



## Chairman, PNASF Speaks

- It is hard to conceive which came first on earth, human being or food. If the human was born first, he or she needed food immediately to survive. Thereafter, the human beings continued to need food and continued to eat food throughout his or her life. Hence, the relationship between human being and food is permanent and the resources of food may survive in nature without human intervention but human being cannot remain alive without food. This clearly signifies the permanent bondage of human being and food which is inseparable under any circumstances. Thus, should we state that every human being necessarily needs food and should have right to food as soon as he or she has born?
- In order to further strengthen this view, the governance which rules human being should also be protective and enact laws to ensure food to each human being born in respective countries.
- The right to food is a basic human right as well as a basic human need.
- The right to food was formally recognized in the very first international human rights document, the Universal Declaration of Human Rights, adopted by the United Nations in 1948.
- "Parties to the International Covenant on Economic, Social and Cultural Rights have a legally binding obligation to take steps to respect, protect, facilitate and fulfill the right to food".

In conclusion, right to food is a birth right of every human being, rich or poor, born on earth to have food. We must understand that it is quite distinct from food availability, food quality and safety and food accessibility which are provisioned by the government. It should be understood that right to food law is our insurance that every person rich or poor gets food. It is further responsibility of the government and people to see whether safe and nutritive food is available and accessible to consumers to fulfill the requirements of right to food.

**Prem Nath**  
Chairman, PNASF

## Events

### PNASF Organizes The Late B.R. Sen Memorial Lectures and Book-Release Ceremony



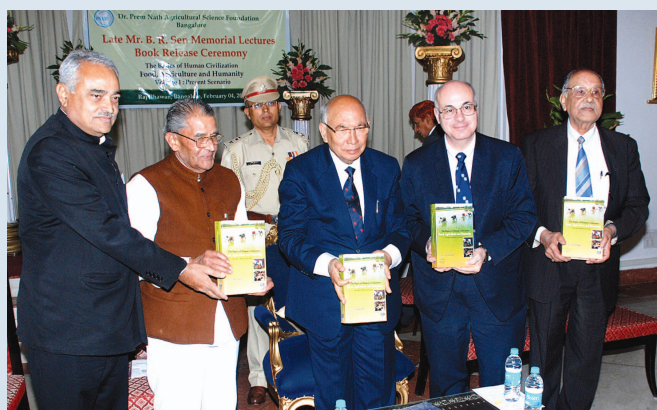
Dr. Peter E. Kenmore delivering his lecture during the Late B.R. Sen Memorial Lecture



Dr. S. Bisalaih delivering his lecture during the Late B.R. Sen Memorial Lecture

In the series of organizing Memorial Lectures and Book-Release Ceremony, the PNASF, laid yet an another mile stone by organizing Late B.R. Sen Memorial Lectures and Book Release Ceremony of the book "The Basics of Human Civilization - Food, Agriculture and Humanity, Volume-I-Present Scenario" on February 04, 2013 at Raj Bhawan, Bangalore. H.E. the Governor of Karnataka, Dr. Hans Raj Bhardwaj was the Chief Guest and Shri M.V. Rajasekharan, former Union Minister of State for Planning, Government of India, Dr. Peter E. Kenmore, FAO Representative for India and Bhutan, and Dr. K. Narayana Gowda, Vice-Chancellor, University of Agricultural Sciences, Bangalore were the Guests of Honor on the occasion. Among the audience were about twelve authors who had contributed articles to this book. The first programme of the event was the **Late B.R. Sen Memorial Lectures**, presided over by Shri M.V. Rajasekharan. Dr. Prem Nath introduced the late Mr. B.R. Sen, on whose name the memorial lectures was organized and the

learned guest speakers who enlightened the audience on Mr. B.R. Sen and his contributions and the subject food, agriculture and humanity. Dr. Peter E. Kenmore, Resident Representative of the Food and Agriculture Organization of the United Nations in New Delhi and Dr. S. Bisaliah, former Vice-Chancellor of the University of Agricultural Sciences, Bangalore were the Guest speakers. Dr. Kenmore delivered his lectures on **“Approaching B. R. Sen’s Newer World in the 21<sup>st</sup> Century”** which illustrated the valuable contribution of Mr. B.R. Sen in the national and international context. Dr. Bisaliah made his presentation on **“Three Vertices of Human Civilization Triangle: Food, Agriculture and Humanistic Ideology”** which highlighted the significance of sustained bondage among food, agriculture and humanity and also conveyed the theme of the book which was released on this occasion. This was a rare design of two lectures where the former signifying the statements of Mr. Sen forecasting the want of more food for humanity more than half a century ago, and the latter illustrating the roots and relationship among food, agriculture and humanity. Dr. K. Narayana Gowda who was present on the dais spoke about the credentials of the speakers and also mentioned about the work being carried out in UAS, Bangalore in the field of food and nutrition. Presiding over this program, Mr. Rajasekharan spoke highly about the valuable contribution of the two learned speakers and complemented the speakers for their excellent presentations. The programme was concluded with vote of thanks by Dr. P.G. Chengappa, former Vice-Chancellor, University of Agricultural Sciences (UAS), Bangalore.



*Release of the book by H.E. the Governor of Karnataka, Dr. Hans Raj Bhardwaj in the middle flanked by Dr. Peter E. Kenmore and Dr. Prema nath on his left and Mr. M.V Rajasekharan and Dr. Narayan Gowda on the right.*

This was followed by the **Book-Release Ceremony** of the book entitled **“The Basics of Human Civilization - Food, Agriculture and Humanity, Volume-I-Present Scenario”** with H.E. the Governor of Karnataka, Dr. H.R. Bhardwaj as the Chief Guest and Mr. M.V. Rajasekharan, Dr. Peter E. Kenmore and Dr. K. Narayana Gowda as the Guests of Honor. Dr. Prem Nath introduced the late Mr. B. R. Sen after whose name the memorial lectures were organized and the learned guest speakers who enlightened the audience on Mr. B.R. Sen and his contributes and the subject of food, agriculture and humanity.

On behalf of PNASF, Dr. O.P. Dutta, Senior Technical Advisor, PNASF welcomed the guests on the dais and dignitaries in the audience, about 100 and more number of senior agricultural scientists and dignitaries. Among the dignitaries were Dr. P.V. Shenoi (former special Secretary, Government of India); Mr. Abhay Prakash (former Additional Chief Secretary, Government of Karnataka); Mr. N. S. Megharikh (Senior IPS, Government of Karnataka); Dr. R. Dwarakinath (former Vice-Chancellor, University of Agricultural Sciences, Bangalore); Dr. G.K. Veeresh (former Vice-Chancellor, University of Agricultural Sciences, Bangalore); Dr. M. Mahadevappa (former Vice-Chancellor, University of Agricultural Sciences (UAS), Dharwad); Dr. P.G. Chengappa (former Vice-Chancellor, University of Agricultural Sciences, Bangalore); Dr. A.S. Sidhu (Director Indian Institute of Horticultural Research (IIHR), Bangalore); and a number of scientists and professors from research institutes and Universities.



*Releasing of the PNASF News Letter*

Welcoming the guests on the dais and the audience, Dr. Prem Nath introduced the book to be released **“The Basics of Human Civilization - Food, Agriculture and Humanity, Volume-I-Present Scenario”** and invited the Chief Guest to honor the release the book. H.E. the Governor of Karnataka, the Chief Guest and the Guests of Honor released the book and congratulated the PNASF and the editors of the book. The New Year issue of the PNASF News Letter was also released by the Guests on the dais and distributed to the audience on this occasion.

