

## Chairman, PNASF Speaks



At this time, I recall my statement made in earlier issue of the PNASF News as follows;

*"We should underscore that none of the natural resources are in 'plenty' and that we should 'economise' on each natural resource to build together the world's livelihood. The food security of humans can not be attained without plants and plant security can not be achieved without soil and water, and it is impossible to keep secured soil and water without economics of management." We can take care of the ecosystems that supply our water needs.*

*Our cultures have developed traditions that protect water. In incoming decades, our security and survival will depend on how will we learn to respect water's essential and irreplaceable role in our lives. There is enough for everyone if we work together to keep it clean, use it wisely and share it fairly. Our village forefathers had professed and practiced that water was an integral part of our living relationship that included, among other things, soil, climate, biodiversity and farming. They understood ecology well.*

*We need to recognize that 97.5 percent of the water on earth is salty. Eighty Four percent of water in the atmosphere comes from oceans, then falls as rain. Of the 2.5 percent of earth's water that is fresh, about 70 percent is ice and inaccessible and 0.3 percent is surface water.*

*A water footprint is the water we consume directly for things like drinking, bathing, cleaning and laundry plus the water used to make the products and to grow food. According to the last year statistics the U.S. Water Footprint of 655,939 gallons per capita per year was the highest in the world, followed by the lowest in Yemen of 163.523 gallons, with India having figure of 258,878 gallons only. In the U.S., indoor direct use for the average person is 69.3 gallons/day. A family of 4 in U.S. uses about 400 gallons/day and out of which 30 gallons for outdoor use only which is how much a person in Algeria uses for everything.*

*The water has been utilized for different purposes. It seems, a strong competition among human, plant and animal exists with regard to fresh water utilization. One estimate indicates that if all US residents reduced their consumption of animal products by half, the nations total dietary water requirement in 2025, would drop by a savings equal to the annual flow of 14 Colorado rivers. By another comparative estimate the 2007 U.S. congressional mandate to produce 15 billion gallons of corn ethanol a year by 2015 would require estimated 1.6 trillion gallons of additional irrigation water annually. With modern requirement and approach on regular water utilization, the demand on prioritization is getting serious. Not very long, described as a classic Western water war, where thousands of dead fish washed up on the shores of Klamath River in U.S, triggered by using Klamath water to irrigate crops and thereby disturbing Indian tribes and the salmon reservoir leading to extinction.*

*We need to have reasonable approach to water consumption in the interest of humans, plants and animals by using it wisely. We are using 2,029 gallons of water to produce one pound of hamburger, 468 gallons for one pound of chicken, 600 gallons for each pound of cheese, 72 gallons for one pound of apples, and only 16 gallons of water to produce one pound of tomatoes. Now it is for us to judge and decide what we like to produce and eat.*

*The ideas forwarded by different authors and visionaries to conserve water are:*

- Take care of the ecosystem,
- Share it because it belongs to everyone, and
- Learn to live within our water means.

*One report estimates that in just 14 years two-thirds of the world's population will be living in countries facing water scarcity.*

*Prem Nath*  
 (Prem Nath)

## EVENTS

### Dr. Prem Nath Received National 'Bharat Excellence Award'

Dr. Prem Nath, Chairman, PNASF was conferred with National Bharat Excellence Award during the national level seminar on 'Economic Growth and National Unity' organized by the Friendship Forum of India, New Delhi -



*Dr. Prem Nath receiving award from Mr. G.V.G. Krishnamurthy, former Election Commissioner of India*

110049 on November 27, 2011 held at C D. Deshmukh Memorial Auditorium, the India International Centre, Max Mueller Marg, New Delhi - 110003. The Seminar centered around the economic growth and national unity attained by India since its independence. It was presided over by Mr. G. V. G. Krishnamurthy, former Election Commissioner of India, flanked by well known dignitaries from the civil society in science, politics, literature, health and social welfare on the dais. About 250 participants attended.



*Awardees during seminar on "Economic Growth and National Unity"*

On this occasion the personalities with outstanding contribution to the civil life were conferred with National Bharat Excellence Awards in the form of plaque, medal and certificate. The recipients of award in agriculture, education, health and child welfare, literature and resource mobilization hailed from most of the states of India including Karnataka. Dr. Prem Nath, who was invited to participate in the seminar was presented with a plaque, medal and certificate of **Bharat Excellence Award** for his contribution in agriculture.

The Friendship Forum of India has served the Indian society since long years by encouraging young and early individuals who have had contributed significantly toward the upliftment of the civil societies. The PNASF acknowledges with pride this recognition extended by the Friendship Forum of India in the interest of national civil societies.

## Green Building Regional Conference and Exhibition 2011, Bangalore

Dr. Prem Nath attended the inaugural session of the Green Building Regional Conference and Exhibition 2011, Innovation in Green Buildings - The GRIHA APPROACH, organized by The Energy and Resources Institute (TERI), Association for Development and Research Sustainable Habitats (ADARSH) and Ministry of New and Renewable Energy, Govt. of India held on November 25, 2011 at Hotel Royal Orchid, Bangalore.

The inaugural address was delivered by Shri R V. Ranganath, Chief Secretary, Government of Karnataka and the Chief Guest address was delivered by Dr. R K Pachauri, Director General, TERI. Mr. P. R. Das Gupta, Distinguished Fellow and Director, TERI welcomed the audience and Dr. A. Ramachandran, Chairman, TERI gave his remarks on the occasion.

The objectives of the conference were to (1) showcase advantages of integrated decision, (2) generate awareness, (3) illustrate financial impacts, (4) invite professional to interact and (5) showcase products, projects and manufactures, dealing in the GRIHA. About 200 participants from Bangalore, other states and abroad attended the conference.

During the inaugural address, the Mr. Ranganath advocated the formulation of bye-law which would meet the energy requirement of cities which converges on synergy between concrete and natural resources. The PNASF may recall its recommendation during the International Workshop on Urban and Peri-Urban Agriculture organized by FAO and PNASF in Bangalore during 2005, which recommended formulation of laws to synchronise activities of concrete with vegetation including fruits, vegetables, flowers and ornamentals to meet the emerging requirement of urban development.

