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First Meeting of the Governing Board of SAARC Agriculture Centre

The Inaugural Session

The 1st Meeting of the Governing Board (GB) was held in Dhaka from 04-06 November 2007. The Meeting was inaugurated by the Chief Guest, Dr. M. Nurul Alam, Executive Chairman, Bangladesh Agricultural Research Council (BARC). Mr. Kazi Imtiaz Hossain, Director General (SAARC), Ministry of Foreign Affairs, Government of the People's Republic of

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Members attending the 1st meeting of the Governing Board

Bangladesh was the Special Guest. The High Commissioner of Sri Lanka and other representatives of the High Commissions/Embassies of SAARC member countries in Dhaka also attended the Inaugural Session as special invitees. The Inaugural Session was chaired by Dr. P.K. Joshi, Director, National Centre for Agricultural Economics and Policy Research, Indian Council of Agricultural Research (ICAR) and Chairman of the Governing Board of SAARC Agriculture Centre (SAC).

In his address of welcome, the Director of the Centre, Dr. Wais Kabir recalled that the Centre was renamed from SAARC Agricultural Information Centre (SAIC) to SAARC Agriculture Centre (SAC) with wider mandate, as agreed upon at the Meeting of SAARC Council of Ministers in December

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First Meeting of the Governing Board

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2006 in Pakistan. He stated that the 1st GB had the challenge of refocusing the activities of SAC aligning with its wider mandate and objectives as well as reassigning the resources. Dr. Kabir said that the Centre would have to enhance networking among the national institutions in the field of agriculture to strengthen the R&D activities in the region.

In his inaugural address, the Chief Guest, Dr. M. Nurul Alam said that the establishment of various SAARC Bodies and Regional Centres like SAARC Agriculture Centre in the Member States have greatly broadened the scope of meaningful cooperation at the regional level. He hoped that the Centre with its wider mandate could facilitate undertaking poverty alleviation initiatives in the region by promoting new technology and facilitating transfer of technology in agriculture and allied sectors.

In his address, Mr. Kazi Imtiaz Hossain highlighted food and nutritional security, developing and transferring new technology, and strengthening research-extension-farmer linkage as some of the major challenges for the region. He said that efforts must continue, with a renewed vigour, for vibrant rural agriculture and economy for sustainable development. He emphasised that decline of land availability and bio-diversity, degradation of soil and natural resources, development of irrigation are some of the serious challenges in the region.

Dr. P.K. Joshi observed that poverty, food shortage and malnutrition still afflict the region. He enumerated some of the challenges that South Asian agriculture is now faced with to enhance productivity and efficiency. The Centre should endeavour to provide inputs and engage in policy advocacy through its programmes, he added.

Mr. Md. Sufiur Rahman, Director, SAARC Secretariat, conveyed the greetings of the Secretary General of SAARC. He briefed the Meeting about the major programmes and projects that are being pursued and developed in the field of agriculture. He particularly underlined the need for reorientation of the focus of the programmes of the Centre to realise the newly defined mandate. He underscored that the Centre must play its due role in contributing for setting the agriculture agenda of SAARC, and implementing decisions taken by higher SAARC bodies.



Dr. P.K. Joshi, Chairman of the Governing Board (left) is handing over a crest to Dr. M. Nurul Alam (right), ex-member of the governing board from Bangladesh for his outstanding contribution towards development of SAARC Agriculture Centre; Dr. Wais Kabir, Director of the Centre is seen in the middle

Director's Report

The Director of SAC presented his report to the GB that included a review of the past few years' activities. The report provided an extensive overview of the functions of the Centre and activities planned for the year 2008. The GB made the following important observations:

- It appreciated linking and networking with agricultural professionals, institutions and stakeholders through the website. The Library Automation Services and CD-ROM database were also appreciated as effective tools for expanding the outreach capability of the Centre.

- Efforts should be made to broadcast audio-visual programmes of the Centre through respective public and private media (TV, Radio, Community Radio). In this regard, assistance of the national authorities and the GB members may be sought. Efforts should also be made in utilising the SAARC Audio Visual Exchange (SAVE)

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From SAIC Newsletter to SAARC AgriNews

Recently, the title of SAIC Newsletter has been changed to SAARC AgriNews. However, all communications should be addressed to the Director, SAARC Agriculture Centre, BARC Campus, Farmgate, Dhaka 1215, Bangladesh.

