

REPORT OF PUM FOAB FISHERY FACTS FINDING MISSION (3-12 SEPTEMBER, 2019)

1. Introduction:

Fish Farm Owner's Association, Bangladesh (FOAB) wishes to receive technical support /cooperation from PUM-Netherlands senior experts in the field fisheries sector of Bangladesh. Mr.Molla Sumsur Rahman(Shahin), President, FOAB had initial correspondence with Prof. Dr. Abdul Gaffar Miah (Miah) PUM Representative Bangladesh and Chairman, Department of



Genetics and Animal Breeding, Hajee Md. Danesh Science and Technology University, Dinajpur. In consultation with Mr Wim Heijser, Country Coordinator Bangladesh, Prof. Dr. Abdul Gaffar Miah (Miah) invited Mr. Molla Sumsur Rahman(Shahin) to join in a Discussion Meeting on

Sustainable Fisheries/Aquaculture Development of on the 24th March, 2019, Bangladesh at the meeting Hall of Royal Dutch Embassy, Dhaka, Bangladesh.

FOAB team comprising members of Executive Council and Technical Advisers joined in that meeting, followed by a power point presentation indicating the status of the fishery resources of Bangladesh where the the field of cooperation were listed. A list of 7 field of cooperation were identified. His Excellency Mr. Harry Verweij, Mr. Wim Heijser, PUM Country Coordinator, Ms. Murielle Kli-vander Pol and other officials were present in the meeting.



Background : Bangladesh is one of the world's leading fish producing countries with a total production of 4.13 million MT. Aquaculture contributes 56.44 percent to total fishery production. According to FAO statistics 2018, Bangladesh is ranked 3rd in world aquaculture production..Almost 60 percent animal protein comes from fish. contributes 3.57 percent to our national GDP. More than 11 percent of total population are engaged with this sector. In 2016-17, the country earns BDT 42876.40 million by exporting almost 68.31

thousand MT of fish and fisheries products. This sector also has high potential for the perspective of economic development of the country.

Coastal aquaculture, both shrimp/prawn and finfish farming complying good aquaculture practices (GAP). Now-a-days eco-friendly integrated farming is also getting more emphasis. Contributing significantly to countries total fish production. During the recent past decades, hatchery and nursery developed very rapidly which helped commercializing aquaculture. But the seed quality of both finfish and shrimp/prawn is now a major threat for aquaculture expansion. Fish seed deteriorated mainly because of inbreeding and scarcity of quality brood stock, while shrimp seed quality deteriorated due to scarcity of virus-free mother shrimp.

Shrimp seed quality deteriorated due to scarcity of virus-free mother shrimp. Open water capture fishery has been shrinking as availability of fish on open waters viz. rivers, canals, haor, beel etc. declined rapidly. In many areas, fishing has become unrewarding as catch per unit effort is extremely low. But poor fishers still try to catch whatever they can and thus destroying the natural resource. The diversified fisheries resources of the country are divided into three groups, i.e., inland capture, inland culture and marine capture. Inland culture includes mainly pond/ditch, baor, shrimp/prawn farm, seasonal cultured water-body, pen and cage culture etc.covering an area of about 8.33 lakh ha and produces about 56.44 percent of the total fish production. Fish seed deteriorated mainly because of inbreeding and scarcity of quality brood stock,

Fisheries Resources and Production data (Source DoF, 2019)

Sector of Fisheries	Water area (Hactare)	Production (MT)	Remarks
Inland open water (capture)	3927142	1163606	
1.River and estuaries	853863	271639	
2. Sunderbans	177700	18086	
3. Beel	114161	98117	
4. Kaptai lake	68800	9982	
5. Flood plain	2712618	765782	
Inland close water(culture)	833752	2333352	

6. Pond	384700	1833118	
7. Seasonal water body	136273	215547	
8. Baor	5488	8002	
9. Shrimp/Prawn	272717	246406	
10. Pen culture	7564	13368	
11. Cage culture	0.1 million cu.m	2490	
Marine Fisheries	-	637476	
12. Industrial	-	108479	
13. Artisanal	-	528997	
Total Fish Production	-	4134434	

2. INITIAL PROPOSAL FOR THE DEVELOPMENT OF FISHERIES SECTOR IN BANGLADESH

PROPOSAL-1 for Black Tiger Shrimp (*Penaeus monodon*)