## UN Day Celebration

The Association of Former United Nations Personnel in and of India (AFUNPI) organized and celebrated the United Nations Day, hosted by the members Dr. Prem Nath and Dr. R. Dwarakinath, and assisted by Mr. K. Sachitanand and Mr. J. Gururaja at the Century Club, Bangalore on October 24, 2011 at 11.30 a.m. Mr. K Jairaj, Additional Chief Secretary, Government of Karnataka was the Chief Guest of the occasion presided over by Mr. K. Natarajan, Secretary, AFUNPI. About 40 members with spouses participated in the celebration.

Mr. Natarajan welcomed the gathering and read the message of Mr. Bank Ki-moon, the Secretary General, United Nations which is stated as follows;

*.....Days from now, the human family will welcome its seven billionth member. Some say our planet is too crowded. I say we are seven billion strong. The world has made remarkable progress since the United Nations was born 66 years ago.....*

*.....As we have seen in this dramatic year, people everywhere are standing up for their rights and human freedoms. And yet..... this progress is under threat from economic crisis, raising joblessness and inequality, climate change.....*

*..... In these turbulent times, there is only one answer: Unity of Purpose. Global problems demand Global Solutions.....*

*..... That is the very mission of the United Nations: To build a better world. To leave no one behind. To stand for the poorest and most vulnerable in the name of global peace and social justice.....*

*..... Never has the United Nations has been so Needed.....*

Chief Guest, Mr. Jairaj spoke about his experiences working with World Bank headquarters serving for some African countries. He also reflected his impressions on future role of UN in the coming years. Dr. Prem Nath gave an account of his experience with the significant changes taking place in UN Agencies like FAO with regard to its role in addressing the new challenges emerging in the present global scenario. He specifically mentioned about national capacity building where national expertise has taken over from international experts in many developing countries. The event concluded with vote of thanks by Dr. M. Seenappa, Vice-President, followed by official lunch.

## Sixth National Noni Symposium

On the invitation by the World Noni Research Foundation (WNRF), Chennai, Dr. Prem Nath participated in the Sixth National Symposium with the theme Noni-A Panacea for Wellness, organized by WNRF and International Society for Noni Science (ISNS) during October, 01 to 02, 2011 at Chennai Trade Centre, Chennai. About 1000 participants consisting of scientists, planners and entrepreneurs attended the symposium. H.E. Shri Murlidhar C. Bhandare, the Governor of Orissa, Chief Guest inaugurated the Symposium. Dr. R.S. Paroda, former Secretary, Department of Agricultural Research and Education and Director General, ICAR, New Delhi presided over. The introductory address was presented by Dr. Kirti Singh, Chairperson, World Noni Research Foundation. Dr. Nath was invited to Chair the Special Lecture delivered by Dr. H.P. Singh, Deputy Director General (Horticulture), ICAR, New Delhi, on Perspectives in Noni Research. The session on *Noni-Biodiversity and Crop Improvement* was Chaired by Dr. Prem Nath and Co-chaired by Dr. Brahma Singh. Dr. Nath served as the member of Advisory Committee, WNRF and also wrote message for the Souvenir published and distributed during the symposium. The Proceedings of the Symposium was also made available during the symposium.

## Seminar on India's Development – Current Scenario

Dr. Prem Nath participated in Seminar on India's Development - Current Scenario as a *Guest of Honor* on Sept. 18, 2011 organized by the Integrated Council for Socio-Economic Progress (ICSEP) of



*Dignitaries on the dais*



# EVENTS / RESEARCH AND DEVELOPMENT SUPPORT

Thrissur at Hotel Citrine, Bangalore 560 020. Shri. M.V. Rajasekharan, former Union Minister of State, Government of India, was the Chief Guest on this occasion inaugurated the symposium.

About 150 invitees attended. Invited speakers Dr. Sashikant S. Seth (Mumbai), spoke on healing touch therapy; Ms. Susheela George (Abu Dhabi) spoke on overall development with special reference to Abu Dhabi; and Mr. S. Ganapathy (Andhra Pradesh) talked on conservation of electrical energy. Dr. Prem Nath deliberated on agricultural development worldwide with particular reference to food security in the present scenario. He emphasized that the food security was the basic need of the people and urged the governance to address the issue in this regard and challenges ahead. Chief Guest,



*Mr. Junain Nazri receiving award for excellent contribution in software programme services*

Shri. Rajasekharan gave a vivid picture of development in India, major issues to be addressed in each sector and wished for the contribution of civil society in assisting the government in implementing the major programmes for the benefit of mass as a whole.

On this occasion ICSEP awards were presented to achievers across the country from different walks of life for their outstanding achievements in chosen field of activity. The mementos and certificates were presented to 25 awardees by the Chief Guest and other dignitaries on the dais. Among the recipients was Mr. Junain Nazri, Director and CEO, Briskon Software Consulting P. Ltd., Bangalore who received award for his excellent contribution in software programme services. Mr. Nazri assisted the PNASF in developing its redesigned website: [www.pnasf.org](http://www.pnasf.org). Dr. Prem Nath congratulated all the awardees and wished them all the success in their endeavors.

On behalf of ICSEP, Mr. Thomas Mathew welcomed the dignitaries and participants and also extended vote of thanks to all the participants.

## RESEARCH AND DEVELOPMENT SUPPORT

### PNASF/SUN/WD-SHG/2005: Promotion of Rural Women Self Help Group Through Dairy Development Project

Data collected at the project site were as follows;

- 10 beneficiaries visited
- Number of cattle
- 2 were having 2 cows and 3 female calves. All the three calves were conceived.
- 2 beneficiaries were having 2 cows and 2 female cows; one is milching and one is conceived.
- 5 beneficiaries were having 5 cows and 1 calf each.
- 1 person sold the cow; in place of it she purchased one Buffalo.

- Milk yield
- 6 cows are milching 4-8 ltr per day
- 3 cows are conceived, hence not yielding milk.
- One beneficiary sold out the cow so no earning is there.
- Cooperative society is buying the milk Rs. 20/- per ltr.
- So each beneficiary whose cow is yielding milk they were earning Rs.80/- to Rs. 160/- per day.
- Kamadhenu Self Help Group (Action points):
- Each beneficiary is having their individual bank account.
- The common bank account under the name of Kamadhenu Self Help Group still to be opened.

