



Homage to Dr. K.N. Shyamasundaran Nair

Rich tributes were paid to Dr.K.N.Shyamasundaran Nair, former Vice Chancellor of KAU (1998-2001) who passed away on July 24, 2005. The General Council of the University condoled his demise and acknowledged the valuable contributions made by him.



Dr.Shyamasundaran Nair started his career as an Extension Officer for agriculture in the Thodupuzha Community Development Block in 1956 and worked at the grass roots till mid sixties. In the late sixties he joined the State Planning Board and worked in various capacities such as Deputy Director and Chief of Agriculture Division and was actively involved in policy formulation and programme development in the agricultural sector of the state. He also served as a Member of the State Planning Board.

For more than a decade he was in the rolls of the Food and Agriculture Organisation of the United Nations (FAO), United Nations Development Programme (UNDP) and Asian Development Bank (ADB). Dr.Nair also served as an Advisor in Agriculture Planning in countries such as Tanzania, Ethiopia, Afganistan, Bhutan, Nepal and China.

Dr.Shyamasundaran Nair was the Member Secretary of the Kerala State Agriculture Commission and the Chairman of the Expert Committee on Paddy Cultivation constituted by the Government of Kerala. Dr. Nair was a Distinguished Fellow of the M.S.Swaminathan Research Foundation, Chennai.

'Certain Provisions in the new Seed Bill are anti farmer'

Though the government is greatly supportive of farmers and their interests, the Seed Bill awaiting enactment in Parliament is curiously anti-farmer. Certain provisions in the Bill are clearly favouring the seed industry, said Dr. Suman Sahai, Director of the Gene Campaign, a leading NGO at New Delhi working on issues of bio-resources, food and livelihood security, farmer's rights, indigenous knowledge and GM technology. She was inaugurating an awareness seminar on Indian legislation on Protection of Plant Varieties and Farmer's Rights at the Communication Centre, Mannuthy on August 11. The new Seed Bill will replace the old Seed Act of 1966 which was meant to govern trading in seed. A law regulating the seed trade is necessary to ensure that farmers are protected against spurious seeds and that seed producers are obliged to put into the market only seeds of good and reliable quality. Such a seed law must encourage competitiveness to ensure good quality and low prices and not encourage monopolies. The Seed law must ensure that the seeds produced by farming communities (Farmer Varieties) are treated on par if not preferentially. The law must provide for a transparent system of seed testing and evaluation of performance so that the farmers get good inputs and the nation's goals of agricultural and food production are met in the most effective manner. The Seed Bill facing Parliament fails on almost all of these counts.



Farmer's Rights vs Seed Industry

Seeing the Bill, one gets a sense that the seed industry, which has not hidden its great unhappiness over the distinctly pro-farmer provisions of the Protection of Plant Variety and Farmers Rights Act (PPVFR), has now >>>

Chief Minister Inaugurates Golden Jubilee

Sri. Oommen Chandy, Chief Minister of Kerala formally inaugurated the Golden Jubilee Celebrations of the College of Veterinary and Animal Sciences, Mannuthy, on June 4 in a colourful function presided by Sri. P.P. George, MLA. Sri. Therambil Ramakrishnan, Speaker, Kerala Legislative Assembly honoured 36 senior scientists who could bring externally aided projects to the Faculty. Sri. Thiruvanchoor Radhakrishnan, Minister for Irrigation laid foundation stone for a project for water conservation financed by *Jalanidhi*. Sri. K.R. Jyothilal, IAS, the Executive Director, KRWSA, was also present. Sri. K.P. Rajendran, MLA unveiled the Golden Jubilee Logo in front of the college. Sri. K. Radhakrishnan, Mayor of Thrissur presented Dr. P.G. Nair Endowment Award for the Best Teacher to Dr. M.R. Saseendranath, for the Jubilee Year. Dr. K.V. Peter, Vice Chancellor welcomed the gathering. Dr. E. Nanu, Dean presented a report. Dr. C.B. Manomohan, General Convenor proposed vote of thanks.



succeeded in reclaiming ground by getting the PPVFR effectively scuppered. The draft Seed Bill undoes most of the pro-farmer provisions of the PPVFR. Worse, the government has elected to sideline the Farmers Rights Act and make the Seed Bill the dominant legislation, sending the signal that in the seed sector, it is the industry that will hold sway, not farmers.

The Seed Bill requires mandatory registration of the varieties/seeds which the PPVFR does not. In the PPVFR, the breeder applies for registration for a Plant Breeders Right. This right is valid for a period of 15 years for crop varieties and 18 years for trees. The Seed Bill allows the period of protection to be doubled so that the seed variety can be protected by the seed producer for 30 years and 36 years respectively. This extension of the seed owner's right will allow monopolies to be established.