The event was marked by the presentation of complimentary copy of the book to the authors present on the occasion by the Chief Guest and Guests of Honor. The authors who received the complimentary copy of the book were Dr. G.K. Veeresh, Dr. S Bisaliah, Dr. M. Mahadevappa, Dr. P.G. Chengappa, Prof. K.V. Peter, Dr. Aminuzzaman Talukder (Cambodia), Dr. C.P.A. Iyer, Dr. K.R. M. Swamy, Dr. K. Santhanam, Dr. K. Narayana Gowda.

The editors of the book viz., Dr. C.P.A. Iyer, Dr. O.P. Dutta, Dr. K.R.M. Swamy, Dr. B.S. Prabhakar and Mr. P.B. Gaddagimath were presented with the PNASF certificates of appreciation by the Chief Guest on the occasion. The joint publisher of the book, M/s New India Publishing Agency (NIPA), New Delhi was also presented with a certificate of appreciation which was received by Mr. P.B. Gaddagimath on behalf of the publisher.



*Dignitaries with authors present during the event*

On behalf of the Board of Trustees of the PNASF, Dr. Prem Nath honored the Chief Guest, H.E. Dr. Hans Raj Bhardwaj and Guests of Honor, Shri M.V. Rajasekharan, Dr. Peter E. Kenmore, and Dr. K. Narayana Gowda by presenting PNASF metallic plaques. Guest Lectures, Dr. Peter E. Kenmore and Dr. S. Bisaliah were also honored with presenting PNASF Special plaques, which they appreciated.

In this address, the Chief Guest highlighted the importance of food and agriculture and its significance to the furtherance of the humanity. In this context, he appreciated the efforts and contribution of the PNASF in organizing such events in the past and the present one as this, far the benefit of all stakeholders. He underlined the personal efforts and scientific contribution



*H.E. Dr. Hans Raj Bhardwaj delivering Chief Guest Address*

*Shri M.V. Rajasekharan*

*Dr. K. Narayana Gowda*

*Dr. Prem Nath*

During the concluding session Shri M.V. Rajasekharan followed by Dr. Peter E. Kenmore congratulated PNASF for organizing this event, its outstanding contribution and appreciated the efforts of the authors and the editors in bringing out this book of relevance to food, agriculture and humanity. Shri M.V. Rajasekharan acknowledged and highlighted the valuable contributions of PNASF and expressed his support to its activities. Dr. Kenmore expressed that he was well aware of the valuable contribution of Dr. Prem Nath to FAO and its member countries and is pleased with the PNASF contributions particularly the book released which contains rich information on food and agriculture for the sake of human kind.

of Dr. Prem Nath and his outstanding team of senior scientists demonstrating professionalism in the area of food and agriculture and valued very much the contribution of well-known authors in making this book possible. He wished and encouraged readers to make use of the information available.

At the end, Dr. B.S. Prabhakar, Senior Technical Adviser extended vote of thanks to the Chief Guest, dignitaries and all invitees, press media and Raj Bhawan staff. The event was concluded with the national anthem, which was followed by high tea.

## Introductory Address by Dr. Prem Nath during Late B.R. Sen Memorial Lectures on February 04, 2013 at Raj Bhavan, Bangalore

Honorable Shri M.V. Rajashekharan ji, Former Union Minister of State for Planning, Government of India.

Respected Dr. Peter E. Kenmore, Resident Representative of the Food and Agriculture Organisation of the United Nations in India and Bhutan.

Respected Dr. K. Narayana Gowda, Vice Chancellor, University of Agricultural Sciences, Bangalore.

Respected Dr. S. Bisalaiah, Former Vice-Chancellor of the University of Agricultural Sciences, Bangalore.

Dignitaries in the audience, Ladies and Gentlemen

On behalf of the P.N. Agricultural Science Foundation (PNASF), I have the privilege and honor to welcome you during the Late Mr. B.R. Sen Memorial Lectures and Book- Release Ceremony organized this evening. Within its mandate, earlier PNASF had organized 3 Memorial Lectures during International Conference on Vegetables (ICV-2002) held in November 2002 and 2 Memorial Lectures during the International Conference on Horticulture (ICH-2009) held in November 2009 in the name of Late Dr. B.P. Pal, Dr. G.S. Randhawa, Dr. Norman Borlaug and others. The third in the series of today after Late Mr. B.R. Sen has great significance and relevance to the book on release today-"**The Basics of Human Civilization- Food, Agriculture and Humanity, Volume-I**".

Mr. Binay Ranjan Sen was born in Assam, India and educated at Calcutta University and Oxford University. He spent the majority of his career with the Government of India starting as District Magistrate in Midnapore, assuming various government official roles including the Secretary of the Department of Food. From 1950, he was sent to Italy, Yugoslavia, the United States of America, Mexico and Japan as the Ambassador of India. It was during his diplomatic career that he started to represent his government at a number of FAO Conference and Council sessions, and also at some UN meetings, including those of United Nations Economic and Social Council and the Security Council.

He was elected Director-General of FAO at the Third Special Session of the FAO Conference in September 1956, and served in this post from November 1956 until the end of 1967.

Among the innovations that took place during Mr. Sen's term of office were the development of the Freedom from Hunger Campaign, World Food Programme (WFP), the FAO/ International Bank for Reconstruction and Development and similar investment-related programmes.

Dignitaries, Ladies and Gentlemen:

We remember Mr. Sen because of his contribution to food and agriculture and because of his visionary statements he made during 1950's and 1960's which hold true today.

I **During the Inaugural Address at the First African Regional Conference, Lagos, Nigeria, 3 November 1960**, Dr. Sen further stated that mankind has traveled far on the road to conquest of nature, and every day coming closer together; yet some of the basic problems that have afflicted humanity since the beginning of society remain unsolved. Large parts of the world still suffer from hunger, and the threat of famine is ever present. The world population is rising by more than 50 million every year. **If today we are having trouble in producing adequate supplies of food for 3 billion people, what a problem lies 35 years ahead when we shall have to feed twice that number?**

I **On the death of John Kennedy, President, USA**, Dr. Sen quoted statement of Mr. Kennedy during the World Congress in June 1963 in Washington that 'So long as freedom from hunger is only half achieved, no citizen, no nation can afford to be satisfied', that "We have the capacity to eliminate hunger from the earth, we need only the will," - This will reverberate through the corridors of time.

II **During the Opening Session of the World Population Conference in Belgrade, 30 August, 1965, Dr. Sen stated that;**

i. Dr. Sen quoted Professor Arnold Toynbee, the eminent historian, who delivered the first McDougall Memorial Lecture at the 10<sup>th</sup> Session of the FAO Conference that "What is the end of Man", and answered it by saying that "Living human beings, whatever their number, shall develop the highest capacities of their nature, and what we should aim at is the optimum size of population for this purpose in the economic and social circumstances of each successive generation".

ii. Dr. Sen further stated that the problem before mankind is that whatever practical measures be taken nationally and internationally, now or in the near future, aiming at the accelerating expansion of productive capacity for the provision of food and other means of livelihood, a continuation of present trends of population growth may well lead to a situation when "the right to life" of those not yet living, that is of larger and larger numbers of future generations, will no longer be a right parallel to, but will be in conflict with, " the right to a worthy standard of living".

iii. In 1962, Dr. Sen mentioned that taking all relevant factors into account, can we expect the growth rate in agricultural productivity in developing countries to keep pace with the population growing at the present rate?

After the lapse of more than half a century, the statements of Dr. Sen seem and remain worthy of consideration.