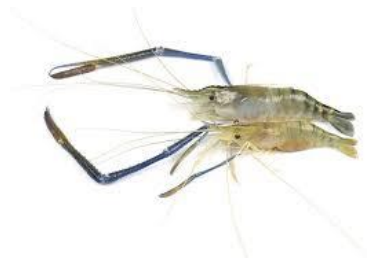


- Black Tiger Shrimp (*Penaeus monodon*) is an important commercial species,
- Widely farming in Bangladesh area 0.27 m ha
- Exported to USA, EU nations including The Netherlands
- Total production of shrimp /prawn 0.13 million MT
- Challenges- hatchery production of SPF (specific pathogen free) Post Larvae .
- Unavailability of SPF (specific pathogen free) Mother shrimp.
- Farming challenge- EMS and WSSV attack during summer.
- Such a challenge of modern hatchery using SPF mother
- Scientific farming system through the cooperation of PUM support.
- Good quality of BTS will be produced with the demand from Dutch
- Hence the support for hatchery operation

- ❑ Scientific farming and Production of quality feed for shrimp could be sought

Proposal-2 for Giant freshwater prawn (*Macrobrachium rosenbergii*)

- ❑ Giant freshwater prawn (*Macrobrachium rosenbergii*) an important commercial species and liked very much by the Dutch consumer.
- ❑ But production becomes redacted in last few years,



- ❑ PL production problem
 - ❑ The natural PL collection has been banned by law
 - ❑ Hence Galda production could be enhanced by adoption new procedure of hatchery production
- ❑ Using concentrated sea water in stead of brine solution, which was seemed to the infested with bacteria and viruses.
- ❑ Hence the support for hatchery operation,
- ❑ Scientific farming for high production
- ❑ Production of concentrated sea water and Production of quality feed for prawn by PUM initiatives

Proposal-3 for Sea bass-baramundii (*Lates calcarifer*)



- ❑ Sea bass-baramundii (*Lates calcarifer*) an important freshwater/marine fish and cultivable species
- ❑ Hatchery technology and farming in net cage has not yet been developed.
- ❑ The brood fishes are naturally available,
- ❑ Hence the support for hatchery operation,
- ❑ Scientific farming and Production of quality feed be sought by PUM initiatives.

PROPOSAL 4- Edible Oyster (*Crassostrea spp.*)

- ❑ Edible Oyster (*Crassostrea spp.*) is grown naturally in the inter-tidal zone in Bangladesh.
- ❑ But due to lack of initiative farming system has not yet been flourishing at all.
- ❑ Farming by using natural spat collection may be the right way of commercial culture.

- Enhancement of hatchery operation,
- Scientific farming using different method of hanging with rope
- Production of quality edible oysters could be sought by PUM initiatives

PROPOSAL-5 for Mud crab (*Scylla serratus*)



- Mud crab (*Scylla serratus*) is being exported live from Bangladesh.
- The wild crabs are collected from natural sources for export.
- Commercial farming technique has not yet been developed due to technical

knowhow.

- Limited scale of fattening has been practiced.
- But there is an ample opportunity of introduction of Mud crab hatchery and farming system through PUM initiatives.

Proposal -6. Hilsa shad (*Tenualosa ilisha*)

- Hilsa shad (*Tenualosa ilisha*) is an important diadromus commercial fish.
- Hilsa shad available plenty in nature in freshwater rivers during monsoon period.
- They spawn into estuary, becomes juvenile hilsha called Jatka.
- The jatka and beried mother fishes are indiscriminately harvested by local people due to poverty.
- Lot of efforts being employed to conserve the Juvenile and mother.
- But the fact is that, the rate of mortality of hilsa fry found to be very high due to lack of initiatives.
- The Pl of Hilsa could be reared in floating net cage or net pen and thus the mortality rate could be minimized substantially.
- Such an initiative could be taken.

PROPOSAL- 7. Open water fisheries management

- Bangladesh is blessed with an area of 2.71 million hectare Open water fisheries area
- Flood plain water bodies with very very little production, i.e. 282 kg /hectare /year
- Which is far behind pond aquaculture production,
- Which is about 4765kg/ hectare/year in case of pond aquaculture
- The production in flood plain increased by Daudkandi model on an average 1500kg/ha/yr.

- ❑ Therefore by applying Daudkandi Model approach along with PUM initiatives
- ❑ Could be spread over other areas of flood plain will reach 3-4 times higher than present production.