Key differences between the Seed Bill and the PPVFR relate to declaring the origins (parentage) of the variety, the conditions for multi location testing and who will conduct these tests, level of transparency maintained on grant of registration, price control and the treatment of farmer varieties. While the PPVFR requires the declaration of the origin of the variety with pedigree details, the seed bill does not.

With respect to testing the new variety, the PPVFR lays down that the national authority will conduct the tests for distinctiveness, novelty and utility of the variety. The seed bill does not specify who will conduct the tests for establishing the usefulness of the new variety. This lacuna can be misused unless it is clarified. The PPVFR allows legitimate opposition to the grant of a registration for a new variety before registration is granted. People have an opportunity to raise objections if they have reason to think that the variety is not what is claimed. In the case of the Seed Bill, the registered varieties will be made known only through periodic publications. The public has no opportunity to object to a new variety for any reason. This lack of transparency could mean that varieties of dubious performance could get registered without giving people a chance to oppose such grants.

The PPVFR accords recognition to the contributions of the farming community in many ways which is not the case in the Seed Bill. The PPVFR recognizes the farmer as conserver, cultivator and breeder of new varieties. The law therefore protects the farmer in all these roles. The farmer varieties are hence eligible for protection under the Act and such varieties can be registered without paying a fee. In the Seed Bill, although farmer varieties are eligible for registration, this can only be done after the payment of the necessary fees. This will place a

Biennial Scientists Meet of AICRP

The Kerala Agricultural University hosted the Biennial Scientists Meet 2005 of the AICRP on Water Management and Chief Scientists Meet of AICRP on Ground Water Utilisation (ICAR) during May 24-27. The Meeting was organized by the All India Co-ordinated Research Project on Water Management (ICAR) and the Agronomic Research Station, Chalakudy at the Hotel Merlin International, Thrissur. The function was presided over by Dr. K.V. Peter, Vice Chancellor, KAU. Dr. D.K.Paul, ADG, (IWM), ICAR inaugurated the meet. Dr. B.K. James, Project Director, AICRP on Water Management, WTCER, Bhubaneswar, Dr. E.J. James, Director, CWRDM, Dr. S.K. Chaudhari and Dr. S.K. Jena, Project Coordinators, were also present. The participants included scientists from 25 centers of AICRP (WM) and 9 centers of AICRP (GWU).



During the technical sessions, the research achievements of all the centers were discussed and recommendations were formulated. The technical programme for 2005-06 were also discussed and approved. The Scientists and technical staff involved in the design, fabrication and evaluation of KAU Micro

sprinkler developed at ARS, Chalakudy were honoured at the function by presenting mementos and certificates.

financial burden on small farmers who have good material to register but may not be able to afford the cost of registering their varieties.

Further cause for alarm are the provisions of the Seed Bill that deal with price control. In the PPVFR, regulation of seed supply and seed price is to be managed through a process of compulsory licensing. This safeguards the interests of the farming community since it places the responsibility of ensuring an adequate seed supply at reasonable price, on the government. The Seed Bill fails to provide any such protection to the farmer. There is no mechanism to regulate seed supply or seed price. This could result in a high cost of seeds fixed arbitrarily by the seed companies, leaving the government with no means to control the price. It could also mean that seed providers are under no obligation to ensure a reasonable seed supply to farmers. This will defeat the very rationale that had kept seed production in the public sector so far.

Issues of concern

There are other issues of concern. The Seed Bill is silent on the origin and ownership aspect of a registered variety for trade. This will facilitate unrestricted commercialization of varieties in the public domain, including farmer varieties, by private parties. On top of this, there are no opportunities for benefit sharing post commercialization, as is the case in the PPVFR.

The Seed Bill attempts to bypass the PPVFR in other ways. It seeks to nullify the need for seeking a Plant Breeders Right (PBR) in order to obtain rights to market the new variety. This allows evasion of the public interest liabilities that are linked to the PBR.

The ambiguity of the Bill on multi location evaluation of varieties which is a standard practice followed by ICAR (Indian Council of Agricultural Research), can open the door to exaggerated performance claims which because they will not deliver, will hurt the farmers. Further, the grant of registration to a seed variety without concurrent registration for PBR, allows the seed owner to evade the onus of compulsory license provisions which protect the cultivators from high seed price and inadequate seed supply. Because the Seed Bill does not require the parentage of a variety to be declared, it allows misappropriation of materials belonging to others. These could be farmers or public sector institutions. The seed owners could in principle have free access to all available agrobiodiversity, without having to go through prior informed consent or engaging in benefit sharing. All this amounts to legalizing the piracy of valuable genetic materials like elite breeding lines.