### PNASF/MHPS/DES/2008-09/Biological Science and Nutrition Project

On September 23, 2011 Dr. Prem Nath accompanied by Dr. B.S. Prabhakar, Dr. K.R.M. Swamy, Head Mistress and Teacher visited the students plot at UAS Campus School, Hebbal.



*Dr. Prem Nath, Chairman, PNASF with Project Coordinator Dr. B.S. Prabhakar, Dr. K.R.M.Swamy and Mrs. Vanaja Vijayraghavan, Head Mistress, UAS Campus School, Hebbal, Bangalore and PNASF Scholars.*

#### Observations:

- The selected plot has been prepared properly with new soil and manure under the leadership of Dr. B.S. Prabhakar. In order to utilize the prepared plot, short-duration crop i.e. radish was planted which was harvested by students under the guidance of Project Coordinator and PNASF scholars.



*UAS Campus School students, Hebbal Bangalore*



*Radish crop grown by the students*

- The radish crop performed well.
- As many as 50 students of class 6<sup>th</sup> learnt the harvesting and cleaning process.

## Action Points:

- Dr. K.R.M. Swamy joined Dr. B.S. Prabhakar in guiding and supervising this project.
- PNASF Scholar will do survey of the nutrition awareness for students in the next period of the nutrition class on Friday.

## INTERNATIONAL CO-OPERATION

### Visit to FAO Regional Office, Asia and the Pacific, Bangkok, Thailand

Dr. Prem Nath visited the FAO Regional Office for Asia and Pacific in Bangkok on November 21, 2011, and held discussion with Mr. Hiroyuki Konuma, Assistant Director General and Regional Representative for Asia and the Pacific in his office.



Mr. Hiroyuki Konuma, ADG & RR for Asia and the Pacific, RAP, Bangkok and Dr. Prem Nath

- Mr. Konuma informed that he had already accepted the invitation of the Organizing Committee to deliver the guest lecture entitled "Growing Role of Vegetables in Food and Nutrition Security and Income Generation in Asia" during the inaugural session of the Regional Symposium-High Value Vegetables in Southeast Asia: Production, Supply and Demand (SEAVEG2012), scheduled January 24-26, 2012 in Pang Suan Keaw, Chiang Mai, Thailand. He will be accompanied by two Specialists on Nutrition and Food Safety who would participate during the whole period of the Symposium.
- Dr. Nath further appraised him about the UNECE "International Harmonization Workshop on Standards for Fresh Fruit and Vegetables for Asian Countries", held 14 – 17 November 2011 at Centara Duangtawan Hotel, Chiang Mai, Thailand, which he participated. It was viewed that the contribution of ESCAP and FAO will strengthen the exercise for the benefit of producers, traders and consumers.
- Dr. Nath explained about the activities of the Rural Bio-Resource Complex in Doddaballapur area near Bangalore and requested FAO to visit the project site in order to witness the integrated agricultural community development among hundreds of villages. Mr. Konuma showed his interest in this programme in the interest of rural development and would explore possibility of visit of a specialist from either Regional office in Bangkok or country office in New Delhi.

Dr. Nath was encouraged by the expression of Mr. Konuma in extending possible collaboration to PNASF and VEGINET in its national or regional activities.

### UNECE "International Harmonization Workshop on Standards for Fresh Fruit and Vegetables for Asian Countries".

Dr. Prem Nath participated as a special invitee at the "International Harmonization Workshop on Standards for Fresh Fruit and Vegetables

for Asian Countries", organized by the United Nations Economic Commission for Europe (UNECE), Horticultural Science Society of Thailand (HSST), Department of Agriculture (DOA), National Bureau for Agricultural Commodities and Food Standards (ACFS), Ministry of Agriculture and Cooperatives (MOAC), Thailand, during November, 14-17 2011, in Chiang Mai, Thailand. The objective of the Workshop was to hold discussion and practicals on

- Building capacity on horticultural fresh produce quality standards and systems in Asian countries,
- Promoting the use of the UNECE standards for fresh fruit and vegetables as international references,
- Harmonizing the practical application and interpretation of UNECE standards in Asian countries,
- Explaining how UNECE standards are interpreted in the exporting/importing countries, and
- Encouraging participation in UNECE standards development.

"International Harmonization Workshop on Standards for Fresh Fruit and Vegetables for Asian Countries", the workshop was organized at Centara Duangtawan Hotel, Chiang Mai, Thailand and attended by officials of the UNECE; representatives from China, India, Indonesia, LAO PDR, Malaysia, Philippines, and Thailand; resource persons from ASEAN and Thailand; officials of the Horticultural Research Institute and the Department of Agriculture, Thailand.

During the inaugural session, the welcome address was read by Dr. Ulrike Bickelmann, Chair of the UNECE Specialized Section on Standardization of Fresh Fruit and Vegetables; Dr. Suraphong Kosiyachinda, Horticultural Science Society of Thailand welcomed audience; Mrs. Nanthiya Unprasert, Deputy Secretary General, ACFS spoke on National Policy of Thailand and the inaugural address was delivered by Dr. Manthana Milne, Deputy Director General, Department of Agriculture, Government of Thailand.

Important issues of the topic were deliberated by invited presentations: (a) The role of UNECE in developing standards for international trade by Mr. Serguei Malanitchev, UNECE; (b) EU regulation on marketing standards by Dr. Ulrike Bickelmann, Germany; (c) Farmers' production challenges to meet export markets expectations by Dr. Suwit Chaikiattiyos, Thailand; (d) Post-harvest management and research & development by Dr. Sermsuk Salakphet, Thailand; (e) Modern fresh produce marketing in Asia by Dr. Kanjana Suthikul, Thailand; (f) Pineapple production, packing and exporting chain by Dr. Chadyl Nimnual, Thailand. Dr. Prem Nath presented his impressions on *Vegetables in India and International Standards*. The paper presentations were followed by the practical demonstration and actual application of UNECE standards on mango, pineapple, asparagus, and chilli peppers.

The final technical session was chaired by Dr. Prem Nath which finalized the recommendations of the Workshop. The important ones are;

1. Support the harmonization of standards between Asian countries and UNECE,
2. Disseminate interpretative guidelines,
3. Assess the implementation needs of quality standards for fresh fruits and vegetables along the value chain,



# INTERNATIONAL CO-OPERATION

4. Capacity building for a regional training of trainers in the Asian context,
5. To make available relevant commercial quality standards and to promote their practical application among stakeholders,
6. Promotion of internationally agreed commercial quality standards among farmers,
7. Mobilization of fund sourcing by Asian countries and international bodies for the implementation of the national programs, capacity building and training, and
8. Encourage Asian countries to actively participate in international standards development activities and related training programmes.