Dignitaries on the dais, Distinguished Guests, Ladies and Gentlemen!

The two learned speakers of the Late B.R. Sen Memorial Lectures today are none less than **Dr. Peter E. Kenmore and Dr. S. Bisalaiah**

- a) Dr. Peter Kenmore is a national of the United States of America and a long term serving member of the FAO and former esteemed colleague of mine, who is presently the FAO Resident Representative in India and Bhutan. Behind him, is an enormous experience of global and regional issues on food and agriculture. Among other awards, he was also the winner and achiever of the prestigious Late Mr. B.R. Sen Award during 1991, for his outstanding contribution and achievements in Integrated pest management activities in Asia.
- b) The other speaker of today is Prof. S. Bisalaiah, a friend of high esteem and former Vice Chancellor of the University of Agricultural Sciences, Bangalore with his valuable contribution in the field of agricultural economics. He mentioned to me that as the student of University of Mysore, he had an opportunity to listen to Mr. B.R. Sen who delivered inaugural Lecture with the honorable former Maharaja of Mysore as the Chief Guest. Dr. Bisalaiah has tremendous knowledge on national and international issues in Agriculture. He inspired me a lot when I started conceptualizing the book which is on release today.

On behalf of the PNASF and on behalf of all of you present, I thank these two esteemed and learned speakers for accepting our invitation to deliver these lectures in the presence of this august audience.

Thank you very much. \*

## Release of the book “The Basics of Human Civilization: Food, Agriculture and Humanity, Volume-I”, Raj Bhawan, Bangalore Monday, February 04, 2013

Key Note Address - About the Book by Dr. Prem Nath

His Excellency the Governor of Karnataka, Dr. Hans Raj Bhardwaj Ji,

Honorable Shri M. V. Rajasekharan Ji, Former Minister of State for Planning, Government of India,

Respected Dr. Peter E. Kenmore, Resident Representative of the Food and Agriculture Organization of the United Nations in India and Bhutan.

Dignitaries in the audience, Mr. Abhay Prakash, former Additional Chief Secretary, Dr. P.V. Shenoi, Special Secretary, Government of India, Dr. K. Narayana Gowda, Vice Chancellor, University of Agriculture Sciences and other Dignitaries, Ladies and Gentlemen.

On behalf of the Dr. Prem Nath Agricultural Science Foundation, Bangalore, I consider it an honor and privilege to welcome you heartily to this event hosted at the Raj Bhawan with the blessings of His Excellency, the Governor of Karnataka.

It seems everything is revolving around food and we are all working for food either as farmer or as consumer; whatever occupation we are engaged in, it ends in access to food and human health.

Food is basic to human being and agriculture is the catalyst between the two which is basically supported by natural resources. The human being is entirely dependent on food and food is fully dependent on agriculture and humanity. Even though food, agriculture and humanity have their own entity; they are inseparable for the survival and existence of each other. Hence, **the three pillars of food, agriculture and humanity forming a triangle symbolize the roots of human civilization.**

At present, more than a billion people are suffering from hunger and malnutrition, indicating every sixth person in the world is suffering from this ailment. Again, it is a coincidence that every sixth person on this earth is an Indian. Have we made satisfactory efforts to mitigate man-made calamity i.e. food and nutrition insecurity? It can be done, provided we all put in our sincere efforts.

The question of food effects the farmer what to grow and how best to grow; scientists and technologists are engaged in producing efficient food; housewives and hoteliers are coming up with modern menus; dieticians are advocating healthy food; and governments are busy in procuring, storing and distributing food. However, it is apparent that there is not enough food for millions; either there is shortage of grain and vegetables or they are available but not accessible to millions.

As we recognize, both food and agriculture are manned by human beings but all the three i.e. food, agriculture and human beings are influenced by nature and its resources. What we are asking now is the renewal or revival of the human element i.e. humanity, which again is empowered by human nature which is probably getting contaminated with narrow and negative mind set. Can we not put our efforts to mitigate negative effects? Let us explore the solution. Let us study the challenges ahead and take it as opportunity to overcome the bottlenecks we are facing in the domain of food, agriculture and humanity.

The present publication “*The Basics of Human Civilization-Food, Agriculture and Humanity; Volume-I*” is intended to make attempt to update present scenario with reference to past in food, agriculture and humanity and identify challenges, followed by opportunities to bring changes in food habits and preferences, technology, and proper implementation of programmes and of proper utilization of a natural resources. Mention has been made of food and agriculture policies and developments, improved agriculture, challenges and opportunities, and to address them appropriately.

The book is intended to have five volumes namely, Volume-1 - Present Scenario, Volume-2- Food, Volume-3-Agriculture, Volume-4-Humanity, and Volume - 5- Expectations.

The present first volume has the contribution of 40 articles covering 665 pages by 34 authors and 22 co-authors from India and abroad, to each of whom the PNASF is very grateful as they have gladly agreed to our request to extend voluntary contribution in the interest of the subject we are dealing with. The authors have drawn their own views based on their own findings and referred other authors, and the views of scientists, professionals and other specialists.

I welcome and congratulate those authors who are present here- Dr. P.G. Chengappa, Dr. S. Bisalaiah, Dr. Aminuzzaman Talukder, (Cambodia), Prof. R.S. Deshpande, Dr. K. Narayana Gowda, Dr. K.R.M. Swamy, Dr. Narayana G. Hegde, Dr. Arun Balamatti, Dr. M. Mahadevappa, Dr. M.R. Raghunath, Dr. G. K. Veeresh, Dr. C. P. A. Iyer, Prof. K.V. Peter, and Dr. Anilakumar Raghavan. Of course, I had an opportunity to contribute six articles to this book. Other authors, from different parts of India and abroad have extended their best wishes on this occasion. On behalf of the P.N. Agricultural Science Foundation, I would make my submission to His Excellency, the Chief Guest to present a complimentary copy to each author from near and far present here.

We are most thankful to our leaders H.E. former President of India, Smt. Pratibha Devi Singh Patil ji; H.E. the Governor of Karnataka, Dr. Hans Raj Bhardwaj Ji; Assistant Director General and Regional Representative FAO RAP, Mr. Hiroyuki Konuma; Director General of AVRDC-The World Vegetable Center, Dr. J.D.H. Keatinge and Vice-Chancellor of the University of Agricultural Sciences (UAS), Bangalore, Dr. K. Narayana Gowda; for their encouragement and message of wisdom, which appear in the book.

About two years ago, I had mentioned to His Excellency that I was writing a book on Food, Agriculture and Humanity. His first question was on 'Right to Food' and further he raised number of issues on food and agriculture. His Excellency, those questions inspired me. Sir, you would find your answers in this book.

In preparing the blueprint and in reviewing and in editing, the Senior Scientific Councillors and Technical Advisory Council members, Dr. V. L. Chopra, Delhi, Dr. S. Bisalaiah, Dr. R. Dwarakinath, Dr. G. K. Veeresh Dr. M. Mahadevappa, Dr. P.G. Chengappa, Prof. R.S. Deshpande, Dr. Anupam Varma, and Dr. C.P.A. Iyer, Dr. O.P. Dutta, Dr. K.R.M. Swamy, Dr. B.S. Prabhakar and Mr. P.B. Gaddagimath have made valuable contribution and assisted me greatly with their expertise and experience, for which PNASF is thankful. Mrs. Vanita Vinay and Mrs. Lakshmi Nataraj of the PNASF spent long hours to prepare the whole manuscript in an excellent manner.