PROPOSAL- 8. Improvement of fish hatchery management

- Brood management
- Larval feed development to reduce the mortality at PL stage
- Water quality management
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PROPOSAL- 9. Development of cost effective fish/rimp feed.

- Price of fish feed doesn't coincide with feed price
- Safe feed ingredients are not available
- Cost effective feed should be formulated

3. BRIEF OF INITIAL PROPOSAL

If all the above mentioned programmes are implemented through PUM Initiative the country would be benefitted in the following way

1. Significant increase in fish and shellfish production
2. Play vital role in poverty reduction of the poor communities
3. Ensure safe and fresh protein supply
4. Women empowerment in rural communities
5. It will create employment opportunity for the youth
6. It will enhance foreign exchange earning
7. Establishment of PUM initiatives for the development of Bangladesh

4. FORMATION OF PUM-FOAB FISHERY FACTS FINDING MISSION:

Recommendations from that meeting were examined in PUM head quarter and were advised FOAB to send a priority list. Accordingly, a priority list indicating the following 4 field of cooperation's were sent to PUM. 1.Modified Semi-Extensive Organic Black Tiger Shrimp (*Penaeus monodon*) Farming System In Bangladesh. 2. Operation And Management Of Prawn Hatchery Through Recirculation Aquaculture System (RAS) Technology. 3.Net Cage Culture Of Sea Bass-Baramundii (*Lates calcarifer*). 4. Supplemental Feed Formulation for rearing crablets of Mud Crab (*Scylla serrata*)

It was then decided to examine the merit of the proposals by a PUM fishery expert. And the work was named PUM-FOAB Fishery Facts Finding Mission, led by Mr. Wim van Eijk (Ejik), PUM Fishery Expert.

Date was fixed from 3rd to 11th September, 2019. The FOAB team comprises 6 members. It was decided to visit 4-5 in Mymensingh, 6-8 in Cox's Bazar and 9-11 in Khulna area. At the end there will be a meeting at the Royal Dutch Embassy, Dhaka in the 11th September, 2019 where the team will have placed their recommendation for consideration.

5. OPENING MEETING PUM-FOAB FISHERY FACTS FINDING MISSION

3 September, 2019

Mr. Wim van Eijk (Ejik), Fishery expert, PUM arrived Hotel Grace 21, Dhaka

18.00: Opening meeting with FOAB members

PUM-FOAB Fishery Facts Finding Mission, Bangladesh started functioning through opening meeting held on the 3rd September, 2019 at Hotel Grace 21, Dhaka. The meeting was presided over by PUM Representative Bangladesh Prof. Dr. Abdul Gaffar Miah (Miah) Chairman, Department of Genetics and Animal Breeding, Hajji Danesh Science and Technology University, Dinajpur.

In the introductory session it was learnt that, Mr. Wim van Eijk (Ejik), Fishery expert, PUM is experienced in Recirculatory Aquaculture System(RAS) in Fisheries sector and he worked in Afrecian countries, South America and Indonesia.

Mr. Henk van den Berkmortel (Henk) Fishery expert, PUM, Netherlands experienced in Recirculatory Aquaculture System(RAS) in Fisheries. This is his 6th visit in Bangladesh. He has developed several RAS Hatchery in Bangladesh.

Mr. Molla Shamsur Rahman(Shahin), President, FOAB.

Dr. Nitya Nanda Das, Chief Technical Advisor(Hon.), FOAB.

Mr. Manmatha Nath Sarker, Sr. Technical Advisor, FOAB.

Miss Elme Tahnima Apan, Gender Promoter, FOAB

6. FIELD VISIT OF PUM-FOAB FISHERY FACTS FINDING MISSION TO MYMENSINGH: 4th September, 2019, Wednesday.



Travel to Mymensingh by road transportation.

Visit Bangladesh Agricultural University, Mymensingh. There was an view exchange meeting with faculty members of the Faculty of Fisheries.



Following points were raised through discussion-

- Thousands of Recirculation Aquaculture System (RAS) set up in Bangladesh but no local expert developed.
- Water management in RAS is a problem.
- People don't know on Recirculatory Aquaculture Devices. Even the manufacturers don't know about RAS.
- Use of RAS in hatchery could be one solution
- Culture of chlorella and zooplankton for hatchery is needed.
- Wild bloodstock is a problem.
- Need to develop your own and well known bloodstock which is good quality.
- Water quality instrument support from Netherlands.
- PUM can find donor to support with multi-parameter water quality mater.
- Training on How To Improve Water Quality.

