

# Investing in WorldFish Center & Our Partners

JANUARY - MARCH 2008 VOL 1

## G RANTS AND AWARDS

### AUSTRALIAN CENTRE FOR INTERNATIONAL AGRICULTURAL RESEARCH

#### Developing Aquaculture-based Livelihoods in the Pacific Islands region and tropical Australia –

WorldFish provides technical inputs to this project on sustainable aquaculture in the Pacific Islands and indigenous aquaculture in tropical Australia. The project supports the Secretariat of the Pacific Community's (SPC) Regional Aquaculture Strategy and will supplement the research and development activities of the SPC Aquaculture Action Plan. It draws on WorldFish expertise developed through ongoing and completed ACIAR-funded WorldFish projects and other ongoing aquaculture projects in the region.

**GRANT:** AUS\$ 14,000 or approx. US\$ 13,043 over 4 years

**WORLDFISH STAFF INVOLVED:** W Nash

#### Review of Sandfish Pond-Culture Progress in Vietnam -

Coastal communities in Asia Pacific are facing severe difficulties in maintaining livelihoods based on fisheries resources. The development of shrimp farming promises to deliver new jobs, but in many Asian countries, including Vietnam, shrimp disease, poor pond management, and inappropriate locations as well as difficult market conditions have increased risks. Farming and co-culture of the sea cucumber, specifically sandfish, offers access to new markets in China and elsewhere. Pioneering research by the WorldFish Center and the Research Institute for Aquaculture No. 3 of Vietnam has catalyzed interest among local farmers in pursuing this option. Researchers working on the proposed project would document recent research progress in Vietnam on sandfish husbandry and pond-based systems, examine pond dynamics during the wet season and methods for minimizing the effects of freshwater input, document the production cycle of pilot commercial trials from hatchery to market through narrative and quantitative data collection, and provide preliminary comment on the potential for the broader application of technologies in

Vietnam and perceived opportunities elsewhere in Southeast Asia.

**GRANT:** AUS\$ 54,226 or approx. US\$ 49,000 over 1 year

**WORLDFISH STAFF INVOLVED:** D. Mills, S. Purcell

### CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH (CGIAR)-Knowledge Sharing Program

**Storymercials – to attract people to our knowledge and keep their attention** – This project aims to examine the role that 'storymercials' can play to attract investors and partners to knowledge, thus increasing the uptake of research outputs. The project will develop, apply, evaluate and share an innovative knowledge-sharing approach to 'storymercials' to make our work more effective. Through workshops and collaboration with other CG Centers, the project will develop high quality short videos produced on WorldFish work and a knowledge toolkit of how videos are produced. The video or 'storymercial' will focus on one key research-for-development project which has benefited from comprehensive assessment of impact and knowledge sponsored by the CGIAR Science Council. The knowledge toolkit will be produced, prepared and shared with CG Centers through the ICT-KM Knowledge Sharing Program.

**GRANT** - US\$20,000 over 5 months

**WORLDFISH RESEARCH STAFF INVOLVED** - H. Leitch

### DEUTSCHE GESELLSCHAFT FUER TECHNISCHE ZUSAMMENARBEIT

#### GTZ Co-funded Program for Centre for International Migration and Development Expert–

This project will bring in a geospatial analyst to assist the WorldFish Center in its work to understand the relationships between poverty incidence and the state of natural resources as they relate to small-scale fisheries. The expert from the German Centre for International Migration and Development (CIM) would use

Geographic Information Systems to engage in poverty mapping analysis for seven countries, enhancing the efforts of participating CGIAR Centers. Such poverty maps are increasingly available in developing countries, and the CIM expert would help the WorldFish Center use these tools to address poverty reduction issues, particularly in small-scale fisheries. It is estimated that 50 percent of the world's poor live in coastal areas, but maps have not been produced to show overlap between where fishing communities occur, where concentrations of the poor occur, and the location of resources the poor depend upon. The expert would support the targeting of research for fisheries development interventions appropriate for the poor - determining geographical concentrations of the poor in relation to their capacity, vulnerability and access to resources and aquaculture development.