Acknowledgement is due to the New India Publishing Agency (NIPA), New Delhi for their best efforts in quality printing of this book in a timely manner.

It is expected that the present publication will enlighten the readers and disseminate the message in line with the title and theme of the book and subject.

Our Chief Guest, respected dignitaries on the dais, distinguished guests, Ladies and Gentlemen and Press Media, and most of all the Staff of Raj Bhavan, on behalf of the Dr. Prem Nath Agricultural Science Foundation and its collaborators, I thank you immensely for your kind support and active participation.

*Jai Hind ! Jai Karnataka !*

### Chairman, PNASF attends UAS Celebration

On invitation by the Organizing Committee of the Golden Jubilee Celebrations, University of Agricultural Sciences (UAS), Bangalore, Dr. Prem Nath attended the inaugural function on June 06, 2013 at the GKVK Campus, Bangalore. The UAS was established during 1963.

His Excellency the Governor of Karnataka, Dr. Hans Raj Bhardwaj inaugurated the function. Other dignitaries were Shri Kishna Byre Gowda, Minister of Agriculture; Shri Shamanur Shivashankarappa, Minister of Agriculture Marketing and Horticulture; Shri D.B. Chandre Gowda, Member of Parliament, Mr. Bharat Lal Meena, Principal Secretary, Agriculture and others. Dr. K. Narayana Gowda, Vice-Chancellor, UAS welcomed the dignitaries and audience. In his speech he highlighted the achievements of the University through the span of 50 years. H.E. the Governor emphasized the empowerment of the farmers, congratulated agricultural scientists and advised the public sector to support on-going agricultural development to attain food and nutrition security.

The Golden Jubilee Celebration is scheduled to cover various events on seminars/conferences on various topics, *Krishi Mela* and others beginning June 2013 to June 2014.

### PNASF Collaborates with ISEC, Bangalore in Organizing Seminar on Urban and Peri-Urban Agriculture

Earlier, Chairman, Prem Nath Agriculture Science Foundation (PNASF), had proposed the Director, Institute for Social and Economic Change (ISEC), Bangalore to have a joint workshop on relevant issues of Urban and Peri-Urban Agriculture in the interest of all stakeholders, Prof. R.S. Deshpande, Director, ISEC agreed with this proposal and subsequently an useful discussion was held on Friday, June 14, 2013 at ISEC and agreement reached that workshop/seminar will be held jointly by PNASF and ISEC on August 08, and 09, 2013 at ISEC, Bangalore. The members present were Prof. R. S. Deshpande, Dr. Prem Nath, Prof. P. G. Chengappa, Prof. Pramod and others and discussion highlighting the scope of workshop was held fruitful.

### Chairman, PNASF Awarded

Dr. Prem Nath was conferred with the Lifetime Achievement Award-2012 in the form of citation and plaque by the Confederation of Horticulture Associations of India, New Delhi during its 2<sup>nd</sup> council meeting and National Conference on Water Quality and Management for Climate Resilient Agriculture held in Jalagaon, India, during May 28-31, 2013. PNASF appreciates this gesture in the interest of science and practice in horticulture.

## Dr Prem Nath Delivers Lecture at the Bangalore International Centre, Bangalore

On the invitation by the management of the Bangalore International Centre (BIC), Bangalore Dr. Prem Nath delivered a talk on “City, Food and Agriculture” at the auditorium of the The Energy and Resources Institute (TERI), Dommaluru 2<sup>nd</sup> Stage, Bangalore 560071 on Friday, May 10, 2013 at 1830hrs.

Addressing the gathering Dr Prem Nath said that in the new millennium, the people are witnessing significant changes in all sectors influencing working conditions and way of life. These changes are either man-made or natural or both, creating new challenges and opportunities for us to address in the interest of human kind. One among the significant changes taking place is the migration of population from rural to urban areas. The major cities of the developing world have already recorded the population of more than 50% which is a dramatic shift from the earlier rural major population of the past century. It is also projected that the urban population will reach to 70% during 2050. This growing urban population is in need of shelter, food, energy and necessary facilities.



*Dr. Prem Nath delivering his talk*



*Audience during the lecture*

Dr. Nath also illustrated the approach and programme of Urban and Peri-Urban Agriculture (UPA) taken up by different countries in the developing world. He explained the role of UPA in mitigating food and nutrition insecurity of the urban population while utilizing scientific, technological and developmental interventions within the transforming social fabric.

The learned audience from different walks of life including science, culture, arts, farming, health, development, social activities and press participated actively in the discussion and the presentation ended with lively interventions.

Mr. P.R. Dasgupta, Director of Bangalore International Center (BIC) welcomed the gathering and invited Dr. G.K. Veeresh , former Vice-Chancellor of the University of Agricultural Science, Bangalore to introduce the topic of the lecture and the speaker Dr. Prem Nath and Dr. Veeresh did it with great pleasure and vivid background of the topic and the speaker. In token of appreciation and on behalf of BIC Mr. Dasgupta presented the speaker, Dr. Nath with a packet which contained the book entitled “**Beyond the Lines-An Autobiography**” of Kuldip Nayar published by Roli Books Pvt. Ltd., New Delhi. The session ended with vote of thanks by Mr. Dasgupta.

## Participation in the National Seminar on Economic Growth and National Unity, New Delhi

On invitation by the management committee, Dr. Prem Nath delivered a key note address at the National Seminar on Economic Growth and National Unity organized by the Friendship Forum of India (FFI), New Delhi-110 049 on April 07, 2013, at the C.D. Deshmukh Memorial Auditorium India International Centre, New Delhi-110 003. Dr. G.V.S. Krishnamurthy, former Election Commissioner of India was the Chief Guest and Dr. Prem Nath, Chairman, Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore; Shri V. Valte, Parliamentary Secretary (Horticulture), Government of Manipur; Shri Amar Kumar, General Manager, WAPCOS, Gurgaon; Shri Andrew Ahoto Sema, Leading Educationist, Nagaland; Shri T. Yanger AO, Nagaland; and Shri Zahoor Ahmed Siah, Kashmir were the Guests of Honor.



*Dr. Prem Nath honored with award by the Chief Guest, Dr. G.V.S. Krishnamurthy*

Welcoming the guests on the dais and the participants in the audience, Mrs. Manju Wahi, Secretary, FFI invited Dr. Prem Nath to deliver the **Key note address** entitled, “**Food and Nutrition Security in Global and National Context**”. This was followed by the speech of other Guests of Honor on the dais who talked about the development in respective sectors. The Chief Guest, Dr. G.V.S. Krishnamurthy, hailed the significant developments achieved since independence in India but did not fail to flag its shortcomings. The participants appreciated the talks delivered and messages received.



*Awardees with the dignitaries*

This was followed by the presentations of honor to the recipients who hailed from different states of India and got recognition of his/her achievements in the area of education, health, rural development, women welfare, horticulture and other areas. The management committee of the FFI honored them with certificate, medals and mementos.