Visit Bangladesh Fisheries Research Institute, Mymensing

Meet Dr. Md. Khalilur Rahman, Director, BFRI who discussed the over all activities of BFRI.



Visit Mr. Ali

Reza's

Fish Farm at Trisal, Mymensingh and then visit Fish Hatchery. 5 September, 2019, Thursday:



Visit Mr. Ali Reza's Fish Farm at Trisal, Mymensingh and then visit Fish Hatchery at Fulbaria, Mymensingh and meet Mymensingh Hatchery Association members led by Mr Ritish Kumar Pandit, President, Mymensingh Hatchery Association along with Prof.(Dr.) Harun –ur-Rashid, BAU and Dr. Abdur Rauf, District Fisheries Officer, Mymensing.

Following points were raised for consideration:

All the participants emphasized one common concern. Two Thai companies are gradually taking over entire tilapia hatchery market since they always renew their bloodstock from Thailand. On the other hand 700 local tilapia hatcheries don't have brood development and management knowledge. This has been identified as one most important area where hatchery owners want training/consulting. An expert able to provide a 2 week training will be supported by Prof. Harun ur Rashid of Faculty of Fisheries, Bangladesh Agricultural University. Since Mymensingh Tilapia hatcheries are the suppliers of 70% tilapia seeds throughout the country, this will have huge positive impacts on the tilapia industry, given the fact that tilapia comprises 2nd highest single species in freshwater aquaculture production of Bangladesh.

The team returned back to Dhaka in the evening.

6 September, 2019

Travel from Dhaka to Cox's Bazar by Regent Air Lines.

Members of the mission were checked in Hotel Sea Princess, Kalatali, Cox's Bazar. Mission was welcomed with flower bouquet at Cox's Bazar Airport by FOAB General secretary, Md. Khalilullah Chowdhary.





Visit Shrimp Hatchery Association of Bangladesh (SHAB) office at Kalatoli, Cox's Bazar

View exchange meeting organized by Shrimp Hatchery Association of Bangladesh (SHAB) which is the private organization representing private shrimp hatcheries. There are 67 shrimp hatcheries mostly located at Cox's Bazar, producing almost 40 billion shrimp PL per year, where only 2 hatchery producing 20 million Specific Pathogen Free (SPF) fry / post larvae (PL). The live PL has an uncertain market which is mainly situated in the western part of Bangladesh. Usually the PL are transported by in polybag filled with limited water and oxygenated packing to Jhashore Airport from Cox's Bazar airport.



President of Shrimp Hatchery Association of Bangladesh (SHAB) Mr. Asheq Ullah Rafiq.M.P. was present in the View Exchange Meeting. Participants has the opinion

that they are willing to work with PUM regarding the development of Specific Pathogen Free (SPF)/ Specific Pathogen Resistance (SPR) Shrimp Hatchery in Bangladesh. They also emphasised to set up Shrimp brood bank so that the dependency of importing SPF Shrimp Brood from abroad. Test kits for detecting virus/bacteria in mother shrimp and post larvaeis costly, so that PUM could be helpfull for sourcing the test kits. There is need for Trainers training (ToT) for upgrading knowledge on shrimp hatchery operation.

Other participants :

- a. Mr. Syed Hadi Khan, Consultant, SHAB
- b. Mr. Nazibul Islam, General Secretary, SHAB
- c. Md. Alamgir, Treasurer, SHAB
- d. Mr. Narayan Chandra Nath, P.I. Mustafa Shrimp Private Ltd/Mustafa Organic Shrimp Ltd.

Visit Koralkhali Shrimp farm and Al Madina Aquafarm,7 September, 2019, Saturday.

Visit Koralkhali, Chowarfari, Chakaria Shrimp farm and view exchange meeting wea held besides the bank of a traditional shrimp farm owned by



Mr.Gafur, where a team of dozens of shrimp farmers were present.

A lively discussion were held. The participants and visiting members raised the following points to be consideration.

- ToT for improved shrimp farm management.
- Providing test kits for measuring salinity, pH and DO of Shrimp farm water and pH meter for Soil would be very helpfull for the farmers.
- ToT for floating cage culture of seabass in the nearby canals of shrimp farm
- ToT for mud crab fattening in plastic cage

View exchange meeting with shrimp farmers at Chiringa, Chakaria at Al Madina Office. The meeting was presided over by the Mayor, Chakaria Pourasava (Municipality).