Conservation of plant diversity: Botanical Garden at the Bangladesh Agricultural University (BAU)

Conservation of plant diversity assumes greater importance when the world is facing unprecedented loss of biological diversity. About 60,000 out of 287, 655 species of plants known in the world are facing the threat of extinction. Of these, 8,321 species are now on the International Union for Conservation of Nature (IUCN) Red List 2004. Unfortunately, in Bangladesh many of the important wild plant species are also becoming rare and some are on the verge of extinction. It has been reported that 24 vascular plant species have been threatened in Bangladesh of which 1 species is extinct/endangered, 21 species are vulnerable, 1 is rare and 1 is indeterminate.

Some 45 forestry species are currently threatened with extinction. Some important medicinal plants have also been reported as endangered by Dr. N. Ahmed (The Daily Janakantha, 1999-2002). The Bangladesh National Herbarium has recently listed 106 plant species as endangered. Of these, some 35 species are known to be important as medicinal plants. Some 23 vascular tree species have been reported as rare and threatened. The threat of extinction is mainly brought about by the degradation and encroachment of habitats due to rapid industrialization and urbanization, housing, illegal

grabbing of forest lands and terminal harvesting of wild species.

The wild and semi-wild plant species have always been the important source of fruits, food, fodder, fuel, and medicines. More importantly, the wild species have genetic potentials and desired



Front view of the BAU Botanical garden

characters that are being utilized in the breeding programme for improved yield and quality factors and to respond to changing environments. Once a population or species is extinct, the gene it possesses is lost, and it can no longer be brought back for developing improved varieties. The loss of plant genetic resources consequently threaten agriculture, forestry, medicine, environment, and in the long run humanity itself.

Considering the threats from the loss of plant species, particularly with changing concept after the proclamation adopted by the Convention of Biological Diversity

(CBD) and the Global Strategy for Plant Conservation (GSPC), conservation of biodiversity has become a common concern worldwide. In view of the inadequacy of in situ conservation activities, botanical gardens in many countries have strengthened the collection and conservation of rare and endangered plant species in order to save them from extinction. There are over 1800 botanic gardens and arboreta located in about 148 countries and they together maintain over 4 million living plants belonging to more than 80,000 species of vascular plants. These institutes are cultivating and maintaining most of the germplasm of wild and semi-domesticated species in their gardens for

conservation, and also for providing education and research opportunities with ready access to a wide range of plant genetic materials. Apart from conservation, botanic gardens are also playing an important role in multiplying and reproducing rare and endangered species for reinforcement of reduced populations and for reintroduction to extinct populations. Botanic gardens are also working with the local communities to enhance plant conservation, especially the medicinal and fruit tree species according to IUCN.

In response to the implementation of the International

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Agenda for Botanic Gardens in Conservation and the Global Strategy for Plant Conservation, the Botanic Garden of Bangladesh Agricultural University (BAU) addresses all issues related to botanic garden activities but pays special attention to the conservation of rare and threatened plant species of the country. The Botanic Garden of BAU was officially opened in 1963 under the Department of Crop Botany with the aim of providing facilities for maintaining the diversity of plants of Bangladesh and for collection and conservation of rare and endangered plant species. The garden is located on the west bank of the Old Brahmaputra river endowed with natural beauty. The BAU Crop Botany Department has been trying to develop the garden from its humble beginning into an attractive botanic garden of scientific importance. The Botanic Garden is playing an important role in multiplying and reproducing rare and endangered species and also providing education and research opportunities to different users of plant genetic materials. The original area of the Botanic Garden was 14 acres. Considering the importance of conservation, the area of the Garden was increased to 30 acres in 1996. The Garden has so far succeeded in collecting and conserving a total of 1228 plant species under 727 Genera and 215 Families comprising a variety of plant species. A mangrove zone has been developed in the Garden with 14 mangrove species.

BAU Botanical Garden

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Students, teachers and researchers from various Departments of BAU as well as from other universities, colleges and research institutes of the country use this Garden as a study site. It also attracts many visitors everyday from different places for learning and recreation.



Encephalartos ferox (collected from the University of Oxford Botanic Garden)

Achievements of the Garden

(a) Conservation in field genebanks

Five Field Genebanks of rare and important medicinal, fruit, timber and ornamental plant species have been established at the BAU campus since 1999.

Two Field Genebanks of rare and important plant species have also been established outside the campus, in Shombhuganj, Mymensingh in 2000.

(b) Propagation and multiplication of rare and important plant species

Fruits and seeds of *Kigelia* (*Kigelia pinnata*) were collected from

Karmichael College, Rangpur and were propagated and distributed for conservation in (i) National Botanic Garden, (ii) Baldha Garden in Dhaka (iii) Botanical Garden of Dhaka University, (iv) Ramna Park in Dhaka, (v) Madhupur Shaal Forest in Tangail, (vi) Karmichael College and (vii) RDRS in Rangpur.

