



# AQUACULTURE WITHOUT FRONTIERS

Newsletter (Issue No.2)

JANUARY 2008



The Directors and Trustees of Aquaculture without Frontiers  
wish you a happy, prosperous and peaceful New Year!



Welcome to the second issue of the new format **Aquaculture without Frontiers** newsletter! We hope to keep you up-to-date at regular intervals with news of our new and existing projects, fund raising events and opportunities for volunteers. Please pass this newsletter on to your friends, family and work colleagues – the more people that know about the work of AwF the better!

Scott Peddie (Editor)

*Aquaculture without Frontiers is registered as a non-profit organization in the USA and  
Aquaculture without Frontiers (UK) as a charity in the UK*

## Message from the Founder of AwF



I am really pleased to see AwF going from strength to strength. I think that you will agree that AwF has been very active since its last newsletter was published in June 2007. Its projects in Bangladesh, India, Indonesia, and Malawi are doing well and it hopes to announce some new projects very soon, including one in Nepal (watch the website and the next newsletter!).

Since all the people involved in AwF (trustees, directors, members of our technical advisory group, technical staff, fund raisers, newsletter editor, website manager, etc.) are volunteers, providing their time and personal office facilities at no cost to AwF and often paying our registration costs themselves, administration expenses are almost zero. I am very grateful to all of these people for their hard work and support.

However, their AwF work load can be very heavy at times, since it has to be done in 'spare' (?) time, so I am delighted that the World Aquaculture Society has agreed to provide home office services to AwF, following a recent decision by the WAS board. This will assist in the administration of AwF tremendously and finally provide AwF with a base that is not just a laptop or somebody's back bedroom.

I am also extremely grateful to all our donors and to those that have provided free services to AwF (including free advertisement design and publication), without whom we could not exist. Those who raise funds from the public are simply marvellous.

When you read this newsletter you will see the kind of field work that AwF is involved in and I hope that you will be amused at some of its fund (or should I say 'fun) raising activities.

I wish you all a very happy 2008 and a successful year for AwF. If you can help AwF in any way, there are plenty of ideas and contacts in this newsletter.

Best regards,

Michael New, OBE  
Chairman, AwF (UK)

## Message from the AwF Chairman



AwF continues to grow with both greater financial assistance from our kind and generous donors and with the number and scope of projects we have been able to support. We are especially happy to be able to partner with several NGO's who have their own resources but lack expertise in aquaculture. Our "stable" of experts are able to provide knowledge and advice by e-mail or in person that greatly increases the likelihood of success of development projects. Small scale, sustainable aquaculture is a critical tool for improving both nutritional and economic welfare. Nutrition experts tell us that the ideal human diet should contain a mix of fish, fresh vegetables and fruit, and a complex carbohydrate. Not coincidentally, this is the most common diet of the rural poor across Asia. The sustainable farming system of fish, vegetables and rice supported the development of some of the earliest civilizations and the current dense populations in Eastern and Southern Asia. Of course the problem of the rural poor is the small amounts of these nutritious foods that must be shared between so many.

AwF supports this type of small-scale aquaculture with its proven benefits, helping to increase the volume of the products while maintaining sustainability. With current concerns over rising fuel costs and global warming, low energy input aquaculture is even more important. Aquaculture that has minimal or even beneficial impacts on the environment is critical in the global efforts to raise the well being of rural poor while protecting the environment.

We hope to gain additional support for our mission, pointing out the full spectrum of benefits that small-scale aquaculture and AwF can achieve. Our desire is to gain awareness and recognition with other NGO and development partners whom we can assist and with potential donors. The ALCAN Foundation has invited AwF and our frequent partner, the World Aquaculture Society, to apply to be considered for their Award for Sustainable Development Prize, which includes cash and administrative support. AwF continues to operate with no administrative overhead, counting on the volunteered time of our founder and the experts who assist the various projects, and spending all donations on projects. You, the reader of this newsletter, can further the success of AwF by sharing this newsletter with your personal and professional contacts. Please forward, print, or post this newsletter and/or links to the AwF website. Increasing the awareness of AwF and collaborations with the donor and development communities, will allow AwF to continue to expand our efforts and bring donations of cash and volunteers. We firmly believe that sustainable small-scale aquaculture makes a considerable contribution to improving the welfare of the poor while protecting the environment. Your efforts to assist AwF are greatly appreciated and we look forward to informing you of new efforts in our future communications.

Kevin Fitzsimmons

## What is AwF and What Do We Do?

*Aquaculture without Frontiers* (AwF) is an independent non-profit organisation that promotes and supports responsible and sustainable aquaculture and the alleviation of poverty by improving livelihoods in developing countries. Formed in 2004, Aquaculture without Frontiers [AwF] is registered as a non-profit organization in the USA and Aquaculture without Frontiers (UK) [AwF (UK)] as a charity in the UK.



AwF has been established for the specific purpose of promoting and supporting responsible and sustainable aquaculture to assist in poverty alleviation through improving rural livelihoods in developing and transition countries. In its work, AwF draws on the experience of respected professionals from every relevant discipline. AwF already has a database of more than 130 volunteers.



AwF is unique in devoting **all** of its resources and attention to aquaculture; however, it does not seek to promote aquaculture in isolation, but as a component of integrated rural and coastal development plans, and of strategies to alleviate poverty.

Add our website to your bookmarks:  
[www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org)

# AwF Project News...

## Project Proposals Requested

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**AwF welcomes proposals for assistance to help poor people in developing countries rear fish for food.....**

As a result of its fund-raising activities and donations from individuals and corporate organisations AwF currently has over US\$ 40,000 available for new projects.

Several project proposals are currently under review but, although we are delighted with what we have been able to do in Bangladesh, India, Indonesia, Malawi and Thailand, we do not want our supporters to think that these are the only countries that we want to work in.

We would therefore welcome proposals from (say) Vietnam, Laos, the Philippines, Brazil or other Latin American countries, or sub-Saharan Africa.

If you wish to make a proposal for assistance, please contact Carol Mendoza at our home office ([carolm@was.org](mailto:carolm@was.org)), using the proforma given under 'New project proposals....' of our website.

In making suggestions, please remember our principles and strategy (which can be checked by clicking 'about AwF' on the navigation panel of this website).

We would like to remind you that our funds are for providing technical assistance for the poorest, either directly or in collaboration with other NGOs.

Thus we would like to see proposals that (for example):

- use technical experts from our volunteer database (we have virtually every aquaculture discipline represented) to provide specific assistance to on-going projects (perhaps being run by other NGOs that need technical advice);
- provide material assistance for aquaculture projects such as those we have in Bangladesh and India (please see the website for details);
- cost a maximum of US\$ 5,000, but preferably less;
- involve the poorest beneficiaries in developing or transition countries; and
- are not requests to fund research activities, feasibility studies or commercial intensive aquaculture ventures.

## New Projects Being Considered

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Our Technical Advisory Committee is considering project proposals received from Ghana, the Lebanon, Nepal and Uganda.



# **Quarterly (July – September 2007) progress report of “Sustaining famine mitigation through integrated aquaculture-agriculture in Traditional Authority Mavwere, Mchinji District in Malawi” Project**

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## **Summary**

The provision of good seed quality and the establishment of contact farmers trained as local extensionists to aid on the dissemination of IAA technology transfer and the existence of demonstration ponds where farmers learn to adopt the integration of aquaculture-agriculture technology, drive hope for food security and income among the small-scale fish farmers from the Traditional Authority Mavwere in Malawi. The collaboration among farmers groups and national government is also helping to progressively strengthen Malawian's capacity for sustainable development of its aquaculture. Farmers revealed that overall pond productivity is better in integrated aquaculture-agriculture (IAA) and the IAA technology is easy to adopt.

Technical backstopping visits at Bunda College of Agriculture/University of Malawi as well as in other innovative farmers from the same district and in Lilongwe with the same agro-ecological climate helped farmers in gaining additional knowledge which was not fulfilled during the training sections. Farmers with experience taught the new farmers and encouraged each other in various areas concerning fish production as well as the marketing of fish. After the visit, farmers were enthusiastic and now believe they can improve the IAA technology in their farms.

