Contents

Marketing News

MPEDA Participates in International Boston Seafood Show (IBSS), Boston, USA ................................................................. 3

Boost for Indo-Japan Food Diplomacy .................................................. 6

Shrimp Market: March 2012 ................................................................. 7

Quality Front

The Indian approach on seafood HACCP compliance presented in Japan ................................................................. 10

Aquaculture Scene

Training Programme on "Eco-friendly & Sustainable Shrimp Farming" for SC/ST beneficiaries organized at Bermajur, Sandeshkhali-II Block, Dist: North 24 Paragnas, West Bengal ................. 12

MPEDA RC (Aq) Kochi organized training programmes for SC/ST beneficiaries .......................................................... 13

MPEDA RC(Aq), Panvel organized Training Programme for SC/ST beneficiaries at Zanjiroli village, Palghar Taluka, Thane District ........................................... 15

News Spectrum .................................................................................. 17

The views expressed in the scholarly articles of this publication are those of the authors and do not constitute the views of MPEDA.
Friends,

As this issue comes to you, MPEDA along with SEAI and a sizeable number of co-exhibitors will be at the largest seafood exhibition on the globe, the European Seafood Exposition. Despite the emergence of Asian markets as a reckoning force for sourcing seafood from India, the European Union still leads as a major destination for our products. This has given the Indian seafood a great deal of value in the international market. This is so because of the impression we have made as a country whose exports meet the EU standards.

We all know that the preferences of EU customers are clear in terms of quality and variety. It is not a market that accepts everything; one has to prove the quality, time and again.

Of late, there is a marked shift of customer preferences, towards products that are sourced from sustainable or certified resources. Market reports reveal that an international fishery certifying agency got its revenue from logo licensing increased as many as 65 times in the last 7 years. This shows the growing awareness of customers towards such issues, and EU is no exception. The introduction of catch certification by EU in 2010 is regarded as a primary step to a larger goal set for conservation and judicial exploitation of fishery products that are sourced for supply to EU.

India strictly follows a conservative approach in fishery exploitation, as our crafts and methodology are largely traditional. The registration and licensing of fishing vessels, registration of farms and processing entities are all efforts to ensure the traceability of the resource and to provide inputs at the right stage of production chain to supply quality seafood ensuring sustainability. MPEDA also make a lot of promotional measures that are aimed to preserve our motto “Export with sustainability”. I would like to point out that the coming years will see severe trade pressure centered around the sustainability tag.

Good luck!

April 2012

Sd/-

(LEENA NAIR IAS)
Chairman
Screening test menu includes:

- Sulphaquinoxaline
- Sulphadiazine
- Sulphamethazine
- Sulphamethoxazole
- Chloramphenicol
- Beta-Lactams
- Quinolones
- Flumequine
- Nitrofurans (AOZ, AMOZ, AHD SEM)
- Streptomycin
- Tetracycline*
- Stilbene
- Zeranol

*To be released in 2011

Time well saved is money well spent

Randox Food Diagnostics provides a unique multi-analyte testing platform that will reduce labour costs and provide overall productivity improvements within your aquaculture testing laboratory.

ELISA Testing Benefits:

- Excellent Limit of detections
- Excellent Generic Antibodies
  - Quinolones — detects 17 analytes
  - Beta Lactum — detects 11 analytes
  - Leucocyanide Green — detects malachite green and leucocyanide violet
- Fast — 40 samples can be analysed in 90 minutes
- User-friendly kit format
- Lower set up costs as no expensive equipment required
- Intra and Inter assay precision typically <10%
International Boston Seafood Show (IBSS) is the largest seafood show event in the North America, which is one among the largest seafood markets. This year the show was held from 11 – 13 March, 2012. MPEDA had been participating in the IBSS since its inception and expanding its space and scope over the years. MPEDA has taken 1000 sq.ft. space, almost double the space compared to previous year. There were six co-exhibitors namely, M/s. Suryamitra Exim Pvt. Ltd., M/s. Gadre Marine Exports Pvt. Ltd., M/s. Shree Datt Aquaculture Farms Pvt. Ltd., M/s. Seven Seas Seafoods Pvt. Ltd., M/s. Dish Hospitality and M/s. West Coast Frozen Foods Pvt. Ltd., in the India Pavilion each having 100 sq.ft. space. In 2010-11 compared to previous year. During this year (2011-12) also, there has been 100% increase in exports to USA mainly attributing to Shrimp, particularly *L. vannamei*.

A dinner was arranged on the first day of the event in Taj Boston for the leading importers of Indian seafoods. The dinner was well attended by the leading importers of Indian seafoods. On MPEDA’s request, Mr. Prabhu Dayal, His Excellency, Consul General, New York (4th from left) along with winner of “Best New Foods Service” award, M/s. Dish Hospitality, accompanied by Ms. Leena Nair IAS, Chairman, MPEDA, Shri Sugandh Rajaram, Consul, CG, New York and Ms. Monika A Batra, Resident Director, MPEDA, TPO, New York (extreme right).
New York had graced the dinner. Several fruitful discussions with the importers were held. His Excellency, Consul General, New York visited India pavilion and appreciated the participation of MPEDA along with the leading exporters in the IBSS which is an ideal platform for showcasing the strength and range of Indian seafood products.

M/s. Dish Hospitality won the “Best New Food Service” award for their product “Oriental Shrimp Nest”. It is pertinent to mention that during the previous show also, M/s. Dish Hospitality had won the Best New Food Service award. His Excellency, Consul General, New York specially appreciated the innovativeness of the Indian seafood products which had been winning awards and the accolades in seafood shows around the world. He was very much appreciative about the range of seafood products exhibited and the response in India Pavilion by the buyers in American market.

MPEDA had displayed almost all the products produced by the Indian seafood exporters. Special emphasis was given to promote value added seafood products, particularly the ready-to-eat and ready-to-cook products which were prominently displayed. MPEDA stall had cooking demonstration, which was well received and there were many visitors lining up for tasting the Indian seafood samples served in the stall. Cooking demonstration was there for all the 3 days.

There was renewed interest in sourcing shrimp and cephalopods from India. The co-exhibitors were able to reestablish their relations with the existing buyers and had been able to enter into several new orders from the largest seafood buyers in USA. There were lot of enquiries on Shrimp, Squid, Cuttlefish, Surimi and whole fishes, which are tabulated in the ‘Trade Enquiry’ segment of this Newsletter.

Ms. Leena Nair IAS, Chairman, Mr. N Ramesh, Director (Marketing), Mrs. Monika A Batra, Resident Director, TPO, New York and Dr. P G Sreenath, Assistant Director, RO, Mumbai represented MPEDA in the IBSS 2012.
Glimpses into IBSS 2012
Boost for Indo-Japan Food Diplomacy

An increasing shift to Japanese foods and dietary patterns could help address a wide range of health issues. This was the focus of a recent seminar on Japanese food products held in the city. The seminar, which also featured a business networking meet for Indian and Japanese businesses in the food sector, was aimed at boosting trade in food products between the two countries.

Organised by the Japan External Trade Organisation (JETRO) just days after the prestigious India International Seafood Show, the seminar underscored the potential for increased Indo-Japan food trade against the backdrop of the 60th year celebrations of the establishment of diplomatic relations between the two Asian majors.

“Japanese presence in India is on the rise. This is especially true of Tamil Nadu. Of the 812 Japanese companies in India, a majority are in this State. JETRO has opened an office in Chennai especially to address the vast number of queries from the region,” noted JETRO Director General Shinya Fujii.

Ms. Leena Nair, Chairman, The Marine Products Export Development Authority (MPEDA), Government of India expressed her condolences to those who had lost their lives in the great East Japan Earthquake and resultant tsunami and noted that India was looking forward to increased trade with Japan’s seafood industry, which had largely taken a massive hit.

Takayuki Kitagawa, Acting Consul-General of the Japanese Consulate in Chennai reflected Ms. Nair’s views. He outlined the history of the global Japanese food boom. “Fact is, the Japanese food boom did not come out of Japan. It came out of the US around 30 years back. Japanese foods and dietary practices were healthy as it is, but especially against American food habits then. The US government was given studies that suggested a shift to Japanese foods,” he noted.