Some rare and important plant species of Baldha Garden and the National Botanic Garden, namely Rajashok (*Amherstia nobilies*), Swarna ashok (*Saraca cauliflora*), Canaga (*Cananga odorata*), African tulip (*Späthodia campanulata*), Tabebuia (*Tabebuia rosea*, *T. lutea*), Atmora (*Helicteres isora*), Gustavia (*Gustavia gracilima*), Ochna (*Ochna squarosa*), Scarlet cordial (*Cordia sebestera*) were propagated and conserved in this Garden.

Fruits and seeds of some rare and important plant species, like *Encephalartos ferox*, *Glycyrrhiza lepidota*, *G. yunnanensis*, *Magnolia sieboldii*, *M. stellata*, *Aesculus indica*, *Liriodendron tulipifera*, *Taxus baccata* etc. were collected from the University of Oxford Botanic Garden and have been successfully propagated in 2007.

(c) Documentation and database management

Computerized databases of all plant species of (i) Botanic Garden of BAU, (ii) Bangladesh National Botanic Garden at Mirpur and (iii) Baldha Garden at Wari, Dhaka have been developed using Microsoft Access Software. This data management system has helped the gardens in exchange/dissemination

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Emulate farmers' innovative knowledge: Community-based approach of establishing seed village in West Bengal, India

Seed is the basic as well as principal input in agriculture and productivity is largely influenced by timely availability of quality seeds to the farmers. The infrastructures at national, state and local levels still lag behind in quality seed production for different crops. The gap between demand and supply of quality seeds is considered as the major constraint in enhancing productivity. To overcome the problem, it is imperative to produce

situation-specific quality seeds through active participation of the farmers. Hence, the participatory approach in community seed production was emphasized where farmers' cooperative society would act as an apex body and scientists of the State Agricultural University, ICAR institutes, State Department of Agriculture would work as technical experts. Selected farmers from different villages under the society would be the seed growers.

A model seed village was initiated in 1997 kharif season with 22 farmer participants and an area of 6 ha with a production target of 21 tonnes of rice seed in Gontra village in Chakdah block of West Bengal. The result was so encouraging that in the 2002 kharif the number of farmer participants swelled to 350 with 88 ha of land and a production of 350 tonnes of seed.

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BAU Botanical Garden

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of information in a better and quicker way with users of germplasm in the country and abroad.

(d) Membership/networking

(i) The BAU Botanic Garden is the only registered participant from Bangladesh in the worldwide implementation of the International Agenda in support of plant conservation, environmental awareness and sustainable development to implement the international agenda for botanic gardens in conservation and the Global Strategy for Plant Conservation (GSPC).

(ii) A sponsorship programme has been developed with the Royal Botanic Gardens, Cranbourne Inc, Victoria, Australia to strengthen conservation activities.

(iii) The BAU Botanic Garden is the only member from Bangladesh of the Botanic Gardens Conservation

International (BGCI).

(e) Seed exchange programme

The garden has established seed exchange programmes with some leading botanic gardens of the world, these are:



Wild banana (*Musa ornata*) at the BAU Botanical Garden

the University of Oxford Botanic Garden and the Arboretum, UK; Friends of the Royal Botanic Gardens, Australia; Civico Orto

Botanico, Italy; Royal Botanic Gardens, Kew, England; and Tropical Botanic Garden & Research Institute (TBGRI), Trivandrum, India.

Conclusion

A network of all the botanic gardens (ex situ conservation centres) and the protected areas (in situ conservation area) of Bangladesh need to be established at national or regional levels to promote conservation and rehabilitation of rare and threatened plants species. Immediate attention is needed for collection and propagation of rare and endangered wild plant species of Bangladesh for ex situ conservation in botanic gardens. A "Directory of Plants in the Botanical Gardens of Bangladesh" may be published from the available databases in the country.

Source: Professor Md. Mustafizur Rahman
Department of Crop Botany, Bangladesh
Agricultural University, Mymensingh-2202,
Bangladesh, Email: mrahman_cbot@yahoo.com
Tel: 880-91-53009, Cell: 01711 372859

There were no specific summer rice varieties in West Bengal and the farmers usually grow early duration, long, slender recommended winter rice cultivars under all the *boro* rice situations. Depending upon the topography of lands, there is a need for selection of specific summer rice cultivars for this situation. In this context, farmers can choose from a set of established varieties by growing them in their own fields for two or more seasons. The participating farmers themselves are convinced about the merit of their own selected variety or varieties and hence, further extension work on the varieties can be reduced. The study aimed at examining the significance of the participatory system of adoption of rice cultivars under specific agro-ecological situations. The comparative performance of ten rice genotypes, including nine established varieties and one as per farmers' choice, were taken for demonstration on 5 (five) farmers' fields in alluvial zone during rainy and summer seasons.