**WORLD FISH RESEARCH STAFF INVOLVED** –  
S. P. Kam

## **FINNISH INTERNATIONAL DEVELOPMENT AGENCY**

### **Feasibility Study of Aquaculture in Luapula**

**Province** - The WorldFish Center will participate in drawing up a plan for living aquatic resource development for the Luapula Province of Zambia. Specifically, the Center would provide socioeconomic analysis of aquaculture and fisheries development, development and evaluation of aquaculture technologies for small scale farmers, including integrated agriculture-aquaculture technologies, economic assessments of fish marketing chains and supply and demand, institutional and policy analysis, and global databases for management of aquatic resources. The WorldFish Center seeks to be involved based on its expertise in building capacity at all levels within national systems as well as its experience in establishing networks and partnerships. Specifically, the WorldFish Center has been involved on the ground in Zambia with integrated agriculture-aquaculture and capacity building efforts in partnership with the Ministry of Agriculture and Department of Fisheries since 2000. The Center proposes to provide technical support in the areas of fisheries and aquaculture development. This support would include assigning a Fisheries Coordinator and providing short-term focused technical expertise and continual technical backstopping to Zambian efforts..

**GRANT** - US\$11,200 over 6 months  
**WORLD FISH RESEARCH STAFF INVOLVED** –  
L. Windmar

## **FISHBASE INFORMATION AND RESEARCH GROUP, INC.**

**Fisheries Information Systems** - FIN aims to support the project FishBase Information Systems as follows: a) to further develop FishBase by making information on fish and fisheries available through FishBase to all users without consideration; b) to provide a user-friendly interface and state-of-the-art tools to give users access to the information contained in FishBase; and c) to collaborate in research in fields related to fish and fisheries for the improvement of FishBase. The objective is to provide supporting funds for the development and maintenance for FishBase, the public domain information system dedicated to enhance understanding, conservation and management of fishes worldwide.

**GRANT** - US\$25,739 over 6 months  
**WORLD FISH RESEARCH STAFF INVOLVED** –  
N. Bailly

## **NEW ZEALAND AGENCY FOR INTERNATIONAL DEVELOPMENT**

### **Solomon Islands – Fisheries Livelihoods Recovery**

**Project** – The goal of this project is to enable a fishing community affected by the April 2007 earthquake and tsunami to re-establish its livelihood. Prior to the earthquake at least two navigable channels existed through the nearby Rarumana reef that allowed the local community in the Solomon Islands to exit a lagoon on its periphery. Due to uplift, the channels are now blocked and the lagoon may not be achieving enough tidal flushing to remain healthy. Based on the document, “Post Earthquake/Tsunami Fisheries Livelihoods Recovery Program,” prepared for NZAID, the WorldFish Center will engage in a short-term, post-disaster fisheries livelihood recovery project that aims to replace canoes, advise on excavations of a raised and now dead reef to allow access to the ocean, assess threats to the now closed lagoon, and arrange for a Solomon Island geologist or engineer to visit the communities near the Rarumana reef to provide preliminary advice on the possibility of constructing channels through the uplifted reef..

**GRANT** – SBD\$1,199,578 or approx US \$164,000 over 1 year  
**WORLD FISH RESEARCH STAFF INVOLVED** –  
A. Schwarz

## **UNITED NATIONS DEVELOPMENT FUND**

**Feasibility Study on a Community Driven Fish Cage Model in Lake Malawi** - Millions of people in Malawi depend on fish products to provide necessary protein in their daily lives. The two most popular fish species in Malawi (Chambo and Utaka) are being over fished. Malawi is also not meeting its domestic demand for fish. The objective of this project is to create a detailed business sector model. This model will include elaboration of investment required and revenue generated according to various scenarios for equipping communities along Lake Malawi with fish cages, high quality fingerlings and fish feed in order to create sustainable revenues and business. Researchers involved will describe the feasibility of a community driven fish cage model of operation in Lake Malawi. In formulating this feasibility study, they will evaluate projected demand, financial implications of community driven cage fish models, logistics of supplies and product to market, and environmental sustainability of proposed options.