There is evidence that the prospect for fish culture is bright coupled with positive response of contact farmers on delivering the IAA technology, this means that farmers will continue to have the right extension services even after the project.

## **A. Progress on the project**

### **1. Project goal:**

The overall goal of the project is to improve livelihoods of rural people through IAA as a sustainable famine mitigation measure. The delivery of integrated agriculture-aquaculture (IAA) farming systems can improve food security, reduce natural resource degradation and enhance rural economic development in T/A Mavwere. Fishponds also serve as important water harvesting function, and enable farmers to cultivate vegetables and winter maize around the ponds. Water in the fish ponds is also important for animals. To promote IAA the project specifically intends to achieve two main objectives:

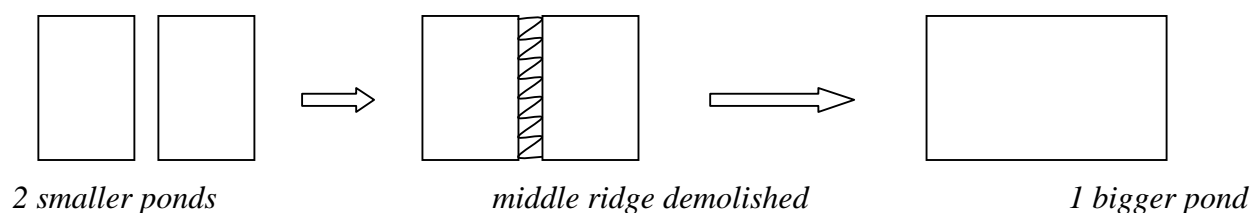
- 1 To improve fingerling availability and accessibility through the identification and training of specialised village fingerling producers.
- 2 To promote capacity building of small-scale farmers on the farmer-to-farmer extension concept to improve and sustain extension services at local level

### **2. Achievements in the quarter (July – September)**

#### **2.1 New pond construction**

68 new ponds were constructed during this reporting period. Many farmers however have started

combining their smaller ponds to make them bigger for improved water holding capacity and fish production (see figure below). It is therefore very likely that by the end of the project pond numbers are going to reduce but with increased pond area.



## 2.2 Fingerling production

The fingerling production units developed in the second quarter started giving dividends in August. Two out of the six were able to supply over 15000 to new farmers at a cost of 3 Malawi Kwacha (0.02 USD) per fingerling. The two farmers (Mr Katengeza and Miss Njolomole) got a total of MK45,000 from fingerling sales. At the same time, other farmers were able to access affordable fingerlings without any transport cost. Fingerlings in other parts of Malawi cost MK10 - MK15 each. High costs of fingerlings and limited fingerling sources have been a major constraint of aquaculture growth in Malawi. This achievement therefore is a milestone towards achieving the objective of improving access to quality fingerlings.

Seven farmers had also sold table-size fish amounting to MK33,000 (USD 235).

## 2.3 Open days and farmers' learning tour

Farmers have been conducting open days on proper pond management and feeding on the 12 demonstration ponds facilitated by the Village Extension Providers. During these open days farmers were able to observe the differences in growth between fish from the demonstration ponds and those from poorly managed ponds. After the observations farmers discussed the reasons for the differences.

To further improve farmer's knowledge and skills in aquaculture a study tour was organised to Bunda College<sup>1</sup> and three innovative fish farmers from Mchinji District. These farmers were deliberately chosen because they operate within the same ecosystem and started small just like the visiting farmers. The objective of the tour was to create a learning environment in which farmers can learn, master and apply specific pond management skills from their fellow farmers. Specific objectives were:

- To empower farmers with knowledge and skills to make them experts in their own fields
- To sharpen the farmers ability to make sound and informed decisions that will help them make their integrated aquaculture agriculture profitable and sustainable
- To sensitize the farmers in new ways of thinking and problem solving
- To help farmers to learn how they can organize themselves within their communities with an aim of achieving their IAA goals.

The tour targeted Community-based Monitoring and Evaluation Committees and their respective village heads. A total of 50 people went on the study tour. Farmers shared their experiences and compared their different management systems. Below are summaries of activities and lessons learnt from each of the sites visited.

### **Bunda College**

At Bunda, the farmers visited hatcheries and laboratories before they were taken to the aquaculture farm where students and lecture conduct several research experiments. The Farm manager explained the objectives of the experiments and the results that are expected. Farmers were so enthusiastic and asked several questions on breeding, feeds and feeding and potential aquaculture species. It was a great opportunity for the farmers to be at this high learning institution as one of the farmers commented,

<sup>1</sup> The only constituent college of the University of Malawi that provides aquaculture and fisheries courses.

*“Please convey out thanks to the Principal for allowing us to be here. I had never dreamed in my life of stepping in a university room. We are very happy and personally feel closer to a university graduate”*

### **Mr. Kampata's Farm**

The first stop on the second day of the tour was Mr Kampata's fish farm. Mr Kampata started very humbly in 1984 with 3 smaller ponds where the smallest was 100 square meters and he biggest was 250 square meters. He now has seven ponds ranging from 1980m<sup>2</sup> to 2420m<sup>2</sup>. Mr Kampata uses compost cribs in the ponds to provide primary nutrients zooplanktons and phytoplankton's and supplements with maize bran mixed with roasted soya. He does not have a standard feed formula but observes that the more soya he add the bigger the fish he produces. Fish farming has now become his number one income provider. Mr Kampata is also growing bananas and sugarcane with the water from the ponds.



*Mr. Kampata briefing his fellow farmers at his farm*

Mr Kampata was currently selling his grown up fish and had sold close to MK 77,000 (USD 550) from partial harvesting of two of his big ponds but the harvesting was still in progress.



*Some of the pond pictures at Kampata's farm*

After the tour of Mr Kampata's farm the farmers were inspired to improve their level of practice as Mr. Lukasi Kazule commented *“I realise that our ponds are very small and I thought what I was doing the best. I didn't believe when our facilitators were saying that fish farming is very profitable. This is admirable; we have to fully implement these things once we get back home”*.

### **Chokani's Farm**

This is a farm that is operated on entirely commercial principles. Mr and Mrs Chokani had stayed in Lilongwe City when the husband was working in one of the money lending institutions. *“I was so depressed when we first discussed of leaving the city and stay in the village”* Mrs Chokani said. *“However, it way just after three years of our stay here that we have realised our hidden treasurers”*.

The farm has 17 ponds and two of them are used to irrigate maize, onions, cabbages and other horticultural crops as per market demand. The farm also has pigs and chickens. Mrs. Chokani



emphasised that the farm's objective is not to keep fish but to produce fish.

The visiting farmers were impressed with the level of integration which is being practiced at the farm. At this farm, aquaculture activities are being integrated with pigs, chickens (layers and broilers), vegetables and other crops. Mrs. Chokani explained that integration of aquaculture with other enterprises greatly helps in minimizing the use of external inputs which in the end helps in maximizing production. On markets, she explained that they identify markets for their products on their own. The husband was actually in Lilongwe (60 kms away) to meet potential buyers of their horticultural products.



*Mrs. Chokani emphasizing a point to the farmers (left). Houses for pigs and the chickens (right)*

### **Mr. Zembere's Farm**

At this farm, fish farming activities are being integrated with different agricultural crops. Some of the crops that are being grown are maize, which is grown three times per year, different vegetables like tomato, cabbage, Chinese cabbage, rape, carrot and onions. He is also growing bananas and sugar cane. The farm has four ponds which are being fed by water from a well. Mr. Zembere emphasized on the importance of integration, harvesting and selling of fish.



*Mr. Zembere telling the farmers what he knows best (left); farmers admiring cabbage at the farm (right)*



*Zembere selling the IAA ideas at his farm (left). Farmers witnessing a fish harvest (right)*

Village Head Woman Nkhumba had this to say after Zembere Farm tour, “*we have learnt quite a lot from this tour, indeed if a farmer describes the challenges and successes of his or her farming system, it is far more realistic than if an extension worker shares knowledge that may be seen as academic*”. She further said that learning from a fellow farmer is like being offered the actual harvest from the particular farmer.



