

# Aquaculture without Frontiers (AwF) 2003-2012



**Michael New**

Founder & Patron, AwF

# AwF 2003-2012



## MISSION STATEMENT

**Aquaculture without Frontiers** is an independent non-profit organization that promotes and supports responsible and sustainable aquaculture in the alleviation of poverty by improving livelihoods in developing countries.

## PRINCIPLES

### **Aquaculture without Frontiers will:**

- Provide technical and managerial experience from individuals in the existing aquaculture community, utilizing all age strata, from students to retirees, as appropriate.
- Support responsible and sustainable aquaculture practices.
- Pay special attention to forms of aquaculture (and associated activities) that have the potential to alleviate poverty and improve health through the provision of 'home-grown' food and the enhancement of livelihoods.
- Recognize and support the role that women play in aquaculture and linked activities.
- Ensure that its activities are targeted at benefiting 'grass-root' farmers and SMEs.
- Be culturally sensitive, and non-discriminatory and non-aligned in religion and politics.
- Carry out projects that are carefully monitored and assessed for efficacy.
- Be transparent and accountable in its work.

AwF will be established as an independent 'stand alone' NGO, although one of its key principles will be to assist existing NGOs, which have a wealth of experience in developing countries. Cooperation need not necessarily be confined to NGOs that already include aquaculture in their portfolio of project work; those that use common resources will also be targeted.

## OPERATIONAL STRATEGIES

A series of operational strategies were also determined (details on our website).



## AwF FOUNDING MEMBERS

<b>Geoff Allan</b>	Australia
<b>Craig Browdy</b>	USA
<b>Pedro Bueno</b>	Thailand
<b>Manuel Carrillo</b>	Spain
<b>John Cooksey</b>	USA
<b>Claude Forthomme</b>	Italy
<b>Mauro Doimi</b>	Italy
<b>Dan Fegan</b>	Thailand
<b>John Halver*</b>	USA
<b>Yves Harache</b>	France
<b>Freddy Ib</b>	Denmark
<b>Narayanan Kutty</b>	India
<b>Denis Lacroix</b>	France
<b>Ricardo C. Martino</b>	Brazil

\* Sadly now deceased

<b>Deb Menasveta</b>	Thailand
<b>M.C. Nandeesh*</b>	India
<b>Cornelia Nauen</b>	Belgium
<b>Michael B. New</b>	UK
<b>William Northcroft</b>	UK
<b>Peter Prior*</b>	UK
<b>Roger Pullin</b>	Philippines
<b>François René</b>	France)
<b>Ziad Shehadeh*</b>	USA
<b>Patrick Sorgeloos</b>	Belgium
<b>Amos Tandler</b>	Israel
<b>Wagner Valenti</b>	Brazil
<b>Michel Vincke</b>	Belgium
<b>Ulf Wijkstrom</b>	Sweden
<b>Meryl Williams</b>	Malaysia