The major differences of perception between farmers and scientists in selection of plants based on characteristics features are as follows:

The concept of farmers' participation at the early stage of plant breeding programme is being preferably taken into account to circumvent any shortcomings in future preference of the farmers on desired characteristics that usually match with the scientists' choice.

In this programme, the farmers select plants or lines from segregating populations of crosses raised in research farms and they

Participatory Seed Village

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carry forward their own selections in their respective zones. The major benefit accrued from this technique is the wide diversity of lines, each selected to suit the specific requirements of the farmers in a given zone.

The usual shortcoming of a plant breeder who often fails to envisage the zone-specific adaptive features while selecting from his breeding population(s) is overcome by farmers' participation at early stage.

The farming community knows local resources, markets, socio-economic situation and needs. The community also has the indigenous technology knowledge for post harvest value addition in women dominated cottage industry chains. Organization-based breeders generally ignore such micro-economic parameters.

The plants selected by farmers revealed widely different preferences. It is evident that the farmers selected plants that, in their opinion, most suited the ecological conditions in which they cultivated rice. The most significant conclusion drawn from this experiment is that it is almost impossible for the plant breeders working in a research farm to envisage the widely diverse ecological conditions prevalent and to anticipate the farmers' distinctive preferences in order to accommodate these in his selection criteria. Farmers' participation at the early stage of plant breeding programme can speed up evolution of eco-specific lines. The criteria selected by scientists are usually academic knowledge based whereas farmers' choice is need based.

Nine established varieties of rice, IR 36, IR 64, IR 72, IR 68305, Iron 4, Ajaya, IET 9994, PSBRC 4, IET 4786 (as Check) and experimental selection Gontra I (pure line selection from a Vietnamese variety - made by the members of Gontra Farmers' Cooperative Society, Chakdah, Nadia) were used for on-farm trial (in farmers' fields) at Gontra, Chakdah under the guidance of the scientists of the RRS, New Alluvial Zone. The experiment was conducted in three consecutive seasons, Boro 1997-98, Kharif 1998 and Boro 1998-99.

Conclusion

In this seed production programme, the farmers' cooperative society played a vital role for processing of seed and distribution of quality seed to the farmers of other villages. The State Department of Agriculture and the scientists from Bidhan Chandra Krishi Viswavidyalaya (BCKV) provided them technical guidance in building their confidence. As such, the whole village is now converted into a "Seed Village". The seed production activity has generated additional rural employment. In the Seed Village, the farmers are getting high yields, which is ultimately reflected in increased rice production in the State (West Bengal). The implementation of the seed village concept has a great potential in enhancing productivity of rice in the State as well as rural employment. This venture has also resulted in increased total food production. Similar models are being tried at different agro-ecological situations in West Bengal.

Source: P. Chattopadhyay and A. Zaman
Bidhan Chandra Krishi Viswavidyalaya, West Bengal, India.

Regional Consultation/ Inception Workshop for Food Security

The First Regional Consultation/Inception Workshop on SAARC Regional Programme for Food Security was held in Islamabad on 16-17 July 2007 in collaboration with the Food and Agricultural Organization (FAO).

The members of the Regional Technical Working Group (RTWG) nominated by the member countries, representatives of FAO and SAARC Secretariat attended the Consultation/Workshop. Mr. Mohammad Saleem Khan, Additional Secretary, Ministry of Food, Agriculture and Livestock, Government of the Islamic Republic of Pakistan, inaugurated the Workshop. He referred to the challenges in the region is confronted with in respect of poverty, food insecurity and malnutrition. While expressing satisfaction at the establishment of SAARC Food Bank, he underscored the need for developing regional programmes to complement the national efforts.

Dr. P. K. Mudbhary of FAO introduced the broad objectives of the workshop and presented the summary of the project. Mr. Md. Sufiur Rahman, Director, SAARC Secretariat gave an account of the regional level initiatives in the fields of agriculture, rural development and poverty alleviation.

The Workshop had some focused discussion in the technical sessions. More specifically, its objectives were to prepare a regional strategy and programme document with the aim to:

- Help increase food productivity and food production, including livestock and fisheries of SAARC member countries;
- Help reduce postharvest losses; set up modern storage, preservation and processing facilities;
- Increase food availability, accessibility, affordability and consumption of the poor and the disadvantaged groups in order to alleviate problems of hunger and malnutrition;
- Complement implementation of

existing regional mechanism(s), like SAARC Food Bank and facilitation of trade in agricultural products within the region;

➤ Help formulate appropriate strategies for food security during natural disasters, such as, tsunami, earthquakes, floods, etc., and provide a common position for member countries to strengthen regional collaboration for food security and to mobilise resources.