*Village Headwoman Nkhumba (left). Farmers discussing their experiences (right).*

After the two day tour farmers reflected on the lessons learnt from each of the sites visited. The farmers said that the visit helped in building their confidence to implementing the different technologies taught to them at different courses which were conducted before the trip. Group Village Headman Guwende said that the trip has helped in building confidence and networking amongst the farmers. He further said that the visit has been a part of a broader extension program. He said, “*Farmers tend to believe other farmers, so the spread of skills and ideas is much faster than through conventional extension*”

### 3. Progress towards results

The table below gives status on progress towards project results as revised at the inception of the project.

Task	Expected results	Achievements to date
<b><i>Objective 1: Improved fingerling availability and accessibility</i></b>		
1.1 Conduct awareness meeting with ADC and VDC and identify beneficiaries	1 meeting	1 meeting conducted at ADC level and 6 meetings at VDC level
1.1. Identify and train local fingerling producers	21 producers	21 fingerling producers identified and trained. Six farmers have since established hatcheries; Over 15000 fingerlings have been sold from the 3 producers.
1.3. Mount demonstrations	10 demos	12 demonstrations established on proper pond construction, stocking rates, water management, feeds and feeding and harvesting.
1.4 Conduct open days	10 open days	12 local open days conducted. 1 tour to Bunda College and other innovative farmers conducted.
1.5 Document small-scale fingerling distribution model	1 doc	A brochure of best practice for quality fingerling



		production from ponds developed. A distribution model yet to be developed.
1.6 Promote restocking with improved fingerlings	200 ponds	300 ponds renovated and stocked with quality fingerlings
<b>Objective 2: Capacity building of small-scale farmers to offer services at local level.</b>		
2.1. Identify lead farmers	21 farmers	71 farmers identified
2.2. Train lead farmers in aquaculture and extension delivery skills	21 farmers	71 farmers trained as extensionists
2.3 Develop verifiable easy to monitor indicators with participation of all stakeholders in the target area (Community Based Monitoring and Evaluation (CBM&E))	1 meeting	Indicators developed by the communities. CBM&E established in every village. Reports are now being written to ADC based on the indicators
2.4 Facilitate community project monitoring and Extension	Monthly meetings	5 monthly CBM&E meetings done since the CBM&E concept was initiated for each VDC.
2.5 Develop guidelines for farmer led extension	Guidelines	Guidelines being developed. However roles for different stakeholders in the project defined
2.6 In conjunction with farmer extensionists train farmers in IAA best practices	200 farmers	278 farmers trained in IAA Half of which have been trained by the farmer extensionists with support from WorldFish and Government fisheries staff
2.7. Promote fish and crop production through best practices of IAA	200 ponds	Over 268 ponds integrated with winter maize and vegetable production.
2.8. Conduct technical backstopping visits	12 visits	15 joint visits by WorldFish and Department of Fisheries (Mchinji) conducted
2.9 Document and publish success stories on AwF website	At least 3	2 stories published on AwF webpage with the help of AwF Chairperson.

#### 4. Outputs

The project is on track towards achieving its outputs. The list below highlights milestones achieved during the 9 months of project operation.

- Establishment of a Local supported participatory extension system
- Establishment of local fingerling producers
- Establishment of Community based monitoring and evaluation system and respective monitoring indicators.
- Awareness of IAA to communities and their local leaders. in fish farming,

#### 5. Implications of Project Outputs and Achievements

Community participation in all the project activities continues to be stronger which indicates high levels of ownership of the project by the communities. The communities are undergoing a social institutional change of recognising and prioritising needs. Through this project, communities are able to set and agree on operational guidelines and institute penalties to non-compliant.

The income gains being observed currently implies high rate of return of the project funds by the end of the project which is likely to boost local economic investments in the target villages. Economic empowerment will thus improve food security as agricultural inputs will easily be accessed on top of cheaper proteins obtained from on-farm fish production.

## 6. Bottlenecks

No major problems were experienced in the implementation and management of the project in the reporting period.

## 7. Linkages with other programmes

Sustaining famine mitigation through integrated aquaculture-agriculture in Mchinji District in Malawi is directly linked to other programmes running for the WorldFish Center in East and Southern Africa. The following are the important projects:

1. Determination of Recommendation Domains for High Aquaculture Potential areas in Africa that will provide a science based tool in identifying potential areas for pond aquaculture.
2. Famine mitigation and food security through IAA in Southern Africa

## 8. Collaborator

The project is being implemented in partnership with Mchinji District Assembly and the Department of Fisheries in Malawi. The two institutions provide personnel which are assisting in capacity building, coaching of the lead farmers and daily monitoring of the activities.

## 9. Future Plans

The main activities for the third quarter are given in the table below.

ID	Activity	Target
1.1	Conduct open days	2
1.2	Develop guidelines for farmer led extension	Guidelines
1.3	Develop fingerling distribution model	2 visits
1.4	Conduct technical backstopping visits	
1.5	Document and publish success stories on AWF website	At least 1

## 10. Budget

By the end of third quarter overall budget spending was at slightly over 95% of the annual budget with no major budget lines overspent or underspent by more than 10%. This indicates that the next quarter only has 5% of the budget because of the high participation and interest of the farmers that has gone beyond planned targets.

## Quarterly (August – October 2007) progress report of “Poverty Alleviation through Small Scale Aquaculture” Project

Project name : Poverty Alleviation through Small Scale Aquaculture (PATSSA)

Funded by : Aquaculture without Frontier (AwF), UK

Implemented by : RDRS Bangladesh

Project duration : February 2007 – January 2011

Reporting period : August – October 2007

### **Major Activities Accomplished During Third Quarter (August – September 2007)**

#### **Pond Harvesting**

During this quarter 55 % ponds were harvested partially. Average 30.75 kg fish were sold from each of the harvested 33 ponds. Average price of per kg fish was Tk 59.00. The family members eat fish regularly. In the coming months (November-December 2007) most of the ponds will be harvested. The water depth of the ponds is sufficient. The family members and neighbours are involved in harvesting, thus encouraging greater participation in fish culture in the region.

#### **Farmers' Orientation**

After the flood, the farmers were given a refresher training on pond liming and feeding. These pond sites refresher are very useful to the farmers. All of the project participants are maintaining record books. Farmers are also advised to communicate with the government Fishery Officers when appropriate. This will facilitate the development of linkages to ensure the future sustainability of this project.

The present biomass for the ponds is 8.66 kg per/decimal. The project farmers are advised on how to feed their fish and fertilize the ponds. Average cost until October 2007 for per decimal pond water was Tk 148.54. The farmers are advised to harvest their ponds as and when the market price is optimal.

#### **Pond Re-Stocking**

The 7 ponds were partially damaged during the flood. Now the broken dikes have been repaired and restocked with large size fingerlings. The ponds have been limed just after the flood and the farmers are advised to regularly feed the fishes.

#### **Material Purchase**

Two seine nets have been purchased from this project. This is very helpful to the participating farmers as they do not need to depend on others for netting their ponds. There is an arrangement to share this net by the project participants.

#### **Impact**

The skills and knowledge of those involved has gradually increased. They are happy with the present production in their ponds. They have become more aware of the importance of adopting regular feeding regimes. In October they sold some fish, which has helped them to buy some food for their families during. The family members, especially the women and children, are encouraged to participate in fish husbandry, particularly feeding.

The involved families are now consuming fish regularly. In the past their fish intake was limited because of financial constraints. Thus, protein intake and nutritional well-being is a major consequence of this project.

#### **Conclusion**

The project participants are happy with the results of this project. They are receiving start-up costs from the project (not subject to interest), which is a major stimulant to entrepreneurship in the fish culture sector. The revolving fund as a start-up operational cost will encourage other pond owners to culture fish. Increased communication with the government fishery people will also help to ensure the sustainability of the project.