\* Sadly now deceased



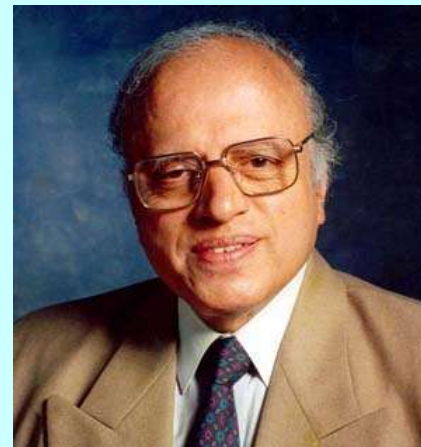
# AwF Patrons



**Founder & Patron**

**Michael Bernard New, OBE**

**Past President, World Aquaculture Society  
Past President, European Aquaculture Society**



**Patron**

**M.S. Swaminathan, FRS**

**UNESCO Chair in Eco-technology  
Chairman, M S Swaminathan Research Foundation.**



# AwF DIRECTORS & TECHNICAL ADVISORS 2003-2012

## DIRECTORS of AwF & AwF (UK)

Geoffrey Allan	AUSTRALIA
Charles (Sungchul) Bai	KOREA
David Conley	CANADA
John Cooksey	USA
Barry Costa Pierce*	USA
Pierre Erwes	FRANCE
Kevin Fitzsimmons*	USA
John Forster	USA
Lorrae Hayes	UK
David Little	UK
Kenny McCaffrey	UK
M C Nandeesh*	INDIA
Michael New*	UK
William Northcroft	UK
Roy Palmer	AUSTRALIA
Scott Peddie	UK
Jose Fernandez Polanco	SPAIN
Patrick Sorgeloos	BELGIUM
Shakuntala Thilsted	MALAYSIA
Joseph Tomasso	USA
Sophie Varley	UK
Patricia Moraes-Valenti	BRAZIL

\* Served as Chairman of AwF and/or AwF (UK)

## AwF TECHNICAL ADVISORY GROUP

Dr. Geoff Allan*	GOV RESEARCH
Dr. Claude Boyd	UNI RESEARCH
Dr. Craig Browdy	PRIVATE SECTOR
Dr. Randall Brummett	WORLD BANK
Dr. Peter Edwards	UNI RESEARCH
Dr. Kevin Fitzsimmons	UNI RESEARCH
Dr. Yves Harache	GOV RESEARCH
Dr. Anita Kelly	UNI RESEARCH
Dr. David Little	UNI RESEARCH
Dr. M.C. Nandeesh*	UNI RESEARCH
Dr. Roger Pullin	CONSULTANT

\* Chairman 2003-2012



## FUNDS RAISED FOR AwF ACTIVITIES 2003-2012

During its first decade AwF income was almost US\$450,000

### DIRECT FUND-RAISING

**AwF (International): US\$ 93,058**

**AwF (UK): US\$ 88,260**

**Total: US\$ 181,318**

### GRANTS

**EAS – Nutreco – Wageningen U – AwF  
Kenya Studentship: US\$ 1,792**

**AwF – WAS - YSI  
Tsunami relief: US\$ 74,812**

**AwF - U of Arizona - USAID Farmer to  
Farmer Programs: US\$ 187,042**

**Total: US\$ 263,646**



# **AwF 2003-2012**

## **Major donations and grants from corporate and charitable organizations**

**American Fisheries Society (Fish Culture Section)  
Aquacultural Engineering Society  
Aquaculture Communications Group  
Aquatic Eco-Systems  
Asian Fisheries Society  
Balanced Food  
Biomar  
BIOMIN  
British Airways  
CP Prima  
Dell Computers  
Essential Live Feeds  
European Aquaculture Society (EAS)  
Fjord Seafood Scotland  
FarmingGroupe Québécois de Soutien à AwF  
Gippsland Aquaculture Industry Network  
Houghton Springs Fish Farm  
Intervet International  
INVE Aquaculture  
International Working Group on Crustacean Nutrition  
Kerala Live Stock Development Board  
Kitchen Table Charities Trust  
Landcatch  
Laval University Department of Animal Sciences  
Marine Harvest (Scotland)  
National Westminster Bank**

**Novus International  
Pan Fish (Scotland)  
Panhellenic Society of Technologists Ichthyologists  
Presbyterian churches in Crumlin, Dromore, Mountpottinger &  
Templepatrick, Northern Ireland  
Prilabsa  
"Prince of Wales" Public House  
Scottish Sea Farms  
Seafood Consulting Associates  
Skretting Aquaculture Research Centre (Nutreco)  
Society for Assistance to Fisherwomen  
State Bank of Travancore  
St. Dunstan's (RC) Parish, Bourne End  
Toleo Foundation  
Trans World Aid (formerly Third World Aid)  
University of Rhode Island/ Rhode Island Sea Grant Program  
University of Stirling Staff Charities Fund  
Visaki Bio Marine  
Winrock International  
World Aquaculture Society (WAS) and its chapters (Asian  
Pacific; Korean; Latin American and Caribbean; USAS)  
University of Ghent University students & staff  
Vet Aqua International  
YSI Foundation**