“That helped the US cut its budgetary deficit as it helped slash health problems and in turn cutting the national health bill. I suggest this can be taken up here as well, to help Tamil Nadu slash its budgetary deficit. Indian foods are healthy overall, but they are oily. Japanese foods can address that,” he said.

The seminar also featured three stalls – two vegetarian and one sushi – for the Indian businessmen to sample Japanese food products.
SHRIMP MARKET: MARCH 2012

A) USA

In general, US retailers seem to be reasonably satisfied with overall holiday sales in 2011. Many consumers opted for home cooking rather than eating at restaurants including the Christmas and New Year celebrations.

The year-end rally in the US stock market could indicate an improvement in consumer confidence, which would be good for shrimp consumption.

The import market is fairly quiet in January with only sporadic orders because of the inventory build-up in the market. However, market prices are not impacted; reduced availability of raw materials at origins, reviving import interests from Western Europe and good demand in East Asia are keeping prices stable in international trade.

The accumulated domestic landings to September totaled 89,757 tonnes, an increase of 53.5% in comparison with the same period of 2010. For imported supplies, the Lunar New Year celebration in East Asia will divert large supplies of fresh shrimp to the domestic and regional markets in China, Hong Kong SAR, Taiwan Province of China, Singapore, Vietnam and Malaysia. Therefore, supplies from these sources will be very limited for frozen exports till the next harvest, which is due in April/May.

Imports

Despite economic concerns, US shrimp imports went up compared with 2010, and they exceeded 2006’s imports, which were the highest in the past five years, by 0.5%.

Thailand remains the main exporter to the US market but with lower supplies than in 2009 and 2010, followed by Ecuador and Indonesia. In Latin America, Ecuador remains the second main provider to the US market with a 9% increase whereas imports from Indonesia rose by 15%. Supply from India rose by more than 83% with predominantly large sized vannamei.

B) ASIA

In 2012 the market began with positive notes in demand and price trends in various markets, while the current low season for farmed shrimp will persist until the next season stars in April/May.

According to industry sources, the world’s production of aquacultured shrimp was estimated to be 2.3 million tonnes last year, only fractionally more than in 2010. Harvests from the southern provinces reached 330 000 tonnes, from the Andaman coast 90 000 tonnes and from the eastern region 150 000-180 000 tonnes. The production decline was mainly attributed to heavy floods in late 2010 and early 2011 in the southern region and heavy rains and cool weather in the central and eastern regions in the second half of the year. Quantitative exports during this period fell by 8% to 361 460 tonnes but value increased by 10% to THB 101 billion.

In Viet Nam, over 81 000 hectares of black tiger shrimp farming were lost as a result of disease last year but vannamei shrimp production offset that loss with its production of 118 100 tonnes up to November 2011. The export value of shrimp during this period registered a 14% rise reaching nearly USD 2.17 billion compared with the same period in 2010, reported Viet Nam Seafood News.

Indian production increased significantly following the introduction of vannamei shrimp. Production of this species is likely to be more than 50 000 tonnes. Full reports are yet to come from the producing countries.

Japan

The post New Year demand is seasonally low in Japan and demand...
from the retail and catering trade moved from large to medium sized shrimp.

Low-key celebrations during the year-end/New Year were reported throughout Japan, which made restaurant trade slow. However, sales at supermarkets were better with more sales of raw vannamei shrimp and processed shrimp products. Post-New Year import inquiries are very few from Japanese buyers, with the next three months being the low harvesting period throughout Asia. Meanwhile, lower seasonal harvests and good Lunar New Year demand in other East Asian markets are keeping shrimp prices firm.

**Japanese market Imported more value-added and less raw shrimp in 2011**

Since the earthquake and the subsequent radiation problems, shrimp imports have been characterised by increased supplies of prepared and value-added products. The falling household demand for raw shell-on shrimp caused a slight decline in cumulative imports during January-September 2011 compared with the previous year. The market also imported more dried shrimp in 2011. Supplies of all types of value-added shrimp have come largely from Thailand, except sushi shrimp with rice, most of which came from China.

Raw shrimp imports on the contrary, were at a five-year low during January-September 2011 from major sources. Although the preference for shell-on vannamei from Thailand is still good, flood-related supply shortage and a shift to value-added processing resulted in lower supplies of raw shrimp from Thailand.

**C) European Union**

The 2011 global shrimp market performed better than expected. Despite the skepticism and concern over the economic situation the EU market seemed to have imported more shrimp than the year before.

In early January, European buyers started sourcing new supplies as stocks were diminished by festive season sales. In the last quarter of 2011, European buyers were not very active and relied on inventories as shrimp prices were high and demand strong in other major markets. However, buyers, particularly from Belgium, the Netherlands and the UK, are currently active in the markets. European importers are buying both

### Subscription Order / Renewal Form

Please enroll me / us as a subscriber / renew my existing subscription of the MPEDA Newsletter. The subscription fee of Rs. 300/- for one year is enclosed vide local cheque / DD No............................... dt................................ .. drawn in favour of the Secretary, MPEDA, payable at Kochi.

Please send the journal in the following address:

........................................................................................................................................................................................................................

........................................................................................................................................................................................................................

Tel No. : ..............................................Fax : .......................................E mail : ........................................................................................

For details, contact:

The Editor, MPEDA Newsletter, MPEDA House, Panampilly Nagar, Kochi - 682 036
Tel : 2311979, 2321722, Fax : 91-484-2312812. E-mail : newslet@mpeda.nic.in / rmohan@mpeda.nic.in
black tiger and vannamei shrimp and demand is expected to increase in the next few months.

As consumers are still cautious about spending, the pattern of shrimp consumption has changed somewhat with more people buying shrimp from supermarkets for home preparation rather than eating in restaurants. Thus, overall the shrimp market saw positive growth as reflected by increasing imports into the EU major markets in 2011, apart from France.

Shrimp imports into France during January-September 2011 declined by 4.5% in quantity against the corresponding period of 2010, amounting to around 78,000 tonnes. Imports from several suppliers dropped, except from Ecuador, the largest supplier of shrimp to France, which managed to increase its exports by 8.4%, Bangladesh (+26%) and Belgium (+27%) during the reporting period. Meanwhile imports from Spain, Colombia and Thailand were lower by 36%, almost 50% and 7% respectively in volume. Supply from Brazil was reduced to almost nothing thanks also to strong domestic demand.

Viet Nam emerged as the largest supplier of shrimp to the German market last year. Overtaking Thailand as the number one exporter, Viet Nam shipped around 8,000 tonnes of shrimp to the German market during the third quarter of 2011, significantly up by 19.4% compared with the same period of 2010, while imports from Thailand dropped by 25.3%. Total shrimp imports into Germany up to September 2011 were more or less on par with the previous year’s level at around 43,500 tonnes.

Shrimp imports into Spain also posted strong growth last year, totaling 118,900 tonnes for the first nine months, up by almost 9% over the same period of 2010. Argentina and Ecuador, the first and second largest shrimp suppliers to Spain, benefited from the growing market by supplying 14% and 52% more shrimp respectively last year. Imports from China, the third largest supplier, also increased slightly by 4.6%, while imports from Thailand were 17.5% lower in volume.

A marginal increase in shrimp imports was also reported by Italy amounting to 54,400 tonnes for the reporting period, up by 6.9% year on year. Imports from Ecuador, India, Spain and Viet Nam increased by 11.3%, 15.9%, 20.5% and 31.6% respectively in quantity while supply from Argentina dropped by 10.5%.

*Source: FAO*GlobeFish*
Shri K Sasidharan Nair, Assistant Director (QC) of MPEDA was invited by the Fishing Boat and System Engineering Association under the Japanese Ministry of Agriculture, Forestry and Fisheries to present a paper on implementation of HACCP in Indian seafood industry with particular reference to the quality control measures being adopted by seafood processing establishments for export of fish and fishery products to the European Union. Shri Nair has presented the paper on 14th February 2012 in the seminar organized in conjunction with the ‘9th Annual Japanese International Seafood and Technology Expo’ held at Osaka together with the ‘Agri Expo’, that showcased regional speciality foods.