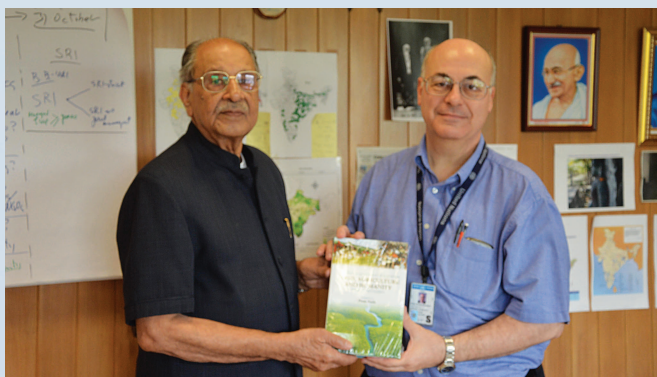


*The Chief Guest, Dr. G.V.S. Krishnamurthy addressing the participants*

On this occasion Dr. Prem Nath was honored with “**Indian Excellence Award for Education**” and Gold Medal for the year 2013 and the “**Rajiv Gandhi Arch for Excellence Award**” and **Gold Medal** (Certificate of Felicitation) by the Chief Guest, Dr. G.V.S. Krishnamurthy.

About 100 invitees and participants attended the event. During the concluding session, Mrs. Manju Wahi, Secretary, FFI thanked the guests and the participants.

### Visit to the Office of the FAO Resident Representative, New Delhi



*Dr. Prem Nath presenting the new book to Dr. Peter E. Kenmore, FAOR, in his office in New Delhi*

On April 08, 2013, Dr. Prem Nath made a courtesy call on Dr. Peter E. Kenmore, Resident Representative of the Food and Agriculture Organization of the United Nations in New Delhi. They had a detailed discussion on relevant issues on food and agriculture particularly in the area of urban and peri-urban agriculture.

On this occasion, Dr. Prem Nath presented him with a complimentary and signed copy of the newly released PNASF book entitled “The Basics of Human Civilization-Food, Agriculture and Humanity; Volume-I: Present Scenario” which he appreciated. Dr. Kenmore kindly agreed to contribute to the full paper of his memorial lecture “**Approaching B. R. Sen’s Newer World in the 21<sup>st</sup> Century**” to be published in the Volume II of the above mentioned book. Dr. Kenmore had kindly delivered this lecture during the Late B.R. Sen Memorial Lecture and Book Release Ceremony presided by was H.E. the Governor of Karnataka, Dr. Hans Raj Bhardwaj; Shri M.V. Rajasekharan, former Union Minister of State for Planning, Government of India, Dr. Peter E. Kenmore, FAO Representative for India and Bhutan, and Dr. K. Narayana Gowda, Vice-Chancellor, University of Agricultural Sciences, Bangalore held on February 04, 2013 at Raj Bhawan, Bangalore.

### Courtesy Call Upon His Excellency the Governor of Karnataka

On behalf of the PNASF, Dr. Prem Nath made a courtesy call on H.E. Dr. Hans Raj Bhardwaj, the Governor of Karnataka on March 13, 2013 at Raj Bhawan, Bangalore. Dr. Nath extended his grateful thanks to His Excellency for gracing the occasion of the Late B.R. Sen Memorial Lecture and Book-Release Ceremony, as the Chief Guest on February 04, 2013. On this occasion the book entitled, “**The Basics of Human Civilization - Food, Agriculture and Humanity, Volume-I-Present Scenario**” and the new-year issue of PNASF News Letter published by PNASF were released. His Excellency appreciated the programme, the new book and newsletter and complimented PNASF and the authors and editors for publishing and disseminating such useful information in the public interest particularly among intellectual community. His Excellency encouraged the PNASF to undertake such programmes at academic centre of the state and nation.

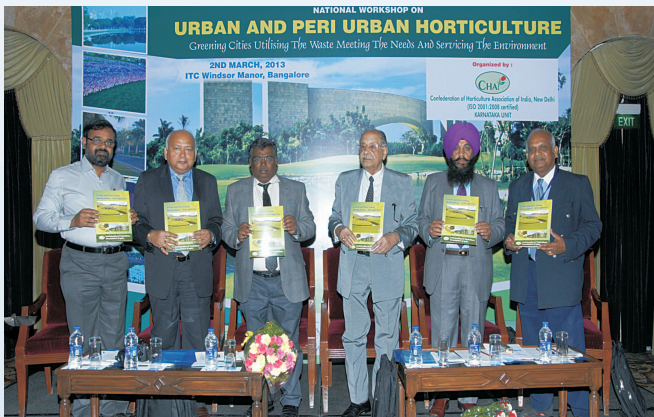
On this occasion, on behalf of the PNASF Dr. Prem Nath presented records of the event with photo-album to His Excellency, which he appreciated. His Excellency has been kind enough to encourage promotion of PNASF activities addressing food and nutritional security of the masses.

### Dr Prem Nath Delivers Key Note Address at the National Workshop on Urban and Peri-Urban Horticulture in Bangalore

On invitation by the management team of the National Workshop on Urban and Peri-Urban Horticulture (UPH) with the theme-*Greening the cities, utilising the waste, meeting the*



*needs and servicing the environment* organized by Confederation of Horticulture Association of India (CHAI), New Delhi on **March 02, 2013** in **Bangalore**. Dr. Prem Nath participated as a Guest of Honor. He delivered the key note address/Guest Lecture entitled “**Concept and Development of UPA-A Global Perspective**” at the Hotel Windsor Manor, Bangalore. Dr. N.K. Krishna Kumar, DDG (Hort.), ICAR was the Chief Guest, Dr. H.P. Singh, President, CHAI presided.



*Release of the Publication on UPA by the Chief Guest Dr. N.K. Krishna Kumar, DDG (Hort.), ICAR*



*Plenary Session chaired by Dr. Prem Nath(Centre) and the panelists were Dr. P. Rethinam (RHS) and Dr. A.S. Sidhu(LHS)*

The one-day workshop programme was divided into 4 technical sessions namely, UPH for Greening cities, Environmental services, Complimenting the needs of food and nutrition and Economic Growth. Total of about 15 papers were presented. Most of the presentations concentrated on urban horticulture. The discussion were informative and useful.

The workshop was concluded with Plenary Session chaired by Dr. Prem Nath and the panelists were Dr. P. Rethinam and Dr. A.S. Sidhu. Dr. H.P. Singh delivered the Plenary Lecture entitled ‘UPH for greening the cities utilizing waste, meeting the needs and servicing the environment. The recommendations of various sessions were discussed and finalized. In his concluding remarks, Dr. H.P. Singh, Chairman, CHAI announced Life-time Achievement Award by CHAI to Dr. Prem Nath. The workshop concluded with the vote of thanks by Dr. H.P. Sumangala.

## FAO/PNASF Regional Workshop on Strengthening Urban and Peri-urban Agriculture towards Resilient Food Systems in Asia



*Dr. Hiroyuki Konuma welcoming the participants*



*Mr. Yukol Limlaemthong, addressing the participants*

FAO Regional Office for Asia and the Pacific, Bangkok, Thailand in collaboration with Dr. P.N. Agricultural Science Foundation, Bangalore organized the **Regional Workshop on Strengthening Urban and Peri-urban Agriculture towards resilient food systems in Asia** held during **January 28-30, 2013** in **Bangkok, Thailand**. During the three day workshop, technical discussion was held for two days and the third day was devoted to study tour/field trip. About 55 participants from India, Bangladesh, Bhutan, Cambodia, Indonesia, Laos, Malaysia, Republic of Korea, Thailand and Viet Nam attended. The discussion was enhanced by the active participation of nine resource persons invited from different countries.



*Dr. Prem Nath delivering his Key Note Address*

The objectives of the workshop were to review experiences on urban and peri-urban agriculture (UPA) in the Region as well as lessons learnt with the aim of identification and advocacy of best practices and case studies from countries across the Region. The regional workshop will also identify priorities and key investment areas for strengthening UPA leading to action plans including pilot interventions that can be taken up for supporting resilient food systems in the cities of Asia; mechanisms to coordinate between different stakeholders (public, private and civil society) and partners will also be identified.”