## More AwF Activities In Africa

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**Previous and current activities in Africa have been in the East - Kenya and Malawi. We are glad to hear from our Chairman, Kevin Fitzsimmons, of some initial activities in two West African countries - Ghana and Liberia.....**

Volunteers from AwF have been remotely assisting **Technoserve in Ghana** and **Idle No More in Liberia**, two NGOs interested in small-scale sustainable aquaculture projects in West Africa.

**Technoserve** ([www.technoserve.org](http://www.technoserve.org)) assists small farmers in Africa and Latin America with plans for agro-based small business. By e-mail and phone, we have helped the Ghana Technoserve representative with basic culture information, local aquaculture contacts in Ghana, and market information for tilapia in West Africa and Europe.

**Idle No More** sponsors an orphanage in Monrovia, Liberia and would like to add a fish pond to be used for producing tilapia and other fish for local consumption. A side benefit of the operation is to educate and train the children in fish culture, ecology, and swimming and water safety. We have provided assistance by e-mail, phone, and hosting a tour for one of the Idle No More founders. AwF also provided a book and technical reprints for the NGO to deliver to the project.

We expect to continue assisting both projects with technical advice and hope to have photos to share with you in the future – please check out our website for regular updates.

## AwF in The Tsunami Zone of Aceh Prvonce, Indonesia

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Indonesia is one of the major seaweed producers in the world. Seaweed farming is widely recognized as one of the most sustainable forms of aquaculture and an opportunity for small-scale producers to grow locally edible crops and to produce commodities, agar and alginates, which are in demand for international trade. The people of Aceh had not been involved with seaweed farming before the tsunami and AwF Volunteers felt that this was an opportunity to assist those impacted to develop a more sustainable aquaculture industry as they rebuilt. Polyculture of seaweeds in shrimp ponds or in the effluent of ponds was one of the Best Management Practices suggested by AwF Volunteers, FAO recovery experts, and the Indonesian Aquaculture Directorate. In 2005, a hatchery and farming manual for *Gracilaria*, a red seaweed with several commercially attractive aspects, was distributed to 150 farmers at a series of workshops led by AwF Volunteers, Amrit Bart and Kevin Fitzsimmons. The goal of the training was to explain the concepts of nutrient cycling and pond dynamics so that the farmers could see for themselves the benefits of incorporating seaweeds or other plants to absorb the wastes from shrimp. In creating a valuable secondary crop, the farmers also reduce water pollution and increase the sustainability of their shrimp farming practices. The AwF Volunteers also met with hatchery owners and described the potential for providing initial seaweed stocks for farmers to place into their ponds.



In 2006, AwF supervised the transfer and expenditure of funds originally provided by the YSI Foundation for a project in which two tons of an endemic species of *Gracilaria* was transported from hatcheries on Java to Sumatra to start seaweed culture. The primary market for the *Gracilaria* is expected to be for agar; however, AwF Volunteers have also promoted its use as a nutritious sea vegetable for human consumption. Edible seaweeds are an important part of the diet in other regions of Indonesia as well as most East Asian cultures.

A series of trials in four different villages growing *Gracilaria* in shrimp ponds has demonstrated rapid seaweed growth and improved water quality. At harvest time, we anticipate significantly improved shrimp growth and survival. A commercial agar producer has agreed to visit Aceh in coming months to negotiate purchases of the seaweed now growing in the ponds.

In an ongoing partnership, US-AID has provided support for two scientists from SEAFDEC in the Philippines to travel to Aceh to conduct workshops in the villages growing *Gracilaria* and to demonstrate back-yard agar production and its use as an ingredient for candies, desserts, and other foods.





Another aspect of the seaweed culture project was to develop raft culture of *Gracilaria* in the ocean. Our partner scientists in the Indonesian Department of Marine and Fisheries Resources, Aquaculture Directorate assisted two fishing cooperatives with instruction and provided them with materials for raft construction and placement in protected ocean locations. These rafts initially were quite successful, but one location was later plagued with storm damage and excessive grazing from wild fish and turtles. Economic analyses showed that sales of the seaweed from the rafts could generate income well in excess of what farmers had been generating from shrimp production.

The YSI-AwF-WAS effort also supported the restoration of three small shrimp hatcheries. In addition to financial and technical support for repairs, the hatcheries were encouraged and trained to consider alternative species for culture in their facilities (tilapia, milkfish, seaweeds, and groupers). They were also provided training in bio-security and encouraged to focus on the endemic species rather than imports of exotic species. Equipment for sustainable collection of wild breeders was provided along with training to improve efficiency and survival of post-larvae (PLs). Provision of high health PLs will be critical to the long-term sustainability of shrimp farming in Aceh and to the development of local and international markets for the shrimp produced.

Mangrove restoration has been a goal of both the aquaculture community and the environmental NGOs, in the tsunami zone specifically and globally in general. Many tsunami damaged ponds have been replanted with mangroves in order to restore natural functions as well as to serve a role as a biofilter for shrimp effluents. Some farms have also planted mangroves along the pond shallows and on the dikes to support the pond ecosystem and to treat wastes. Provision of substrate for bacterial and algal colonization and shrimp grazing has been promoted by many biologists as contributing to a more sustainable production system. SEAFDEC has published a text on Mangrove Friendly Shrimp Aquaculture which provided several worthwhile examples and technical descriptions. AwF Volunteers have used these documents in their workshops to train the shrimp farmers in the techniques and explain the benefits.



Our partners in the Indonesian Directorate of Aquaculture have provided invaluable technical, linguistic, and logistical support. They are also rightly proud of the science and extension work that has been achieved. In July of 2007, Mr. Sugeng and Mr. Hasanuddin presented results of our collaborations at the Indonesian Aquaculture Conference. In August 2007, Mr. Hasanuddin also presented at the Asia-Pacific Aquaculture Meetings in Hanoi, Vietnam. In each presentation, the donations of YSI and the contributions of AwF were recognized and thanked.

AwF Volunteers, donated accommodations, and travel on grants provided the synergy to allow the efficient delivery of support to those fish and shrimp farmers most impacted by the tsunami.

The long-term restoration of the industry will depend most directly on sustainability and the ability to market products meeting sustainable criteria. Several large seafood customers have offered to purchase aquaculture products from the tsunami impacted area as soon as sustainable certifications can be obtained. They are considering both the humanitarian issues of supporting the people and their livelihoods but, just as importantly, they would like to ensure a continuous supply of high quality

products for international markets. This would surely be the most encouraging and worthwhile outcome from one of the worst humanitarian and natural disasters in history.

## **Final Report On AwF-CARITAS Bangladesh Project**

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**This report has been kindly received from Anwara Begum Shelly and records the result of this one-year project. We are grateful to M.C. Nandeeshha for his involvement in the project.**

### **Acknowledgements**

Caritas would like to acknowledge its sincere thanks and gratitude to Dr. M. C. Nandeeshha, the Member of the AwF Board of Directors for his concern for the poor rural women, as well as his financial contribution to this project from the honorarium he received for the evaluation of the CBFM project as an AwF representative. Caritas also would like to thank Michael New (OBE), the Chairman of AwF (UK) for his cooperation, logical support and guidance to run the project activities.

### **INTRODUCTION**

Caritas Bangladesh has been working in the fisheries sector for the past two decades in the field of promoting pond based aquaculture. Caritas provides technical support along with financial needs to the beneficiaries. In 1994, a project for open water fisheries management (community based) was introduced for the development of the fishers community. In addition, wetland resource management and the management of environmental degradation in coastal areas through community participation in the southwest zone of Bangladesh was also implemented. In 2005, Dr. M C Nandeeshha, a renowned scientist from India and an Aquaculture without Frontiers Volunteer was invited to evaluate a project on “Community Based Fisheries Management (CBFM)”. During the process of evaluation he also observed some of the pond fisheries projects of Caritas Bangladesh and suggested the initiation of women focused aquaculture activities. He also donated the honorarium that he received for evaluating the CBFM project to initiate a small study on the suggested project. Recognising the potential of his idea, Caritas agreed to implement the project.

