

## ASA-IM Joins Bangladesh Save Our Fish Campaign to Promote Use of Soy-based Feeds

April 10, 2007 - ASA-International Marketing Bangladesh has joined with Bangladesh Shrimp and Fish Foundation in a new campaign called "Save our Fish." The campaign goal is to create general public awareness of the importance of brood fish as the source of spawn for culture. Bangladesh is ranked third globally in fresh water aquaculture production (approx. 2 mmt per year) and has potential to expand through the introduction of appropriate technologies and education. However, the population of genetically pure brood stock is declining due to indiscriminate capture of mother fish during egg hatching season, according to Zahurul Haque, Technical Director, ASA-IM. "The Save our Fish campaign will help increase the number of brood fish, giving farmers a supply of better quality spawn," Haque explains.

ASA-IM has been active in increasing soybean use in Bangladesh aquaculture by sharing technical information from other world areas to help improve production practices. In a seminar recently held in Dhaka, the capital of Bangladesh, Haque presented a paper on "Soybean based aquafeeds: ASA-IM's experiences in China and India." The seminar was titled as "Aquaculture for poverty reduction" and several government high officials and fisheries experts participated.

Carp are the largest species group cultured in Bangladesh, which makes the work done in China and India very applicable to the aquaculture industry in Bangladesh. ASA-IM has demonstrated all plant protein grow-out diets with over 50 percent soybean meal inclusion for freshwater species such as carp, tilapia, and catfish for over a decade in China and for the last three years in India as part of the Soy-in-Aquaculture project. ASA-IM technical and program assistance is helping organizations accelerate spawn growth rate through innovative feeding techniques. As a result, use of soybean meal by the fish farmers and especially the shrimp sector has increased by 200 percent in Bangladesh since the program began.



The Save Our Fish campaign coordination committee is, from left, Mr. Zahurul Haque, Technical Director ASA-IM Bangladesh; Dr. Mahmudul Karim, Executive Director and Mr. Syed Mahmudul Haque, Chairman, both representing the Bangladesh Shrimp and Fish Foundation; Prof. Mohammad Ali Taslim, Chairman, Bureau of Economic Research, Dhaka University; and Prof. Gulshan Ara, Zoology Department, Dhaka University.



Guests and speakers at the "Poverty reduction through aquaculture" seminar from left: Professor Hossain Jillur Rahman, Lead Consultant, PRSP Formulation Team, Government of Bangladesh, Professor Mohammad Ali Taslim, Chairman, Bureau of Economic Research, Dhaka University, Dr. Mahmudul Karim, Executive Director, Bangladesh Shrimp and Fish Foundation, Mr. Syed Ataur Rahman, Secretary, Ministry of Fisheries & Livestock, GOB, Mr. Syed Mahmudul Haque, Chairman, Bangladesh Shrimp and Fish Foundation, Mr. Mohammad Nazrul Islam, Director General, Directorate of Fisheries, GOB and Mr. Zahurul Haque, Technical Director, ASA-IM Bangladesh.

## SPECIAL REPORT AQUACULTURE WORKSHOP IN KHULNA, BANGLADESH 26 FEBRUARY 2007

As a part of ongoing efforts to introduce and popularize appropriate and environment friendly technologies in the shrimp industry of Bangladesh, ASA-IM recently organized an aquaculture workshop on "Appropriate Technologies for Shrimp Farming Management" in the regional city of Khulna, in the heart of the country's major shrimp farming region. About 80% of Bangladesh's exportable shrimp are produced and processed here.



The workshop was organized in cooperation with the Bangladesh Frozen Food Exporters' Association (Khulna Region) and the Bangladesh Shrimp and Fish Foundation, and was presided over by Mr. Kazi Belayet Hossain, the BFFEA Vice President, and by Dr. Mahmudul Karim of BSFF. Attendees at the workshop included association/foundations members and other representatives from shrimp and fish farms, feed mills and research organizations, as well as from relevant departments of the Government of Bangladesh.

The main objective of the workshop was to encourage shrimp farmers to use probiotics as a preferred alternative to antibiotics in shrimp disease management and to follow environmentally friendly technologies for shrimp farm management. Dr. Mahmudul Karim of BSFF delivered a keynote speech on this topic. Mr. Mohammad Zahurul Haque, Technical Director, ASA-IM, Bangladesh followed with a detailed presentation on how to use probiotics in shrimp farm management. Mr. Haque also discussed the potential of soybean meal as a key protein source in shrimp feed. Dr. Md. Shahadat Hossain of Bangladesh Fisheries Research Institute, Cox's Bazar discussed various other appropriate technologies suitable for shrimp farming.



Towards the end of the workshop, there was a question and answer session, in which shrimp farming experts responded to queries from the participants.

The potential for the off-take of SBM in the Bangladesh shrimp sector is 50,000 MT by 2010, if strong promotional efforts like these are undertaken.

# SPECIAL REPORT: ASA AQUACULTURE WORKSHOP IN COX'S BAZAR, BANGLADESH (26 DECEMBER 2006)

ASA-International Marketing/Bangladesh's feed-related promotion activities include various types of contact sessions throughout the country, aimed at both the aqua and poultry sectors. In the aquaculture program, ASA-IM organizes seminars and workshops related to shrimp and fresh water fish farming and hatchery management. ASA-IM's international aquaculture experts participate in these programs. In 2006, ASA-IM organized three aquaculture programs in Bangladesh. The last one of these was held in Cox's Bazar on 26<sup>th</sup> December 2006.