Liability and Compensation

The Liability and Compensation provisions of

the PPVFR that allowed farmers to be compensated for spurious or poor quality seeds, has been dispensed with in the Seed Bill. Instead the farmer must try as best as he can, to claim compensation through District Consumer Courts. This will be a daunting if not an impossible task for small farmers. Apart from that, the District Forum or the State Council under the Consumer Protection Act has no expert knowledge in agriculture, to be able to award a fair decision. A straightforward insurance package linked to the seed would be a system that would work far better for farmers. If the seeds did not perform, the insurance claim would become automatic.

The stringent punishment and large penalties for violating the law that was put in as a deterrent against bad seeds in the PPVFR, has been reduced to a token which no one needs to be afraid of. The loophole that has been created to allow provisional registration of transgenic varieties is preposterous. It not only violates biosafety norms, but also clearly provides a particularly favoured condition for the multi national companies who are the greatest producers of transgenic seeds.

Finally, the bill is highly bureaucratic. The system of seed inspectors and central and state seed testing institutions with unbridled (often misused) powers, that have proved to be thoroughly incompetent in enabling an effective seed trade, have been retained in the Seed Bill when there was an opportunity to come up with a better alternative. Everywhere in the Bill there are opportunities for bureaucratic interventions which provide an opportunity to maneuver and manipulate many critical aspects of the Bill. Not only does this indicate a complete lack of transparency in the implementation of the provisions, it allows opportunities for back-door actions. The high level of bureaucratic intervention is likely to lead to biased actions and genuine wrong or misinformed decisions.

RECOMMENDATIONS FOR CHANGES IN THE SEED BILL

1. The Seed Bill should be harmonized with the Protection of Plant Variety and Farmers Rights Act (PPVFR), 2001 and the Biodiversity Act, 2002.
2. Nothing in the Seed Bill shall dilute the rights and protections granted to farmers under the PPVFR.

FOUNDATION DAY CELEBRATED

The fiftieth Foundation Day of the College of Veterinary and Animal Sciences, Mannuthy was celebrated on August 1 with a State level seminar on Advances in Zoonotic Disease Management and a get together of the Alumni of the Veterinary College.

ICAR Book Exhibition

An exhibition of books on agriculture and bioscience subjects was arranged at the College of Horticulture, Vellanikkara from Sept. 30 - Oct.1. All publications of the ICAR were displayed in the exhibition. The exhibition was a great opportunity for the libraries, students, teachers and researchers in Thrissur area to select and purchase books. Books in agriculture, veterinary and animal sciences, dairy technology were available for purchase.



3. Registration of varieties under the Seed Bill shall require a sworn declaration of the parentage of the variety and make provisions for benefit sharing in harmony with the PPVFR and the Biodiversity Act, when farmer varieties and public sector varieties are used.
4. Registration for sale should be required only for new varieties as in the Seed Act 1966 which limits the requirement to notified varieties. No registration should be required for extant varieties and landraces.
5. Wherever registration provides for marketing rights, there should be explicit provisions for ensuring adequate seed supply at a reasonable price.
6. The compensation for non-performance of seed supplied by agencies must be regulated through the National Plant Variety Authority, not the District Consumer Courts as in the present draft Bill.
7. The duration of protection granted to registered varieties in the Seed Bill should be commensurate with what is granted under the PPVFR. An extension of five years may be considered for those varieties that are very popular with farmers, provided the decision is taken transparently.
8. The provisional permission granted to transgenic varieties is dangerous and violates principles of biosafety, it must be rescinded.
9. Multi location testing of varieties bred by the private sector must be done by the ICAR. It is proposed that industry contributes to a fund to pay for multi location testing but the testing itself should be done by the ICAR.
10. The small token penalties for violations contained in the Seed Bill must be revised. When the declared source of registered material has been accessed illegally,

registration would be cancelled and criminal and civil liability will be determined.

11. To ensure transparency, a process for pre-grant opposition to registration of a seed variety must be included in the Seed Bill, like it is in the PPVFR.
12. An autonomous institution should be established to do seed testing by DNA finger printing.
13. A consultative process of governance should be established where the communities that will be affected are part of the decision making process.
14. The Seed Bill contains several provisions biased in favour of a specific stakeholder; it is against the interest of farmers and in that sense, against the larger national interest. Parliament may therefore refer the Bill to a Joint Parliamentary Committee with the mandate to prepare an amended draft, rectifying the existing drawbacks of the Bill in consultation with stakeholders.

Excerpted from the speech delivered by Dr. Suman Sahai while inaugurating the awareness seminar on Protection of Plant Varieties and Farmers Rights on August 11, 2005. The opinion expressed on the seed bill is entirely that of Dr. Suman Sahai. She can be contacted at genecamp@vsnl.com

All India Dog Show

All India dog show was organized on Sept. 18, at Mannuthy, in connection with the Golden Jubilee Celebrations of the College of Veterinary and Animal Sciences, Mannuthy. The programme was a joint venture with the Thrissur Canine Club. Over 170 dogs belonging to 30 different breeds brought from various states of the country participated. Over 6000 people witnessed the show.



