

## **Proceedings of the interactive meeting between representatives of the National Commodity Boards and ICAR officials**

A Meeting of the representatives of the National Commodity Boards and Senior ICAR officials was held on 22<sup>nd</sup> December, 2015, in NASC Complex, New Delhi under the Chairmanship of Dr. S. Ayyappan, Secretary DARE & DG, ICAR.

Dr. N. S. Rathore, DDG (Agril.Edn), ICAR, welcomed all the participants. He elaborated the concept and genesis of the meeting and stated that Prime Minister's Office has been emphasizing the need to develop strong linkages between Agricultural Universities (AUs) & Commodity Boards for accelerated promotion of agriculture based commodities. He mentioned that AUs and ICAR institutes are responsible for developing various technologies, products, processes and quality human resources in various specialized areas of agriculture and allied sciences for the benefit of farming community and other stakeholders. National Commodities Boards in collaboration with Agricultural Universities can play a very crucial role in promoting identifying/refining research/teaching agenda. He mentioned that National Agriculture Research and Education System with its 101 Research Institutes, 73 Agricultural Universities, and 642 KVKs is an ideal system and can collaborate for problem solving and dissemination of technologies.

The Chairman, Dr. S. Ayyappan underlined the continuing importance of agricultural research, education and extension for sustaining agricultural production against the odds of reducing profitability, increasing global competition, and adverse impact of biotic and abiotic stresses. He emphasized that Boards can help and interact with SAUs across the country for promotion of relevant technologies produced by AUs, and was of the view that linkages between Commodity Boards and AUs will lead to better dissemination of the developed technologies. He expressed that Boards may also invite proposals for Central Sector Research projects from ICAR Institutes and SAUs to tackle persistent problems and to address challenges in agriculture & allied sciences, and also play an important role in promoting the various production technologies. He emphasized that this interactions will be an excellent opportunity to draw complete strategies for common field of interaction. He stressed that the purpose of the meeting should be to chalk out the strategy and decide the future course of action for the development of various R & D activities on mutual basis.

It was also suggested that the subject matter Divisions of ICAR may look into these issues and clearly suggest action points for strengthening the linkages and future course of action for creating strong research & extension linkages between various boards, ICAR institutes and SAUs.

Dr A. K. Sikka, DDG (NRM) was of the view that since each Board supports a specific commodity they should collaborate with Institutes and universities in their specific domain area and the region. Spice Board must interact with universities in NEHR region and Central Agro forestry Research Institute, Jhansi.

Dr N.K. Krishna Kumar, DDG (Hort. Sci.), highlighted that ICAR has been interacting for long time with Boards for solving problems e.g ICAR played a crucial role in managing the

invasive coffee berry borer, papaya mealybug, a bug also on mulberry etc. Besides, NBAIR has taken the responsibility of conserving silkworm germplasm, a unique collaboration between ICAR & Silk Board. Similarly, ICAR has been in regular touch with tea board in mitigating pesticide residue. Coffee Board is a partner in the ICAR'S borer platform. He expressed his concern that any commodity treated in isolation cannot solve regional problems therefore, linkages in the specified areas need to be further strengthened.

Dr. K.M. L. Pathak DDG (Ani.Sci.) mentioned that already close linkages between National Dairy Development Board (NDDB) and National Dairy Research Institute (NDRI) exists. However, he indicated the need to extensively collaborate with CIRB, Hisar, CIRC, Meerut and CIRG, Makdhoom. Linkages with Wool Board to be encouraged to compete in the world market. The Board may help with establishing processing plant and skill development in production of wool and such training programmes may be organized for the benefit of different stakeholders.

Dr A. K. Singh, DDG (Agril. Extn.), suggested that a vast network of KVK exists in every part of the Country and there KVKs deal with all commodities, therefore, collaboration with Boards will encourage dissemination of new technologies, including processing and value addition technologies and finally for federating farmers into business group.

The inaugural session was followed by discussion spread over entire day wherein the representatives from various commodity Boards presented the mandate and activities of the Board and probable linkages and way forward with relevant State Agricultural universities and Institutes of the ICAR for addressing the gaps and common field of interaction.

