,5,6,7.

Table 4. List of freshwater fish species available in different fish landing centers of Mymensingh town during October 2009 to September 2010

Family	Local Name	Common Name	Scientific Name	Seasonal abundance
1. Mastacembelidae	Tara baim	One stripe spiny eel/Lesser spiny eel	<i>Macrognathus aculeatus</i>	WN
	Guchi Baim	Striped spiny eel/ Barred spiny eel	<i>Macrognathus pancalus</i>	WN
	Baim, Sal baim	Tire-track spiny eel	<i>Mastacembelus armatus</i>	WN
2. Polynemidae	Muni/ Rishi	Paradise threadfin	<i>Polynemus paradisesus</i>	WN
3. Osphronemidae	Khalisha/Khailsha	Giant gourami	<i>Colisa fasciatus</i>	
	Lal Khalisha	Red gourami	<i>Colisa lalia</i>	
4. Anabantidae	Koi	Climbing perch	<i>Anabas testudineus</i>	TY
5. Hemirhamphidae	Ek Thuita Ek Thota	Wrestling halfbeak	<i>Dermogenys pusillus</i>	WN
6. Gobiidae	Bele	Tank goby	<i>Glossogobius giuris</i>	WN
	Dahuk	Walking goby	<i>Scartelaos histophorus</i>	SM
7. Nandidae	Bheda	Mud perch	<i>Nandus nandus</i>	SM
8. Sciaenidae	Poa	Pama	<i>Otolithoides pama</i>	SM
9. Ambassidae	Chanda	Elongate glass-perchlet	<i>Chanda nama</i>	WN
	Kata chanda	Himalayan glassy-perchlet	<i>Chanda nama</i>	SM
	Ranga chanda	Indian glassy fish	<i>Parambassis ranga</i>	WN
10. Synbranchidae	Kuicha	Kuchia	<i>Monopterusuchia</i>	TY
11. Chnidae	Shol	Striped or banded snakehead	<i>Channa striatus</i>	SM
	Gajar/ Gajal	Giant snakehead	<i>Channa marulius</i>	SM
	Taki, Lata	Spotted snakehead	<i>Channa punctatus</i>	SM
	Telo taki / Cheng	Asiatic snakehead	<i>Channa orientalis</i>	SM
	Ragha	Walking snakehead	<i>Channa gachua</i>	SM
12. Belonidae	Kaikka	Needle fish	<i>Xenentodon cancila</i>	WN
13. Heteropneustidae	Shing	Stinging catfish	<i>Heteropneustes fossilis</i>	SM
14. Clariidae	Magur	Air breathing catfish	<i>Clarias batrachus</i>	WN
15. Pangasidae	Pangas	Yellowtail catfish	<i>Pangasius pangasius</i>	TY
16. Schilbeidae	Gharua	Garu bacha	<i>Clupisoma garua</i>	WN
	Kajuli	Gangetic alilia	<i>Alilia colia</i>	WN
	Banspata	River catfish	<i>Alilia punctata</i>	WN
	Bacha	Bacha	<i>Eutropiichthys vacha</i>	WN
	Ghaura	Garua bacha	<i>Clupisoma garua</i>	WN
	Batasi	Indian potasi	<i>Pseudeutropius atherinoides</i>	WN
17. Siluridae	Pabda	Indian butter catfish/ pabo catfish	<i>Ompok pabda</i>	SM
	Boal	Freshwater shark	<i>Wallaga attu</i>	WN
	Madhupabda	Pabo catfish	<i>Ompok pabo</i>	SM
	Boali pabda	Butter catfish	<i>Ompok bimaculatus</i>	SM
18. Bagridae	Tengra	Striped dwarf catfish	<i>Mystus vittatus</i>	WN
	Golsha tengra	Gangetic mystus	<i>Mystus bleekeri</i>	WN
	Bujuri-tengra	Tengra mystus	<i>Mystus tengara</i>	WN
	Ayre	Long-whiskered catfish	<i>Sperata aor</i>	WN
	Rita	Rita	<i>Rita rita</i>	WN
19. Cobitidae	Gutum	Cross fish	<i>Lepidocephalichthys guntea</i>	SM
	Gutum, Puiya	Annandale loach	<i>Lepidocephalichthys annandalei</i>	SM
	Rani	Bengal loach	<i>Botia dario</i>	WN
20. Cyprinidae	Rui	Rohu	<i>Labeo rohita</i>	TY
	Catla	Catla	<i>Catla catla</i>	TY
	Mrigel	Mrigal	<i>Cirrhinus cirrhosus</i>	TY
	Kalibaus	Black rohu	<i>Labeo calbasu</i>	TY
	Bhangon bata	Bata labeo	<i>Labeo bata</i>	SM
	Bhangna, Bata	Reba	<i>Cirrhinus reba</i>	SM
	Sarpunti	Olive barb	<i>Puntius sarana</i>	TY
	Chola punti	Swamp barb	<i>Puntius chola</i>	SM
	Ghora chela		<i>Securicula gora</i>	SM
	Tit punti	Ticto barb	<i>Puntius ticto</i>	SM
	Jat punti	Pool barb	<i>Puntius sophore</i>	SM
	Mola punti	Glass barb	<i>Puntius guganio</i>	SM