The Workshop was concluded by visit to Royal Flora Ratchaphuek 2011-12, organized by the Government of Thailand in Chiang Mai.

## Vegetables in India and International Standards, excerpt of the presentation made by Dr. Prem Nath

At the UNECE "International Harmonization Workshop on Standards for Fresh Fruit and Vegetables for Asian Countries", Chiang Mai, Thailand, November 13-17, 2011.

### 1. Indian Horticulture and Vegetables:

Presently, Asia is the largest producer of vegetables in the world and among the countries China ranks first followed by India. In India, horticulture contributes 30.4 percent to AGDP, covering 10 percent of cropped area. The horticultural research is managed by the Indian Institute of Horticultural Research, Bangalore and Indian Institute of Vegetable Research, Varanasi, assisted by 23 research centers on different horticultural crops and 14 All-India Coordinated Projects on separate group of horticulture crops. The State agricultural research and education in India is managed by 63 State Agricultural Universities.



Participants at the UNECE meeting in Chiang Mai, Thailand

India has a comparative agro-climatic advantage of tropical, sub-tropical and temperate regions. In the present global scenario, India ranks first in okra production and third in tomato. The latest horticulture production was reported as 235 million tons during 2010-11 which included 130 million tons of vegetables. India contributes to 13.8 percent of the global production. Bangalore situated at mid elevation has mild climate with the advantage of growing cabbage, tomato, eggplant, okra open in the field year round. The area around Bangalore has specialized in commercial net house farming of sweet pepper, gherkin, cucumber, for export and domestic market. In addition to vegetables, corporates are engaged in production and export of pomegranate, grape, custard apple, sapota, cut roses and gladiolus and others.

### 2. International Horticulture:

The International Conference on Vegetables (ICV-2002) held in Bangalore during November 2002 had recognized vegetables as strong supporter to food and nutrition security. The International Conference on Horticulture (ICH-2009) held in Bangalore and attended by about 850 participants from 40 countries recognized horticulture as the second line of defense with cereals in the front line of the food domain. In terms of trade value, horticulture products significantly exceeded cereals. The production and area under horticultural crops has increased globally because of its importance as a) strong supporter of food security, b) major contributor to nutrition security, c) promoter to health security, and d) income generation activity. As a result of the increased production and demand the movement of fresh fruits and vegetables from one country to another, and from one continent to other is growing significantly. In this context, the standardization of fresh fruit and vegetables at national, regional and global level assumes importance in order to facilitate the movements.

### 3. Pre-requisites of export:

The FAO and WHO in collaboration with the participating countries, have done a tremendous job in developing the Codex Alimentarius, and the Codex has served as a global model and as the base for developing regional and national standards. The standards facilitate easy movement of fresh fruit and vegetables from tropical to temperate countries, tropical to sub-tropical, and temperate to temperate countries.

In order to produce high standard fresh fruits and vegetables for export, it is incumbent on producers to follow recognized Codex/Regional standards/GAP in production, pre and post-harvest handling, packaging and storage and transport.

### 4. Development of Standards for Asia:

In order to encourage and facilitate export of fresh fruits and vegetables among the Asian countries as well as to promote export to other continents, it has become important to develop Asian standard as has been done in other continents like Europe. This would enable and facilitate (a) export to and import from other countries, (b) export tropical fruits and vegetables to temperate countries, (c) export to countries with national standard and (d) export to countries with no standards. As required by other importing continents, the Asia should have its own standards to accept the importation of fresh fruit and vegetables.

# INTERNATIONAL CO-OPERATION

It is encouraging that ASEAN has already taken initiatives to develop standards which will help not only ASEAN member countries but also countries in Asia and abroad. The development of UN standard for Asia (UNECA) will be a welcomed recommendation on this occasion.

## 5. This Workshop:

As understood, this workshop has conveyed some important messages to member countries. (a) This Workshop has taken one step forward to facilitate trade of fresh fruit and vegetables, thereby augmenting food security to countries/regions short of these commodities. (b) Another message is to fruit and vegetable breeders who would be able to fine tune quality parameters for breeding of fruit and vegetables. (c) Codex is recognized as mother to give birth to regional and national standards.

### Meeting with the Organizing Committee of SEAVEG2012 in Bangkok

Dr. Prem Nath participated in the meeting of the core group of the Organizing Committee, where Dr. Grisana Linwattana, Head of Vegetables of the Horticultural Research Institute (HRI), Bangkok and Dr. Robert Holmer, Regional Director of AVRDC, East and Southeast Asia Centre, Bangkok, along with their active colleagues assisting on the preparation of SEAVEG2012 were present. The meeting was held with a working lunch at a nearby hotel in Bangkok on September 17, 2011. Dr. Robert and Dr. Grisana briefed the group with regard to progress and development in the preparation for the symposium.



*Dr. Prem Nath at the meeting of Organizing Committee, SEAVEG2012 in Chiang Mai, Thailand*



*Dr. Prem Nath presenting PNASF publication entitled, "Horticulture and Livelihood Security" to Dr. Robert Holmer, AVRDC, Thailand (Left) and to Dr. Grisana Linwattana, HRI, Bangkok, Thailand (Right)*

- About 200 abstracts were already received with the deadline of September 15, 2011.
- Mr. H. Konuma (Asstt. Director General and Regional Representative for Asia and Pacific, Bangkok and Dr. Jacqueline Hughes, (Deputy Director General-Research, AVRDC, Taiwan) had already agreed to deliver Keynote address. The response from the Secretary General, ASEAN was awaited.
- The venue, accommodation and food were already finalized and contracted.
- There was budget constraint but with focused activities, it was

possible to complete the task.

- It was informed that soon Review and Editorial Committee or Groups will be in action to scrutinize the abstracts.
- VEGINET will assist.
- Both the Abstract Book and Proceedings will be published.
- Different committees have already met with conclusive recommendations.