It emerged during the course of discussion that interactions and linkages in specific areas already exist among Commodity Boards and NARES system. Some of the institutes like National Jute Board is actively collaborating with ICAR-CRIJAF, Barrackpore. A programme on "Improved cultivation and Retting Exercise" under which a Package of practices has been structured in consultation with CRIJAF and Jute Corporation India Ltd. and inputs under these schemes provided to the farmers has led to the yield improvement. ICAR is also collaborating with Central Silk Board and Spice Board for solving various problems. Similarly, Fishery Science Division, ICAR is collaborating with MPEDA, Coconut Development Board and Rubber Board and are sharing technology on rubber wood and FRP sheathed canoes. The linkages between ICAR and other Boards also exist and scientists are involved in solving problems faced by the National Boards in various areas. However, this opportunity offered the valuable suggestions and inputs and discussed the way forward. The Boards also highlighted the specific issues and constraints in which the collaborations could be beneficial for the stakeholders. The support of ICAR institutions and State Agriculture Universities for the various Boards and Vice versa in the following areas will mutually benefit both the organizations various commodity Boards and NARES institutions including agricultural universities for their linkages is provided in the Annexure I. The meeting ended with vote of thanks by Dr. P. S. Pandey, Asstt. Director General (EP&HS). The list of participants is also attached.

The strategies and action points that emerged from the deliberations are listed Commodity Board wise as follows:

## **1. Agricultural and Processed Food Products Export Development Authority (APEDA)**

### **Board priorities**

- May associate with KVKs to address the gaps between demand & supply for export
- Association with ICAR Institutes viz. CITH, Lucknow & IIHR, Bangalore, for export of other varieties of mangoes
- Assistance and certification to NRC on Meat, Hyderabad for quality testing of meat from different parts of the country.

### **ICAR priority**

- May address comprehensively the food safety issues to facilitate export of commodities across various Boards

## **2. National Horticulture Board (NHB)**

### **Board priorities**

- Green initiatives for cold storage can be supported by Board
- Awareness and dissemination of technologies developed by ICA
- Food safety parameters and address these issues even for domestic consumption
- Inclusion of temperate fruits (Kiwi, Blueberry etc.) need to be encouraged

### **ICAR priorities**

- Post harvest processing of produce
- Supply of disease-free planting material
- Sanctioning of research programs e.g developing microchips for diagnosing problems
- Developing tissue culture protocols for dates, and citrus.

## **3. Central Wool Development Board**

### **Board priorities**

- Minimum support price of wool in the country(Area wise)
- Linkages between Jute and Wool board, NRC Yak, CRISW, Avikanagar, NIRJAFT for developing novel products
- Training of rural youth through KVKs.
- Improve the marketing system of wool in the country and prevent the exploitation of sheep breeders.

### **ICAR priorities**

- Improvement in breed for-
  - High wool yield per sheep
  - Fine quality wool (Finer micron)
  - Disease resistance
- Research in development of new varieties of fodder for desert area
- Identify the problems of sheep breeders for the research and implement the solutions in the field

## **4. National Dairy Development Board:**

### **ICAR priorities**

#### **Animal Breeding:**

- Development of indigenous technology for sorting semen of cattle and buffaloes.
- Development of kits for early detection of pregnancy in cattle & buffaloes.
- Production/reproduction related data generation for various breeds of cattle & buffaloes, which can be used while formulating state-wise breeding policy.

#### Animal Nutrition:

- Breed-wise data generation on nutrient requirement for maintenance & milk production.
- Development of heat tolerance varieties of fodder crops
- Development of dual purpose varieties of cereal crops.

#### Animal Health:

- Development of techniques for early & rapid diagnosis of prevalent diseases.
- Vaccines against IBR and BVD infections & disease control models for dairy animals.
- Strategies for control of vector borne diseases like Babesiosis, Rift Valley Fever, African Horse Sickness & Blue Tongue that previously limited to tropical areas, may spread to cooler areas.

### **5. Coir Board of India**

#### **ICAR priorities**

- Funding for research on Dust Mite

### **6. Marine Products Export Development Authority (MPEDA)**

#### **ICAR priorities**

- Technologies developed by the Authority should be disseminated to wider area through network of KVKs.

### **7. Coconut Development Board**

#### **Board priorities**

- Network project for development of rapid multiplication technology under the leadership of CPCRI

#### **ICAR priorities**

- Urgent need for research funding in areas such as: Coconut as intercrop.
- Development of effective technology for management root wilt disease
- Refinement of technology for management of Ganoderma wilt disease.
- Start Postgraduate Diploma courses in Coconut processing technologies in Agricultural Universities.

### **8. National Jute Board**

#### **Board priorities**

- May provide infrastructure for demonstrations/trainings to farmers especially for rural women empowerment and employment.