**GRANT** - US \$20,000 over 3 months

**WORLDFISH RESEARCH STAFF INVOLVED** –

L Windmar, D Jamu

## **UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION**

**Ecopath Training Workshop** - Ecosystem modeling has an important role to play in implementation of ecosystem-based management. With modeling, it is possible to address ecological, economical and social issues in an integrated manner. The Philippine Office of the WorldFish Center convened an Ecopath Training Workshop from 31 January to 5 February 2008. The training workshop was designed to support ecosystem-based management capabilities in Global Environment Facility projects. The workshop was the first to use new methodology for database-driven model generation. Ecosystem models for each of the Large Marine Ecosystems in the region were made available to participants. The location, at WorldFish Center IRRI, was chosen because of interest in providing information from databases for direct use in the ecosystem models. The workshop made new technology for database linkages available for the Southeast Asian Large Marine Ecosystems. Partners in the training included experts from the University of British Columbia, Canada

**GRANT**– US \$16,300 over 1 month

**WORLDFISH RESEARCH STAFF INVOLVED** –

N. Bailly, J. Glorioso

## **UNITED STATES NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

**Enhancing MPA Management Effectiveness for the Calamianes Islands MPA Network, Palawan Province, Philippines** -

Despite the potential benefits of Marine Protected Areas, the majority of MPAs do not meet their management objectives. Researches involved in this proposal will work to develop, refine, and test indicators of MPA effectiveness. Specifically, researchers will assess the management effectiveness of a network of MPAs in the Calamianes Islands of the Philippines. They will craft and measure biophysical, socioeconomic, and governance indicators appropriate to regional conditions. The ultimate goal is to use the results of indicator testing to adapt and improve the management of the Calimianes Islands MPA network. Partners include Palawan State University and the FISH Project.

**GRANT** - US \$45,670 over 16 months

**WORLDFISH RESEARCH STAFF INVOLVED** –

M. Tupper

**S**

**UBMISSIONS**

## **CANADIAN INTERNATIONAL DEVELOPMENT AGENCY**

**Developing a Wellbeing Framework for the Assessment of Small and Medium Scale Fisheries in the Global South** - In partnership with the University of Manitoba and Memorial University of Newfoundland, the WorldFish Center proposes to work to develop a framework for the analyses of wellbeing of small and medium-scale fisheries in India and Thailand. The Center would also assess linkages between poverty and resource degradation in fisheries, increase empirical understanding of the case study areas, and strengthen connections between participating organizations and their local counterparts. Using wellbeing as a starting point, the project would enhance understanding of small-scale fisheries and systemize that understanding in a framework, bringing further clarification and a more thorough assessment of the linkages between poverty and resource degradation in fisheries.

**GRANT REQUESTED** – CAD\$225,000 or approx US\$227,000 over 3 years

**WORLD FISH RESEARCH STAFF INVOLVED** – E. Allison

## **CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURE, COLLECTIVE ACTION AND PROPERTY RIGHTS**

### **Concept Note: Collective Action, Property Rights, and Conflict in Natural Resources Management**

This concept note proposes support for a research workshop followed by an expert “write-shop”. The purpose would be to consolidate and synthesize experience on best practices for policy and institutional change from CGIAR research and other international sources of expertise. The “write-shop” would produce a special issue in an international journal including select cases and findings for researchers on collective action, property rights and conflict management. Researchers would also produce policy briefs that synthesize principles for effective support for natural resource management in areas vulnerable to conflict—for use by policy makers, civil society leaders, and practitioners. The proposal directly supports participation of external experts to produce conceptual frameworks and three or four commissioned working papers in advance of the workshop.

**GRANT REQUESTED:** US\$60,000 over 6 months  
**WORLD FISH STAFF INVOLVED:** B Ratner

## **DEUTSCHE GESELLSCHAFT FUER TECHNISCHE ZUSAMMENARBEIT**

### **Public Private Partnerships in Fisheries and Aquaculture in Developing Countries in Asia and Africa – A Review**

Researchers working on this proposed project would aim to evaluate the impact of public private partnerships as a tool for knowledge sharing and implementation of research in developing countries. Led by the WorldFish Center in partnership with the Free University of Berlin, researchers would seek to achieve a better understanding of the effective use of public private partnerships as a tool for development. Researchers would analyze the structures of partner organizations, financing, objectives, results and impacts of projects, and use knowledge gained to inform business practices such as supply chain management and methodologies for food safety.