## **AwF 2003-2012: Donations of money and facilities**

**Our advertisements were freely designed and placed by the aquaculture press, including:**

**Aquaculture Europe**  
**Aquaculture Pacific**  
  
**Aquafilia**  
**Aquafin**  
**Aquaculture Research**  
**AquaTT**  
**Eurofish**  
**Fish Farming International**  
**Fishing Chimes**  
**Growfish (GAIN)**  
**Hatchery International**  
**International Aquafeed**  
**IntraFish**  
**Northern Aquaculture**  
**Panorama Acuicola**  
**Panorama da Aquicultura**  
**World Aquaculture**

**Apart from donations from companies and charities, AwF income came from individual donations and fund-raising activities.....**



# AwF 2003-2012: some of our fund-raising activities: abseiling, art expositions, dragon-boat racing, street parties, student fundraising



Michael New AwF 2003-2012  
Ho Chi Minh City December 2013





# AwF 2003-2012 SUMMARY OF PROJECTS & ACTIVITIES

## (excludes Tsunami relief work and Farmer to Farmer programs)

LOCATION	PARTNER	SPECIES	TYPE	FAMILIES	YEARS
BANGLADESH	CARITAS	CARPS	PONDS	14	1
BANGLADESH	RDRS	CARPS	PONDS	64	4
BANGLADESH	VOSD	TILAPIA	CAGES	35	1
BURKINO FASO	NGO	CLARIAS	ADVICE	n/a	n/a
GHANA	CO-OP	TILAPIA	ADVICE	n/a	n/a
HAITI	CO-OP	TILAPIA	ADVICE	n/a	n/a
INDIA	DON BOSCO	CARPS	PONDS	30	1
INDIA	DON BOSCO	CARPS	INTEGRATION	50	1
INDIA	DON BOSCO	CARPS	HATCHERY	MANY	2
INDIA	JGVK	CARPS	HATCHERY ETC	100	2
KENYA	EAS/NUTRECO	TILAPIA/CARPS	SURVEY	n/a	0.1
LIBERIA	ORPHANAGE	TILAPIA	ADVICE	n/a	n/a
MALAWI	WORLD FISH	TILAPIA	INTEGRATION	350	1
NEPAL	AIT	CARPS/TILAPIA	INTEGRATION	70	2
NEPAL	AIT	CARPS/TILAPIA	INTEGRATION	49	2
PAPUA N G	ACIAR	AQUAFEEDS	TRAINING 41	n/a	n/a
PERU	INADERU		ADVICE	n/a	n/a
THAILAND	WORLD VISION	TILAPIA/CATFISH	TRAINING	n/a	n/a
THAILAND	WORLD VISION	AQUAFEEDS	TRAINING 27	n/a	n/a



# AwF Projects

***Just three examples***

**This concerned the integration of aquaculture in watershed management programs to help very poor and marginal farmers that were cultivating rice, vegetables, potatoes and pineapples. All of those involved were from tribal groups.**

**Our aim was to improve their income and family nutrition and to create employment opportunities.**

**30 families were chosen. In each case both husband and wife were trained in fish culture for two days in the training centre.**

**These trained farmers utilized their knowledge to renovate their own ponds, which had been used for water storage, wild fish capture and - in some cases – the stocking of cultivated varieties of fish without resorting to proper aquaculture practices.**

**Popular carp species, along with few of the self-recruiting species, were introduced to ensure sustainability.**

**Integration of fish ponds with other agricultural activities was encouraged.**



## INDIA: AwF-Bishramganj 2<sup>nd</sup> phase DESIGN & RESULTS

In Phase 2, our work was expanded to include a further 20 poor tribal, Muslim (Bengali) and Hindu families.

These were given training and follow-up support, along with essential inputs such as lime, fish seed and chemical fertilizers.

This enabled them to increase fish production from 500-600 kg/ka to more than 1,200-1,400 kg/ha.

Besides fish culture, farmers were also assisted through an integrated approach to improve other farming activities, particularly the production of tuber crops and the supply of good breeds of poultry, pigs and mangos. It was found that the activity of farmers from the Bengali community was much higher than those from the tribal groups.