#### **ICAR priorities**

- Better seeds and high yielding varieties are required due to declining land resources
- Research on development of jute as mulching material for soil conservation and greening and development of wasteland

### **9. Spices Board**

#### **Board priorities**

- Identify and prioritize the commodity for which collaboration is needed
- Support in technologies developed by ICAR for dissemination to farmers

- Support for availability of Quality Management Kits especially with reference to microbial residues in spices
- Support for capacity building programmes/ pilot projects on value addition of cardamom
- Multiplication of quality planting material supplied by ICAR

#### **ICAR priorities**

- Seed bank for indigenous spices may be established
- Supply of quality planting material through ICAR
- Development of integrated packages for nutrients, disease and pest management for large and small cardamom
- Post harvest processing

### **10. Coffee Board of India**

#### **Board priorities**

- Strengthening ToT & Capacity building programmes, entrepreneurship development
- Mechanization to improve efficacy of farm operations
- Expansion in traditional, NTAs and NER and in new areas

#### **ICAR priorities**

- Evolving disease & pest resistant (especially addressing stem borer problem), high yielding varieties of Arabica and drought tolerant Robusta varieties
- Developing new planting designs to suit mechanization

### **11. Tea Board**

#### **Board priorities**

- Extend ICAR in capacity building and training of farmers
- As women are involved in tea picking the CIWA may collaborate on gender sensitive issues
- Issue of pesticide residues in tea needs to be addressed by ICAR
- Production of organic tea

### **12. Cashew and Cocoa Development Board**

#### **Board priorities**

- Organize intensive thematic campaigns/ training programmes
- Empowering farmers by formation of societies/groups for marketing
- Establishment of demonstration plots in potential non-traditional areas

#### **ICAR priorities**

- Quality planting material production
- Research on intercropping with other crops viz. coffee, coconut etc. and its economic viability
- Management of stem borer in cashew
- Promotion of organic farming

### **13. Rubber Board**

#### **Board priorities**

- To train and produce skilled tappers
- To collaborate in hastening the adoption of technologies

- Jute Board may also collaborate with Rubber Research Institute in specific areas viz. lining/lamination of jute fabric with rubber

#### **ICAR priorities**

- Major concern is to reduce the gestation period in non- traditional areas

### **14. Central Silk Board**

#### **Board priorities**

- Ready Package of Practices from Board for dissemination by Krishi Vigyan Kendras in the area.
- Identify and prioritize the silkworm host (mulberry, som, tassar, arandi, arjun and others) for which collaboration needed
- Promotion of mechanization in sericulture

#### **ICAR priorities**

- Dissemination of developed technologies through KVKs
- Extension of soil testing facilities: to the sericulturists located in their respective areas
- Facilitation in multiplication of quality planting material of identified commodity and value addition.
- Dissemination of sericulture based agroforestry systems as a part of integrated farming system model
- Facilitation for mechanization in sericulture
- Use of mulberry as source of antioxidants

### **15. Tobacco Board**

Tobacco Board currently coordinates with CTRI, Rajamundry and NIPHM, Hyderabad for products, technology for growing tobacco economically and soil health management, including use of biopesticides.

#### **ICAR priorities**

- Control of *Orobanche* in tobacco with support from ICAR is the major concern.

From the discussion it emerged that PPVFRA can play an important role in Farmer's Variety Commercialization and Agriinnovate India Ltd. can play an important role in liasoning with Boards for dissemination of technologies from ICAR Institutes and State Agricultural Universities.

#### **Other action points**

- Boards may prioritize the commodity for which collaboration is needed
- Identify area in which the Board needs collaboration for technology development and trainings
- Arrange interaction meeting with the Institute/SAU
- ICAR Institutes / SAUs may develop a module for trainings in specific areas as per the requirements of the Board.
- Active participation of the Board members in the activities of ICAR is essential. Board representatives must participate actively in AICRP annual meeting/workshops.
- Under Student READY component; Boards can help students for In Plant Trainings and their subsequent placement in associated industries.
- Board can support research components in agricultural universities and ICAR-institutes in identified gaps.

- viii. Part of funds through export of commodities can be invested in setting up of quality control laboratories by Boards. APEDA could collaborate with ICAR to set up food safety/ referral laboratories (to tackle aflatoxin/ pesticide problem) to help exports.
- ix. Liaising of Boards with relevant KVKs to be strengthened.
- x. Demand driven proven technologies developed by ICAR could be supported for implementation by Boards.

The tentative list of SMDs/ ICAR Institutes/ Universities and for collaboration with various commodity Boards is also attached (Annexure I)

The SAUs, ICAR-Institutes and various Commodity Boards may interact with each other and progress /action taken in this regard may be communicated to the Education Division on half yearly basis for apprising the PMO and Cabinet Secretariat.

## Annexure I

### Tentative List of SMDs AUs and ICAR Institutes for Linkages and collaborations with Specific Boards for addressing major issues and concerns.