In his presentation, Shri Nair highlighted the implementation of the HACCP system, which is a mandatory requirement in India for all seafood establishments engaged in export processing. A HACCP compliance audit of the establishment is essential prior to its approval by the Indian regulatory authorities. India is one among the countries that has a large number of seafood processing establishments (238 Nos - as on date) approved for exports to EU. He highlighted the system of such approval prevailing in the country. Shri Nair has also pointed out the significance of training programmes in HACCP implementation and elaborated on such programmes being organized by MPEDA for the benefit of seafood processing technologists in India towards capacity building in HACCP implementation and compliance.

India is one among the major suppliers of shrimp to Japan and
MPEDA has already introduced a Quality Logo that is granted to prime quality Indian seafood in the Japanese Market. Citing this, Shri Nair stressed the long term goals of the organization to raise the image of Indian seafood products in the sophisticated International markets through co-branding with major labels. This would facilitate India to shift from bulk sales to consumer products. The presentation also emphasized India’s desire to collaborate with Japan in the processing of value-added shrimp products as preferred by the Japanese consumers, utilizing the abundant resources of prime quality Indian black tiger and vannamei shrimps.

During his stay at Osaka, Shri Sasidharan Nair also visited the Osaka Seafood Market, where a wide range of live, fresh/chilled and processed frozen seafood products are traded.
Training Programme on "Eco-friendly & Sustainable Shrimp Farming" for SC/ST beneficiaries organized at Bermajur, Sandeshkhali-II Block, Dist: North 24 Paragnas, West Bengal

The 5-days Training Programme on "Eco-Friendly & Sustainable Shrimp Farming" for SC/ST beneficiaries was conducted from 19th – 23rd March 2012 at Bermajur, North 24 Paragnas dist. In West Bengal. 20 farmers belonging to SC/ST community in Bermajur, North 24 Paragnas dist. attended the programme.

The inaugural session was held on 19th March 2012. MPEDA officials briefed the farmers about the scope and status of shrimp farming in West Bengal. It was happy to note that all the participating farmers had obtained CAA licences. MPEDA officials explained various financial assistance schemes of MPEDA to the farmers.

Shri Krishnapada Sardar, leading farmer of Bermajur thanked MPEDA to take up the training programme for the SC/ST beneficiaries in their area and requested all the trainees to utilize the training in practical life. He also brought to notice that as day by day the lease value of land is on the rise, taking up scientific shrimp farming would boost the profit margin of poor SC/ST beneficiaries of their area.

Inaugural session was followed by technical session. MPEDA officials have taken classes on probiotics & probiotics utilization during pond preparation, site selection, design & layout of shrimp farms and ETS for scientific shrimp farming, screening of seed by applying PCR, stress test, etc. and acclimatization in pond condition, soil & water quality management, biosecurity measures & its significance in shrimp farming, grow-out management for shrimp farms and BMPs in scientific shrimp culture.

On the third day trainees were taken to Field visit to Shimulia, Hasnabad, North 24 Paragnas Dist. The trainees were exposed to different kind of farm activities involved in
shrimp culture. The farmers were explained on the methods of biosecurity, feeding methods, ideal pond construction methods, pond preparation and various aspects of scientific shrimp farming. The trainees also interacted with Sri Nimai Das, member, Shimulia shrimp farmers welfare society.

On the fourth day classes were taken by Sri Santi Kumar Naskar, ADF cum CEO, Meen Bhawan, Barasat, Sri Jagadish Mondal, AFO (BW), Meen Bhawan, Barasat, Sri Atanu Roy, State Coordinator, NETFISH and Smt Subhalaxmi Das Banerji, Programme Manager, Ornamental Fish division, MPEDA. Farmers have shown interest to learn about ornamental fish culture to make it as a cottage industry.

On the last day, Sri Archiman Lahiri, Field Supervisor, MPEDA, Sri D K Biswas, Deputy Director, MPEDA and Shri Joy Sengupta, Field Manager, NaCSA, took classes on the role of NaCSA for sustainable development of shrimp culture, diversification in aquaculture, feed & feeding habits, disease diagnosis & remedies and other related subjects. A group discussion was arranged where the farmers could interact with the officials and discuss various problems faced by them. A valedictory function was arranged in the afternoon. Sri D K Biswas, Deputy Director (AQ), MPEDA distributed certificates to the trainees. The vote of thanks was proposed by Shri Sibasish Mohanty, JTO, MPEDA. Farmers thanked MPEDA for organizing the training programme in their region.

MPEDA RC (Aq) Kochi organized training programmes for SC/ST beneficiaries

MPEDA RC(Aqua), Kochi organized two training programmes exclusively for the benefit of SC/ST beneficiaries during the month of February & March 2012, one in Thakazhi, Alappuzha Dist., and the other in Valappu-Malippuram, Ernakulam Dist.

The first training programme was held at Gramma panchayat hall, Thakazhi, Alappuzha district where in 15 SC/ST beneficiaries sponsored by Thakazhi Gramma Panchayat were imparted training on Eco-friendly and sustainable scampi farming. The training programme was inaugurated on 30th January and concluded on 3rd February 2012. During the training programme the beneficiaries were
imparted training on various technical aspects of scampi farming including site selection, construction of ponds, pond preparation for stocking, nursery and grow out management, water and feed management, harvesting and marketing, diversification in aquaculture, organic aquaculture and importance of group farming. As part of the training programme, the trainees were taken to open water seabass demonstration project site at Thanneermukkam where in, they were informed on technical aspects on seabass farming and witnessed the harvest of the seabass from cages. The beneficiaries were also taken to a scampi farm of Shri Thomas Mathew in Karuvatta, Alappuzha District for on hand field experience. During the training programme, the lecture classes were taken by officers of MPEDA Regional Centre, Kochi as well as ADAK and Dep. of Fisheries, Govt. of Kerala. The valedictory function of the training programme was held on 3rd February, in which the beneficiaries were distributed certificates and stipend by Dr. A S Upadhyay, Joint Director (Aqua), MPEDA, RC, Kochi.

The second training programme was held at Ajantha Marananthara hall, Valappu-Malippuram, Ernakulam district where in 20 SC/ST beneficiaries sponsored by Kerala Pulayar Maha Sabha were imparted training on Eco-friendly and sustainable shrimp farming. The training programme was inaugurated on 19th March and concluded on 23rd March 2012. During the training programme the beneficiaries were imparted training on various technical aspects of shrimp farming including site selection, construction of ponds, pond preparation for stocking and grow out management, water and feed management during culture, harvesting and marketing, diversification in aquaculture, organic aquaculture and importance of group farming. As part of the training programme the trainees were taken to the farm of Shri A M Nizar at Kovilakatham Kadavu, Pallippuram Village. Where they witnessed the cage farming of pearl spot and poly culture of shrimp with mullets. The beneficiaries were also taken to a Crab fattening farm of Shri Shaju, in Pallippuram, Ernakulam District. During the training programme the lecture classes were taken by officers from MPEDA RC, Kochi as well as from ADAK and Dep. of Fisheries, Kerala. The valedictory function of the training programme were held on 23rd March, wherein the beneficiaries were distributed certificates and stipends by Dr. A S Upadhyay, Joint Director (Aqua), MPEDA RC, Kochi.
MPEDA RC(Aq), Panvel organized Training Programme for SC/ST beneficiaries at Zanjiroli village, Palghar Taluka, Thane District

The existing reservoir in Zanjiroli village with an area of about 105 Ha, has been taken on lease by M/s. Janseva Jalsinchan Adivasi Sahakari Sanstha Limited, Zanjiroli for scampi culture in reservoir. For the benefit of the members of this society and other members of SC/ST community in the nearby area, MPEDA, Regional Centre (Aqua), Panvel organized training programme on Eco-friendly and sustainable scampi farming and aquaculture diversification from 17.03.2012 to 21.03.2012 at Zanjroli village itself.

The training programme was inaugurated on 17-3-2012 by Shri Nandkumar Patil, Assistant Fisheries Development Officer, Palghar, Thane district. He advised trainees to use the opportunity for getting scientific knowledge on scampi farming for improving their economic status.

Earlier Shri Maruti D Yaligar, Deputy Director, MPEDA welcomed participants and introduced them to scampi farming. He narrated role of MPEDA and its different promotional schemes. He explained that diversification in aquaculture is very essential for sustainability. Shri Jaywant Rathod, leading farmer encouraged trainees and asked them to come forward with positive approach. Shri Purushotham Donde, Chairman, M/s. Janseva Jalsinchan Adivasi Sahakari Sanstha Limited, Zanjroli also felicitated.