*During the Field Trip*



During the Inaugural Session on January 28, 2012, the dignitaries on the dais were Mr. Hiroyuki Konuma, Assistant Director General, FAO Regional Office for Asia and the Pacific, Bangkok, Mr. Yukol Limlaemthong, Ministry of Agriculture and Cooperatives, Government of Thailand; Dr. Chanvit Tarathep, Deputy Permanent Secretary, Ministry of Public Health, Government of Thailand and Dr. Prem Nath, Chairman, Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India. The welcome address was delivered by Mr. Konuma and opening address was given by Mr. Limlaemthong. The key note address entitled, “Concept and Implementation of Food Security and Its Relevance to Urban and Peri-urban Agriculture” was delivered by Dr. Prem Nath, another address entitled, “Trends of Urbanization, Policy and Planning and Research Priorities in Sustainable Urban and Peri-urban Agriculture” was presented by Dr. Elumalai Kannan. It was followed by a lecture on “Global



*Participants of the UPAFSA-2013*

perspective on strengthening UPA towards resilient food systems” presented by Ms. Makiko Taguchi, FAO, Rome, Italy.

The technical sessions included (a) presentation of country reports by each government delegate; (b) presentation of case studies, reviews and prospects; (c) group discussion; and (d) finalization of recommendation. It was followed by study tour. Before the workshop the government delegates were requested to write country report based on framework/plan of action format provided them, which were presented through power point presentation, which was handy to generate discussion.

The case studies covered almost all areas embracing urban and peri-urban agriculture. The following titles were presented during the workshop;

1. Global perspective on strengthening UPA towards resilient food systems by Ms. Makiko Taguchi, Agricultural Officer, FAO, Rome;
2. Enhancing Multi-stakeholder Collaboration and Investment in Urban and Peri-urban Agriculture by Prof. P.G. Chengappa, National Professor of Agricultural Economics, Institute of Social and Economic Change, Bangalore, India;
3. Development initiatives in food production, utilization and mechanism of management in developing Urban and peri-urban Agriculture in Asia by Prof. N. Nagaraj, Principal Scientist (Markets, Institutions and Policies), ICRISAT, Hyderabad, India;
4. Application of Horticulture in Improving Urban and Peri-urban Agriculture Towards Enhancing Food Production in Bangkok City” by Dr. Grisana Linwattana, Horticultural Research Institute, Bangkok;
5. Contribution of Small Livestock in Developing Resilient

Food Systems for Urban and Peri-urban Agriculture in Thailand by Dr. Sansak Nakavisut, Department of Livestock Development;

6. Towards Sustainable Wastewater-fed Fish Culture in Kolkata, India by Dr Peter Edwards, Emeritus Professor, Asian Institute of Technology and Advisor, Sustainable Farming Systems Programme, Network of Aquaculture Centres in Asia-Pacific, Thailand;
7. Tree Planting in Urban and Peri-urban Areas by Mr. Roger Steinhardt, FAO Regional Office for Asia and the Pacific;
8. Integrated Homestead Farming Systems for Improving Nutrition Status of Urban & Peri-urban Populations – Case study/ Experiences from Selected Asian countries by Dr. Lalita Bhattacharjee, Nutritionist, National Food Policy Capacity Strengthening Programme, FAO, Bangladesh;
9. Urban and Peri-urban Agriculture (including organic agriculture) for Ensuring the Safety of Foods by Dr. A Thimmaiah, Advisor, Bhutan Agriculture and Food Regulatory Authority (BAFRA) ;
10. Impact of Waste Management and Utilization in Improving Urban and Peri-urban Agriculture by Dr. Permpong Pumwiset, Office of Public Health and Environment, Thailand;

During the group discussion sessions, the three groups formed as follows;

1. **Working group 1:** *Research priorities (including pilot interventions, investment areas, etc) on horticulture, food, waste*

*management*- Chair: Dr Prem Nath, PNASF. **Facilitator** :Ms. Wilailak Sommut

2. **Working group 2:** *Development initiatives (including priorities, pilot interventions, investment areas, etc) in food production, utilization and management in UPA* - Chair: Dr N. Nagaraj, ICRISAT, Hyderabad. **Facilitator:** Mr.P.B. Gaddagimath
3. **Working group 3:** *Mechanisms for handling multistakeholder collaborations (including public and private partnership) in improving urban and peri-urban Agriculture* - Chair: Prof P.G. Chengappa, Institute of Social and Economic Change, Bangalore

**Facilitator:** Mr. Roger Steinhardt, FAO, Bangkok

The concluding session was chaired by Mr. H. Konuma with Mr. P.B. Gaddagimath as the Rapporteur. The Workshop proceedings to be published soon will contain all details including Recommendations. The vote of thanks was extended by Ms. Shashi Sareen, Senior Food Safety & Nutrition Officer, FAO Regional Office for Asia and the Pacific, Bangkok.

The field study programme covered visit to waste management and water treatment plant, roof-top garden, waste-fed fish culture, peri-urban vegetable plantation and street market. It was coordinated by Ms. Wilailak Sommut.

The workshop was a success with regard to contents, participation as assisted by FAO and the management by PNASF. It was appreciated and acknowledged by the participants. It may be noted that PNASF on behalf of FAO had organized such workshop on similar subject in Bangalore during 2005.

## RESEARCH AND DEVELOPMENT SUPPORT

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

The project continued and will be updated in the next issue of the news.

PNASF/UASCS/2011/Biological Science and Nutrition Project

The project ended.

## INTERNATIONAL COOPERATION

### Meeting with Asst. Director General (ADG) and Regional Representation (RR) of Asia and the Pacific, Bangkok, Thailand

On April 29, 2013, Dr. Prem Nath had a working lunch with Mr. H. Konuma, ADG/RR, FAO office for Asia and the Pacific in

Bangkok, Thailand. Mr. Konuma was accompanied by Dr. Subhas Dasgupta, FAO Plant Production Officer. The discussion focused on the subject of Urban and Peri-urban Agriculture. The usefulness of UPAFSA-2013 held in January, 2013 was highlighted in terms of large participation, and rich in contents for the benefit of all member countries of the region. Dr. Nath flagged the UPAFSA-2013 discussion and recommendations particularly in the area of Horticulture and Livestock. The availability of technology and need for research for UPA and other elements to be put together for the benefit of practioners. Also, reference was made on the collective information and documentation on UPA. Reference was made on participate in the upcoming SEAVEG-2014. Dr. Nath thanked Mr. Konuma and his colleague for useful discussion and hospitality.

## Participation in the SEAVEG-2014 Meeting in Bangkok, Thailand

On invitation by the Organizing Community of the *SEAVEG 2014: Families, Farms, Food Regional Symposium on Sustaining Small-Scale Vegetable Production and Marketing Systems for Food and Nutrition Security* scheduled during **25-28 February 2014** at Centara Grand at Central Plaza Ladprao, Bangkok, Thailand, Dr. Prem Nath participated in the preparatory meeting on April 29, 2013 held at the Horticultural Research Institute, Department of Agriculture (HRI), Ministry of Agriculture and Cooperatives (DOA), Bangkok, Thailand.

Dr. Prem Nath chaired the meeting. All the members of the SEAVEG Co-ordination Committee attended. The members present were Dr. Grisana Linwattana (HRI/DOA), Dr. Jacqueline d'Arros Hughes (AVRDC), Dr. Robert Holmer (AVRDC), Dr. Poonpipope Kasemsap (Kasetsart University), representative from Horticulture Science Society of Thailand and others.