Research would focus on Bangladesh, Indonesia, Malawi, and Egypt.

**GRANT REQUESTED** – Euro\$50,000 or approx US\$75,000 over 1 year

**WORLD FISH RESEARCH STAFF INVOLVED** – F. Weirowski

## **EUROPEAN COMMISSION**

### **Biodiversity of Freshwater Ecosystems: Status, Trends, Pressures, and Conservation Priorities-**

Global and continental freshwater taxonomic groups are poorly known compared to those of terrestrial species. The BioFresh Project would build a freshwater biodiversity information portal to bring together the vast amount of information that exists but is widely dispersed. The project would provide a coherent scientific foundation by which freshwater biodiversity could be incorporated in water policy and environmental agreements. The project's findings and data would be distributed widely and would strengthen public awareness on the status and importance of freshwater biodiversity for environmental and human wellbeing. The overall objective of the BioFresh project would be to improve the capacity to protect and manage freshwater biodiversity. This would be achieved by establishing the gateway to scientific information, but also by predicting the responses of freshwater biodiversity and its services to multiple stressors at global, continental, and local scales. The project would lead to increased awareness of freshwater biodiversity conservation among scientists, policy makers, and the public, improving present conservation strategies and supporting the work of the European Union as well as international environmental agreements. Partners would include Forschungsverbund Berlin, the Royal Belgian Institute of Natural Sciences, the Universitaet fuer Bodenkultur of Wien (Germany), the Institut de Recherche pour le Développement of France, the Universitaet Duisberg-Essen (Germany), The World Conservation Union, Oxford University, the Universidad of Barcelona, Helmholtz Zentrum fuer Umweltforschung of Germany, the University College of London, Eidgenoessische Anstalt fuer Wasserversorgung, Abwasserreinigung und Gewaesserschutz of Switzerland, Université Claude Bernard of France, Université Paul Sabatier of France, Ecologic GmbH Institut fuer Internationale und Europaeische Umweltpolitik of Germany, the Commission of the European Communities – Directorate General Joint Research Centre, The University of Debrecin of Hungary, Naturhistorika

riksmuseet of Sweden, Center za kartografijo favene in flore of Slovenia.

**GRANT REQUESTED:** Euro 325,790 or approx. US\$ 503,000 over five years

**WORLD FISH RESEARCH STAFF INVOLVED:** N. Bailly

## **INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT**

### **Concept Note: IFAD Support to Fisheries and Aquaculture: Lessons for the Future-**

This concept note proposes a partnership between the WorldFish Center and the International Fund for Agricultural Development's Livestock and Farming Systems Division to generate strategic guidance for IFAD's support of fisheries and aquaculture. Specifically, WorldFish Center researchers would work to evaluate IFAD's US\$ 132 million past investments in fisheries and aquaculture. Based on this evaluation, researchers would prioritize and design future investments in areas where IFAD comparative advantages have been identified, and promote more effective inclusion of fisheries and aquaculture in its multi-sectoral rural development programs. Finally, researchers would disseminate this information among development partners to help align efforts and increase positive impacts. Two options for proceeding have been proposed. One option includes a desk review of project reports and secondary data. The other approach proposed is a longer-term assessment that integrates field-based study in Asia and Africa.

**GRANT REQUESTED:** US\$ 220,000 over 8 months or US\$ 1.15 million over 18 months (2 options were presented)

**WORLD FISH RESEARCH STAFF INVOLVED –** E. Allison

### **Concept Note: IFAD Support to Fisheries and Aquaculture: Providing Technical Advice for Project Design-**

This concept note proposes a partnership between the WorldFish Center and the International Fund for Agricultural Development. IFAD would access the WorldFish Center's technical expertise for use in the design of projects involving fisheries and aquaculture. The specific aims would be to increase opportunities for successful investment by IFAD in fisheries and aquaculture, to support IFAD staff search for opportunities, to build IFAD staff's capacity, and strengthen the impact of IFAD's investment in fisheries and aquaculture. The WorldFish Center would contract

for three months of staff time as well as provide on-call services.