Dr. Nath reviewed the titles of abstracts received and observed that there would be need to invite more speakers to fulfill requirements of different aspects listed in each session in order to ensure success of the symposium. Since, there was budget constraint and there was no budget for international travel, it was agreed that only those selected and available speakers should be invited who can bear their own cost of travel and the organizing committee will support the local cost. Dr. Nath agreed to nominate some selected speakers.

The meeting was brain storming and fruitful in the interest of SEAVEG2012. Dr. Nath thanked all, particularly Dr. Grisana and Dr. Robert for lively and fruitful discussion, and excellent hospitalities.

### Visit to Private Sector in Agriculture, in Myanmar

On September 15, 2011, Dr. Prem Nath visited the office of the recently established Agribusiness and Rural Development Consultants (ARDC) and held discussion with the Chief Executive Officer, Mr. Tin Htut Oo, who was formerly the Director General of Agriculture Planning, Ministry of Agriculture and Irrigation, Myanmar. The private company ARDC team consists of Board of Technical Adviser with qualified and experienced members from Myanmar and Southeast Asian countries like Malaysia, Indonesia, Singapore, Philippines, Thailand, Bangladesh, India, Korea and Japan.

The ARDC's private sector work focuses on commercial agricultural production; investment in agribusinesses, and farm and land development; and conceptualization of new business.

It includes conceptualization of new business opportunities in the sector, feasibility studies and development of field crops, horticultural and plantation crops production and marketing, post harvest management, cold chain and agri-infrastructure development, contract farming and agro-processing. The public sector work focuses on sustainable agricultural, natural resources and rural development; post harvest management, integrated cold chain and agri-infrastructure including agricultural wholesale marketing and market information services; project and program formulation on agricultural, rural economy development and natural resources management; provision of technical assistance in planning and evaluation of agricultural, natural resources and rural development planning and programs; and agricultural policy research and analysis.

Mr. Tin was accompanied by Dr. San Nyunt the CEO of Myanmar Agri-Tech Ltd (MAGT) based in Yangon and engaged in agricultural development. At the present MAGT has ongoing project on *Jatropha* for biofuel production.

In the absence of hardly any organization with such technical capacity and forward looking approach in the country it would be beneficial to have engagement for those interested agencies in



# INTERNATIONAL CO-OPERATION

agriculture development and investment in Myanmar, particularly in private sector.

ARDC asked for support on improved crop varieties e.g. black pepper, *Jatropha*, technical knowledge eg. chilli seed production private to private investment e.g. black pepper production on agriculture production in Myanmar and India. PNASF may assist as catalyst in this regard.

Dr. Nath encouraged Mr. Tin to support the participation of Myanmar vegetable growers in SEAVEG2012, and he kindly agreed.

## Visit to FAO in Myanmar

On September 14, 2011, Dr. Prem Nath visited the office of the FAO Representative in Yangon. He held meeting as scheduled with the officials present, namely Dr. Bir. C. Mandal, Chief Technical Advisor (UNJP/MYA/074/UNO); Dr. Maung Mar, National Project Manager, Environment Sustainable Food Security Programme; Mr. Saw Ler Wah, National Project Manager, Oil Development Project; and Mr. Thu Kha, Programme Assistant. The officials explained about their programme and project activities in the area of food and agriculture.



Dr. Prem Nath at the office of the FAOR in Yangon, Myanmar

Dr. Mandal handed out a note on vegetable crops in Myanmar which indicated that "Excluding potato, the total area and production under vegetables for Myanmar were 341,000 ha and 34.1 million tons respectively. The figures amounted to availability of 173g vegetables/day/individual with present population of 54 million. Accordingly, 173g availability of vegetables turned out to be 130g vegetable/day/individual assuming 25% post-harvest loss. The recommended amount of vegetables/day/individual was about 300g; thus, availability of vegetables in Myanmar is less than the required amount. It was suggested that efforts need to be initiated and strengthened to boost the production and productivity of vegetables in Myanmar".

Dr. Nath appreciated the efforts of the Project leaders and their team in augmenting food and agriculture development in the country. He further appreciated the efforts of the FAO Representation in conveying PNASF and VEGINET message to the Myanmar Ministry of Agriculture and Irrigation to participate in the upcoming **Regional Symposium on High Value Vegetable in Southeast Asia: Production, Supply and Demand (SEAVEG2012)**, during



Presenting new publication of PNASF to Dr. Bir C. Mandal, FAO, Yangon

January 24-26, 2012 in Pang Suan Keaw, Chiang Mai, Thailand in the interest of vegetable industry in Myanmar.

On this occasion Dr. Prem Nath presented a copy of each of PNASF publication 1) Horticulture and Livelihood Security and 2) Foods and Nutrition to the FAO Library which was revitalized by him during his tenure as FAO Representative in 1996-98. On behalf of FAO, Dr. Mandal presented to Dr. Prem Nath two FAO publications namely 1) Proceedings-Workshop on "Vegetables for Sustainable Food and Nutrition Security" held in Myanmar and 2) Manual on Seed Productions of Major Vegetables of Myanmar.

Dr. Nath thanked the FAO Representation and officials for their strong support to PNASF and VEGINET in assisting Myanmar agriculture.

## Meeting with the Ministry of Agriculture and Irrigation, Myanmar

On September 14, 2011, Dr. Prem Nath held a meeting with the senior officials of the Myanmar Agriculture Service at its campus in Yangon. It was informed that Ministry headquarters had shifted from Yangon to the new capital Naypyidaw. The members present were Dr. Maung Maung Yi, General Manager (Planning); Mr. Thet Zin Maung, Director, Fruit and Vegetable Research and Development Centre (VFRDC) and Dr. San San Yi, Manager (Biotechnology). The members appreciated the meeting of the agricultural research states particularly of vegetables.

It was pointed out that the major areas identified in vegetable research were germ-plasm collection and evaluation, varietal improvement, seed multiplication and food safety. Though local varieties were common, there was a need to introduce varieties from abroad and to develop a sound breeding programme for which an experienced vegetable breeder was required. Dr. Nath suggested that a collaborative programme with India on short or long-term training on Governmental or non Governmental (NGO) basis like PNASF could facilitate developing a joint programme between Myanmar and India. The host members suggested a joint programme with VEGINET-MAS-AVRDC on "Improving Farmers Livelihoods and Food Security through Enhanced Vegetable Seed Production Technologies in Myanmar". Dr. Nath welcomed the idea and suggested for a draft proposal.