Patent Granted for Coconut Husking Tool

The simple hand-operated coconut husking tool, named 'Keramithra', developed in 1995 in the Kerala Agricultural University at its Kelappaji College of Agricultural Engineering & Technology, Tavanur, by Sri. Jippu Jacob, Associate Professor and Sri. Joby Bastian, Assistant Professor has been granted a patent (Patent No.192670) by the Patent Office, Government of India. This is in response to the application filed on August 25, 1995. The patent is jointly in their names and the KAU. This tool, commercially released in 1996, is now very popular in Kerala and gaining popularity in other coconut growing regions in India and abroad like Indonesia, Sri Lanka etc. Also, it won the 1999 Republic Day Award for Meritorious Inventions instituted by the National Research Development Corporation (NRDC).



Annual Review Meeting of KVK

Annual Review Meeting of the Krishi Vigyan Kendras (KVK) of South Zone States, comprising Goa, Karnataka, Tamil Nadu, Pondicherry and Lakshadweep was held at KAU from Sept. 28-30. Sri. C.K.Chandrappan, M.P inaugurated the meeting Sri. P.P. George MLA presided over the function. Dr.S.Prabhukumar, Zonal Co-ordinator of KVKs and Dr.V.K.Raju, Director, Kerala Plantation Corporation Ltd. spoke on the occasion. Dr.K.V.Peter, Vice Chancellor welcomed the gathering. Dr.M.K.Sheela, Director of Extension proposed vote of thanks.

Thirty six KVKs in the zone presented their achievements in the areas of on farm testing and verification of techniques to different farming situations, popularization of proven techniques for large scale adoption through front line demonstrations and providing refresher training to field level functionaries of the line departments. The meeting provided a forum for exchange of innovative strategies and approaches adopted by different KVKs.

General Council Reconstituted

General Council of Kerala Agricultural University has been reconstituted with the following members for a period of three years from June 18, 2005.

Ex-officio members

- The Chancellor
- The Pro-Chancellor
- The Vice Chancellor
- The Agricultural Production Commissioner
- The Secretary to Government Department of Agriculture
- The Secretary to Government Department of Finance
- The Secretary to Government Department of Fisheries
- The Secretary to Government Department of Animal Husbandry
- The Director of Agriculture
- The Director of Animal Husbandry
- The Director of Dairy Development
- The Director of Fisheries
- The Principal Chief Conservator of Forests
- The Chairman, Rubber Board
- The Chairman, Spices Board
- The Chairman, Marine Products Export Develpt. Authority
- The Director, CPCRI
- The Director, KFRI

Representative of ICAR

- Dr. B. Balasundaram
Director, Sugarcane Breeding Institute

The MLA representing the constituency in which the Headquarters of the University is situated

- Sri. P.P. George MLA

ELECTED MEMBERS

Members of the Legislative Assembly

- Sri. A.K. Balan, MLA
- Sri. Umesh Challyil, MLA
- Sri. K.A. Chandran MLA
- Sri. A.K. Moni MLA

One Member from the Deans of Faculties of the University

Vacant

Constituency of Teachers of the University

- Dr. Jose Joseph
- Sri. P.K. Sureshkumar
- Dr. P.B. Pushpalatha
- Dr. Joy Mathew

Constituency of students of the University

- Sri. J.S. Shubin
- Sri. Abdul Gafoor

Constituency of Non teaching staff of the University

- Sri. P. Sreejith
- Sri. R. Vijayan

Constituency of Permanent Laboures of the University

- Sri.M.S.Pushpakumar
- Sri. T. Surendran Pappachani

Members nominated by the Chancellor

Scientists

- Dr. F.M.H. Khaleel
- Dr. M.K. Sheela
- Dr. R. Sabarinathan Nair
- Dr. K. Gopakumar

Farmers

- Smt. Alice Joseph
- Sri. Suresh
- Sri. S. Harindranath
- Sri. I. K.Subramanian Master

Member from the Association of Planters Kerala

Adv. Cherian Kavanal

Presidents of Grama Panchayaths

- Sri. P.V. Balachandran
- Sri. P.A. Salam

Other Members

Three members to represent the University of Calicut, Cochin and Kerala

- University of Calicut – Vacant
- Cochin University of Science & Technology – K.A.Zakkariya
- University of Kerala - Vacant



Best Teacher Award

Dr. M.S. Saseendranath, Assoc. Professor & Head, Dept. of Veterinary Epidemiology and Preventive Medicine, College of Vety & Animal Sciences, Mannuthy has bagged the PG Nair Endowment Award for the "Best Teacher" in the Faculty of Veterinary & Animal Sciences for the year of 2003. This award is in recognition for his contribution in teaching, research and extension activities in the concerned field.