Classes on Biology of freshwater prawn, hatchery production of seeds, selection of good quality seed, transportation, acclimatisation and stocking of seed were taken by Mr. Reji Mathew, Assistant Director (AQ).

On 18.03.2012, a field trip was arranged for the trainees. Trainees were taken to farms in Makusar and Kelwe villages where they observed practical aspects. On 19.03.2012 lecture classes on pond construction, pond preparation, water quality management, feed management for scampi farming and avoid use of antibiotics were taken by Shri S M Shirodkar, Jr. Tech. Officer.
AQUACULTURE SCENE

On 20.03.2012, the classes of Growth monitoring of scampi and diseases of scampi were taken by Shri K Reji Mathew, Assistant Director (AQ). Shri S M Shirodkar, Jr. Tech. Officer took classes on Good management practices for scampi farming and economics for scampi farming project.

During the valedictory function held in the afternoon of 21.03.2012 Smt Asha Ramesh Chipat, Sarpanch, Maykhop Zanjroli Gram Panchayat was the chief guest. Mr Reji Mathew, Assistant Director (AQ) welcomed the guest and participants. Smt. Asha Chipat addressed the gathering and said that as these beneficiaries are sincere they can be very successful in aquaculture field. Shri N S Patil, AFDO, Dept. of Fisheries, Palghar also attended the function. Ku. Chitra Bhavan and Shri Santosh Govari also spoke on behalf of trainees and appreciated MPEDA for conducting training programme effectively and successfully in their village. The stipend and certificates were dispersed to trainees by the guests.

The programme was concluded with vote of thanks by Shri S M Shirodkar, Jr. Tech. Officer.
India joins top successful countries involved in Pop-up Satellite Tagging of Yellowfin Tuna.

Pop-up X-tag was used on yellowfin tuna (Thunnus albacares) for the first time in Indian waters by the Central Marine Fisheries Research Institute during December 2011 to February 2012. A total of 15 tags were used in two phases along the Bay of Bengal and the Arabian Sea with the Pop-up time ranging from 4 months to a year. Tagging was done in the Bay of Bengal Region from Visakhapatnam where eight tags were used and along the Arabian Sea seven tags were used off Lakshadweep Islands. The tagging programme is funded by INCOIS under the project entitled "Satellite Telemetry studies on Migration patterns of Tunas in Indian Seas" (SATTUNA). With this achievement India joins the elite group of countries engaged in satellite tracking of yellowfin tuna. Earlier reports on Pop-up tagging of yellowfin tuna are only from the Gulf of Mexico using Pop-up satellite archival tags during 2009.

Migratory movements of yellowfin tuna in oceanic waters near and away from Indian waters remain untested and exchange rates are still unidentified. Tagging studies have been carried out to study the growth and migration of marine fishes. However, conventional archival tags used have a number of disadvantages with very poor recovery rates and limited data on habitat and environment. The "Pop-up" tags have been developed to avoid such problems and also to increase the probability of data recovery. These tags are attached externally and have a release mechanism that causes the tags to detach from the fish at a predetermined time and "pop-up" to the sea surface where the data can be recovered via the ARGOS system aboard polar-orbiting NOAA satellites. The first-generation Pop-up tags provided only limited data; more of migratory data and less environmental data. These tags, therefore, provide fisheries-independent measure of the straight-line distance travelled from the point of tagging. More recently Pop-up tags have become available and its positions as determined by Argos which enables temperature, depth and ambient daylight that can be reduced (e.g. as time-at-depth and time-at-temperature histograms and profile-depth temperature data) on board the tag before data transmission.

Tuna, mainly the bluefin tunas, have been tracked using the Pop-up tags in the Atlantic Mediterranean and Australian waters. The large size and weight of the original tags and the high cost of the tags were the major limiting factor for tagging smaller migrating fishes. With the development of the x-tags, smaller bluefin tuna, marlin and yellowfin tuna too can be tagged. The high cost of tags (PSAT) still makes large scale tagging of fishes with satellite tags a challenging proposition.

A good scope of fishery for the yellowfin tuna is existing in the Indian waters. To manage the stock and to fish the stocks at a sustainable level, information regarding its migratory patterns, movement for feeding, breeding, its diving characteristic, reasons for the fish to remain within a depth zone and to know whether the tuna available in our waters belongs to the same stock or migrating from neighboring countries are essential, but hardly known. It is in this context that CMFRI took up the challenging task of tracking yellowfin tuna with pop-up tags. The pioneering work carried out by the Institute has placed the country on par with few other countries of the world that have been successful in using the pop-up tags to track marine fishes.

Farmed shrimp demand rises in overseas markets

Indian aquaculture farms are upbeat about the rising prospects of farmed shrimps in the overseas market. Both the black tiger and vannamai varieties from India have been going at a premium in the foreign market, particularly in Southeast Asia.

A shortage of shrimps in countries like Thailand, Vietnam, Japan and China has raised the demand of Indian varieties.

The domestic farms have gone on an overdrive to increase the production. "The production could see a jump of 30-40% if the seeds are available. We are experiencing a slight shortage of seeds because of the sudden rise in demand," said Surya Rao, an aquaculture farmer in Andhra Pradesh.

According to him, around 70% of the production is vannamai shrimps. Medium-size vannamai fetches Rs 220 to 230 per kg for a
farmer against a cost of Rs 150 to 160 per kg. Higher demand has resulted in the mushrooming of several new farms in Andhra Pradesh, where the majority of shrimp farms are located.

The total production of farmed shrimp in the country is expected to touch 1.40 lakh tonne this fiscal year, a senior official of the Marine Products Export Development Authority (MPEDA) said.

Since the sea catch has shown a decline this year, there is more dependence on farmed shrimp. There are a lot of unregistered farms operating to cash in on the demand.

Most of the farms are at the harvesting stage. The international market is rather subdued now, which has pushed down the prices. Indian vannamei was fetching $5.50 to $7.25 a kg in the overseas market.

The exporters are expecting the demand to pick up in the coming weeks with China becoming active in the market. However, a slight appreciation in rupee may not help the exports.

-Economic Times

Chilika: Japan team to study Irrawaddy dolphins

A team of scientists from Japan arrived here to study the migratory behaviour of the threatened Irrawaddy dolphins in Chilika lagoon. One of the less-studied cetacean species, Irrawaddy dolphins’ dropping numbers in the brackish water lagoon had prompted Chilika Development Authority to set up a permanent station project at the lake’s mouth to study their pattern of migration.

In January this year, the annual census had put the dolphin population at 145 which was a 10 per cent drop compared to last year. What was intriguing was the significant drop in mortality (just one death was reported) of the species leading to the belief that the cetaceans might be migrating to Bay of Bengal and vice versa although it has not been established yet. "The permanent monitoring station project at the lagoon’s mouth is aimed at collecting data to strengthen the population assessment of Irrawaddy dolphins through visual and acoustic observation. A major component will be monitoring possible migration and habitat use of the mammals," CDA Chief Executive Dr. Ajit Kumar Patnaik said. The stationary observatory around mouth of the lagoon is expected to establish the migration model for understanding the population dynamics.

The CDA is already in an agreement with Tokyo University for acoustic technology study of underwater behaviour of the dolphins since 2006 and it has now proposed to go for advanced observations to develop a strategy for conservation of dolphins. The systems have been used for the Ganges river dolphin’s observation in the past.

The CDA plans to study the new mouth, near Rambhartia for monitoring possible migration. That apart, it will also carry out assessment at Outer channel (Mahisa Ostapalli) for arriving at a safe dolphin watching protocol, evolving a carrying capacity of mechanised boats as well as habitat-use.

-ENS

World Bank okays $50 m credit for Assam farm project

The World Bank has approved a $50-million additional credit for an ongoing agricultural project in Assam.

The Assam Agricultural Competitiveness Project (AACP) aims at increasing the productivity, profitability and market access of the farming community in the State. The focus is on mainstreaming management approaches and practices, strengthening the agriculture technology management agencies and making ground water usage more sustainable.