In order to facilitate coordination and resource mobilization, the consultation/workshop underscored the need for association of regional and international organizations mandated to work towards ensuring food security. It requested the SAARC Secretariat to liaise with development partners, such as the Asian Development Bank (ADB), the World Bank, the World Food Programme (WFP) and International Fund for Agricultural Development (IFAD) and to invite them to be present at future Consultation meeting/ Workshops.

Pandemic disease of jackfruit in Bangladesh

Jackfruit contributes significantly to the livelihood of the people dwelling around Dhaka, the capital city of Bangladesh and also throughout Gazipur, Tangail and Mymensingh districts. Jackfruits are grown in homestead, marginal land and even on raised crop fields. It was learnt that some people earn more than 50% of their annual cash income from jackfruits grown on their own land. A number of landless people are also involved in trading of

jackfruit. Some farmers grow pineapple under the jackfruit trees. Jackfruit provides additional income to the marginal farm families.

In a recent visit to Maona of the Sreepur upazila, Gazipur it was observed that most of the jackfruit trees were infested with stem-borer. One could see lichen growing on most of the jackfruit trees indicating that the site quality is very good for tree growth. Many of the jackfruit trees were dying and some trees were already dead and felled. The

Union Council Member of Maona showed all his infested trees and some dead trees which were felled. He observed the problem of stem borer since the last year, and within one year he had lost at least five trees. He is upset for his 100-year-old tree, which was planted by his grandfather. Unfortunately, his 100-year-old trees showed deep scars with holes and oozes were coming out of the holes.

Such scars were found in almost

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Leaf area and rind colour influence fruit cracking in pomegranate under arid conditions

Pomegranate – a native fruit of the region spread between Iran and the northern Himalayas - is widely cultivated throughout India and the drier parts of the South-east Asia, Malaysia, Indonesia and tropical Africa. The fruit is known for its nutritional and medicinal importance. The plant is naturally adapted to regions with cool winters and hot summers but under hot and semi-arid conditions it suffers a heavy setback due to cracking of its fruits. Some causes of fruit cracking in pomegranate are low or excess moisture, high temperature, hot wind, pest and diseases, etc. However, in a study it was observed that under arid conditions the fruit cracking was significantly and negatively correlated to leaf size of the cultivar especially in case of Ambe Bahar (flowering in March- April) crop (the major crop which is preferred in the north Himalayan conditions). The larger the leaf size of the variety the lesser was the cracking. This may be attributed to the greater capacity of this type of cultivars to support the fruit growth and to prevent the direct exposure of the fruits to solar radiation or ir-radiated heat from the dry soil surface. Chawla and Ganesh were the cultivars with larger leaf area in comparison to Kandhari Hansi, Kandhari Kabuli, Mohamad Ali and Jodhpur Red.

Further, the cultivars with dark red coloured fruit rind were found to be more prone to fruit cracking than those with light red or yellowish red coloured rind. It may be attributed to

the fact that dark colour absorbs more heat than the light colour. The rind tissues having direct exposure to solar radiation or irradiated heat from soil were damaged and as the internal growth of the fruit advanced



Light coloured cultivars are less prone to fruit cracking



Fruit showing damage due to excessive exposure to radiations and initiation of fruit cracking

the dead portion of the rind could not expand and it led to the cracking of the fruits. In dark red varieties like Kandhari Hansi and Mohammed Ali cracking upto 86%

was observed whereas it was less than 32% in yellowish red coloured Chawla.

For management of this type of cracking, studies were conducted for conserving moisture around the rind and controlling the radiation level for fruit development. Polythene bags of two types, i.e. transparent and white/opaque were used for covering the fruits during their development. For aeration, the bags were perforated at a spacing of two holes (2mm size) per 100cm². With transparent polybags the cracking was checked to some extent but fruit dropping was greater. In case of opaque or white poly bags the cracking was significantly low and fruit dropping was also low. The colour development of the fruit was poor in this case but it was improved by removing the bag 7 to 10 days before harvesting. In this way fruit cracking was controlled upto 72% with equivalent colour development of the fruits to the non-covered fruits.

It was therefore concluded that under arid conditions yellowish red cultivars should be preferred to dark red cultivars. For managing cracking, the fruits in their developmental stage should be covered with perforated opaque/white poly bag.