Table 4. Contd.

Family	Local Name	Common Name	Scientific Name	Seasonal abundance
	Bashpata		<i>Devario devario</i>	WN
	Bhangon	Boga labeo	<i>Labeo boga</i>	SM
	Mola	Mola carplet	<i>Amblypharyngodon mola</i>	SM
	Mola	Indian carplet	<i>Amblypharyngodon microlepis</i>	SM
	Dhela	Cotio	<i>Rohtee cotio</i>	WN
	Khoira	Indian grass barb	<i>Chela laubuca</i>	WN
	Tatkini	Kala bata	<i>Crossocheilus latius</i>	TY
	Dankina	Rasbora	<i>Rasbora rasbora</i>	WN
	Fulchela	Finescale Razorbelly minnow	<i>Salmostoma phulo</i>	WN
	Chela	Silver razorbelly minnow	<i>Salmostoma bacaila</i>	SM
	Elong	Bengala barb	<i>Bengala elanga</i>	WN
	Chebli	Gaint danio	<i>Devario aequipinnatus</i>	WN
	Teri punti	Onespot barb	<i>Puntius terio</i>	WN
	Ghonia	Boggut labeo	<i>Labeo boggut</i>	WN
21. Notopteridae	Chital	Humped featherback	<i>Notopterus chitala</i>	WN
	Foli	Grey featherback	<i>Notopterus notopterus</i>	WN
22. Engraulidae	Phasa	Gangetic hairfin anchovy	<i>Setipinna phasa</i>	WN
	Chapila	Indian river shad	<i>Gudusia chapra</i>	WN
23. Clupeidae	Ilish	Hilshad	<i>Tenualosa ilisha</i>	SM
	Choukka	Indian pellona	<i>Pellona ditchela</i>	WN
	Chandana ilish	Toil shad	<i>Hilsa toli</i>	SM
	Kachki	Ganga river	<i>Corica saborna</i>	WN
24. Tetraodontidae	Tepa	Gangetic puffer fish	<i>Chelonodon patoca</i>	TY
25. Mugilidae	Khorsula	Corsula mullet	<i>Rhinomugil corsula</i>	WN
26. Anguillidae	Bao Baim	Giant Mottled eel	<i>Anguilla bengalensis</i>	WN
27. Tetraodontidae	Potka	Green pufferfish	<i>Tetraodon fluviatilis</i>	WN
28. Syngnathidae	Kumirer Khil	Crocodile- tooth pipefish	<i>Microphis cuncalus</i>	WN
29. Ophichthidae	Kharu	Rice-parry eel	<i>Pisodonophis cancrivorus</i>	SM
30. Sisoridae	Baghair	Devil catfish	<i>Bagarius bagarius</i>	WN

SM= summer, WN= winter, TY= throughout the year

Table 5. List of marine fish species observed in the fish landing centers of Mymensingh town during October 2009 to September 2010

Family	Local Name	English Name	Scientific Name	Seasonal abundance
1. Centropomidae	Bhetki	Bhetki	<i>Lates calcarifer</i>	TY
2. Tunnidae	Tuna	Born maittya	<i>Euthynnus affinis</i>	WN
3. Harpadontidae	Loitta/ Nehari	Bombay duck	<i>Harpadon nehereus</i>	WN
4. Sciaenidae	Poa	Pama	<i>Pama pama</i>	WN
	Vola/ Lal poa	Silver jew	<i>Johnius argentatus</i>	TY
	Sada poa	Silver jew	<i>Otolithes argentatus</i>	TY
5. Polynemidae	Lakhua	Indian threadfin	<i>Leptomelanosoma indicus</i>	WN
	Lakhua	Indian salmon	<i>Polynemus indicum</i>	WN
6. Mugilidae	Bhangon	Mullet	<i>Mugil cephalus</i>	SM
7. Trichiuridae	Chhuri	Ribbon fish	<i>Lepturacanthus savala</i>	TY
8. Scatophagidae	Chitra	Spotted butterfish	<i>Scatophagus argus</i>	TY
9. Stromatidae	Rup chanda	Chinese pomfret	<i>Pampus chinensis</i>	TY
	Foli chanda	Silver pomfret	<i>Pampus argenteus</i>	WN
10. Engraulidae	Phasa	Hairpin anchovy	<i>Setipinna taty</i>	SM