Investments in rural roads in select districts with low-cost construction and innovative bridge designs also form part of the project. The roads are meant to connect smaller habitations and for linking agricultural production with markets in a cost-effective manner.

A World Bank report says that according to the Planning Commission estimates of 1999-2000, about 36 per cent of the people in Assam live below the poverty line and the State is fourth in terms of poverty ratio. This is next only to Orissa, Bihar and Madhya Pradesh.

Mr Roberto Zagha, World Bank Country Director for India, said that the ongoing project had played an important role in raising the productivity and market access of targeted farmer groups of Assam. It has mobilised more than three lakh beneficiaries across the fishery, agriculture, dairy, forestry and livestock sectors.
The project investments will also focus on raising crop production through a combination of increased irrigated ‘boro’ rice output, crop diversification, improved extension advice and wide-spread use of micro-

The additional World Bank credit will help scale up these project activities.

The credit will be provided by the International Development Association, the World Bank’s concessionary lending arm, which extends interest-free loans with 25-year maturity period and a five-year grace period.

Karnataka earmarks Rs 215 crore for fisheries development

The Karnataka Budget for 2012-13 has earmarked Rs 215 crore for the fisheries sector in the State.

This includes funds for construction of houses for fishermen, to increase fishing production, and for the second stage work on a fisheries harbour in Udupi district.

Presenting the Budget on Wednesday, Mr D.V. Sadananda Gowda, Karnataka Chief Minister, said that Rs 24 crore will be provided for construction of 4,000 houses during 2012-13 for fishermen without houses.

As there is demand for diesel used by mechanised fishing boats, the quantity of tax-free diesel will be increased to 1.25 lakh kilo litres during 2012-13. This figure was 1 lakh kilo litres in the 2011-12 Budget. However, it was increased by 15,000 kilo litres during the year, taking the total to 1.15 lakh kilo litres during 2011-12.

Stating that there is demand for fishlings in the State, he said Rs 10 crore will be provided for upgrading fish production centres.

Of the 80 crore demand for fishlings in the State, only 40 crore is being produced now. There was an increase of 35 per cent in fishing production during 2011-12.

Mr Gowda said Rs 26 crore will be provided for the second stage of the Hejmdadi Kodi harbour in Udupi district during 2012-13. This requires a total investment of Rs 60 crore.

He said Rs 4.5 crore will be provided for supply of life jackets costing Rs 1,500 each to 30,000 fishermen. Insulated boxes costing Rs 4,000 each will be supplied to 6,000 fisherwomen in the state, he said.

Mr Gowda said an oceanarium of international standards will be constructed at KRS Brindavana and at Pilikula in Mangalore under public-private partnership.

Oceanarium: compensatory mangroves planting mooted

The proponents of the Kochi oceanarium project have come up with a green offer to compensate for the disturbances the project is likely to cause to the mangrove vegetation at Puthu Vypeen.

The State Fisheries Resource Management Society (FIRMA), which is piloting the project, has offered to plant, nurture and maintain mangroves either at Vypeen or Valanthakadu Island in lieu of the mangroves that would be lost or disturbed while the project is implemented. FIRMA will approach the State-level Environment Impact Assessment Committee (EIAC) with the proposal for seeking environmental clearance for the project, said A. Gopalakrishnan Nair, Executive Director of the Society.

The Authority had earlier directed the Centre for Earth Science Studies, Thiruvananthapuram, to prepare a mangrove map of the area. The clearance of the EIAC is required as the area proposed for the oceanarium falls under the Zone One of the Coastal Regulation Zone.

It was during the term of the previous government that the Fisheries Ministry initiated the project at Puthu Vypeen. The State government had also formed a Special Purpose Vehicle—Kerala Oceanic and Marine Park Ltd—for conceptualising, executing and commissioning the project in the Public-Private Partnership mode.

The feasibility report prepared earlier had estimated the cost of the project at around Rs. 480 crore. While the oceanarium component would require Rs. 350 crore, the marine biology research park would require Rs. 130 crore. The Union Ministry for Earth Sciences had offered to support the park by setting up an international biological research centre and shifting its Centre for Marine Living Resources and Ecology to the new site. The State government had also identified 40
CMFRI develops vegetarian nutraceutical

CMFRI’s Cadalmin Green Algal extract (Gae) has been released at 83rd Annual General Meeting of the ICAR Society at National Agricultural Science Complex by Dr. Charan Das Mahant, Hon’ble Minister of State for Agriculture and Food Processing Industries, Govt. of India on 6-3-2012. Shri Sharad Pawar, Hon’ble Union Minister of Agriculture and Food Processing Industries and President of the ICAR Society presided over the function. Earlier, Dr. S. Ayyappan, Hon’ble Secretary, DARE and Director General, ICAR presented a glimpse of key achievements of ICAR during 2011-12. Agriculture and Animal Husbandry Ministers of various States, Members of the Governing Body of the ICAR and representatives from international organizations participated in the AGM along with senior ICAR officials and other dignitaries. Concurrently, an exhibition on agri-technologies is also organized on the theme "Innovative Technologies go Commercial" in which CMFRI product Cadalmin Green Algal Extract (GAE) has been exhibited as ICAR technology.

MPEDA to foray into premium seafood sector

Riding high on the success of a captive breeding programme for finfish, the Marine Products Export Development Authority (MPEDA) is gearing up to enter the booming export market for premium grade seafood products.

The authority is preparing to take up commercial production of sashimi-grade chilled fish. The Rajiv Gandhi Centre for Aquaculture (RGCA), the research and development wing of the MPEDA, has developed a technology for breeding and sea-cage farming of cobia (Rachycentron canadrum), an edible, high-value species of finfish. Cobia is known for its firm, white, and tasty flesh, making it a preferred choice for the sashimi, a Japanese seafood delicacy served raw and thinly sliced.

The first harvest of cobia from the sea-cage farm set up at Muttom in South Tamil Nadu is scheduled to be held on April 9.

P. Anilkumar, project manager of the marine finfish hatchery set up by the RGCA at Pozhiyoor in Thiruvananthapuram, said efforts were on to tie-up with seafood processors and exporters to manufacture sashimi-grade chilled fish. The MPEDA has identified resource persons from Taiwan to impart the techniques for value addition. European Union standards prescribe stringent measures like chill killing and bleeding for production of sashimi-grade fish that fetches more than Rs.280 a kg in the international market.

At the hatchery, huge tanks hold teeming stocks of juvenile cobia in different stages of maturity. Seawater is pumped through underground pipes to the tanks. A re-circulating system, an array of filters, bioreactors, protein skimmers, and scavenging bacteria keep the tanks clean.

The hatchery is equipped with facilities for conditioned spawning of broodstock and intensive larval rearing of cobia in tanks. It has a strict disease-monitoring and surveillance system for the caged stock.

Also known as Lemon fish or Ling, the cobia at full growth, achieved in two years, weighs around 25 kg, though a rare few are known to have reached 65 kg. The commercial market size is six to 10 kg in a year.

Unlike most fish, the cobia does not move around in shoals, making it difficult to be netted in large numbers. But, all over the world, they are a

It is a reality that the mangrove vegetation of the area is in peril as several mega projects including the LNG terminal are coming up there. The society, which is bound to protect and propagate the mangroves, has offered to ensure the propagation of the plants in a suitable location, Mr. Nair said.

The CESS is expected to submit the map this week. The society will submit its proposals along with the map to the Authority.

-The Hindu
favourite of anglers. The few cobia that are caught by local fishing vessels are sold to upmarket restaurants and well-heeled customers for a premium.

Cobia’s domesticated nature, better adaptation to farming environment, and rapid growth rate have contributed to its potential for offshore aquaculture. At present, cobia is cultured in nurseries and grow-out in offshore cages in China, Taiwan, Vietnam, the U.S., Mexico, and Panama.

The technology for captive breeding, production of cobia seed, and sea cage farming was developed by the RGCA to overcome the high juvenile mortality of the species, which together with over-exploitation, has resulted in dwindling natural stocks.

Mr. Anilkumar said the development of export-oriented aquaculture technologies would attract youngsters from coastal communities to commercial fish farming and processing. The RGCA is preparing to take up a breeding programme for other commercially important marine fishes.