Dr. Nath recommended the scientists to participate in the upcoming **Regional Symposium on High Value Vegetable in Southeast Asia: Production, Supply and Demand (SEAVEG2012)**, during January 24-26, 2012 in Pang Suan Keaw, Chiang Mai, Thailand which could be good forum to discuss joint research and training collaboration among different institutions and countries, where VEGINET could provide support.



Meeting with Ministry of Agriculture and Irrigation, Myanmar

## SOCIAL COMMITMENT

### GOLD MEDAL PNASF/UAS/2001

The PNASF Gold Medal 2010 was awarded to the Ph. D student Mr. Ningaraju T.M., for highest grade point average at the University of Agricultural Sciences, Bangalore. The award was presented during the University's 45<sup>th</sup> Convocation at GVKK Campus, Bangalore held on August 06, 2011.



Her Excellency, President of India, Smt. Pratibha Devisingh Patil presented PNASF/UAS Gold Medal Award to Mr. Ningaraju T.M., Ph.D. Student, UAS, Bangalore

### PNASF/DHARMSHEELA NATH SCHOLARSHIP/2006

On the recommendation of the University of Agricultural Sciences (UAS), Bangalore, Ms. Savitri Byadagi, a student of Junior M. Sc. (Agri.) at UAS was awarded the PNASF/Dharmasheel Nath Scholarship for the academic year 2010-11 and to assist the Project PNASF/MHPS/2005- Biological Science and Nutrition Project for school children.

### PNASF/AHUJA/FELLOWSHIP/2001

On the recommendation of the University of Horticultural Sciences (UHS), Bagalkot, Ms. Jyothi Kattagoudar, a student of Junior M. Sc. (Horti) at UHS was awarded the PNASF/Devki Devi Ahuja fellowship for the academic year 2010-11 to undertake research work towards M. Sc. thesis in Horticulture.

### PNASF Member received the Environmentalist of the Year Award-2010



Dr. Raviraj Shehety G., PNASF Member receiving "Environmentalist of the Year Award-2010"

Dr. Raviraj Shetty G., Assistant Professor (Horticulture), Krishi Vigyan Kendra, Dakshina Kannada member of PNASF, Bangalore, received the "Environmentalist of the Year Award-2010", by National Environmental Science (NESA), New Delhi on 27<sup>th</sup> December 2010 in the 23<sup>rd</sup> International conference of the NESA academy held at Jamia Hamdard University, New Delhi.

### PNASF Felicitates Newly Wed couple of its Family

In its continued efforts to augment social well-being among the PNASF members, some of the PNASF members attended the wedding of Ms. Vanita N. Shetty with Mr. Vinay Sampath in Bangalore on Sunday, December 04, 2011. Ms. Vanita has served as an outstanding Administrative



Assistant at the PNASF for about four years and Mr. Vinay is a Software Engineer with M/S Hewlett Packard in Bangalore. On this happy occasion the PNASF members present were Dr. Prem Nath,

Ms. Shyamla Nath, Mrs. and Dr. K. R. M. Swamy, Dr. O. P Dutta and his family, Dr. B.S. Prabhakar and family, Mr. P. B Gaddagimath and present and former staff of the PNASF secretariat. We wish a bright future and pleasant life to the couple. PNASF awaits the convenient date for a get-together of the newly wed couple.

## INFORMATION DISSEMINATION

### Impression of Some Readers on Recent PNASF Publications

..... It was good to hear from you and receive the January-June Report. Your contribution to food production methods and the development of young people programs will continue to grow. The encouraging part is to see the number of developing countries participating in The PNASF Foundation youfounded.....

**Prof. Charles V. Hall**

Emeritus Professor of Horticulture,  
Iowa State University, USA

..... I have received the book and will make notice of it in *Chronica Horticulturæ*. It looks very good.....

**Prof. Jules Janick**

James Troop Distinguished Professor in  
Horticulture, Department of  
Horticulture & Landscape Architecture,  
Purdue University, USA

..... I would like to take this opportunity to convey my heartiest congratulations. As I have been saying, you are one of our outstanding leaders not only in India, but also in the region, who has been committed for the development of this great country and specially to help the poorest of the poor through horticultural activities. It shall be my greatest pleasure to extend my full support in your great work.....

**Shri M.V. Rajasekharan,**

former Union Minister of State for Planning,  
Government of India, New Delhi.

..... Delighted to receive a copy of PNASF News January-June 2011. I am quite impressed by the activities of PNASF and in particular the contribution that you are making in promoting growing and consuming vegetables..... Thank you for providing your website about information on PNASF and VEGINET.....

**Dr. Justice V.S. Malimath,**

Chairman, Law Commission of Karnataka,  
former Chief Justice of Karnataka and Kerala

..... I would like to thank you for sending us a copy of the recently published "PNASF News" which is very informative and useful. I do appreciate your initiative to document recent and modern advances in this very important sector. Please accept our best wishes for the further success in this endeavor.....

**Mr. Hiroyuki Konuma**

Assistant Director-General and Regional  
Representative  
FAO Regional Office for Asia and the Pacific,  
Bangkok, Thailand

..... Thank you very much for your kind letter dated October 21, 2010 closing a complimentary copy of the book entitled "Horticulture and Livelihood Security". I very much



# INFORMATION DISSEMINATION

appreciate your kind and thoughtful initiative. I take this opportunity to commend you and Dr. Prem Nath Agricultural Science Foundation (PNASF) for the major achievements made in promoting agricultural research and science at a critical time of serious challenges facing food security in dry areas. I have Placed your publication in the center's Library to enable our scientists make utmost use of this valuable publication.

**Dr. Mahmoud Solh,**  
Director General,  
International Center for Agricultural Research  
and the Dry Areas (ICARDA), Syria.

.....I thankfully acknowledge receipt of the copy of your book 'Food and Nutrition', which is well planned and articulate. It is known that the Foundation has been striving hard for the development of agricultural education, research and sustainable development on food and nutrition security for the country and it has been appreciable effort. I convey my best wishes for the success of the Foundation in their endeavor.