Protection of TK and Genetic Resources Under IPR Regime - Issues

India has one of the world's largest reservoirs of Genetic Resources. Through its forest, wetland, and marine areas, India has about 7-8% of total recorded species of plants and animals in this biosphere. The statistics reveal that about 1,06,565 species of animal, plants, fungi and micro organism have been identified, catalogued and classified from different bio- geographic zones in India. It is only a part of the species available in India, a lot more is left to be explored and documented. In earlier period, when man was much associated with the nature for their survival, communities developed these genetic resources as source of food, for maintenance of health, agriculture and for other uses. Though development of civilization and urbanization has reduced this dependence certain local and indigenous communities preserve and develop this knowledge base. The advent of biotechnology and genetic engineering enabled large corporations to produce marketable products out of this knowledge base and reap profits without giving anything to these communities.

Intellectual Property Rights - An overview

Intellectual property is the reward given by the society/state to creator for the intellectual contribution made by him to the society. This is a mechanism adopted by the states to encourage more inventions/creative action ultimately resulting in the betterment of people. Thus a limited private property protection is given to the original person who has made this contribution. But rights depend on the territoriality, item claiming to be protected and are also subject to limitations based on public interest. Now the IPR family includes, Copyright, Patent, Trademark, Industrial Designs, Geographical Indication, Trade secret, and integrated circuit Designs. It also include protection of plant varieties and biological diversity.

Nature and Characteristics of Traditional knowledge (TK)

Traditional Knowledge, the information possessed by local and indigenous communities for centuries, has been developed by them as a strategy for survival in the biosphere. Some important features of this knowledge base are as follows ;

- The knowledge is transmitted from generations to generations

- Learned through observation and hands on experience
- Impossible to identify the original creator of the information
- It is inseparable part of their cultural life.

Protection of TK under IPR Regime-Issues

The protection of traditional knowledge base possessed by the traditional communities under IPR regime faces many hurdles. Main of them are

- The communities considered this Knowledge base as gift of God and not as a private property to be claimed as monopoly.
- Since this knowledge base is being possessed by traditional communities, the original owner of it cannot be identified
- Many of this knowledge base will not satisfy the strict criteria of IPR Regime. For e.g. It will be very difficult to satisfy novelty, inventive step and true and first inventor for a patent claim involving the wound healing property of turmeric. Apart from that the traditional communities use the extracts and mixture, and not the particular molecule which is the cause for the expected result. This also makes their claim for a patent a weak one.

Biotechnology and Exploitation of Traditional knowledge

The importance TK and genetic resources has increased after the advances made in the field of biotechnology . The new modes of biotechnology, particularly mapping and

genetic engineering enabled, identification of the gene responsible for particular trait or characteristic of a plant and to isolate and characterize the particular gene of DNA from one organism to another. With these technology, it has become much easier for the modern industries to develop new and improved form of drugs, crops, products and process using TK from the genetic resources, as the knowledge base is capable of producing lead molecules in these discoveries. The lead provided by TK had increased the rate of discovery by saving time, money and investment of these pharma and agricultural companies.

The new patent regime under the TRIPS (Trade Related of Intellectual Property Rights) mandated uniform standards for protection for all new products, processes irrespective of the technology used. It also provided for patent protection or an effective *sui generis* protection for plant varieties. This enabled the technology driven corporations to claim patents on their inventions even if it was based on Traditional Knowledge. In a study on a randomly selected 762 U.S. patents, having a direct relationship with medicinal plants 374 found to be on Traditional Knowledge.

Impact of Exploitation of TK on Genetic Resources & Traditional Communities

The patenting of genetic material will result in indirectly granting ownership of genetic resources, which was in public domain to the patentees.

The marketing of the improved products developed through biotechnological inventions by the corporations may result in loss of market for the products of the community. These patented products can prevent the original products from entering into a market.

Vice Chancellor presents book to Rashtrapathi

Dr.K.V. Peter, Vice Chancellor, Kerala Agricultural University presented a copy of " Hand book of Industrial Crops" to Dr.A.P.J.Abdul Kalam, President of India at Rashtrapathi Bhavan, New Delhi. The book is a comprehensive exploration of 12 important agricultural components of economy and export trade. The book examines the aspects of cultivation and trade in addition to the available information of evolution and adaptation of each agricultural crop. The book focuses on commercial crops such as Arecanut, Cashew, Cocoa, Coconut, Coffee, Palm Oil, Rubber, Tea etc.



Once the importance of a material is identified, they are being planted without caring for the bio diversity resulting in the extinction of many traditional species.

The lives of traditional communities are closely associated with these genetic resources. If the genetic resources were destroyed it would affect the way of life of the community resulting in the extinction of knowledge base. These genetic resources not only provide livelihood but also a part of their cultural heritage. It is being taken away and made private property without giving any commercial benefit for the same.