**GRANT REQUESTED:** US\$ 170,000 per year

**WORLD FISH RESEARCH STAFF INVOLVED –** E. Allison

## **INTERNATIONAL FUND FOR AGRICULTURAL RESEARCH**

### **The Possible Impact of Common Zoonotic and Food Borne Bacteria on Fish and Human Health with Suggestive Control Measures-**

The WorldFish Center has applied to gain funding for an International Fund for Agricultural Research Fellow. Dr. El Boushy of El Mansoura University of Egypt would work to examine the possible impact of common zoonotic and food borne bacteria on fish and human health as well as suggest control measures. Specifically Dr. El-Boushy would work with the Center to assess the epidemiology of zoonotic and food-borne bacteria, survey antimicrobial usage in Egyptian aquaculture, investigate the prevalence of antimicrobial residues in cultured fish, investigate the prevalence of antimicrobial resistance in fish bacteria, and develop fish health management plans. Currently the approach for the prevention and treatment of infectious aquatic animal diseases in Egypt and other developing countries relies heavily on application of antimicrobial agents. Many farmers have little information about efficient and safe application processes. The proposed fellowship and work of Dr. El-Boushy would provide insights into better and more refined methods. El Mansoura University would provide facilities for PCR techniques and DNA analysis. **GRANT REQUESTED:** US\$ 11,000 over one year **WORLD FISH RESEARCH STAFF INVOLVED:** S. Mesalhy Aly, supervising scientist.

## **UNITED KINGDOM DEPARTMENT FOR INTERNATIONAL DEVELOPMENT - RESEARCH INTO USE PROGRAM**

### **Enhancing the Impact of Decentralized Seed**

**Production -** Production of fish seed (fry and fingerlings) in household rice plots is proposed as a way to overcome critical restrictions on small-scale aquaculture development in Bangladesh and Nepal. The project outlined in this proposal would aim to ensure the facilitation of linkages between fish farmers, fingerling traders, producers, and others in the private sector and government. Researchers hope to create direct improvements in value chains via widespread

propagation of improved fish seed, eventually targeting supply to 90,000 marginal rice farming households, and creating up to 80 percent increases in incomes from fish production. Based on its long work in the region, the WorldFish Center would provide guidance and technical backstopping to Rangpur Dinajpur Rural Service of Bangladesh, the organization leading the project. Other partners would include the Bangladesh Agricultural University, the University of Sterling in the United Kingdom, International Development Enterprises of Bangladesh, Practical Action of Bangladesh, the Department of Fisheries of Bangladesh, People's Resource Oriented Voluntary Association of Bangladesh, SACHETAN of Bangladesh, the Bangladesh Association for Community Development, and Tribhuvan University- Institute of Agriculture and Animal Science.

**GRANT REQUESTED** – GBP 392,000 or approx US\$779,700 over 2 years

**WORLDFISH RESEARCH STAFF INVOLVED** –  
A Brooks

## **UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT, BANGLADESH**

### **Cyclone Affected Aquaculture Rehabilitation**

**Project**– On 15 November 2007, Cyclone Sidr damaged the southern coastal districts of Bangladesh causing loss of some 3,000 lives and rendering many hundreds of thousands homeless and destitute. The goal of this project would be to re-establish and enhance the productive capacities of cyclone Sidr affected fish, shrimp, and prawn farmers as well as contribute to the restoration of farmer livelihoods in six districts across the south and southwestern areas of Bangladesh. By partnering with 15 non-governmental organizations, an estimated total of 46,500 farmers would be supported in their efforts to re-establish the productive potential of their fish, shrimp, and prawn farms. Capturing lessons learned from this project may also add to understanding of post-disaster coping strategies. The WorldFish Center work in Aceh and the Solomon Islands, as well as the scores of projects led by WorldFish Center in Bangladesh provide institutional experience to achieve results in this new context.

**GRANT REQUESTED** – US\$4,998,127 over 1 year

**WORLDFISH RESEARCH STAFF INVOLVED** –  
A Brooks

These briefing notes are produced as a service to WorldFish Center staff and Board of Trustees by the

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