Source: Dr. Shashi K. Sharma
Asstt. Scientist (Pomology)

Dr. Y. S. Parmar University of Horticulture and Forestry, Regional Horticultural and Forestry Research Station, Neri, P. O. Khagal, Distt. Hamirpur, Himachal Pradesh – 177001, INDIA

Deep-sea resource survey in the Bay of Bengal

BIMSTEC (Bay of Bengal Initiatives for Multi-Sectoral Technical and Economic Cooperation) member countries (Bangladesh, India, Myanmar, Sri Lanka, Nepal and Thailand) implemented a deep-sea resource survey project entitled "Ecosystem-Based Fishery Management in the Bay of Bengal" during 25 October-21 December 2007. The collaborative survey project aimed at management of the deep-sea fishery resources in the Bay of Bengal. The project was coordinated jointly by the Department of Fisheries, Thailand and SEAFDEC (South-East Asian Fisheries Development Centre). The project was subdivided in 19 sub-projects of various interesting scientific topics related to fishery resources, fishery technology and oceanography. The project would certainly provide greater opportunities of technology transfer, exchange of scientific information, better understanding and building relationships among the fishery scientists and related organizations of the BIMSTEC member countries.

The Fishery Research Vessel, M.V. SEAFDEC was deployed for the survey. The vessel was 65 m long and very stable. In addition to the normal crew/staff of the research vessel, two researchers

from each of the five countries (Bangladesh, India, Myanmar, Sri Lanka and Nepal) and 16 researchers from Thailand participated. The survey was conducted in the following three areas: Area A,

survey.

Altogether 77 fish catches weighing about 1755 kg, were made by the pelagic long line (PLL) operation during the survey. Important species caught were,

Yellowfin tuna (*Thunnus albacares*), Swordfish *Xiphias gladius*, Black marlin (*Makaira indica*), Sharks: Thresher shark (*Alopias pelagicus*), Bigeye thresher shark (*Alopias superciliosus*), Silky shark (*Carcharhinus falciformis*), etc.

Among the species caught by the PLL, the pelagic sharks (Fig. 2) dominated, which contributed about 48% of the total catch. A valuable species of fish, the Swordfish contributed about 42% of the total PLL catch by weight. Another valuable species of fish, the Yellowfin tuna contributed only 4%, while other species together contributed only 6% of the total catch by PLL. The PLL was the best among the three gears used.

Fifteen Species belonging to nine Families were caught by the gill net during the survey. The average catch rate was 5.37 kg/km for the multifilament gill net and 1.24 kg/km for the monofilament gill net. In the overall gillnet catch,



The Fishery Research Vessel, M.V. SEAFDEC used in the BIMSTEC deep-sea resource survey



A scene of the hauling of a pelagic shark caught by the pelagic long line during the BIMSTEC deep-sea resource survey

Latitude 16o-19o N & Longitude 88o-91o E; Area B, Latitude 09o-14o N & Longitude 82o-85o E and Area C, Latitude 10o-12o N, Longitude 95o-97o E. Three important gears, viz. pelagic long line, drift gill net and automatic squid jigging were used in the survey. Besides, different oceanographic and hydro-biological studies were conducted during the

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Senior Finance Officer, SAC joined SAARC Secretariat



Mr. Md. Akhtar Hossain Chowdhury, Senior Finance Officer of SAARC Agriculture Centre (SAC) joined as "Accounts in Charge-II" at SAARC Secretariat, on 01 August 2007.

Mr. Chowdhury served about 16 years in SAC. He joined SAC during 1991 and worked till July 2007. He

showed a good managerial skills while he was serving in SAC.

He served the Centre with utmost sincerity and integrity. He organised the financial management system of the Centre very efficiently. The Centre recognizes his hardwork and acknowledges his contribution towards developing the Centre. Mr. Chowdhury was born at Homna Upazila under Comilla district in Bangladesh. He is married and blessed with one daughter and one son.

Mr. K. M. Hossain goes to retirement



Mr. Kamal Mustafa Hossain, Support Service Officer of SAARC Agriculture Centre retired on 31 December 2006 after serving the Centre for about 16 years.

Mr. Hossain introduced successful personnel management skill in the Centre. His integrity and sound administrative capacity helped the Centre to mark a good record. The Centre appreciates his hardwork and acknowledges his contribution towards developing the Centre. Mr. Kamal Mustafa was born at Tungipara upazila under Gopalganj district in Bangladesh. He is blessed with two sons and one daughter.

Contribute to SAARC AgriNews

SAARC AgriNews is a widely circulated publication devoted for disseminating agricultural research findings and information on applied technology for economic development of the farmers of South Asian region.

SAARC Agriculture Centre has been publishing this Newsletter (formerly SAIC Newsletter) since 1991 and distributing it to about 7,000 readers in SAARC member countries. The Centre has been distributing the SAARC AgriNews to the relevant agricultural institutions, scientists and extension experts of SAARC member countries free of cost. Please send your articles, success stories and news on applied research, extension activities, proceedings and/or recommendations of seminars, symposia and workshops in the field of agriculture with relevant photographs either by post or through e-mail. Please note that unaccepted articles are not returned to the Authors.