Bangladesh is an overpopulated , developing country. The people have only small and limited resources for their livelihood. The rural people in particular are disadvantaged and are in a poor socioeconomic condition. Particularly women are deprived and have less opportunities to develop themselves due to cultural and socio-economic conditions. Hence this project aimed at changing the social norms by encouraging the participation of women directly in fish farming activities and thereby improving their socio-economic conditions through family based integrated aquaculture. The project aimed to create awareness of the potential of integrated aquaculture to improve their income, family nutrition and to provide employment opportunities to the whole family, particularly women and children. The beneficiaries were the rural poor women, but having ponds and organized under the Development Extension Education Services (DEEDS) of Caritas Bangladesh. The programme aimed at the effective utility of the available homestead resources and created opportunity for the protection, preservation and responsible management of all available resources. To cover part of the expenses of fish culture, interest free credit support was provided as per the needs, based on the area of the pond as well as the resources available to cover fish culture expenses.

### **PROJECT WORKING AREA**

Village	:	7 (Bholabo, Paiska, Caritaluk, Kuliadi, Kalni, Deboi, Hirnal)
Union	:	2 (Beldi and Bholabo)
Upazila	:	1 (Rupganj)
District	:	1 (Narayanganj)

## PROJECT AIM

- Empowerment of women through family based integrated aquaculture and improvement of their livelihood.

## PROJECT OBJECTIVES

- To utilize the unused and under used water and land resources
- To develop aquaculture technology and increase consumption of fish
- To improve economic condition of poor people through fish farming
- Capacity building of women in aquaculture practices

## MATERIALS AND METHODS

A survey was conducted with 35 members; finally, 14 beneficiaries were selected based on the level of poverty, but with a condition that family must own the pond or should have a pond taken on lease basis. Out of the 14 beneficiaries, 13 were women. After the completion of the selection, foundation training on integrated fish culture and management was conducted. During the training, discussion was held on the package programme and the responsibilities of the project holder as well as the role of Caritas. All of the selected beneficiaries received the training including the spouse or the nominated member of the family. A monthly follow up training was also arranged in the implementing area. A Work Assistant was assigned to assist the beneficiaries to run the project smoothly as well as monitoring the project activities.

The beneficiaries were provided with a record book for keeping records of the data of their project activities. The record keeping included pond preparation, fingerling stocking, feeding and harvesting. Finally, the cost benefit analysis was prepared based on this data. Maintained by farmers, but cross verified by the project assistant, these records formed an important source of information.

The average pond size was 20 decimal (one decimal = 40m<sup>2</sup>) with a range of 6 to 78 decimal. The total area covered was 282 decimal. A package of carp culture technology (Indian & Chinese carp) was provided to the beneficiaries, where stocking density was 40 fingerlings per decimal. Finally, a workshop was conducted after the completion of the project.

Net production, mortality rate, specific growth rate and food conversion ratio were obtained from the following formula.

Net production = Final wt. at harvesting – Initial wt. at stocking

No. of fish at stocking – No. of fish at harvesting

Mortality rate (%) =  $\frac{\text{No. of fish at stocking} - \text{No. of fish at harvesting}}{\text{No. of fish at stocking}} \times 100$

No. of fish at stocking

Actual cost of fish seed, fertilizers and feed were used in the calculation, while the valuation of fish consumed was calculated based on the local market price.

Net profit (Tk.) = Total sale (Tk.) – Total investment (Tk.).

A total of BDT 60,000 (US\$ 882) was provided in interest free loans to the 14 beneficiaries to cover fish culture expenses ranging from BDT 2,000 to 10,000 per individual.



RESULTS

The project was started in April 2006 and completed in March 2007. After the completion of the one year production cycle, the income derived from fish culture was calculated. The total number of fingerlings stocked and the total number of fish harvested were counted. Based on the recorded observations, total weight of the fish harvested was calculated. Production analysis of fish culture was done at the end of the final harvesting.

An average of 11.95 kg of fish was produced per decimal (which works out to about 2987 kg/ha/year. This is an impressive production, compared to the level of inputs used. The mortality rate was 9.85%.

The average expenditure and income per decimal area were BDT 282 and 860, respectively and thus the average net profit for a one decimal area was BDT 578. Fish was the major source of income, though two families also undertook vegetable cultivation and earned some income.

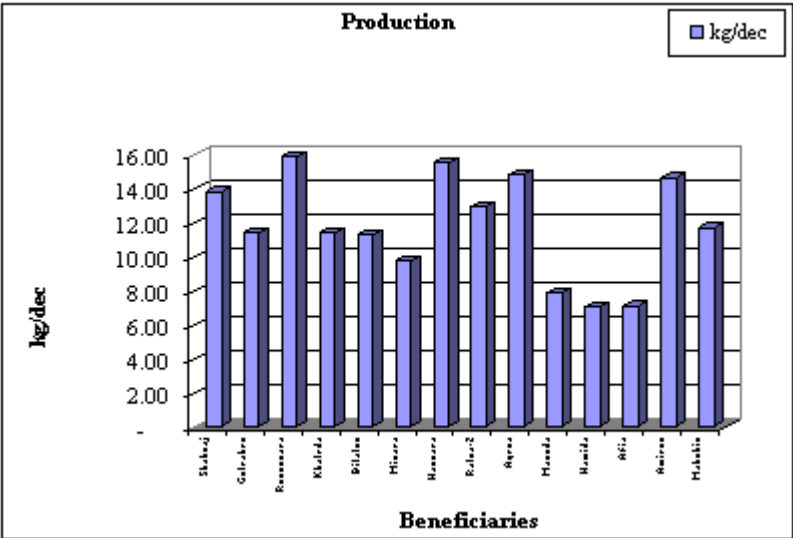


Fig 1: Fish production/decimal obtained by different beneficiaries

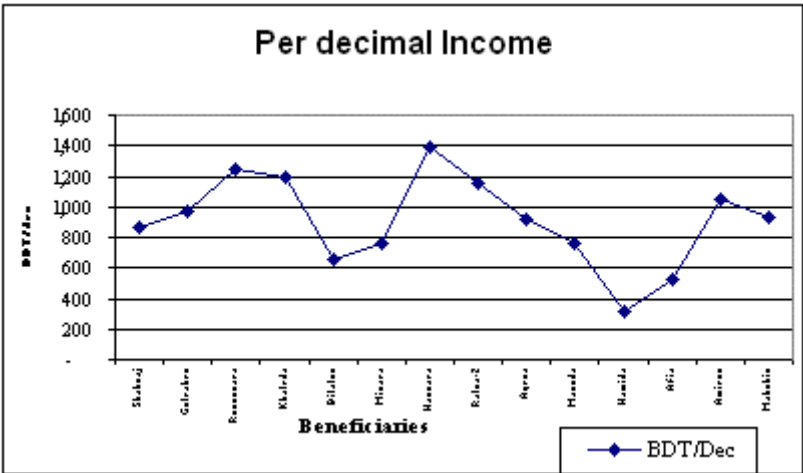


Fig 2: Income obtained by beneficiaries per decimal

BENEFITS OF THE PROJECT

This intervention differed from others in view of the financial support being provided interest free.

The small-scale fish culture was accepted socially as the source of income and the women could contribute to their family from the income of the project.

The women members, who had been confined to household activities, were able to manage the new activity by taking care of the regular fertilization and feeding of fish.

Unlike in the past, where women were not allowed to participate in outside activities, now they were able to participate in workshops and other social events related to projects.

Women acquired the new skill of growing fish with only limited support from men (in cases where heavy physical labour was involved).

Family health improved by consuming fish regularly from their own ponds.

## **LIMITATIONS**

The project has some limitations, particularly for women. The women can still not easily take part in the project, due to the socio-cultural system. Women cannot involve in activities that involve physical labour and also they cannot easily go out to market for the purchase of inputs such as lime, fertilizer, feed etc. They also have to depend on the male member of the family for marketing support of products, i.e. the sale of fish, vegetables etc. Absorption of technical details is also a limitation for women due to poor literacy level.

## **RECOMMENDATIONS**

In the completion workshop, the beneficiaries and other stakeholders made the following recommendations:

Projects should provide at least a two-year support to the beneficiaries to make them technically and financially self-reliant.

There was a need for training on poultry, livestock, fish diseases and resource management.