## QUOTATION FROM PROGRESS REPORT

*Mr. Manoranjan Debbarma (42) comes from a agricultural background in paddy cultivation. However, he found it difficult to run a family of 6 through selling paddy alone, so he had to work as a wage laborer in the neighborhood whenever it is off-season for paddy. His poor economic condition is reflected everywhere in his house.*

*With only about 0.3 ha of paddy land, apart from a mud walled house and a small tank (pond), he has no other assets. His living conditions have changed over the last 3 years since he has got in touch with AwF initiatives implemented through the St. Xavier's Vocational Centre.*

*With the inputs and technical help from the Centre he has made significant efforts to improve his relatively unproductive pond, which is situated in a difficult elevation of land vulnerable to many externalities.*

*However, during 2009 he was able to sell more than 80 kg of fish @ 80 INR/kg [US\$ 1.28/kg] from his 0.16 ha pond, which is a large amount of money for him, besides obtaining fish for (family) consumption regularly from his pond.*

The project farmers (now 75) requested assistance in the production of quality fish seed; this led to Phase 3 – the establishment of a hatchery to be managed with the community.

Due to the personal fund-raising and keen interest of a particular street in England, the project participants named their new hatchery ‘the South Place Marlow Fish Hatchery’.

Its facilities became an additional resource for local youths involved in 1-year integrated farming training Programs run by the St. Xavier’s Vocational Training Centre and providing training in integrated agricultural activities.

Generally 50 boys and 50 girls from the rural areas were trained per year, mainly School dropouts looking for some skills to earn their livelihood. Some were also trained in ornamental fish production.





## **MALAWI: AwF-WorldFish project: DESIGN**

**In this joint AwF-WorldFish Center project the beneficiaries were provided with integrated aquaculture agriculture (IAA) training for growing tilapias with vegetables and crops and poultry and livestock to increase farmers' income, thus improving their financial status and their well-being.**

**Poor families were included because, in fish farming, total investments and risks are so minimal. With improved fingerling quality and accessibility, coupled with a good extension services the project hoped to increase average yield the current 800-1,000 kg/ha/year to 2,500 kg/ha/year.**

**The water surface was also capable of supporting a second production of more than 20 hectares of the staple food, maize - enough to feed 1,000 people for 4 months.**

**The main goal of the program was to promote sustainable integrated aquaculture-agriculture to help the local communities to achieve their goal of reducing poverty and improving food security, nutritional status, and increased household incomes. To achieve this overall objective, work was pursued in two main areas:**

- developing technologies for fingerling production and establishing a core group of fingerling producers among the 500 farmers that had adopted integrated aquaculture in the project area.**
- building the capacity of small-scale farmers within a farmer-to-farmer extension concept to improve and sustain extension services at the local level.**



# MALAWI: AwF-WorldFish project: PHOTOS

**Integrated farm**



**Pond harvesting**



**Community monitoring and evaluation**



# **MALAWI: AwF-WorldFish project: RESULTS**

## **THE RESULTS OF THIS PROJECT WERE REMARKABLE**

**21 potential fingerling producers were originally identified but 38 eventually participated, producing a total of 218,000 fingerlings.**

**213 new ponds were constructed, of which 152 had been stocked with quality fingerlings by year-end.**

**12 demonstrations were given by several farmers who conducted open days. During these they reported achieving tilapia production rates of 1,800-3,200 kg/ha, considerably higher than their pre-project rates of 800-1,000 kg/ha.**

**A brochure on best practice for quality fingerling production was developed.**

**71 lead farmers were identified and trained in small-scale fish production.**

**278 farmers were trained in IAA methodology.**

**Nearly 270 ponds were integrated with maize and vegetable production.**

**The satisfaction of local demand for fingerlings led to the need for a fingerling marketing system to supply farmers beyond the Mavwere Area.**

**An aquaculture production booklet in the Chichewa language was produced.**

**A community-based monitoring and evaluation system was established.**



## THE STORY OF OLIVE NJOLOMOLE



This lady had been struggling to raise three children. One was born when she was at school, which she then left. Nothing was working for her, being a young woman living with only her mother.