Senior Upazila Fisheries, Assistant Fisheries Officer of the department of Fisheries were present on the view exchange meeting. The following points were raised for consideration;



- Training on improved shrimp culture methodologies.

- Test kit for measuring salinity, pH and DO of Shrimp farm water and pH meter for Soil.



The Mission then visited the Al Madina Aquaculture Farm owned by Mr. Khalilullah Chowdhury. GS, FOAB, The Fish farm of 20 acres area found very suitable for set up of Fish and prawn hatchery with RAS and a Prawn and tilapia Brood Bank could easily be established. The farm owner Mr. Khalilullah and Barrister Md. Muhibulla Muhib should visit the Netherlands to see the opportunities suitable for their farm.

Visit Sonali Shrimp Hatchery, situated in the sea beach, Inani, Ukhya, 8 th September, 2019, Sunday.

It was raining from early in the morning. The team visit Sonali Shrimp Hatchery, situated in the sea beach, Inani, Ukhya, Cox's Bazar. The owner Mr. Alamgir welcomed the team and arranged to see inside the hatchery. The Shrimp hatchery was designed by local technician



Mr. Syed M Hadi for produci



ng Specific Pathogen Free Shrimp Post Larvae (PL). The hatchery was designed to with a view to one mother one tank system were followed. A cordial view exchange meeting were held and the following points were raised for consideration.



- Measure should be taken to reduce the production cost of shrimp PL
- ToT for improved water treatment for shrimp hatchery
- Develop shrimp brood bank to get SPF/SPR mother
- Test kit for detection of disease should be easily available.
- Explore the opportunities for SPF/SPR shrimp hatchery .

Visit Village Supermarket at Dumuria, Khulna, 9 September, 2019, Monday :



Visit Village Supermarket at Dumuria, Khulna. Nice infrastructure of model village super market. Farmers has easy access to the market at a nominal fees.

Arrangement for marketing farmers product of 3 specific products fish/shrimp, agro product and milk.

Funded by The Netherlands operated by Solidaridad



Visit Zhilerdanga Prawn Cluster farm:

The farmers of Barodanga has developed a system of prawn farming using their own indigenus knowledge. The total farming system using freshwater from



natural sources. Prawn post

larvae collected from natural sources are using for the farming system. Women members are very much active in farming process starting from pond preparation, feeding and marketing if necessary. They are using their hand made feed.



Participation by



women
community-
feeding
harvesting and
marketing which
makes them

better income generating process.
ToT for improving the farming of prawn

Visit Prawn Hatchery

There are a lot of problems in Post larvae production of prawn for last few year. The local practice is using brine solution collected from salt field generally from Cox's Bazar area for making 12-13 ppt saline water for prawn egg hatching. Larval feed used local hand made egg custard and artemia. But mass mortality occurred in the zoea stage with a colossal loss by total failure for last few years. The Hatchery owners are trying to find out the reason of total failure but no realistic solution have been found yet.

All most all prawn hatchery closed due to lack of technology. PUM could provide expertise to find out a solution for prawn hatchery production Bangladesh.



in



Visit semi-intensive shrimp farm

The team visited a semi-intensive shrimp farm at Batiaghata crossing a small river. N.K. Seme-Intensive Shrimp Farm is operated by Mr. Profulla Kumar Roy, who has developed his own feed and had success



View exchange meeting with shrimp farmer:

The farmers are facing problem in operating traditional shrimp farms.



Problem in importing feed raw materials

Water and soil testing kits

- ToT for improving farming and feed mill
- ToT for improved shrimp farm management.
- Providing test kits for measuring salinity, pH and DO of Shrimp farm water and pH meter for Soil would be very helpfull for the farmers.
- ToT for floating cage culture of seabass in the nearby canals of shrimp farm
- ToT for mud crab fattening in plastic cage

Visit an NGO named SHUSHILON at Khulna :

SHUSHILON is an local NGO working for fisheries, climate change adaptation, agriculture etc. The Chief Executive Officer, Mr Nuruzzaman described their activities in a brief power point presentation.



Visit to a Shrimp Nursery, Batiaghata. 10 September, 2019, Tuesday.