Loan were required for additional income generating activities

A full time technical Field Worker should be provided.

Project activities should be expanded to cover more people.

## **CONCLUSIONS**

The project outputs showed an encouraging trend. The beneficiaries also showed their great interest to continue this type of activities. Learning of this short-term project, Caritas would like to continue the support to its beneficiaries to make them strong enough to manage the fish culture system independently. In addition, there is scope to replicate this initiative with similar efforts in other areas to benefit the people.

## **Annex - 1**

### **Case Studies:**

**Hasnara Begum** never thought she would earn and contribute to her family by doing some activity like this by herself. She deposited savings regularly and borrowed a loan from Caritas. But when she borrowed her normal loan from Caritas, like other members, she handed over the money to her husband for utilizing in the activities planned by him. During implementation of this project she took out a loan but decided to carry out the activity by herself with the support provided by CARITAS. While her

husband provided help in purchasing fingerlings and other inputs like fertilizer and feed, she managed to carry out the routine activity of fertilizing the pond and feeding the fish.

Her family consists of 5 members: a husband, two sons and one daughter. Her husband does small business in the local market and one son and daughter are going to school.

She earned a total of BDT 26,340 (US\$ 387) from this fish culture project, while she spent BDT 6,884 (US\$ 101), thus the net profit she gained was BDT 19,456 (US\$ 286). This is a lot of money for her and she was happy that she could get such a large income by involving herself in this activity. Her two children go to school regularly and she was easily able to cover school expenses from her income. The family also consumed fish from the pond and that helped them to get better nutrition and keep up good health. She expressed her gratitude to Caritas for such kind of contribution, which helped her to make herself confident in managing the project by herself.

**Ratna Begum** is a housewife and she could make a remarkable profit from the fish culture project. When the opportunity came through this project to initiate fish culture, her husband took lease of a pond of 27 decimal close to their house from the community (a pond of graveyard of the community) for BDT 3,000/ year in 2005 for 3 years. She earned a net profit of BDT 20,524, where she spent BDT 10,496 as input cost. Her family is a joint family and consists of 9 members: husband, one daughter, mother-in-law, 4 brother-in-laws and one sister-in-law. Her daughter is 1 year old. Her husband is involved in agriculture through sharecropping and provided help to her in guarding her pond.

From this income she contributed to her family and her contributions were used to buy clothes and food, as well as school and medical expenses, She expressed her thanks to Caritas for showing her the way of earning income by taking up fish culture, which has helped the family in many ways.

Note: Bangladeshi Taka Calculated as **1 US \$ = 68 BDT**

## Annex - 2

### The package for fish culture

#### 1. Pond preparation

Lime 1 kg/dec, Cow dung 6 kg/dec, Urea 300g/dec, TSP 150g/dec, MP 50 g/dec

#### 2. Stocking density

Sl. No	Species		Length	Stocking density per
	Common name	Scientific Name	(Inches)	decimal
<b>1</b>	<b>Catla</b>	<i>Catla catla</i>	6 - 8	03
2	Silver Carp	<i>Hypophthalmichthys molitrix</i>	6 - 8	12
3	Rohu	<i>Labeo rohita</i>	6 - 8	03
<b>4</b>	<b>Grass Carp</b>	<i>Ctenopharyngodon idella</i>	6 - 8	03
5	Rajpunti	<i>Barbados gonionotus</i>	3 - 5	12
6	Mrigel	<i>Cirrhinus mrigala</i>	6 - 8	03
7	Carpio	<i>Cyprinus carpio</i>	4 - 6	04
	<b>Total</b>			<b>40</b>

### **3. Post stocking management:**

- a. Feed: Mustard Oil Cake (MOC) and Rice bran = 1:2, 3 - 5% of body weight daily, applied twice in a day
- b. Cow dung 5 kg/dec fortnightly
- c. Health observation (sampling) once in a month

### **4. Harvest and restocking:**

The fish would be harvested partially, when they are marketable size, i.e. 500-1,000 g per piece. The same species and number would be re-stocked after partial harvesting.

### **5. Final Harvest & production Analysis:**

Final harvest took place in the end of the project period and the number counted and weighed for analysis.

## **The Punjab - AwF - FAO Motorbike Takes to the Roads of Tripura!**

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**The following story has been received from AwF Director M.C. Nandeesha. AwF is very grateful to him and his AwF co-volunteers and was pleased to join with them in making the purchase of this motorbike possible. We wish the Centre many years of safe driving on project activities. There are two lessons to be learnt from this story: - the volunteers were very generous and small NGOs can react to requests very quickly....**

FAO supported a study to investigate the economics of feeding cultured fish in selected Asian countries, one of which was India. Punjab State, where carp culture is growing rapidly (with an average production of more than 6,000 kg/ha/yr) was recommended for the study; Punjabi farmers are well known for their contribution to the green revolution in India and to the increase in agricultural productivity.

Dr. M.C. Nandeesha (AwF Director and Volunteer), along with staff working with him in the Central Agricultural University Fisheries College in Agartala, Tripura (Mr. Manojit Debnath, Mr. Abhijit Pal and Mr. Manidip Roy) provided the technical support for the successful completion of this project. The results of the study will be included in an FAO technical publication expected to be published in 2007. An honorarium of Rs. 27,000/- was paid for their work, which was shared among all those who contributed. However, these individuals decided to donate their honoraria to the St. Xavier's Vocational Training Centre towards the purchase of a motorbike that could be used for AwF project work and also rented out when it is available to earn some income for the Centre. The final Rs. 10,000/- needed to complete this purchase was made available through the use of AwF project funds.



*Left to right: Mr. Manidip Roy, Dr. M.C. Nandeesh, Mr. Abhijit Pal & Mr. Manojit Debnath with the Punjab-AwF-FAO motorbike*

The idea was presented to Father Joseph. Many projects suffer from the lack of resources to hire four-wheel vehicles and the non-availability of two wheelers for rental purposes has been a major hindrance for carrying out these activities. The idea was well received by Father Joseph and he suggested asking Michael New [Chairman of AwF (UK)] if part of the funds already supplied by AwF could be used for this purpose. An email was sent to him on 17 June asking if Rs. 10,000/- from project funds could be used for the purchase of the motorbike. His approval was received on the same day and the new vehicle was purchased and placed into use on 18 June.

This bike has been named as **the Punjab-AwF-FAO motorbike**, recognizing the source of the funds utilized – the relation to the FAO project in the Punjab project and the contribution of the AwF volunteers and AwF funds.



*Mr. Manojit Debnath astride the motorbike*



## **News From VOSD Bangladesh**

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**Although the AwF-VOSD cage culture project is completed, VOSD is continuing this initiative into its second year, using their own resources, as shown in the following notes from Tamanna Khatun. A second proposal for AwF support for the aquaculture work of VOSD is currently being considered by the AwF Technical Advisory Group.**

Our cage culture project is going well. The 2nd cycle stocking already started at Nalcity last week. It was late due to warm weather as we were waiting for rain. The rainy season started here very late due to hot (temperature maximum 40 in some places). The number of cages has increased at Nalcity because some beneficiaries have taken a loan from VOSD to extend the number of cages that they have. The technology we introduced in the AwF-VOSD project has spread to another upazila in Pautakhali district. Having read the cage culture book that the project published some farmers have shown their interest and asked for our help.

Next week a workshop will be held at Dhaka on Integrated cage-cum-pond aquaculture, organized jointly by Aquaculture Collaborative Research Support (ACRSP) AIT, Thailand, Bangladesh Fisheries Research Forum (BFRF) and VOSD. on 14th June. I would like to inform you that I am going to make a presentation on the output of the AwF-VOSD cage culture project.

Best Regards

Tamanna  
8 June 2007

# AwF News

## AwF receives further assistance from the World Aquaculture Society

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**A new agreement between WAS and AwF comes into force on 1 January 2008**

AwF is very pleased to announce that, as part of a new agreement with the World Aquaculture Society (WAS), the WAS Home Office is now kindly undertaking several administrative duties for us. These include the management of our volunteer and newsletter databases, the distribution of our newsletter and the tracking of our projects.