Regional workshop on farm mechanization

A Regional workshop will be held on 'Farm Mechanization for Small Holder Agriculture' at Central Institute of Agricultural Engineering, ICAR, India. It is expected that the workshop will be held during 3rd week of September 2008 with the joint collaboration between SAARC Agriculture Centre and the Central Institute of Agricultural Engineering, Nobibag, Berasia Road, Bhopal, Madhya Pradesh, India.

Deep-sea resource survey

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Katsuwonus pelamis dominated followed by *Auxis thazard*, *Coryphaena hippurus*, *Euthynnus affinis*, *Thunnus obesus*, *Carcharhinus falciformis*, etc. The catch of the automatic squid jigging was not found encouraging.

Depending on the preliminary results obtained during the BIMSTEC deep-sea resource survey, some important findings are summarized below. Some suggestions for action to be taken by the management are also provided side by side in a tabular form.

Table 1: Important findings/outputs of the BIMSTEC resource survey project and suggestions for action to be taken by the management

Sl No	Important findings/outputs	Suggestions for action
1	Pelagic long line (PLL) is the best gear for the deep sea	Entrepreneurs should be motivated to use PLL to utilize export oriented large pelagic fish.
2	Gillnet is the second best gear	Gillnet operators should be encouraged to fish in the deeper region.
3	Squid jigging is not suitable in the deep sea	This fishing may be given as bonus for the PLL operators
4	Sharks dominated in the deep sea contributing about 48% of the total PLL catch.	Entrepreneurs should be encouraged to harvest more sharks from the deep sea.
5	Swordfish is the most important commercial fish and as a single species dominated most contributing 42% of the total PLL catch.	Entrepreneurs should be encouraged to harvest and export that valuable pelagic resource.
6	Yellowfin tuna, the lucrative commercial species relatively more abundant in Area A, but overall catch rate was poor.	Entrepreneurs should be encouraged to harvest and export this valuable pelagic resource.

Source: Dr. M. J. Rahman, Bangladesh Fisheries Research Institute Marine Fisheries & Technology Station, Cox's Bazar, Bangladesh
E-mail: Jrhmn@yahoo.com

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Committee to broadcast the materials.

- The Centre should focus on providing policy inputs to the higher SAARC bodies for consideration, particularly the Ministerial Meeting on Agriculture.

- The Centre should gradually put greater emphasis on in-house studies and participatory programme development beneficial to the region.

Programmes

The GB underscored the need for re-designing the activities of the Centre, with a view to aligning them with the new mandate. The Centre should develop a long-term vision / perspective that should guide articulation of medium-term programmes (3-5 years). The annual programmes should be developed as building blocks to realise the objectives and goal as defined in the SAC mandate. The perspectives, mid-term programmes and activities should adequately reflect the emphasis articulated at the Summit and Ministerial level meetings.

The Programmes of the Centre must reflect the needs of the SAARC Member States and should be regional in nature. Mutual benefit and interest are to be the guiding factors for planning the Centre's activities. Based on the mandate of the Centre, the programme activities should mainly focus on (a) undertaking studies for developing policy inputs and regional projects, (b) networking with stakeholders in agriculture, (c) promotion of proven

agriculture technologies and (d) establishing effective research-extension-farmer linkages.

Re-organization of the Centre

The GB decided to re-structure the Centre along three broad Divisions in order to realise the wider mandate, especially in undertaking regional studies, establishing networks, disseminating information and technology, policy advocacy and strengthening capacity. The three thematic Divisions would be (i) Agriculture Management, (ii) Knowledge Management and Networking and (iii) Policy Planning.

The personnel structure of the Centre has been re-designed and some of the existing staff re-deployed. The GB recommended the cost outlay for the agreed programme activities and institutional expenses for the financial year 2008 as US\$3,34,950.00 and US\$3,60,200.00, respectively.

The GB stressed the need for a full-time Director and qualified professionals drawn from the region. The GB reviewed the audit observations made by JAT-06, and concurred that the Centre should follow the appropriate rules / provisions in the conduct of its business.

The Chairman of GB, Dr. P. K. Joshi, thanked the GB members for their constructive contributions and cooperation during the meeting. He particularly appreciated the efforts and contributions of Dr. Kabir and Mr. Rahman in expanding the mandate of SAC. The GB members expressed their gratitude and appreciation to the Chair for efficiently steering the Meeting.