Convention on Biological Diversity (CBD)

The protection of TK and genetic resources at the international level became a controversial issue between developed and developing countries. Developing countries possessed much of this genetic resources and TK, whereas the developed countries possessed the technology to tap these resources. The CBD was an attempt to compromise this converging interests. It arose during Earth Summit for U.N. Conference on Environment and Development held at Rio De Janeiro in June 1992. It is the first legally binding instrument that explicitly refers to the protection of traditional knowledge in genetic resources against exploitation. The prime purpose of CBD is to ensure conservation of biological diversity, sustainable use of its components. The fair and equitable sharing of the benefits arising out of their utilization with the indigenous communities and local communities. It provides the states (sovereign countries) the rights over the natural resources

WORLD ZOONOSES DAY COMMEMORATED

The World zoonoses day was commemorated by the College of Veterinary and Animal Sciences, Mannuthy on July 6, with three major regional programmes. In the Mannuthy Campus, a field programme of rabies containment, an exhibition and seminar on zoonotic diseases and a quiz competition were organized. An awareness seminar was organized on rabies at Kandanassery Grama Panchayath which was under scare from a rabid dog which attacked about 27 persons and a number of animals during the previous weeks. One day Scientific Seminar on zoonotic diseases and a state level quiz competition for high school students were organized at the 'Malabar Gate', Kozhikkode with the assistance of Indian Veterinary Association,

MANGOFEST

King of the fruits, mango was highlighted in an unique function depicted "Mangofest 2005" organized at College of Agriculture, Padannakkad on May 14, under the auspices of Students' Union, KAU and Students' Union, College of Agriculture, Padannakkad. Sri.M.Kumaran, MLA inaugurated the programme. Fruits from the twenty two rare varieties of mango grown in the college campus along with rare pickle varieties from RARS, Pilicode and choicest table varieties from Agricultural Farm, Karimbam were displayed in the stall. A seminar on "Conservation of local mango varieties" was held as a part of the Mangofest. Dr.Jayaprakash Naik, Associ-



ate Professor (Plant breeding & Genetics) led the discussion highlighting the richness of mango varieties in North Kerala.

and the authority to determine access to their genetic resources. The role of traditional communities as protectors of genetic resources was recognized by this convention. It also provides for access and sharing of genetic resources based on mutually agreed terms, access to technology and transfer of technology to developing countries.

The Patent Act as amended in 2002

The Second Patent Amendment Act, passed to make Patent Act, 1970 in compliance with the TRIPS Agreement contained certain provisions to prevent traditional knowledge patenting. Sec. 3 (p) provides that an invention is not patentable if it, in effect, is a traditional knowledge or is an aggregation or duplication of known properties of traditionally known components. It also ensures that invention involving biological material should disclose the source and geographical origin of the biological material. Non-indication or false indication of biological material is a ground for opposition or revocation of Patent. The patent can also be revoked on the ground that there is prior art among the local and indigenous communities.

The Protection of Plant Varieties and Farmer's Rights Act, 2001

Article 27 (3) of the TRIPS Agreement mandates all member countries to protect plant varieties either under patent system or effective *sui generis* system. Union for the Protection of New Varieties of Plants (UPOV), was an international attempt to protect new varieties of plants so as to encourage breeders by protecting their investment. Under this new plant varieties were given 15 years of protection. The plant variety bill based on UPOV adopted in 1991 was opposed since it failed to consider the interests of farmers and farming community of India. Thus the new Act included 'extant variety' and

'farmers variety' for protecting the rights and knowledge of the Indian farmers. By introducing the concept of Farmers' right, the Act expressly provided for the protection of knowledge base of the farmers or the farming community and has recognized the role played by the varieties of farmers in developing the new variety. It has also taken following measures to prevent the exploitation of the knowledge base of traditional communities by the techno savvy large corporations.

The Act provides for registration of a variety, which has been traditionally cultivated and evolved by the farmers in their fields. Thus it enables the documentation of traditional varieties, protecting it from misappropriation by modern industries. In order to prevent the exploitation of knowledge base of the farming community the Act also provides for disclosure of the source of genetic material and contribution of the farming community while registering the new variety.

It also provides for benefit sharing to the communities. After granting of certificate of registration to the breeder for the new variety, the Protection of Plant Varieties and Farmers Rights Authority notifies the details of the protected varieties and invites claims for benefit sharing. After such invitation the interested parties, i.e. any person, or group of persons or non governmental organization can submit the claim of benefit sharing. The authority fixes the amount and asks the breeder to deposit the amount to gene fund, in order to distribute among the beneficiaries. The Act also provides for compensation to village or local community for their contribution in the evolution of the variety.