Her father had died several years earlier in Lilongwe. Olive and her family went back home to depend on farming as a coping mechanism. There her mother struggled to raise five children alone. She started growing tobacco, the main cash crop of Malawi.

Olive finally married a man who also depended on small-scale agriculture. Together they supplemented their income by laboring in nearby tobacco estates.

The AwF project made Olive see another side of her life and made her economically independent.

*“After I had attained my JCE, I tried to apply for several jobs but I could not be employed,” lamented Olive, “but now with the IAA technologies that I have learned and the idea of taking fish farming as a business, I call myself now employed. I have two ponds; I am selling fingerlings to different farmers.*

*On average, I earn Mk 12,000/month (~US\$ 32/month) from fingerling sales and about MK 3,000 (~US\$ 8/month) from table-sized fish. I also sometimes barter fish. Recently I exchanged six table sized fish for a chicken. It was an egg laying chicken and was worth Mk 1,500 (~US\$4)”.*

**Operating in Rainas Tar village of Lamjung, a district in the mid-hills (1,500-2,000 ft) of Nepal this project made tremendous impacts on the empowerment of women.**

**Within two years, with a small grant from AwF, it trained more than 70 women and constructed 70 new ponds.**

**In addition to producing over half a ton of fish in two seasons, it had created tremendous awareness about small-scale fish farming among women in the entire district as well as in neighboring districts.**

**Although the ponds constructed were quite small and the total production of fish was not large, the large proportion of family consumption (80%) indicated that they played a significant role in family nutrition.**



**Carrying fingerlings uphill**



**Scaring away birds**



## NEPAL: AwF-AIT PROJECT 2<sup>nd</sup> PHASE DESIGN & RESULTS

Phase 2 extended it two more villages in Lamjung and two new districts, Gorkha and Kavre. In its first year 49 families were supported by forming three women's groups. 49 ponds were constructed and 1,275 kg fish (valued at about US\$ 3,600) produced from the total pond area of 2.58 ha.

This showed that small family ponds (<100 m<sup>2</sup>), can produce over 40 kg fish in about 8 months. Families consumed at least 60% of their production (sometimes up to 90%). Mean family fish consumption was 5.6 to 25.8 kg.

Family fish consumption increased to ~10 kg per capita (national average was <2 kg per capita).

By selling surplus fish, families in Gorkha earned about NR 2,600/family (US\$ 26)/family) - more than adequate to support the education of two children.



**NEPAL: AwF-AITt PROJECT 2<sup>nd</sup> PHASE**  
*MORE RESULTS will be described by Ram Bhujel later in this session*





## AwF TSUNAMI RELIEF: ACEH, INDONESIA





## AwF TSUNAMI RELIEF: KERALA, INDIA







# AwF - University of Arizona - USAID PROGRAMS

The **first program** provided travel funding for 20 AwF volunteer missions to work with farmer collaborators to implement more sustainable farming techniques in Bangladesh, India, Indonesia, Mexico, Trinidad & Tobago and New Caledonia



Based on the success of the first program, further support was obtained from USAID for a **second Farmer to Farmer program** by AwF volunteers to work in Kenya and Mexico



AwF - University of Arizona – USAID:

**2<sup>nd</sup> PROGRAM**



***The program leader, a former Chairman of AwF, will be talking about the activities of the 2<sup>nd</sup> Program later in this session***



**Cage frame construction from split bamboo and making feeds  
(BANGLADESH)**



**Aquaculture-crop Integration and family involvement  
(INDIA)**

# AwF PAST, PRESENT AND FUTURE

*Please look at the project pages of our website*

*[www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org)*

*for further details of our 2003-2012 work*

***A paper on the future activities of AwF  
[AwF - THE SECOND DECADE]  
will be presented by  
AwF Executive Director Roy Palmer  
at the end of this session***

***Don't miss it!***