Besides setting up hatcheries for mud crab and Seabass at Nagapattinam in Tamil Nadu, the RGCA has programmes for domestication of tiger shrimp, broodstock development of scampi, an aquatic quarantine facility at Neelankarai, Chennai, and projects for Tilapia and grouper fish.

MPEDA's pre-processing centre starts operations; works to complete in June

The Marine Products Export Development Authority (MPEDA) has recently set up a common pre-processing centre (CPC) at Sakthikulangara, Kollam district, Kerala.

The official from MPEDA said that the operations have just begun and the remaining works on the facility were expected to complete by June this year.

The centre has been approved under the Assistance to States for Development of Export Infrastructure (ASIDE) scheme for Government of India. The official informed that the project envisaged better working environment for women folk engaged in pre-processing activities in the area and also ensure hygienic handling and pre-processing of raw materials meant for export.

In this regard, a number of funds were released during 2008-09 - Rs 113 lakh, Rs 27 lakh and Rs 112 lakh were released for the years 2009-10, 2010-11 and 2011-12 respectively - MPEDA informs through its website.

"The human nature itself is such that when an individual is engrossed in some work there are possibilities of the work getting hampered through external factors, for instance, when the fish peeling process is done, chances are high that the hygiene conditions are compromised when it is carried at their homes," official said.

He then said that the common pre-processing unit would provide a basic platform for all those farmers providing all the amenities required for the processing of seafood exports.

Further, other schemes include provision of basic facilities for fish curing, drying, packing, storage for export of chilled fish or chilled tuna, technology upgrade for marine products, setting up of modern ice plant and renovation of existing plant acquisition of machinery for tuna cannyery or processing of value-added tuna product for acquisition of refrigerated truck and containers, setting up of large cold storages and subsidised distribution of insulated fish boxes.

Not only this, but also a maximum sum of Rs 50,000 for establishing peeling shed and pre-processing plant has been allotted, the MPEDA said in a release.

Fisherwomen get subsidised loans through JLGs

Corporation Bank, in association with Dakshina Kannada and Udupi Co-operative Fish Marketing Federation Ltd., launched a subsidised loan scheme for fisherwomen through joint liability groups (JLGs) in the city.

The bank has identified 72 groups consisting of 700 fisherwomen in Mangalore through the federation and about Rs. 3.50 crore credit will be extended to them through 11 branches of the bank in Mangalore.

Each Joint Liability Group would have a minimum of four and a maximum of 10 members and each member would be eligible for a maximum loan of Rs. 50,000 repayable in 35 months.

Ajai Kumar, Chairman and Managing Director, Corporation Bank, presided over the function. He said the fisherwomen would pay an interest rate of 3 per cent. The balance of the 12.65 per cent rate of interest
Modern Plastics and Equipments

- Standard & Custom Built and Compact Power Packs
- Cost Effective & Innovative Design and Leigh Economic Efficiency
- Control Blocks After Ideal System Solution Thanks to Their Compact Design and Direct Valve Connection.
- Standard and Reported Hydraulic Elements Used
- Trouble Free Performance
- Ease to Maintenance
- Application wise we are manufacturing into Power Packs.

SF No. 345/3, Kalkatti Thottam, Periyar Nagar Via, Ganapathy, Coimbatore - 641 006. Ph : 0422 - 2530836 Mobile : 98430 - 08365 E-mail : info@modernplasticsandequipments.com
would be subsidised by the State Government.

"People (who are taking loans from the bank) are repaying the loans," Mr Kumar said. The bank provides credit linkages to 1,24,000 self-help groups (SHGs) with an amount of Rs. 1,000 crore, he said. Representatives of Sri Raksha Swasahaya Sangha, Mangalore, were given a cheque of Rs. 5 lakh. The other SHGS that received cheques for loans included Sri Vinayaka Swasahaya Sangha, Bokkapatna, Mangalore; Sri Ganesha Swasahaya Sangha, Bokkapatna; Vaishnavi Swasahaya Sangha, Boloor; Spandana Swasahaya Sangha, and Durgambika Swasahaya Sangha from Thota Bengre.

Earlier, in association with the Federation, the bank had financed 223 JLGs, consisting of 2,000 fisherwomen and a loan of Rs. 9.73 crore had been extended through six branches in Udupi district.

B. Nagaraj Shetty, Chairman of the Coastal Development Authority, inaugurated the loan disbursing event.

Yashpal A. Suvarna, president, Fish Marketing Federation; Nitin Kumar, president, Karnataka Fisheries Development Corporation Limited; Palangappa, Assistant Registrar of Co-operative Societies, Mangalore; Suresh Kumar, Joint Director (Fisheries), Mangalore; and R.P. Arora, Deputy General Manager, Corporation Bank, were present.

Dependence on imported fish on the rise

The Portuguese fleet manages to capture only a quarter of the fish consumed in the country, which means that if the Portuguese ate only the fish caught by their fishing boats, they would have no reserves.

According to a joint report by News Economic Foundation (NEF) and OCEAN2012, Portugal is one of the countries of the European Union (EU) depending more on imported fish.

This year, the country stopped being self-sufficient on 30 March while last year the same happened but almost a month later, on 26 April.

This means that in 2012, Portugal has less capacity to meet its fish consumption needs with their own catches in EU waters. And the country depends more on fishing outside the EU to fulfill the remaining three quarters of its annual consumption.

Aniol Esteban, from News Economic Foundation, co-author of the report, notes that Portugal is the country showing the highest per capita fish consumption across the EU, with an intake that is three times higher than the EU average.

The report prepared by the two international bodies also warns that "fish stocks are a renewable resource, but, according to statistics from the European Commission, more fish are being caught from the sea than what ecosystems can replenish," the agency Lusa reported.

The purpose of this report is to "draw attention to a fundamental issue because if both the EU and Portugal consume more fish than their waters can produce, something has to change."

The warning comes just when the reform of the Common Fisheries Policy (CFP) is under discussion.

The report also reveals that much of the consumption in Portugal is focused on a single species, cod, which is not captured by the Portuguese fleet.

Thus, the two bodies recommend that the Portuguese should choose other species that are caught in national waters even when they may not be as well known and popular, such as mackerel, which currently has a low commercial value.

Gonzalo Carvalho, president of the Association of Marine Sciences and Cooperation, believes aquaculture can solve part of the problem "but only if it is directed towards environmentally sustainable production methods" and towards species that are not dependent on other wild fish for their production.

Source:www.fis.com

Clown fish rearing gets a boost in Ramanathapuram

In a significant step towards conservation of marine biodiversity, the Centre for Advanced Study in Marine Biology of Annamalai University has developed a technology for establishing marine ornamental fish hatchery for 10 species of clowns, which usually live in and around coral reefs.

The new technology enables the growers to develop clown larvae and rear them in non-coral region such as estuaries, mangrove forests and backwater areas by creating artificial coral reef ambience.

Though, the initial nourishment for the clown's larvae is obtained from yolk, the new technology moots exogenous feeding as yolk reserves is limited.
T. T. Ajith Kumar, Senior Research Officer, Centre of Advance Study in Marine Biology, who played a key role in the development of the technology, told The Hindu that the larvae were fed with micro algae Chlorella salina and enriched rotifer Brachionus plicatilis and from $11^{+h} \{+t\} \{+h\}$ day onwards newly hatched Artemia nauplii were supplied. After 15-20 days of post hatching, the larvae became juvenile and were shifted from pelagic to epibenthic sledge.

Juveniles were transferred to 500 litre capacity Fibre Reinforced Plastic tanks along with anemones. In this stage, the feed was switched to boiled clam meat, oyster, prawn and squid. After 3 months, juveniles grew into marketable size which ranges from 3-3.5 cm and they would be sold to aquarists, hobbyists and other entrepreneurs.

The species of clowns such as A. sebae, A. percula, A. ocellaris, A. clarkii, A. frenatus, A. akallopisos, A. nigripes, A. ephippium and A. perideraion P. biaculeatus, which have good demand in the market, could be grown by using estuarine water. The new technology boosts the survival rate of juveniles to around 80 percent, which was just 55 to 60 percent in the old technology.

He added that besides a demonstration hatchery for marine ornamental fishes at Chennai in collaboration with Fisheries Institute of Technology and Training, a rearing unit for clown fishes has been established at Ervadi near here in collaboration with Gulf of Mannar Biosphere Reserve Trust.