The Biological Diversity Act, 2002

The Act is passed to fulfil the obligation under

Workshop on Package of Practices Recommendations: Crops



Karshakasree Sri.T.V.Thomas, urged that multiple cropping has to be adopted by the farmers so that agricultural activities can be undertaken round the year rather than depending up on a single crop at their peril. He was inaugurating the workshop on Package of Practices Recommendations- Crops :2005 at Vellanikkara on October 25. He stressed that new technology should be developed to

help the farmers during drought, flood, and pollution.

Delivering the presidential address Dr.K.V.Peter, Vice Chancellor, stated that Kerala has been experiencing a negative growth of -5% in the agricultural sector for the last few years. Now only 16% of the human workforce in Kerala is engaged in agriculture and there is a steady migration of rural population to urban areas in search of gainful employment. Sri.M.N.Babu, Addl. Director of Agriculture, Dr.V.K.Raju, Director, Plantation Corporation of Kerala Ltd, Sri.Asok Kumar Thekkan, Chief Exe. Officer, Vegetable and Fruits Promotion Council of Kerala, Dr.S.Janardhanan Pillai, Director of Research and Dr.R.Muraleedhara Prasad, Professor of Extension, Communication Centre, KAU spoke on the occasion. Dr.M.K.Sheela, Director of Extension welcomed the gathering.

Convention on Biological Diversity. Objectives of the Act are to ensure conservation of biological diversity, sustainable use of the components and to ensure equitable sharing of benefits arising out of the use of biological resources. It also regulates access to genetic material and the knowledge associated with it and to ensure the benefit sharing in the case of appropriation of the knowledge base. Main features of the Act are as follows :-

Non-citizens, citizens residing outside India and Foreign corporations must obtain prior approval from National Biodiversity Authority (NBA) before accessing any biological resources occurring in India for research, commercial utilization etc.

It also prohibits transfer of the result of research relating to any biological resources occurring or obtained from India by any person to a non-citizen, a body corporate or corporation outside from India without the prior approval of NBA.

It also provides that no application for intellectual property can be made in India or outside for any invention based on any research or information on a biological resource obtained from India without the approval of NBA.

The NBA while granting approval for the utilization of biological resources or intellectual property rights is bound to ensure equitable sharing of benefits arising out of the

use of accessed biological resources, their by products, innovations and practices associated with the knowledge there to in accordance with the mutually agreed terms and conditions between persons applying for such approval, local bodies concerned and the benefit claimers.

The Act also provides for constitution of Biodiversity Management Committee under every local body for the purpose of promoting conservation, sustainable use and documentation of biological diversity.

Though these legislation address the issue of biopiracy, unless the communities are made aware of the value of their knowledge base, it can be exploited further. These legislations also fail to grant ownership of knowledge base to these communities. The concept of 'prior informed consent' for appropriation of genetic resources is adopted in CBD is absent in all these legislations. The Traditional Knowledge Digital Library (TKDL) Project initiated by the Centre for Science and Industrial Research (CSIR) for documentation of Traditional Knowledge is a welcome move, since it can be used as a valid evidence for prior art while opposing patents. More cautious and strong measures are required to monitor and fight against bio piracy, otherwise we need to pay royalty for our own traditional knowledge base.

Paper presented by Adv. Benoy K. Kadavan (bkkadavan@rediffmail.com), IPR consultant, Kochi in the Awareness Seminar on Indian Legislation on Protection of Plant Varieties and Farmer's Rights.

Nominated as Fellow



Dr.T.R.Gopalakrishnan, Assoc. Professor & Head, Department of Olericulture, College of Horticulture, Vellanikkara has been nominated as a Fellow of Indian Society of Vegetable Science. This

recognition is based on his contributions in the field of vegetable research. Dr. Gopalakrishnan is the Principal breeder for the development of improved vegetable varieties like Surya, Swetha, Haritha, Neelima (Brinjal), Ujwala (Chilli), Ambili (Pumpkin), Baby (Snake gourd) Anaswara, Lola, Vyjayanthi (Vegetable Cowpea) and associated with the release of a number of other vegetable varieties. He is the recipient of Young Scientist Award – 1989, Dr.Harbhajan Singh Award – 1993, Best Research Paper Award 2001 and Krishi Vigyan Award for the best Agricultural Scientist in Kerala.

HSI Gold Medal in Floriculture



Dr. P.K. Rajeevan, Asso. Professor & Head, Dept. of Pomology and Floriculture, College of Horticulture, Vellanikkara has secured the Horticultural Society of India (HSI) Gold Medal in

Floriculture for his contribution and leadership in Floriculture for the year 2005. For the last thirty years, Dr.Rajeevan has been working on Orchids, Anthuriums, foliage plants and other tropical ornamentals. He has made significant contribution in popularization of commercial floriculture. Presently he is acting as consultant for floriculture development for the Government of Goa.