S. No	Name of the Board	SMD	Name of the University	Name of the Institute
1.	<b>National Jute Board</b>	Agril. Engg. Crop Sci.	1. BCKV, Mohanpur 2. UBKV, Coochbehar 3. OUAT, Bhubaneswar 4. RAU, Pusa 5. BAU, Sabour	1. NIRJAFT, Kolkata 2. CRIJAFT, Kolkata 3. CIRCOT, Mumbai
2.	<b>Tea Board</b>	Hort. Science Agril. Education Division Agril. Engg.	1. AAU, Assam 2. TNAU, Coimbatore 3. UAS, Bangalore 4. UAS, Raichur 5. BCKVV, Mohanpur 6. UBKV, Coochbehar 7. KAU, Thrissur	1. CIWA, Bhubaneswar 2. CIAE, Bhopal
3.	<b>Coffee Board of India</b>	Hort. Science	1. KAU, Thrissur 2. TNAU, Coimbatore 3. UAS, Bangalore 4. UAS, Raichur	
4.	<b>Spices Board</b>	Hort. Science	1. KAU, Thrissur 2. UHS, Bagalkot 3. UAHS, Shimoga 4. UAS, Bangalore 5. SKRAU, Bikaner 6. AU, Kota 7. AU, Jodhpur 8. SKNAU, Jobner 9. SKAUST- Kashmir, Srinagar 10. AAU, Jorhat	1. IISR, Calicut 2. CIARI, Port Blair 3. CAZRI, Jodhpur 4. NRCSS, Ajmer 5. CIPHET, Ludhiana 6. CIAE, Bhopal 7. ICARresearch complex for NEH region, Umiam
5.	<b>Rubber Board</b>	Agril. Engg	1. AAU, Assam 2. KAU, Thrissur 3. CAU, Imphal 4. TNAU, Coimbatore 5. OUAT , Bhubaneswar 6. UAS, Bangalore 7. UBKV, Coochbehar 8. AUs in Maharashtra	1. IINRG, Namkum, Ranchi 2. CPCRI, Kasaragod 3. CIFT, Cochin



6.	<b>Central Silk Board</b>	NRM	<ol style="list-style-type: none"> <li>1. TNAU, Coimbatore</li> <li>2. UAS, Bangalore</li> <li>3. IGKV, Raipur</li> <li>4. RAU, Pusa</li> <li>5. AAU, Jorhat</li> <li>6. UHS, Bagalkot</li> <li>7. UAHS, Shimoga</li> <li>8. UAS, Bangalore</li> <li>9. UAS, Dharwad</li> <li>10. MPKV, Rahuri</li> <li>11. MKV, Parbhani</li> <li>12. SKAUST-Jammu</li> <li>13. KAU, Thrissur</li> <li>14. BCKV, Mohanpur</li> </ol>	<ol style="list-style-type: none"> <li>1. NRC Agroforestry</li> <li>2. CARI, Jhansi</li> <li>3. ICAR Regional Centre NEH region, Umiam</li> </ol>
7.	<b>Coconut Development Board</b>	Crop Science Hort. Science	<ol style="list-style-type: none"> <li>1. KAU, Thrissur</li> <li>2. OUAT, Bhubaneswar</li> <li>3. TNAU, Coimbatore</li> <li>4. ANGRAU, Hyderabad</li> <li>5. NAU, Navsari</li> <li>6. UHS, Bagalkot</li> <li>7. UAHS, Shimoga</li> <li>8. UAS, Bangalore</li> <li>9. UAS, Dharwad</li> </ol>	<ol style="list-style-type: none"> <li>1. CPCRI, Kasaragod</li> <li>2. CIARI, Port Blair</li> <li>3. CIFT, Cochin</li> <li>4. CIAE, Bhopal</li> </ol>
8.	<b>National Dairy Development Board,</b>	Animal Sciences	<ol style="list-style-type: none"> <li>1. All Agriculture and Vet. University (Total no. of universities 65)</li> </ol>	<ol style="list-style-type: none"> <li>1. CIRB, Hissar</li> <li>2. CIRC, Meerut</li> <li>3. CIRG, Makdoom</li> <li>4. NDRI, Karnal</li> <li>5. IVRI, Izatnagar</li> <li>6. NINP, Bengaluru</li> </ol>
9	<b>The Marine Products Export Development Authority</b>	Fishery Sciences	All Agricultural Universities with Fishery Colleges	<ol style="list-style-type: none"> <li>1. CIFE, Mumbai</li> <li>2. CIFRI, Barrackpore</li> <li>3. CIBA, Chennai</li> <li>4. CIFT, Cochin</li> <li>5. CIFA, Bhubaneswar</li> <li>6. CMFRI, Kochi</li> <li>7. DCFR, Bhimtal</li> <li>8. CIARI, Port Blair</li> </ol>
10	<b>Agricultural &amp; Processed Food Products Export Development Authority (APEDA)</b>	Hort. Science	All Agricultural Universities	<ol style="list-style-type: none"> <li>1. ICAR Institutes in Crop Science &amp; Horticulture Science &amp; Agril. Engg.</li> <li>2. NRC on Meat, Hyderabad</li> </ol>
11	<b>Coir Board</b>	Hort. Sci.	<ol style="list-style-type: none"> <li>1. KAU, Thrissur</li> <li>2. OUAT, Bhubaneswar</li> </ol>	<ol style="list-style-type: none"> <li>1. CPCRI, Kasaragod</li> <li>2. CIARI, Port Blair</li> </ol>