The team visited South Bangla Shrimp Nursery, at Batiaghata, Khulna. The authority collecting shrimp nauplii from hatchery at Cox’s Bazar. They carry the nauplii in polybags by air. They use phytoplankton at early stages and then use live feed as artemia nauplii. This process reduce the stress of carrying post larvae by polybag in air route.



Visit Dakope Mud crab fattening project:

Mud crab is another important species which is being exported live from Bangladesh to South East Asean countries. Now a days the process of fattening mud crablings in confined mud pond which is fenced properly so that the crabs cannot be escaped. Chopped fishes are being used, but the productivity is not so encouraging. Proper feed has to be formulated for commercial Farming . PUM could come up with training of trainers for crab fattening program.



On the way the team had the opportunity of have a look into the Sunderbans, the natural mangrove forest.





Mr. Ejik and Prof. Gaffar Miah availed the flight from Khulna (via Jessore) to Dhaka. Other team members took the road transportation from Khulna to Dhaka.

11 September, 2019

Agenda and Time schedule of the FOAB-PUM Meeting on 11th September, 2019

1. 14:00 : Opening, introduction of participants (Professor Dr. Abdul Gaffar Miah, PUM Representative)
2. 14:10 : “Internal” Discussion, evaluation on Fisheries Factfinding Mission,
recommendations and plan for follow-up activities, prepare presentations for 15:30
3. 15:30 : Welcome to Mr. Harry Verweij, Hon’ble Ambassador of NL in Bangladesh
 - a) Presentation of findings/conclusions/follow-up to officials of FOAB, PUM and embassy staff -by Wim van Eijk, PUM Fisheries Expert
 - b) Short speech (3-5 min) by-
 - i) Mr. Manmatha Nath Sarker, Senior Technical Advisor, FOAB
 - ii) Dr. Nitya Nanda Das, Chief Technical Advisor (Hon.), FOAB
 - iii) Mr. Molla Shamsur Rahman (Shahin), President, FOAB
 - c) Great speech by Mr. Harry Verweij, Hon’ble Ambassador of NL
 - d) Discussion of possible future cooperation among FOAB-PUM and the embassy

4. 16:30 : Closing speech by Prof. Dr. Abdul Gaffar Miah, PUM Representative

Participants in the meeting with FOAB-PUM at 11th September

1. Prof. Dr. Abdul Gaffar Miah (Miah), PUM Representative
2. Mr. Molla Shamsur Rahman (Shahin), President, FOAB
3. Dr. Nitya Nanda Das, Chief Technical Advisor (Hon.), FOAB
4. Mr. Manmatha Nath Sarker, Senior Technical Advisor, FOAB
5. Mr. Prafulla Kumar Sarker, Consultant, FOAB
6. Barri. Mohammad Mohibulla (Mohib). Member, FOAB
7. Mr. Aminullah Al Amin, Member, FOAB
8. Mr. Wim van Eijk (Ejik), Fishery expert, PUM

A power point presentation was demonstrated in presence of His Excellency Mr. Heim Heihenger , The Ambassador of Royal Dutch Embassy where all the observation by the PUM FOAB FISHERY FACTS FINDING MISSION was reflected for follow up action.



12 September, 2019

Visit Abdullahpur Wholesale Fish Market and reception by Abdullahpur Fish Traders Association. The traders are facing problems in operating the market due to lack of a permanent structure there and water supply. PUM could help them to develop a fish market.



Visit the office of Bangladesh Live and Chilled Food Exporter's Association at Uttara ,Dhaka. 12th September, 2019. Thrusday.

Visit live freshwater mud eel (*Monopterusuchia*) collection, packing and export performance at Uttara. The exporter willing to extend their export marke to EU countries. PUM could help them in this regards.



Visit live mud crab (*Scylla cirrata*) collection, packing and export performance at Nalbhogue, Uttara, Dhaka. The exporters also opinion to extend their market to EU countries. PUM could be much helpful for them.



Conclusion: The team had the opportunity to visit potential area of fisheries interest and recommended to undertake Training of Trainers for the following subject matter :

- 1. TOT for Shrimp farming in Cox's Bazar area**
- 2. TOT for Prawn farming in Dumuria, Khulna**
- 3. TOT for Crab fattening in Dakope , Khulna**
- 4. TOT for Floating Net Cage Culture of Seabas in Dakope area**
- 5. TOT for shrimp/prawn feed producer in Khulna.**

(The End)