Shrimp export is the second largest source of foreign currency in Bangladesh (after readymade garments) and contributes approximately 5% to the total of national exports. This sector employs approximately 700,000 people and supports a large variety of ancillary industries such as shrimp processing plants; feed mills; ice plants; hatcheries; net factories; home-based bamboo screen, mat and basket making operations; and transportation outfits (rickshaws, vans, scooter taxis and boats). In 2005-06, the total shrimp export value was US\$470 million, which was approximately 54% of total agro-based commodity exports. Thus can be seen the importance of this industry to the overall economy of the country.



Cox's Bazar is the country's only shrimp hatchery zone, with 64 hatcheries (53 active) that produce approximately 4 billion post-larval per year for culturing (growing out) on 217,000 hectares of land.

ASA-IM maintains close relationships with both shrimp hatcheries and grow-out farms in Cox's Bazar and the Greater Khulna area (pink area on the map to the left), in order to encourage the shrimp industry to use soybean meal in their feed formulations. Last year (2005), for the first time and as a result of our efforts, shrimp farmers in the Greater Khulna area successfully incorporated soybean meal in their shrimp feeds (previously, only costly fish meal was used).

The theme of the December workshop was the use of biotechnology in shrimp hatchery management. Unlike some other aquatic animals, shrimp are highly prone to bacterial and viral diseases and, in order to prevent disease loss, hatcheries and farms generally use huge amounts of chemical antibiotics. Such uncontrolled use of chemicals creates enormous problems in the export of shrimp, since most international consumers have modified their bio-security policies to "zero tolerance" and have specifically banned some of the antibiotics commonly used in the shrimp hatcheries and farms of Bangladesh.



Realizing the extent of the crisis, the Bangladesh Fisheries Research Institute in Cox's Bazar asked ASA-IM to organize a workshop for shrimp hatchery technicians on the use of biotechnology for shrimp hatchery management, highlighting alternatives to chemical antibiotics. With the expectation that ASA-IM's support for such a workshop will ultimately result in a stronger shrimp industry using more soybean meal, ASA-IM agreed to coordinate planning for the workshop along with the Bangladesh Fisheries Research Institute, the Bangladesh Shrimp & Fish Foundation and the Alltech Corporation USA (the latter sells feed additives including alternatives to chemical antibiotics).



Attendees at the 4-hour workshop included representatives from 44 hatcheries in the area (including Indian technicians who work in these hatcheries), 25 shrimp farmers, eight feed millers (producing feed for aquaculture), 12 shrimp traders and wholesalers, nine medicine and other component suppliers, journalists, researchers, Government of Bangladesh officials, and local leaders. Mr. Syed Sarwar Hossain of the USDA Foreign Agriculture Service / Bangladesh was the special guest. Dr. Mahmudul Karim of the Bangladesh Shrimp & Fish Foundation, and a well-known aqua researcher, delivered the keynote speech on "The Need for Harmless Substitutes for Hazardous Pesticides and Antibiotics Now Used by Shrimp Hatcheries and Farms and in Feeds". His paper emphasized organic means of operating shrimp hatcheries and farms.

ASA-IM's Technical Director, Mr. Zahurul Haque, presented the second paper on "The Use of Probiotics for Shrimp Health Management". Mr. Haque, trained at the University of Hawaii in the commercial production of microbes, described the adverse effects of the uncontrolled application of antibiotics, on both shrimp health and the environment. Specifically, he discussed the use of probiotic bacteria to prevent the infestation of *V. harveyi* bacteria. He also discussed the process of dominance shifting from *Vibrio* to *Bacillus* as the mechanism of probiotic interaction. Mr. Haque acknowledged the contributions of Dr. David Moriarty of Australia and Dr. Olivier DeCamp of Belgium in probiotics research.



On behalf of the Alltech Corporation, Mr. Ramesh Shubramaniam presented a paper on "The Use of Immunostimulants as an Alternative to Antibiotics". He discussed the use of oligosaccharides and polysaccharides in shrimp feed formulations as a stimulant and toxin binder. He also described the non-tariff barriers imposed by the European Commission and other regulatory issues.

Dr. Shahadat Hossain of the Bangladesh Fisheries Research Institute, Cox's Bazar presented a paper on "Disease Management in Shrimp Aquaculture". He discussed the common but deadly diseases currently seen in the shrimp hatcheries and farms of Bangladesh, especially describing the degree of infestation caused by white spot and other viruses. He also described the effects of luminous bacteria on the hatchery and grow-out processes.



In his address, Special Guest Mr. Syed Sarwar Hossain appreciated the efforts of the organizers in planning such a timely workshop, and he applauded the informative nature of the program. He specifically requested the continuation of efforts to create awareness among shrimp stakeholders of the devastating effects of over-using chemical antibiotics in aquaculture farming.

As an especially invited speaker, Mr. Mahfuz Iqbal of Sonargaon Hatchery Pvt Ltd expressed his concern regarding the use of antibiotics and pesticides in an indiscriminate matter and high rate. He said that, in fact, the hatcheries in the Cox's Bazar area have been using only a very small quantity of approved antibiotics. He further mentioned that the farmers of Greater Khulna are almost completely unaware on the crisis and, therefore, continue to use large quantities of antibiotics. He added that pesticides used in paddy fields also pollute shrimp farm waters, which is another important issue that must be addressed.



As part of its overall program, which also focuses on poultry and human food applications, ASA-IM will continue to assist the aquaculture sector in Bangladesh to address the constraints it faces while, at the same time, aggressively introducing soy into feed formulations.