Manjusha bags PTA Gold Medal



Kum. U. Manjusha (2000-2004) of the College of Agriculture, Vellayani, Thiruvananthapuram bagged the gold medal and a certificate of merit, instituted by PTA, College

of Agriculture, Vellayani. The award ceremony was conducted on the sidelines of the PTA annual meet held on August 29. Smt. Sugatha Kumari, the poetess and environmentalist was the chief guest. Sri.J.Venugopalan Nair presided. Dr. R. Vijayan, Dr.P.Santha Kumari and Sri. P.Jayaraman spoke on the occasion.

Gama Irradiation Chamber Installed

The Bhaba Atomic Research Centre (BARC), Mumbai, had approved the proposal for Production of Safe and Quality Meat by employing gama radiation and installed a Gama Radiation Chamber with a capacity of 5 litres in the Department of Livestock Products Technology, College of Veterinary & Animal Sciences, Mannuthy. KAU has become the only organization in the State and the first State Agricultural University to use irradiation technology on eatables.

As per Prevention of Food Adulteration Act 1998 (PFA) the minimum irradiation dosage for meat and meat products is set at 2.5 kGy and maximum 4 kGy. The

advantage of low dose of irradiation is that pathogenic and spoilage causing micro organisms and parasitic cysts can be destroyed without affecting the safety or quality of meat.

Training on Modern Diagnostics & Therapeutics



Training on Modern Diagnostics and Therapeutics was conducted for the Veterinary Surgeons of the State Animal Husbandry Department on August 16 at the Veterinary Hospital, Kokkalai. The programme was conducted with financial assistance of the State Veterinary Council and in association with Elite Mission Hospital, Thrissur. The training programme was inaugurated by Dr. K.K. Mohandas, Medical Superintendent, Elite Mission Hospital.

Course for Management of Captive Elephants

Refresher course on health care management for captive asian elephants was held at the Elephant Study Centre of the College of Veterinary & Animal Sciences, Mannuthy from Oct. 1-10. The training which was meant for Veterinary Surgeons from different States of

India was sponsored by the Project Elephant, Govt. of India.

KVK Kannur News letter

The first issue of the newsletter of the Krishi Vigyan Kendra, Kannur was released by Sri.K.A.Chandran, MLA & Member, General Council, KAU in the inaugural function of Annual Review meeting of KVKs of Zone VIII held in Thrissur from Sept. 28-30.

National Entrepreneurial Case Chase Competition

" Foster Foods", the Entrepreneurial Case written by Philip Sabu and Dr.A.Sukumaran bagged Best Case Award. The competition was organized by the Wadhvani Centre of Entrepreneurial Development (WCED), Indian School of Business (ISB) and Society of Entrepreneurship Educators(SEE), Hyderabad to create an archive of entrepreneurial cases written in the Indian context.

The case jointly written by Philip Sabu, Assistant Professor and Dr.A.Sukumaran, Associate Professor, College of Co-operation, Banking & Management titled "Foster Foods" won the case prize of Rs.20000/- and citation. In this case they have tried to project the various dimensions of entrepreneurship using Boban Kollannur, the mentor of Foster Group, as a model.

Book Release



Research work entitled "The philosophy of HRD and Arthasastra" by Sri. C.T. William, College of Horticulture, Vellanikkara was published and released by the Kerala Sahithya Academy on June 25. Dr. Sukumar Azhikode, eminent writer and orator released the book. Dr. Alexander Jacob, IPS delivered the keynote address. The eminent writer and film director Sri. Raveendran received the first copy from Dr. P. V. Ouseph, Head, Vastusastra, Sree Sankaracharya University of Sanskrit, Kalady.

The KAU NEWS is intended for free distribution among the KAU Community and officials of universities/institutions in Kerala and those connected with agriculture and allied sectors. All interested persons are invited to send comments and opinion to the Editor.

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South India Science Fair



Prasanth Nandakumar, Akhil Mohan, Mary Alexander, students of KAU High School and Smt.U.Najeema Teacher who participated in the South India Science Fair 2005 held at Secunderabad during January 2005.

KAU Football Fest

The KAU football tournament was held from October 13-15 at the College of Veterinary and Animal Sciences, Mannuthy. The College of Cooperation, Banking & Management was the winner and the College of Veterinary and Animal Sciences, Mannuthy was the runner-up in the tournament. Dr. E.Nanu, Dean, College of Veterinary and Animal Sciences was the guest of honor for the closing ceremony and he distributed the trophies.



The College of Cooperation, Banking and Management Football Team, the winners.

Inter University Foot Ball Tournament

The Inter University Foot Ball Tournament (South Zone) will be held under the auspices of KAU from November 21-30 at the Mannuthy Veterinary College ground on the sidelines of the Golden Jubilee celebrations of the College. Forty four universities in the South Zone will be participating in the tournament. Adv.C.Mohanachandran, President, Kerala Sports Council will inaugurate the matches on November 21 at 8.a.m. KAU is hosting the South Zone Inter University Foot Ball Tournament for the fifth time.