Mr. Kumar said the technology had also been transferred to the coastal people and fisheries extension officials through training and demonstrations. Aspects such as establishment of backyard hatchery, fish handling, feeding, water quality, larval rearing, live feed culture, disease diagnosis, packing, transportation and marketing were taught to various stakeholders.

This new technology could prevent the collection of ornamental fish from coral reef habitats and indiscriminate exploitation of ornamental fishes, which causes severe damage to the ecosystem, he added.

IARI honour for fish farmer

K.K. Manoj, a fish farmer supported by the Peruvannamuzhi Krishi Vigyan Kendra (KVK) of the Indian Institute of Spices Research (ISSR), has won the Innovative Farmer Award of the Indian Agricultural Research Institute (IARI), New Delhi, for 2012.

Manoj, 46, hailing from Atholi in Kozhikode, was chosen for the award for an innovative approach to fish farming in a two hectare brackish water pond near his home.

Low-cost culture unit

He developed a low-cost fish cage culture unit using plastic bottles as floats. He also designed a trap using PVC net for catching fish from the prawn filtration field and for collecting pearl spot (Karimeen) fingerlings.

With technical support from the KVK, he had successfully reared scampi, a giant freshwater prawn locally known as "aatu konchu" in his hatchery.

Manoj is the only farmer from Kerala to receive the award this year.

Sompal Shastri, former Minister for Agriculture and Member of the Planning Commission, presented the award on March 3 at the Pusa Krishi Vigyan Mela in New Delhi.

Manoj was nominated by the KVK for his innovations. Manoj is given technical support by B. Pradeep, fisheries expert at the KVK.

Fresh fish you can even catch yourselves

Although spring is still a month away, those zero temperatures appear to have vanished and I have already seen a bird flying into one of my trees with a beak full of nesting material. I see this period of the year as the perfect time to visit popular places that are overloaded with visitors during the tourist season, which is why I took my Border collie for a day out to the Cotswolds.

I chose Bibury, just 28 miles from Oxford and about eight from Burford as there’s a 41-acre trout farm in the centre of this lovely little village, where freshly-caught trout can be bought every day.

Bibury was described by William Morris as the most beautiful village in England, and having visited it many times and in all its guises, I am inclined to agree, although I tend to avoid it at the height of the holiday season when it is clogged up with tourists. Visit it now and you will be able to park your
car with ease and wander comfortably around the streets without finding yourself dodging around Japanese visitors and their cameras.

The trout farm was founded in 1902 by naturalist Arthur Severn, who wanted to stock local rivers and streams with native brown trout. This still goes on today, which means that there is a little bit of Bibury in rivers, streams, lakes and ponds all over the country.

Mature fish find themselves distributed to the kitchens of pubs and restaurants, where Bibury trout is much prized. You will also discover them on sale in many Oxfordshire farmers’ markets.

Apart from walking the grounds of the trout farm, visitors can view and feed the fish, watching them jump high in the air to catch the pellets. That’s the bit my dog loves most, though I have to keep a firm grip on his lead at that point to stop him trying to join the leaping fish. Yes, dogs are allowed into the fish farm providing they are kept on a lead which turns a visit there into a real family day out.

A playground in a corner of the farm caters for children, though they will also enjoy learning all about the trout, the grading process and the hatcheries.

Visitors can even catch their own trout if they visit during the weekend from March to October. Fishing tackle is provided if they haven’t brought their own. Fresh and smoked trout is also on sale at the farm’s little shop where brown and rainbow trout are available, both whole and filleted.

You can differentiate rainbow trout from brown trout by their colour. Rainbow trout is distinguished by the broad purple band along its flanks and the black spots on its tail fin. The brown trout has — not surprisingly! — a brownish appearance, with numerous black and rusty red spots on its upper side, though both its colour and shape will depend on where it is found.

Trout is one of the oil-rich fish that the government recommends we eat at least once a week. Unfortunately, only a third of adults reach this target, despite the fact that the fish’s Omega-3 plays a vital role in preventing death from heart disease by lowering blood fat levels and reducing blood clotting. An average portion of grilled trout flesh provides 1.838 grams of Omega-3 polyunsaturated fatty acids, which is well within the guidelines of 1.5g a week.

Trout is an excellent source of iron, calcium, selenium and vitamins A, B1, B2 and B6. It also contains natural oils which help keep hair and skin in good condition.

When buying trout, it’s the eyes that tell you if it is fresh. Look for a bright-eyed, firm fleshed fish that has a fresh sweet smell. One word of
advice though: if you are buying fresh fish from the trout farm, visit the shop just before you drive home, so that it remains at a chilled temperature until the last moment. Fail to do that and those gleaming eyes will begin to lose their lustre.

A day out at Bibury is not complete without taking lunch at The Catherine Wheel, Bibury’s only pub, which is just a few yards from the trout farm. This atmospheric, family-owned 15th-century pub is run by Jeremy White and his team. As Jeremy is both the owner and the head chef, a good meal created from local produce is always assured, especially if you choose Jeremy’s fish cakes made from Bibury trout and finish your meal with his delicious home-made ice cream.

-Government to Enhance Aquaculture with New Policy

The Government of Kerala proposes to come up with a state aquaculture policy to enhance cultured fish production in the state.

The Times of India reports that the fisheries department has put forth the proposal for cabinet approval. It has also come up with a Government Order notifying the setting up of a 11-member expert panel to propose recommendations for an effective policy.

The names of international aquaculture expert M N Kutty as the chairman of the panel and the fisheries joint director as the panel convenor has been proposed. The other names have not been finalised but experts from universities and fishery institutions will be among the members.

“A policy is needed to look at ways to enhance fish production in the state, which has a high potential for aquaculture. Yet Kerala’s contribution is less than two per cent of the country’s production,” said fisheries minister K Babu.

He said there were a lot of pokkali farms (paddy cultivated in water with low salinity) that also had aquaculture and added, “We need to promote inland fisheries culture”.

The government is also looking at the resources, fields that can have only one crop at a time and also the leasing policy for fish farming. “At present, the land can be leased for just one year. But no bank lends loan for such a short lease period. So, the policy will look into such issues,” said Mr Ajayan, joint director, fisheries department, Thiruvananthapuram. He said there were factors of pollution and inland fisheries development that needed to be looked into, and rules formulated accordingly.

“We have to look at the zonation of water bodies and Kol wetlands to identify where aqua farming can be done,” said C Mohanakumaran Nair, pro-vice-chancellor, Kerala Fisheries University. On the problems of aquaculture in the state, he said there were several environmental and socio-economic aspects that would need serious discussions.

-Fish farming: Profitable but beset by many challenges

Tilapia refers to a group of almost hundred fish species that mostly live in freshwater bodies. They are a highly nutritious food source. Tilapia is low in saturated fat and is a good protein source. It also contains the micronutrients; phosphorus, niacin, selenium, vitamin B12 and potassium. The fish therefore generally vary in appearance and size.

Ms Theresa Namisango, who rears fish at St. Jude Fish Farm in Senya, Kingo sub-county in Lwengo district, says that the colour of the fish differs depending on the type of breed. Though fish farming is profitable as a source of income, there are a number of challenges that hinder realising its full commercial potential.

She gave the ever-increasing price of feeds as one of the major challenges that fish farmers face. “Yet under all circumstances the fish have to be fed and often this leads to losses because the traders who buy the fish from the farmers are not ready to pay commensurate prices,” she says.

The weather also has a strong effect on the fish. When it is hot, the water tends to warm up which she said retards the fish’s growth. When there is insufficient rain for a long time, the flow of water reduces yet it is this water that aids in taking oxygen into the farming ponds.

Against the odds

There is also the challenge of neighbouring farms using herbicides on weeds, which are then washed into the ponds when it rains. These herbicides sometimes poison the fish.
In addition to theives who steal the fish from the ponds with scoop nets, fish is also eaten by birds, snakes and other predators. This reduces the fish numbers and minimises the farmer’s income. Tilapia fish is ready for sale at about a weight of 400 grams. The fish is normally weighed every two months to ensure and monitor proper growth and progress.

Namisango says her customers are from as far as Rwanda, D R Congo, apart from the fish vendors from Masaka district. Despite all the odds, Namisango continues to practice fish farming because it brings extra income.