**Dr. H.P. Singh,**  
Deputy Director General (Horticulture),  
Indian Council of Agricultural Research  
(ICAR), New Delhi

.....I am in receipt of your letter dated 21.10.2011 along with the book entitled "Horticulture and Livelihood Security" published by the Scientific Publishers, Jodhpur and PNASF, Bangalore. I am delighted to know that the book was released during an excellent Ceremony at Raj Bhawan, Bangalore on September 25, 2010. I congratulate you and PNASF for bringing our valuable book on Horticulture.

**Dr. K.D. Kokate,**  
Deputy Director General (Agricultural Extension),  
Indian Council of Agricultural Research (ICAR),  
New Delhi

.....Thank you for your letter of 21<sup>st</sup> July 2011 sending along with a copy of the recent PNASF News published by you. I have gone through the Newsletter and I am happy to note that PNASF has done excellent work which is reflected in the summary of activities undertaken during first half of 2011.

**Prof. R.S. Deshpande,**  
Director, Institute of Social and Economic Change  
(ISEC), Bangalore

.....I congratulate you for bringing out the publication "Foods and Nutrition" in such a short time after the International Conference on Horticulture (ICH-2009). It will be of an immense value to the students of Food and Nutrition as well as to the teaching and research faculties of several universities in the country.....

**Dr. H.A.B. Parpia,**  
Former President, Afro-Asian of Food Science  
and Technology Institutions, Mysore

.....Please accept my heartiest congratulations for the publication on book entitled, "Horticulture and Livelihood Security".

I missed the occasion of the book release by the Hon'ble Governor of Karnataka. The book provides excellent information on horticulture and its importance in the livelihood security. I am sure, the book will be an important reference source on the topic for a long time to come.

**Dr. Anupam Varma,**  
INSA Senior Scientist, Advanced Centre for  
Plant Virology, New Delhi

.....I have received your book "Horticulture and Livelihood Security" as well as the CD with all the presentations. Congratulations for the book. Thanks a lot for all your love and for the opportunity that you gave me to share my ideas. It will be a excellent way of promoting VEGINET and next activities.

**Prof. João Carlos da Silva Dias,**  
Technical University of Lisbon,  
Instituto Superior de Agronomia,  
LISBOA, Portugal.

.....Complimentary copy of the book has arrived. It has come up very well. Congratulations.....

**Prof. Peter J. Batt**  
Curtin University of Technology  
Perth, Australia.

.....Thank you for your email of 14 July 2011 along with a copy of comprehensive PNASF news. It looks that you are keeping yourself over busy and using your rich national and international experience for the good of the world in general and your country in particular. I have gone through your website and found it very useful for the development of agriculture.

**Dr. Ghulam Haider**  
former FAO Irrigation Specialist,  
Development & Management Consultants (Regd.)  
Lahore, Pakistan

.....I am pleased to acknowledge with thanks receipt of the latest PNASF News Letter. I have read the News Letter which contains very relevant information. Please allow me to seize this opportunity to congratulate PNASF on this achievement.

**Dr. Rémi Nono-Womdim,**  
Agricultural Officer, AGPML,  
Food and Agriculture Organization of the  
United Nations (FAO), Rome

.....Thank you very much for your mail. It was very nice to receive so informative new issue of the PNASF News. I wish you all the best in your un-resting activity.

**Dr. Ravza Mavlyanova**  
Regional Coordinator for Central Asia and the  
Caucasus,  
AVRDC – The World Vegetable Center,  
Uzbekistan

..... Thank you very much for your letter and the book entitled: Horticulture and Livelihood Security.

This book will be very useful to enlarge our knowledge in horticulture science. I hope I can continue to support to the PNASF activities in the future.....

**Dr. Yuniarti**  
Senior Researcher,  
Assessment Institute for Agricultural  
Technology (AIAT) East Java,  
Malang, Indonesia.

..... Thank you very much for keeping in touch and sharing the news letter with us. I found the news letter very interesting and informative. Will share this with my colleagues here.

**Dr. G.B. Chettri**  
Agriculture Specialist,  
Department of Agriculture,  
Thimphu, Bhutan

# INFORMATION DISSEMINATION

## Black Raspberry in Bangalore Garden

In his pursuit to select and grow nutritive and healthy fast growing fruit and vegetables plants in homegarden in Rajmahal Vilas Extension, Bangalore, Dr. Prem Nath introduced plants of edible mulberry, phalsa, koronda, Malaysian Apple, eggplant fruit, guava, dwarf citrus, pomegranate, custard apple, banana, passion fruit and raspberry. While all the plants are growing well, passion fruit, raspberry, guava and banana flowered and fruited well in the first year. Passion fruit and raspberry have produced excellent fruits with heavy bearing. While Passion fruit is common in Bangalore, the black raspberry seems to be uncommon, which should be encouraged in homegardens because of its vigorous climbing growth, heavy bearing and ornamental appearance. Some information on black raspberry as mentioned below will be useful to the home gardeners.



Black Raspberry plants at the PNASF garden.

- BLACK RASPBERRIES, *Rubus occidentalis*, have a look and flavor that is quite distinct from that of red raspberries. Wild red berries turn from red to black when ripen. Perfectly ripe fruit will come off the receptacle with the slightest pull.
- Like many other berries, the black raspberries are eaten fresh and dried and mixed with other berries. Mashed black raspberries have been used as a dye, and their roots infused for a tea.
- It has one of the highest antioxidant levels of all foods and most healthful benefits. To make sauce, seeds need to be removed. Black raspberries are rich in vitamin C, the free radical scavenger, folates, potassium and fiber. Besides, they contain cholesterol lowering pectin and polyphenols that include anthocyanin pigments. In addition, black raspberries are full of disease fighting phytochemicals. The fiber-rich seeds contain high levels of ellagic acid, which has been shown to battle cancer on all fronts at the same time and also encourage apoptosis (self destruction) in diseased cells and improve healing. The insoluble fiber in black raspberries is a great help for a healthy digestive tract. With almost no sodium, low fat and low calories, a cup of berries provide about 60 calories.

### PNASF Publications

- Nath, Prem (2011). Role of Horticulture in Livelihood Security, Horticulture and Livelihood Security, Scientific Publishers and P. N. Agricultural Science Foundation, India; page 1 -11.
- Nath, Prem; Varma, Anupam (2011). Vegetable Science International Network (VEGINET) - The Way Forward, Horticulture

and Livelihood Security; Scientific Publishers and P.N. Agricultural Science Foundation, India; page 534-545.