The meeting (a) reviewed the proceedings of the previous meeting held on November 26, 2012 (b) discussed the technical programmed (c) reviewed and finalized budget estimate (d) decided the venue. The draft of second announcement was reviewed and finalized. It was decided that the second announcement be published by next week. It was emphasized that the premier Horticulture / Agriculture Research Institutes of Asian Countries be contacted / invited to present their latest findings. The meeting ended with vote of thanks.

## Second Announcement

*SEAVEG 2014: Families, Farms, Food*

**Regional Symposium on Sustaining Small-Scale Vegetable Production and Marketing Systems for Food and Nutrition Security during 25-28 February 2014** at Centara Grand at Central Plaza Ladprao, Bangkok, Thailand

### Hosted by

Thailand Department of Agriculture (DOA); ASEAN-AVRDC Regional Network (AARNET); AVRDC – The World Vegetable Center (AVRDC); Food and Agriculture Organization of the United Nations (FAO); Vegetable Science International Network (VEGINET); Kasetsart University (KU); Horticultural Science Society of Thailand (HSST).

### Deadlines

Deadline for submission of abstracts	July 31, 2013
Notification of acceptance	October 31, 2013
Submission of full papers	December 15, 2013
Deadline of payment for registration	December 15, 2013

**Theme Areas and Sessions:** The symposium is divided into five technical sessions to review small-scale vegetable farming, processing and marketing, to encourage improvement in the sustainability of vegetable production, promotion of vegetable consumption for better nutrition and health, to examine policy and development aspects, to attract industry profitability and competitiveness, and to enhance the performance of the vegetable industry in Southeast Asia.

**Session 1: *Small-scale Farming Systems:*** Topics include small holdings and farming status, contribution of farm families in food production, measures to improve small-scale farming systems as well as home, school and other public facility (i.e. hospitals, prisons, etc.) gardens.

**Session 2: *From Seed to Harvest:*** Topics include germplasm, breeding, seed and plant health, integrated crop management with a focus on Good Agricultural Practices (GAP), low-input organic vegetable production, and ASEAN indigenous vegetables.

**Session 3: *From Harvest to Table:*** Topics include vegetable postharvest technologies, postharvest loss prevention, Good Manufacturing Practices (GMP), cold chain management, vegetable economics and marketing, supply chain model simulation, food safety, health and nutrition aspects of vegetables, food consumption and nutrition in the 21<sup>st</sup> century, and measures to improve the role of vegetables in nutrition.

**Session 4: *Cross-sectoral Issues:*** Topics include contributions of vegetable research and development to achieving the Millennium Development Goals (MDG) as well as cross-sectoral issues such as climate change, gender equity, ecological sanitation, urban and regional planning, urban and peri-urban horticulture, disaster risk management and microfinancing.

**Session 5: *Policies and Programs:*** Topics will examine present policies and programs in the sector and suggest changes on issues mentioned in sessions 1 to 4.

Please contact directly the SEAVEG-2014 Secretariat at the following address;

### Horticulture Research Institute

Department of Agriculture  
Bangkok 10900, Thailand

Email: [sym-veget@hotmail.com](mailto:sym-veget@hotmail.com)

### AVRDC – The World Vegetable Center

East and Southeast Asia  
Bangkok 10903, Thailand

Email: [seaveg2014@worldveg.org](mailto:seaveg2014@worldveg.org)

For detailed information, please visit: [www.seaveg2014.com](http://www.seaveg2014.com)

## SOCIAL COMMITMENT

### Gold Medal PNASF/UAS/2001

The PNASF Gold Medal 2013 was awarded to the Ph.D. student Ms. Arpita Srivastava for highest grade point average at the University of Agricultural Sciences (UAS), Bangalore. The award was presented during the University's 47<sup>th</sup> Convocation at UAS, GKVK, Bangalore held on March 08, 2013.

### PNASF/Dharmasheela Nath Scholarship/2006

On the recommendation of the University of Agricultural Sciences (UAS), Bangalore, Ms. Nayana P., ID No. PALB 2216 a student of Junior M.Sc. (Agri.) in Food Science and Nutrition, UAS.GKVK, Bangalore was awarded the PNASF/Dharmasheela Nath Scholarship for the academic year 2012-13.

### PNASF/Ahuja Fellowship/2006

On the recommendation of the University of Horticultural Sciences (UHS), Bagalkot, a student of Junior M.Sc. (Horti.) at UHS, Bagalkot, Karnataka was awarded the PNASF/Devki Devi Ahuja Fellowship for the academic year 2012-13.

### PNASF Member received the Lifetime Global Achievements Award by the ASDF



*Dr. C. Prasad was honoured with the Lifetime Global Achievements Award by the ASDF*

Dr. C. Prasad was honored with the *Lifetime Global Achievements Award* by the ASDF, an Agro-Technical Group, Pondicherry, presented by Honorable Chief Minister, Pondicherry, Shri N. Rangaswamy on 30<sup>th</sup> December, 2012.

PNASF heartily congratulates Dr. Prasad for his achievements and the prestigious award received.

### Loss of a Friend, Colleague and Scientist



*Late Dr. R.K.N. Singh with his wife in their garden*

With a heavy heart, the members of the PNASF family received the sad news of the demise of a founder member of the Technical Advisory Council, Dr. Rajendra K.N Singh who lived in Toronto, Canada, since 1969.

Dr. Singh was born on April 30, 1935 at Dinapore, Bihar, India. He graduated from Bihar Agricultural College, Sabour and obtained his M.Sc. and Ph.D. degrees in

Horticulture from Kansas State University, USA during 1961 and 1964 respectively. On return to India, he served with the Haryana Agricultural University and the ICAR during 1965-69. During 1969, he immigrated to Canada and since then he lived in Toronto until his demise.

In Canada, he worked on different aspects of glasshouse structure and horticulture production and later he was devoted to different aspects of energy utilization with a number of private enterprises. He published several papers on his studies.

He was the member of the President Council, University of Toronto. He also established a post-graduate scholarship at the University of Toronto in 1998 which continues after his death.

Dr. Singh was a strong supporter of PNASF activities and extended valuable contribution from time to time.

Dr. Singh is survived by his wife, son Sunil and daughter Nita who live in Toronto.

The photo shows my last visit with him in his home garden in Toronto during July, 2012.

The members of the PNASF join Dr. Singh's family in sharing the feelings of sorrow and pray that his soul rests in peace.

## INFORMATION DISSEMINATION

### Publications of PNASF

- ◆ Anonymous (2013). The Late B.R. Sen Memorial Lectures and Book-Release Ceremony, Plant Horti Tech Magazine, Vol. 12 No. 5, February-March, 2013 Page 6.
- ◆ Bisalaiah, S. (2013). Investment in Indian Farm Sector: Pathways and Policy Directions, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 139-156.
- ◆ Deshpande, R.S. & Tagade, Nitin (2013). Progressive Change in Land Reforms and Agriculture Policy, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 157-174.
- ◆ Iyer C. P. A. & Reddy, Y.T.N. (2013). Providing Nutritional Security through Fruits-Indian Context, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 499-520.
- ◆ Mahadevappa, M. (2013). Seed Industry and its Future in India: A Retrospective Resonance, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 323-348.
- ◆ Nath, Prem (2013). Introduction, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 1-4.
- ◆ Nath, Prem (2013). The Right to Food, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 5-12.
- ◆ Nath, Prem (2013). Some Perceptions on Natural Resources, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 97-102.
- ◆ Nath, Prem, Swamy, K.R.M. (2013). Messages from International Horticulture Conferences and Symposia in the New Millennium, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 199-224.
- ◆ Nath, Prem (2013). Urban and Peri-Urban Agriculture, The Basics of Human Civilization-Food, Agriculture and

Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 465-476.