**PROJECTS:** New project proposals will continue to be considered by our Technical Advisory Group (TAG), chaired by AwF Director Geoff Allan. Those wishing to submit [proposals for new projects](#) should consult the webpage called 'Projects' and submit the forms to Carol Mendoza ([carolm@was.org](mailto:carolm@was.org)) who will ensure that they reach the TAG and will track their progress. [Regular reports on current AwF projects](#) should also be sent to Carol Mendoza ([carolm@was.org](mailto:carolm@was.org)), who will forward them to AwF Chairman Kevin Fitzsimmons for inclusion on our website.

**VOLUNTEERS:** Those who wish to volunteer should consult the webpage called 'Volunteers' and submit their forms to Carol Mendoza ([carolm@was.org](mailto:carolm@was.org)) who will enter their details into our volunteer database.

**NEWLETTERS:** Our newsletters will continue to be edited by AwF Director Scott Peddie but will be distributed by the WAS Home Office. Requests for copies should be sent to Carol Mendoza ([carolm@was.org](mailto:carolm@was.org)) and suggestions for content should be sent to Scott Peddie ([s.peddie@pattersonpeddie.com](mailto:s.peddie@pattersonpeddie.com)).

## AwF Director Honoured

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**Another of the AwF Directors has recently been honoured.....**

AwF sincerely congratulates Dr. M.C. Nandeesha, who was awarded a Gold Medal by the Asian Fisheries Society during the 8th Asian Fisheries Forum in November 2007 for the contribution that he has made to the Society.

We wish you many more successes in the future, Nandeesha, particularly in your much appreciated work for AwF!

## Some News From Our Affiliate in Spain

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**We are pleased to hear from Daniel Montero Vitores, the President of Acuicultura sin Fronteras (España).**

"A paper on the development of Acuicultura sin Fronteras (AsF) was presented in the 2007 National Symposium on Aquaculture organised by the Spanish Aquaculture Society (SEA). SEA has shown interest in AsF and will help us in the future.

AsF is exploring the potential of the following activities to alleviate poverty through small-scale aquaculture:

- Cooperating with local NGOs to develop cage farming for some communities of the islands in Lake Titicaca, Peru
- Working with the organisation "Andalucia por un Mundo Nuevo" in Malawi.
- Cooperating with "Lanzarote Help" in to help Pigmy communities to rear fish around a hospital that this group has already established there.
- Discussing how to assist "La Casa de Africa" (a Spanish Government organization in cooperation with the Government of the Canary Islands)"

*Daniel Montero may be contacted at the following email number: [dmontero@iccm.rcanaria.es](mailto:dmontero@iccm.rcanaria.es)*

## **A "Guess Who?" competition in Scotland has raised funds for AwF for the second year running.....**

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At the Edinburgh conference 'Aquaculture Today 2007' a "Guess Who?" competition asked participants to identify twelve people currently engaged in the UK aquaculture industry with photographs of them when they were young children. The individuals who agreed to have their childhood photographs used in this way were Chris Mitchell and Alan Stewart (Landcatch), Nick Bradbury (Biomar), Sue Utting (Seafish), Sid Patten (SSPO), Richard Slaski (FSAP), Christina Reid (Fish Farmer Magazine), Nick Joy (Loch Duart), Charlie Brooke (Cromarty Salmon), David Sandison (Shetland Aquaculture), Pauline Munroe (FRS) and Paul Irving (Lakeland Smolt). The main sponsor of this competition was Landcatch Natural Selection [[www.landcatch.co.uk](http://www.landcatch.co.uk)] and the event was managed by Fish Farmer Magazine [[www.fishfarmer-magazine.com](http://www.fishfarmer-magazine.com)]. The competition raised over £525 for AwF. Major donors were Biomar Ltd, Christopher Mitchell, Hjaltland Seafarms Ltd and Muirachmhainni Teoranta. The board of AwF (UK) is extremely grateful to the organisers and participants in this fun event for supporting our work.

## **Michael New Celebrates 75 Years With Fund-Raising Event**

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**A garden party was held in the beautiful village of Hambleton (England).....**

A jazz barbecue in the garden of his favourite English pub was the way in which our founder chose to celebrate with nearly 90 guests in July 2007.

Since he said that he did not want any presents, guests brought a total of £1,100 (US\$ 2,200) in donations for our NGO instead.

AwF is extremely grateful to his friends and relatives and hopes that other people may choose to mark family and other celebrations in this way.

The following pictures show that it was a happy (and, for once in this dismal English summer, sunny!) occasion. Michael was of course saddened by the absence of his late wife Janet but happy to that his daughter Sophie and her family were with him).



*The 'aquaculture table'. (Left to right) Magda Sorgeloos, Johan Verreth, Michael New, Kai Lorenzen, Patrick Sorgeloos.*

## **Tripura Fish Hatchery Being Named After English Street by AwF Project**

The following message was sent by the AwF Bishramganj project in Agartala, Tripura (north-east India) to the residents of a street in Marlow, to be read out during a street party raising funds for the work of AwF. The residents of South Place Marlow were very happy with this news and pleased that they are so closely identified with AwF's work; they all sent their best wishes to Bishramganj for continued success.

MESSAGE TO THE SOUTH PLACE MARLOW (ENGLAND) STREET PARTY (14 July 2007)\*  
FROM THE AwF-BISDHARAMGANJ PROJECT IN WEST TRIPURA, INDIA

(\*This summer party was organized for the second year running by a street committee that included AwF Director Sophie Varley to raise funds for the work of AwF. In 2006 the party contributed over £4,400 (~US\$ 8,800) to AwF to help its work with poor people in developing countries)



*Group photo of AwF Fish Farmers and Volunteers*



Fish ponds are like “live banks” as well as a source of food for the people in the eastern part of India and Bangladesh, where AwF has concentrated much of its work. Farmers can harvest fish and sell them at any time, irrespective of the size, based on financial necessities. Our work focuses on poor people and, in particular, we have placed special emphasis on reaching those that are not reached through existing programmes of Government or other agencies. More than the material support provided, AwF focuses on building the knowledge of the poor and helping these people to use this to improve their livelihoods. Wherever possible, we have always used an integrated approach to help the farmers to recycle wastes and to utilize agricultural land efficiently by providing support to them in various aspects of agriculture. In addition, as we are generating a lot of information, this is being used to influence the policies and programmes of various institutions. For example, a focus on women in aquaculture had been almost non-existent before and we are gradually building information on how an investment in educating both men and women can pay rich dividends, instead of a gender-blind approach of focusing only on men.

With the support we have already received from all of you, we commenced our work in India with 30 farmers in the first year and increased this to 50 farmers in the second (current) year. We have already made reasonably good progress and have learnt many lessons. In this coming year we have decided to work with 75 farmers to celebrate the 75<sup>th</sup> year of the Founder Chairman of AwF, Michael New. His selfless commitment has been an inspiration to many of us here.

During this year, we also intend to complete the fish seed production facility (hatchery) with the St. Xavier’s Vocational Training Centre, with a view to earning a regular income and to self-financing our activities, at least after another two years. Most importantly, our aim is to provide quality fish fingerlings to poor farmers. We seek your kind approval to name the proposed hatchery after your street –

### **THE SOUTH PLACE MARLOW FISH HATCHERY**

- and to dedicate it as your contribution to poor people to continue aquaculture in a sustainable way. We have an assurance from the leader of the training centre, Father K.J. Joseph, that he would set apart a portion of the income of the hatchery to provide support to farmers on a regular basis.

St. Xavier’s Training Institute trains young people (every year about 50 boys and 50 girls) in various aspects of agriculture including aquaculture. Our efforts have been influencing these young boys and girls in many ways, in addition to our field work with farmers around the centre. Our proposed fish seed production unit will complement the existing integrated fish farm facility on the farm and help these young boys and girls to learn the necessary techniques to spread aquaculture throughout the poor of Tripura State.

We are so grateful to all of you for your continued support, which is contributing to make a tremendous difference to the lives of poor people.