SM= summer, WN= winter, TY= throughout the year.

Table 6. List of Crustaceans and reptile observed in the fish landing centers of Mymensingh town during October 2009 and September 2010

Family	Local Name	English Name	Scientific Name	Seasonal abundance
1. Palaemonidae	Golda chingri	Fresh water prawn	<i>Macrobrachium rosenbergii</i>	TY
	Chatka chingri	Monsoon river prawn	<i>Macrobrachium malcolmsonii</i>	TY
	Golda chingri	River prawn	<i>Macrobrachium rude</i>	TY
	Gura chingri	Spider prawn	<i>Nematopalaemon tenuipes</i>	TY
2. Penaeidae	Bagda chingri	Giant tiger shrimp	<i>Penaeus monodon</i>	TY
	Chaka chingri	Indian white shrimp	<i>Penaeus indicus</i>	TY
	Horina chingri	Brown shrimp	<i>Metapenaeus monoceros</i>	TY
3. Portunidae	Shela kakra	Mud crab	<i>Scylla serrata</i>	TY
*4. Bataguridae	Pond tortoise	Kasim	<i>Melanochelys trijuga</i>	TY

* Reptile, TY= throughout the year.

Table 7. List of exotic fish species observed in the fish landing centers of Mymensingh town during October 2009 to September 2010

Family	Local Name	Common Name	Scientific Name	Seasonal abundance
1. Cyprinidae	Mirror carp	Mirror carp	<i>Cyprinus carpio var specularis</i>	TY
	Scale carp	Scale carp	<i>Cyprinus carpio var nudus</i>	TY
	Carpu	Common carp	<i>Cyprinus carpio var communis</i>	TY
	Silver carp	Silver carp	<i>Hypophthalmichthys molitrix</i>	TY
	Bighead carp	Bighead carp	<i>Aristichthys nobilis</i>	TY
	Black carp	Black carp	<i>Mylopharyngodon piceus</i>	TY
	Rajputi/ thai sarputi	Silver barb	<i>Barbonymus gonionotus</i>	TY
	Grass carp	Grass carp	<i>Ctenopharyngodon idella</i>	TY
2. Clariidae	African catfish	North African catfish	<i>Clarias gariepinus</i>	TY
3. Pangasiidae	Thai pungus	Big-catfish	<i>Pangasius hypophthalmus</i>	TY
4. Cichlidae	Tilapia	Mozambique tilapia	<i>Oreochromis mossambicus</i>	TY
	Nilotica	Nile cichlid	<i>Oreochromis niloticus</i>	TY
	GIFT	Nile tilapia	<i>Oreochromis niloticus</i>	TY
5. Characidae	Red bellied piranha	Red piranha	<i>Pygocentrus natterii</i>	TY

TY= throughout the year.

From the observation of availability of fishes in different landing centers/markets, it was found that 84.6% of the total fish were transported to Mymensingh town from Mymensingh region and other 15.4% from outside of Mymensingh region. Sen (2008) Studied the fish marketing of Madaripur town and noted that 33.66% were carps and 29.33% were SIS and 95 species of fish imported from the rural areas. The fish composition in different fish markets is presented in Table 8.