- ◆ Nath, Prem (2013). Challenges and Opportunities in Food, Agriculture and Humanity, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 565-667.
- ◆ Swamy, K. R. M. (2013). Technological Innovations in Cashewnut Production, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 383-418.
- ◆ Varma, Anupam, Mandal, Bikash, Roy, Anirban & Singh, Manoj K., (2013). New Approaches for Combating Viral Diseases of Crop Plants- The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 303-322.
- ◆ Veeresh, G. K. (2013). Making Small Farmers Sustainable in India, The Basics of Human Civilization-Food, Agriculture and Humanity-Volume-I: Present Scenario, New India Publishing Agency (NIPA), New Delhi and Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore, India; pages 455-464.

### Presentations

- ◆ Nath, Prem (2013). Key Note Address/Guest Lecture - Concept and Development of UPA-A Global Perspective, National Workshop on Urban and Peri-Urban Horticulture with the theme-*Greening the cities, utilising the waste, meeting the needs and servicing the environment*, Confederation of Horticulture Association of India (CHAI) Association of India, New Delhi, March 02, 2013in Bangalore.
- ◆ Nath, Prem (2013). Introductory Remarks, The Late B.R. Sen Memorial Lectures, Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore February 04, 2013.
- ◆ Nath, Prem (2013). About the Book, Book-Release Ceremony, Dr. P.N. Agricultural Science Foundation (PNASF), Bangalore February 04, 2013.
- ◆ Nath, Prem (2013). Guest Lecture - City, Food and Agriculture, Bangalore International Center, The Energy and Resources Institute (TERI), Domlur 2<sup>nd</sup> Stage, Bangalore, May 10, 2013.
- ◆ Nath, Prem (2013). Key note address, Food and Nutrition Security in Global and National Context, the National Seminar on Economic Growth and National Unity, the Friendship Forum of India (FFI), New Delhi, April 07, 2013, India International Centre, New Delhi-110 003.
- ◆ Nath, Prem (2013). Key Note Address, Concept and Implementation of Food Security and Its Relevance to Urban and Peri-urban Agriculture”, Regional Workshop on

Strengthening Urban and Peri-urban Agriculture towards resilient food systems in Asia, January 28-30, 2013 in Bangkok, Thailand.

## 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- AGlobal Perspective (Pages:437) 2004	200.00 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
* CV-2002 Abstract Book-(Pages :445) 2002	150.00 including postage	35.00 including postage
ICH Abstract Book (Pages: 487) 2009	300.00including postage	50.00 including postage
ICH Souvenir (Pages:142 )2009	150.00 including postage	35.00 including postage
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. Email: <a href="mailto:studiumpress@gmail.com">studiumpress@gmail.com</a>
ICH-2009 Proceeding CD (Pages: 2553) 2010	100.00 including postage	25.00 including postage
Book-Horticulture and Livelihood Security		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 Email: <a href="mailto:scientificpub@gmail.com">scientificpub@gmail.com</a>
Book-The Basics of Human Civilization- Food, Agriculture and Humanity, Volume-I: Present Scenario		Available with New India Publishing AGENCY (NIPA), 101, Vikas Surya Plaza, CU Block LSC Market, Pitam Pura, New Delhi Tel: +91-011-27341616, 27341717 Email: <a href="mailto:newindiapublishingagency@gmail.com">newindiapublishingagency@gmail.com</a>

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

## How to order?

Making online order to [drpremnath@vsnl.net](mailto: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;

- Preparation of the Proceedings of the FAO/PNASF *Regional Workshop on implementing resilient food systems in Asia by Strengthening Urban and Peri-urban Agriculture* held January 28-30, 2013 in Bangkok, Thailand.
- Preparation of the book “*The Basics of Human Civilization- Food, Agriculture and Humanity-Volume-II: Food*”.
- Preparation of the book “*The Basics of Human Civilization- Food, Agriculture and Humanity- Volume-III: Agriculture*”.
- Organizing Book-Release Ceremony.
- Preparation for SEAVEG-2014-*Regional Symposium Sustaining on Small-Scale Vegetable Production, Food and Nutrition and Marketing Systems SEAVEG 2014: Families, Farms, Food* scheduled February 25-28, 2014 in Bangkok, Thailand.
- Participation in Conferences/Symposium/Workshop/ Congress;
- Awards/grants to university students and researchers to continue ;
- Collaborate with the national and international institutions/ associations in the area of food and nutrition security etc.;
- Publication of the PNASF News Letters and E-VEGINET News.

## 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.

### Publications

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

### 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 [pnasffoundation@gmail.com](mailto:pnasffoundation@gmail.com).

THE BASICS OF HUMAN CIVILIZATION  
**FOOD, AGRICULTURE  
 AND HUMANITY**  
 VOLUME-I: PRESENT SCENARIO

Dr. Prem Nath Agricultural Science Foundation (PNASF), Bangalore, India

It seems everything is revolving around food and we are all working for food either as farmer or as consumer; whatever occupation we are engaged in, it ends in access to food and human health.

The question of food effects the farmer what to grow and how best to grow; scientists and technologists are engaged in producing efficient food; housewives and hoteliers are coming up with modern menus; dieticians are advocating healthy food; and governments are busy in procuring, storing and distributing food. However, it is apparent that there is not enough food for millions; either there is shortage of grain and vegetables or they are available in plenty but not accessible to millions.

This publication tries to sketch present scenario on food, agriculture and humanity as its first volume with the hope to prepare subsequent three volumes with further discussion on Food, Agriculture and Humanity.

The present publication "The Basics of Human Civilization-Food, Agriculture and Humanity: Volume-I: Present Scenario" is intended to make attempt to update present scenario with reference to past in food, agriculture and humanity and identify challenges, followed by opportunities to bring changes in food habits and preferences, technology, and proper implementation of programmes and of proper utilization of a natural resources. Mention has been made of food and agriculture policies and developments, improved agriculture, challenges and opportunities, and to address them appropriately.

On the whole, the attempts will be made to give adequate treatment to the three basics of human civilization-food, agriculture and humanity in 5 volumes, namely I) Present Scenario, II) Food, III) Agriculture, IV) Humanity and V) Expectations.

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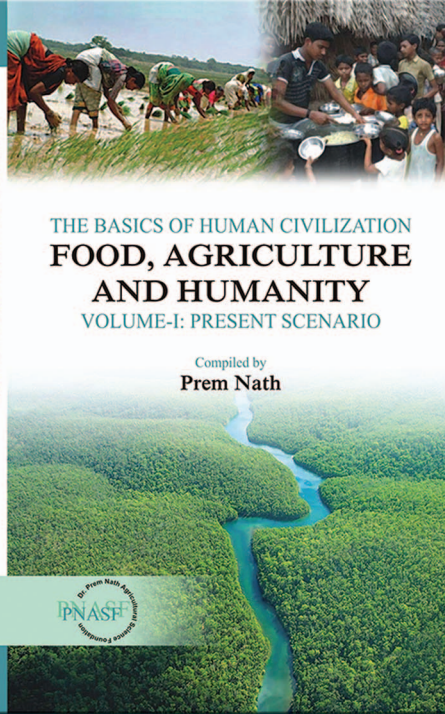
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