- Nath, Prem (2011). Vegetables in India and International Standards; UNECE International Harmonization Workshop on Standards for Fresh Fruit and Vegetable for Asian Countries, November 13-17, 2011 in Chiang Mai, Thailand.
- Nath, Prem (2011), Urban and Peri-Urban Agriculture and Vegetables, Abstract Book Regional Symposium, SEAVEG2012, Chiang Mai, Thailand, January 24-26, 2012. (in press).
- Nath, Prem and Swamy, K.R.M (2011). Vegetables for the Tropical region, ICAR, New Delhi (in press).

### Other Publications

- Anonymous (2011). Symposium: High Value Vegetables for nutrition, food security, economic development in Southeast Asia, Fresh News from AVRDC - The World Vegetable Centre, December 07, 2011, Taiwan; page 10.
- Anonymous (2011). Regional Symposium: High Value Vegetables in Southeast Asia - Production, Supply and Demand (SEAVEG2012), Fresh News from AVRDC - The World Vegetable Centre, October 14, 2011, page 06

### Publications of PNASF

#### Publications on shelves

Description	India (In Rs.)	Foreign (In US \$)
* Book – Vegetable Crops : Improvement and Production (Pages :398 ) 2007	125.00 + Rs. 55.00 (postage)	25.00 including postage
* Book – Food Security and Vegetables- A Global Perspective (Pages : 437) 2004	250.00 including postage (PB) 300.00 including postage (HB)	50.00 including postage
* ICV-2002 Proceedings – CD (Pages:931) 2003	150.00 including postage	10.00 including postage
* VEGINET Booklet (Pages: 22) 2003	35.00 including postage	5.00 postage
* ICV-2002 Abstract Book- (Pages:445) 2002	150.00 including postage	25.00 including postage
ICH Abstract Book (Pages:487) 2009	600.00 including postage	25.00 including postage
ICH Souvenir (Pages:142) 2009	300.00 including postage	20.00 including postage



# INFORMATION DISSEMINATION

Description	India (In Rs.)	Foreign (In US \$)
Book – Foods and Nutrition (Pages: 485) 2009	Available with Studium Press LLC 4735/22, 2 <sup>nd</sup> Floor, Prakash Deep building (Near PNB), Ansari Road Darya Ganj, NEW DELHI-110 002.	
ICH-2009- Proceedings-CD (Pages: 2553) 2010	100.00 including postage	30.00 including postage
Book-Horticulture and Livelihood Security (Pages: 550) 2011	Available with Scientific Publishers 5-A, New Pali Road, P.O. Box 91 Jodhpur - 342 001, Rajasthan Phone: +91-291-262 4154 Fax: +91-291-261 3449	

\* 15% discount given to PNASF and VEGINET members, Professors, Students and Libraries.

## How to order?

Making online order to drpremnath@vsnl.net and by sending Bank Demand Draft or Cheque in favor of Dr. Prem Nath Agricultural Science Foundation, A/C No.: 0417101037688 in Indian rupees and

A/C No.:0417101039815 in US Dollars, payable at Canara Bank, Vyalikaval, Bangalore – 560 003, India.

## Plans on hand

While the ongoing activities will continue, the PNASF proposes to undertake new programmes and activities;

- ↪ Joint organization of the Regional Symposium: High Value Vegetables in Southeast Asia - Production, Supply and Demand (SEAVEG2012) scheduled January 24-26, 2012 in Chiang Mai, Thailand.
- ↪ Participation in the Annual Conference of the American Society of Horticulture Science (ASHS) scheduled July 31 to August 03, 2012 in Miami, Florida, USA.
- ↪ VEGINET Awards during SEAVEG2012
- ↪ Collaborate with the national and international institutions/associations in the area of food and nutrition security etc.
- ↪ Preparation and publication of the book - 'Food, Agriculture and Humanity'.
- ↪ Publication of the PNASF News Letters.

## OPPORTUNITIES

### Awards/Scholarships

PNASF encourages universities/institutions to institute PNASF Medal Awards for outstanding post-graduate students/young scientists working on research problems augmenting food and nutrition security and invites them to support these activities through funds.

### Field Projects

PNASF invites societies/associations/NGOs interested in implementing small rural community projects on self help income generation augmenting food security, for any assistance.

### Publications

The PNASF publications are available on price with the Central Secretariat, PNASF.

### Contribution/Membership

Registration/membership/contribution either to PNASF or to VEGINET available at

Website: [www.pnasf.org](http://www.pnasf.org)

and by E-mail to

[drpremnath@vsnl.net](mailto:drpremnath@vsnl.net)

or

[pnasfoundation@gmail.com](mailto:pnasfoundation@gmail.com).

PNASF News is an official News Letter of Dr. Prem Nath Agricultural Science Foundation, Bangalore, India, published half yearly by Dr. Prem Nath on behalf of PNASF and Printed at Bangalore, India by Jwalamukhi Mudranalaya Pvt. Ltd.  
#44/1, K.R. Road, Basavanagudi, Bangalore – 560 004. Ph : 080 – 2660 1064

### Central Secretariat

#### Dr. Prem Nath Agricultural Science Foundation,

#9, 1<sup>st</sup> Cross, 1<sup>st</sup> Main, 1<sup>st</sup> Block, Rajmahal Vilas Extension, 2<sup>nd</sup> Stage, Bangalore – 560 094, Karnataka, India  
Phone : +91-80 2341 5188. Tel-fax: +91-80-2351 1555  
E-mail : drpremnath@vsnl.net / pnasf@rediffmail.com / pnasfoundation@gmail.com, Website : www.pnasf.org



Book Post

To \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If undelivered please return to  
**Dr. P.N. Agricultural Science Foundation (PNASF),**  
 #9, 1st Cross, 1st Main, 1st Block, Rajmahal Vilas (RMV) Extension 2nd Stage,  
 Bangalore - 560 094, Karnataka , INDIA  
 Tel: +91-80-23415188; Fax: +91-80-2351 1555;  
 E-mail: drpremnath@vsnl.net, pnasf@rediffmail.com, pnasfoundation@gmail.com;  
 Website: www.pnasf.org.