**Cabinet nod to M’laya Aquaculture Mission**

The State Cabinet approved the ambitious Meghalaya Aquaculture Mission aimed at enhancing fish production in the State.

Addressing a press conference after the Cabinet meeting, Chief Minister Dr Mukul Sangma informed that the Meghalaya Aquaculture Mission would be launched on March 5.

It may be mentioned that the State Government is intending to cover a total water area of 10,000 hectares, averaging around 20,000 fish ponds every year under the aquaculture project.

“This programme would generate employment opportunities for the people,” Dr Sangma told reporters after the meeting.

He also informed that the total estimated cost of the project would be Rs 1134 crore and funds are derived from the State plan.

VAT amendment: The State Cabinet has approved the amendment of the Meghalaya Value Added Tax wherein the amount of VAT would be calculated at the bonded ware house and not at the bottling plant.

According to Dr Sangma, the CAG has also observed that there is no reason to feel that there would be loss of revenue if VAT is enforced at the bonded ware house since the State was sourcing the Indian Manufactured Liquor (IML) bottles from bottling plants located outside Meghalaya.

- The Shillongtimes

**Delhi Govt. to promote fish farming in rural areas**

‘24 water bodies identified where fishing could be introduced’

The Delhi Cabinet has approved auctioning of fishing activities in 24 water bodies on gram sabha land in the Capital.

At a meeting chaired by Chief Minister Sheila Dikshit, it was decided that fish culture would be encouraged in the water bodies and village ponds to overcome the problem of encroachment of such water bodies situated on gram sabha land.

By virtue of a notification of May 23, 1957, water bodies in the villages of Delhi had become the property of gram sabha. However, over the years it was noticed that due to increase in population, such water bodies were also being encroached by the people resulting in reduction in natural sources of water and depletion of water table in Delhi. Further, many of these water bodies had also suffered on account of pollution caused by running of drains and sewerage lines into them.

As per the provision of Delhi Land Reforms Act, 1954, it is the duty of gram panchayat to develop activities such as poultry farming and fishery. Further, the Delhi High Court had directed the Delhi Government to take all precautionary measures for revival and maintenance of water bodies.

In view of this, the Government said the Fisheries Unit of its Development Department had identified 24 such water bodies in North-West District where fishing could be introduced.

“The Cabinet has decided to auction these water bodies for fishing activities on approved terms and conditions which include utilisation of ponds for only fish and fish seed of cultureable varieties, not to further hand over pond to any other person, no modification in the existing structure in the water bodies and not to do any activity which is not in conformity with the existing or future laws of environment,” a statement by the Delhi Government said.

Further, the ownership of lands and ponds shall continue to remain with the gram sabha. The Cabinet has also approved composition of the proposed auction committees which will conduct auctions.

-Tribune News Service.
1. **Mr. Levkovich Aleksandr**  
   President,  
   Mega Line,  
   21, Ruzovskaya str.,  
   Saint-Petersburg, 190013, Russia  
   Tel: +7 (812) 380 08 40  
   Email: cvo@megalinefish.com  
   Crabs, Shrimp (small size)

2. **Mr. Paul Do**  
   Manager  
   New Ocean Seafood Market  
   793 Crescent Street,  
   Brockton MA 02302  
   Tel: +781 535 8494  
   Shrimp, Pomfret, Mackerel, Grouper

3. **Mr. Vanessa Ip**  
   C You Group Limited  
   Workshop A, 20/F  
   Capital Trade Centre,  
   No.62 Tsun Yip Street,  
   Kwan Tong, Kowloon,  
   Hong Kong  
   Tel :+ 852 9880 4122  
   E-mail : Vanessa@cyougroup.com  
   Shrimp, Leather Jacket fish, Ribbon fish

4. **Mr. Chris Giannis**  
   Director of Sales  
   Aquafin Trade. Inc  
   5240 N. Sheridan Rd,  
   Suite 101, Chicago, IL 60640, USA  
   Tel : + 773 358 2300  
   + 312 256 4546  
   E-mail : chris@aquafintrade.com  
   Shrimp, Leather Jacket fish, Ribbon fish

5. **Mr. Z. Zheng**  
   Purchasing Manager  
   Dalian Rich Enterprise  
   Group Co. Ltd.,  
   Shiyuan International Mansion 30F,  
   Jinma Road 156,  
   Development Zone, Dalian,  
   China – 11600  
   Tel : +86 11 88032000  
   +86 13998627581  
   E-mail : june@richseafood.com  
   Shrimps (HL, HO)

6. **Mr. Chee Hyoun Kim**  
   LA Branch Director,  
   Wang Globalnet  
   2465 Fruitland Ave.,  
   Vernon CA 90058  
   Tel : + 213 841 7400  
   E-mail : cheekim@hanmiinc.com  
   Crab, Belfish

7. **Mr. Jacky Djeu**  
   S.L. Seafood (USA) Inc.,  
   4340 Stevens Creek Blvd,  
   Ste 163, San Jose, CA 95129  
   Tel : + 408 983 0988  
   + 408 829 1180  
   E-mail : slseafood@yahoo.com  
   Small clam, Squid whole, Cuttlefish, Shrimp

8. **Mr. Mohamed Elbey**  
   Manager, HAFSA SAMAC  
   332, Lotissement Lina-Sidi Maarouf  
   20190 Casablanca – Maroc  
   Tel : + 212 5 22 97 40  
   + 212 6 61 47 20 44  
   E-mail: mohamed.elbey@hafsasamac.com  
   BT Raw/Cooked

9. **Mr. Bi Cui**  
   General Manager  
   Guangzhou Aquatic Product Group Co., Ltd.,  
   Zhaocunqishimu Commerce Zone,  
   Fangcun, Liwan District,  
   Guanzhou.  
   Tel : + 13922187031  
   +020 81567608  
   E-mail : ssjtysc@126.com  
   BT / Shrimp

10. **Mr. Celestino Villarreal**  
    President  
    AMA Packing LLC, P O Box 5208,  
    Brownsville, TX 78521  
    Tel : + 956 592 1318  
    E-mail : amabrown@aol.com  
    AFD Shrimp

11. **Mr. Alexey Golovchenko**  
    General Director  
    Konus-plus  
    6 Burakova Str, Moscow  
    Tel : + 7 495 921 03 05  
    + 7 916 858 06 35  
    E-mail : chef@konusplus.ru  
    BT / Shrimp

12. **Mr. Kevin Suh**  
    Vice President  
    Pacific Frozen, Inc.,  
    4300 Campus Drive # 103  
    Newport Beach, CA 92660  
    Tel : + 949 250 0757  
    + 949 836 4417  
    E-mail : kevin@pacific-frozen.com  
    Squid

13. **Mr. Sergio Mendez**  
    Head Chef, VIVA, 15 East Plain St.,  
    Wayland, MA 01778  
    Tel : + 508 651 3300  
    E-mail: viva@vivamexicangrill.com  
    Shrimp, Tilapia, Whole Squid

14. **Mr. Alexander Shuvalov**  
    General Director  
    KIT Ltd., 19304, 157, bld. 19  
    Dmitrovskoye shosse  
    Moscow, Russia, 127276  
    Tel : + 7 495 787 38 01  
    + 7 495 720 85 50  
    E-mail : coo_kit@bk.ru  
    BT / Vannamei

15. **Mr. Sasha Qu**  
    Vice General Manager,  
    Shandong Oriental Ocean Sci-tech Co., Ltd.,  
    18Acuma Avenue,  
    Hi-Tech Zone, Yantai, China  
    Tel : +0535 6929077  
    E-mail : goldenfoods@163.com  
    Raw Cuttlefish

16. **Mr. Mitsuo Ishikawa**  
    Purchase Manager,  
    True World Foods New York LLC  
    32-34 Papetti Plaza, Elizabeth,  
    NJ 07206, USA  
    Tel : +908 351 9090  
    +908 347 7320  
    E-mail ishikawa@trueworldfoods.com  
    Tuna Fresh & Chilled

17. **Mr. Philip S. Drew**  
    President, Delta Sea Products,  
    14660 McCormick Drive  
    Tampa, FL. 33626, USA  
    Tel : + 813 855 5777  
    + 1 800 732 4803  
    Grouper