Jackfruit Disease

(from page 7)

all trees where stem-borer infection was noticed for more than six months. The affected trees gradually became weak and started dying from the top as well as branch tips. Sometimes the trees became brittle in the infected zones. With strong wind, the trees broke from the oozing points. Some such dead trees were seen, which were either felled by the owner or broken due to wind. If such dying continues, it would be like top dying of *Sundari* in the *Sunderbans* or dieback of *Sissoo* in northern Bangladesh.

It is not clear whether stem-borers are the primary or secondary cause of infection. The scientists, especially pathologists and entomologists of the country should come forward to identify the causal organism and developing control measures. Jackfruit trees in Dhaka, Tangail and Mymensingh play a vital role in forest conservation. Jackfruit growing areas around *Shaal* forests are serving as buffer zones of the forests. If we fail to control the stem-borer problem of jackfruit in Bangladesh, we will have to pay a heavy toll in near future. People living in the jackfruit growing areas depend on jackfruit trees for both fruits and timber. With the reduction of jackfruit trees, people dwelling around the *Shaal* forests would have no other alternatives than to collect their fuel wood and timber from the *Shaal* forests resulting in deforestation.

Source: Farid Uddin Ahmed, Executive Director, Arannayk Foundation, House 68, Road-1, Block I, Banani, Dhaka 1213, Bangladesh.

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Vacancy Announcement

SAARC Agriculture Centre (SAC)

BARC Campus, Farmgate, Dhaka 1215, Bangladesh

APPOINTMENT NOTICE

Applications are invited from citizen of SAARC Region for filling up the following posts on temporary basis

Designation	Qualification, Experience and Age
1. Deputy Director (Agriculture)	Ph. D in any discipline of Agricultural Sciences with 17 years experience or Master degree in any discipline of Agricultural Science with 20 years experience. Person should be specialized in the field of agricultural program development, implementation, and management aspects, analyzing of natural hazards, quality standards of agricultural products (GAP, SPS, MRL etc.) and processes etc. Persons having work experience in international/ regional agency in the relevant field would be of added advantage. Should have experience to lead collaborative studies in agricultural development program. Preference will be given to persons having working experience in a multidisciplinary team and exposure to Agricultural Research/ Extension System. Age: Maximum 55 years
2. Deputy Director (Policy Planning)	Ph. D in any discipline of Agricultural Science/Agricultural Economics/Economics/ Development Studies with 17 years experience or M. Sc. in the above discipline with 20 years experience. Experience in International and Regional Organizations /Centres and socio-economic research and development work would be preferred. Should have five years experience in handling and analyzing quantitative data and hands on experience in operating software packages for data analysis is essential. Person should be specialized in policy planning, program development, evaluation and monitoring, HRD and highly exposed to regional issues including potentials and constraints, regional food security, production trend opportunities and limitations, global / regional / bilateral trade related issues in agriculture. Age: Maximum 55 years
3. Senior Program Specialist (Crops)	Ph. D in any subject of Crop Agriculture with 12 years or Master degree in any subject of Crop Agriculture with 15 years experience. Person should be specialized in the field of agricultural program development, implementation and management aspects, analyzing natural hazards, climate change, seed, quality standards of agricultural products (GAP, SPS and MRL) etc. Age: Maximum 55 years
4. Senior Program Specialist (Audio Visual)	M. Sc. in agricultural science or allied field with diploma/certificate in communication particularly Audio Visual productions with 15 years experience. Should be a specialist in Video production, dubbing, editing and maintenance of the knowledge and document those in the form of package to meet the diverse clientele requirements. Should have sound knowledge base on ICT in technology packaging. Should be able to work in a mixed culture and in a team. Age: Maximum 55 years
5. Senior Program Specialist (Priority setting & Program Development)	Ph. D in any discipline of Agricultural Science/Agricultural Economics/ Economics/ Development Studies with 12 years experience or M. Sc. in the above discipline with 15 years experience in priority setting, program development etc. in agriculture. Person should be specialized in policy planning, program development, priority setting, program / project planning, monitoring and evaluation, implementation, and impact analysis. Age: Maximum 55 years

Must obtain minimum 2nd class/ division in all stages of academic records. Quality journal publications, books, monographs, technical reports will deserve consideration. Must have proven record of English Language proficiency and competent in computer use.

Applications in prescribed form (available at the SAARC Division of Foreign / External Affairs, Ministry of SAARC Member Countries and also at the SAC web site: www.saarcagri.net) duly filled in by the applicant and recommended by the competent authorities should reach the Director, SAARC Agriculture Centre (SAC), Farmgate, Dhaka - 1215, Bangladesh through ministry of foreign/ external affairs of the respective member countries no later than 31st July, 2008. Age is relaxable in case of highly deserving candidates.