Table 8. Market shares in main fish species in different fish markets of Mymensingh town during October to September 10

Sources of fish in the markets	Fish	Mechhua bazar (%)	Natun bazar (%)	Sankipara bazar (%)	Charpara bazar (%)	Kathgola bazar (%)	Avg.
Mymensingh region (84.6%)	Indian major carps	44	43	42	41	42	42.4
	Catfishes	13	14	11	13	16	13.4
	Tilapia	5	6	6	5	7	5.8
	SIS	9	6	8	5	10	7.6
	Thai Koi	5	5	5	6	3	4.8
	Shrimp	2	5	2	2	4	3
	Others	7	5	11	9	6	7.6
Outside of Mymensingh (15.4%)	Hilsa	7	7	9	8	8	7.8
	Carps (Indian and exotic)	6	6	5	7	2	5.2
	Others (including marine fish)	2	4	1	4	1	2.4
	Total	100	100	100	100	100	100

From the study it has been observed that most of the fish (84.6 %) were brought from different areas of the districts and adjacent districts like Netrokona, Gazipur, Sherpur, Jamalpur, Kishoreganj and the rest (15.4 %) were brought from internal source in Mechhua bazar, Natun bazar, Sankipara bazar, Charpara bazar, Kathgola bazar, Railway market and then brought to Keyotkhali bazar, K.R market, Pourashova bazar, Shesmor bazar, Sutiakhali bazar and other fish markets. Main source of these fishes were different ponds, haors, beels and rivers of Mymensingh district and adjacent districts in Mymensingh. Hossain (2009) reported that 29% of fish supplied in the markets were carps, 28% SIS, 2% hilsa, 24% catfish, 4% prawn/ shrimp, 3% tilapia, 2% koi, and 8% others. About 90% of fishes have been transported from the rural areas of the district and adjacent district like Netrokona, Jamalpur and Krishoreganj the rest 10% comes from external sources in Mechhua bazar, Natun bazar, Railway market and Pourashova bazar. Whereas 100 % of the fish species are brought from different areas of the district and adjacent district in Keyotkhali bazar, K.R. market, Shesmor bazar, and Sutiakhali bazar. In this study a total of 113 fish species were found in the landing centers of Mymensingh town out of 260 freshwater fishes (Rahman, 2005). Chowdhury and Iqbal (2007) carried out an investigation on the fish species availability in the fish landing centers of Dhaka. They observed a total of 98 inland and marine water fish and crustacean species and out of 98, 87 species belonged to fin fish. Among the finfish species, 52 were freshwater species.

Among the 14 species of marine fish species 6 species were found in winter, 2 species in summer and the rest 6 species all the year round. In case of winter season, fish supply was comparatively higher than the rest of the season because the sea remains calm in winter season (Ali *et al.*, 2004).

A total of 9 shellfishes were observed in the landing centers of Mymensingh town where as 11 shellfishes were observed in the landing centers of Dhaka city (Chowdhury and Iqbal 2007). All 14 exotic fishes were freshwater and were found all the year round as they were being cultured by commercial fish farmers. Bhuiyan (1964) identified 71 species of fish from Dacca and Doha (1973) collected 106 species of freshwater fish from Tangail and Mymensingh. In view of fish biodiversity Mymensingh seems to be still rich in fish fauna because of available natural water resources in Mymensingh.

Acknowledgements

The authors gratefully acknowledge the financial support provided by BAURES, BAU, Mymensingh through a project by which the work was conducted.

References

- Ali, M.Y., Salim, G.M., Mannan, M.A., Rahman, M.M., Sabbir, W. and Mursida, A. 2004. Fish species availability observed in the fish landing centers of Khulna district in Bangladesh. *J. Biol. Sci.* 4(5): 575-580.
- Bhuiyan, A.L. 1964. *Fishes of Dacca*. Asiat. Soc. Pakistan. Dacca. Publ. No. 13: 148 pp.
- Chowdhury, M.M. and Iqbal, K.F. 2007. A survey on the availability of fish species in the landing centers of Dhaka city in Bangladesh. *Bangladesh J. Zool.* 35(2): 259-267.
- DoF. 2001. Brief on Department of Fisheries Bangladesh. Department of fisheries. Ministry of Fisheries and Livestock. Dhaka. Bangladesh. 8 pp.
- Doha, S. 1973. Fishes of the districts of Mymensingh and Tangail. *Bangladesh J. Zool.*, 1: 1-10.
- Hossain, M.F. 2009. Abundance of fish and shellfish species in some Mymensingh markets. MS thesis, Department of Aquaculture, Bangladesh Agricultural University, Mymensingh. 54 pp.
- Rahman, A.K.A. 2005. *Freshwater Fishes of Bangladesh*. 2nd ed., Zool. Soc. Bangladesh, Dhaka, Bangladesh, xviii+ 394 pp.
- Sen, A.K. 2008. Availability and marketing of fishes in Madaripur town. MS thesis, Department of Fisheries Management, Bangladesh Agricultural University, Mymensingh. 79 pp.