M.C. Nandeeshia and B. Santhosh (AwF Volunteers)



*Fr. Joseph opens the Indian Fish Farmers' Day events*



*AwF fish farmers on a field visit (10 July 2007)*

## **Another Event in Marlow Raises Record Amount for AwF!**

**We are delighted to report that the residents of a street in England have raised a record sum for the work of AwF.....**

The residents of South Place Marlow (England) have come up trumps again!

In their street party on 14 July 2007, they raised nearly £5,200 (~US\$ 10,400) for AwF. This was about 16% more than they raised in a similar event in 2006, bringing their total contribution to our work so far to £9,600 (~US\$ 19,200).

This superb effort shows just what can be done when the general public becomes enthused about our work. However, persuading the general public to contribute requires careful planning, a lot of dedicated work and the organisation of a 'fun' event.

Having a celebrity to open the event also helps, especially one like Paul Ross (for those of you who do not live in England, he is a well-known media presenter) who lives locally and had done impressive homework about AwF! Paul was therefore able to speak authoritatively to local reporters about the value of teaching poor people how to farm fish for food and income.

For all of this we are again very grateful to all the members of the South Place Marlow Street Party Committee, this year led by Suzanne Brown, for adopting AwF as 'their' charity. A few photos of the event are provided below.

The trustees and directors of AwF are very proud of South Place!



*South Place Marlow before the public was admitted [right to left: Paul Ross (Media personality), Richard Scott (Marlow Town Mayor), Suzanne Brown (South Place Committee Chair) and Sophie Varley (AwF Trustee)]*



*Entertainment included a great band, a wonderful DJ from Manchester, a super singer with guitar, and the beautiful Indian dancers shown above*



*With his wife Laura, Tony Brondbjerg raised over £1,400 for AwF by organising a silent auction. Here he announces the super items contributed for the auction by many Marlow shops, restaurants and other businesses (the little girl just likes having her photo taken!)*



*Batman (alias Mick Varley) strode purposefully down the street before the party commenced. His disguise in selling raffle tickets helped to raise over £500*

## **Marlow (England) Raises Funds for AwF Again!**

**For the third year running, Mick and Sophie Varley and their friends entered a crew into the Marlow Town Regatta Dragon Boat Race.....**

The dragon boat crew has raised nearly £2,100 for AwF in 2007. This brings the total raised for AwF through this activity alone to nearly £4,700 (~US\$ 9,400) since 2005.

AwF is most grateful to the Prince of Wales Marlow (public house), which paid for the entry of the AwF - PoW crew and supplied its special t-shirts and to the members of the crew (some were PoW customers and two were British Airways staff). Above all, we thank those who painstakingly collected the money for the sponsorships that raised so much money for AwF and those who contributed to their initiative.





*Sophie & Mick Varley get their safety kit on*



*Beating the drum for the first race*



*Setting off for the second of their three races*



*Crew and supporters relax between races*



*AwF is everywhere!*



*OK, they didn't come first but Mick Varley still gets a certificate from former Marlow Mayor Jim Campbell*

## **AwF and AwF (UK)**

**Aquaculture without Frontiers was originally registered in both the USA and the UK under the same name but with different directors. Recently, AwF in the UK has been renamed to prevent confusion between the two.....**

By decision of the trustees on 10 May 2007, Aquaculture without Frontiers (as registered in the UK) changed its name to Aquaculture without Frontiers (UK) - [AwF (UK)]. This is the name now registered with Companies House and the Charity Commission.

There has been no change in the organisation registered in the USA - Aquaculture without Frontiers [AwF].

AwF and AwF (UK) continue to share this website and to produce a joint newsletter.

**The current Directors of the AwF are:** Kevin Fitzsimmons (Chairman), Geoff Allan, John Cooksey, John Forster, Michael New, M.C. Nandeesha and Joe Tomasso.

**The current Trustees of AwF (UK) are:** Michael New (Chairman), Geoff Allan, John Cooksey, William Northcroft, Scott Peddie and Sophie Varley (Secretary).

How to contact AwF and AwF (UK):

- **general enquiries** should be sent to Kevin Fitzsimmons [AwF] and Michael New [AwF (UK)].
- **project proposals , messages about volunteering and requests to be added to the newsletter mailing list** should be addressed to Carol Mendoza.
- **email addresses** for all these contacts are provided at the top of the home page of our website.
- **you can make our continued work possible by** clicking 'donate' in the navigation panel of our website (please help us).

## **AwF (UK) Chairman Helps a Tsunami Affected Library in Aceh**

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**AwF has recently been able to assist a fisheries/aquaculture library in the tsunami-devastated area of Aceh, Indonesia. Michael New has shipped scientific journals and books from his own collection to Jakarta, including a thirty-year run of the journal 'Aquaculture' [from Volume 1(1) onwards (1972-1992)], and long runs of the journals 'Aquaculture Research' (1995-2006) and 'Aquaculture Nutrition' (1995-2005). The Indonesian Directorate-General for Aquaculture is kindly taking care of the transshipment of these donated materials from Jakarta to Aceh. We in AwF hope that they will be a small but useful contribution to the progress of sustainable aquaculture in Aceh.....**

The library is at Balai Budidaya Air Payau (Brackishwater Aquaculture Development Centre) Ujung Batee, about 16 km out of Banda Aceh. BBAP Ujung Batee was badly damaged in the December 2004 tsunami. One part of the facility (Neuheun site) is being rebuilt by the Japanese government, while the main site is being rebuilt by the Australian government under the Australia Indonesia Partnership for Reconstruction and Development (AIPRD).

The Australian Centre for International Agricultural Research (ACIAR) is funding (also under AIPRD) a project to build capacity amongst BBAP Ujung Batee staff to allow them to support the development of coastal aquaculture in Aceh. This project has three main activities:

1. implementation of Better Management Practices for shrimp aquaculture;
2. strengthening of fish health services, including testing for shrimp viral pathogens;
3. production of high-health seedstock of established species, and production of 'new' aquaculture species to allow production diversification in coastal aquaculture.

BBAP Ujung Batee functions as a focal point for the dissemination of aquaculture technologies to the coastal aquaculture industry in Aceh. To support this function, a good reference library is essential. Many reference books were lost in the December 2004 tsunami, along with the laboratory and much of the seed production infrastructure.

To date the following agencies have donated books and reference material to help rebuild the BBAP Ujung Batee library:



- Australian Centre for International Agricultural Research
- World Aquaculture Society (through its Outreach Committee)
- Aquaculture without Frontiers / Michael New

## AwF Advertising Campaign

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Many of you will have seen advertisements designed to raise funds for AwF in the aquaculture press. These have cost us nothing, due to the generosity of various people and publishers, to whom we are most grateful.....

A fund-raising advertisement was recently designed by the staff of **Capamara Publications** as a donation to AwF. We are deeply grateful to them..

We are also very thankful to **David Little (Institute of Aquaculture, Stirling)** who allowed us to use a photograph of his in the advertisement.

Many aquaculture publications and websites have kindly and generously donated advertising space to AwF to publish this advertisement, including (to date): **Aquaculture Asia Pacific, Aquaculture Health International, Aquaculture Research (Blackwell), Aquafeed.com, Aquafilia, Aquafin, Fish Farming International, Eurofish Magazine, Hatchery International, Panorama da Aquicultura .....**




Photo courtesy of Dr. Dave Little, University of Stirling

*Working Together to Alleviate Poverty*


**Aquaculture without Frontiers**

**Requests Your Assistance**

The independent non-profit organisation Aquaculture without Frontiers (AwF) promotes and supports sustainable aquaculture initiatives in developing countries around the world. AwF is currently teaching poor families in Bangladesh, India, Malawi and Thailand to raise fish for food and income through small-scale responsible aquaculture. AwF has also assisted tsunami-devastated shrimp farmers in India and Indonesia.

Further information on our activities, including how to donate to help our future work, can be found at:  
[www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org)

Aquaculture without Frontiers - be a part of something special.



**AQUACULTURE**  
WITHOUT FRONTIERS

For Up-to-Date News, Please Visit Our Website  
Regularly:  
[www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org)