			<ol style="list-style-type: none"> <li>3. TNAU, Coimbatore</li> <li>4. ANGRAU, Hyderabad</li> <li>5. NAU, Navsari</li> <li>6. UHS, Bagalkot</li> <li>7. UAHS, Shimoga</li> <li>8. UAS, Bangalore</li> <li>9. UAS, Dharwad</li> </ol>	
12.	<b>National Horticulture Board</b>	Hort. Sci.	All Agricultural & Horticultural Universities (Total No. of Universities 53)	<ol style="list-style-type: none"> <li>1. CIAH, Bikaner</li> <li>2. CISH, Lucknow</li> <li>3. CITH, Srinagar</li> <li>4. CIARI, Port Blair</li> <li>5. CPCRI, Kasaragod</li> <li>6. CPRI, Shimla</li> <li>7. CTCRI,</li> <li>8. Thiruvananthapuram</li> <li>9. DCDRD, Puttur</li> <li>10. DFR, Pune</li> <li>11. DMAPR, Boriavi</li> <li>12. DMR, Solan</li> <li>13. DOGR, Pune</li> <li>14. IIHR, Bengaluru</li> <li>15. IOPR, Pedavegi</li> <li>16. IISR, Calicut</li> <li>17. IIVR, Varanasi</li> <li>18. NRCB, Tiruchirapalli</li> <li>19. NRCC, Nagpur</li> <li>20. NRCG, Pune</li> <li>21. NRCL, Muzaffarpur</li> <li>22. NRCO, Pakyong, Gangtok</li> <li>23. NRCP, Pune</li> <li>24. NRC on Seed Spices, Ajmer</li> <li>25. CIAE, Bhopal</li> <li>26. CIPHET, Ludhiana</li> </ol>
13.	<b>Central Wool Development Board</b>	Animal Sciences	<ol style="list-style-type: none"> <li>1. SKAUST-Kashmir</li> <li>2. SKAUST-Jammu</li> </ol>	<ol style="list-style-type: none"> <li>1. CSWRI, Avikanagar</li> <li>2. NRC Yak, West Kemang</li> <li>3. NIRJAFT, Kolkata</li> </ol>
14.	<b>Cashewnut &amp; Cocoa Development Board</b>	Hort. Sciences	<ol style="list-style-type: none"> <li>1. BSKV, Dapoli</li> <li>2. KAU, Thrissur</li> <li>3. SKAUST-Kashmir</li> <li>4. UAS, Bangalore</li> </ol>	<ol style="list-style-type: none"> <li>1. DCR, Puttur</li> <li>2. CITH, Srinagar</li> </ol>
15.	<b>Tobacco Board</b>		<ol style="list-style-type: none"> <li>1. UAS, Bangalore</li> </ol>	<ol style="list-style-type: none"> <li>1. CTRI,</li> </ol>

			<ul style="list-style-type: none"> <li>2. UAS, Dharwad</li> <li>3. UAS, Raichur</li> <li>4. UHS, Bagalkot</li> <li>5. UAHS, Shimoga</li> <li>6. KVAFSU, Bidar</li> <li>7. TNAU, Coimbatore</li> <li>8. TNFU, Naggipattiam</li> <li>9. TANVASU, Chennai</li> </ul>	<p>Rajamundry, Andhra Pradesh</p>
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**The list of officials from ICAR and Commodity Boards who attended the meeting:**

- Dr. S. Ayyappan, Secy. DARE & DG, ICAR, Chairman
- Dr. N. S. Rathore, DDG (Agricultural Education)
- Dr. N.K. Krishna Kumar, DDG (Horticultural Science)
- Dr. A.K.Sikka, DDG (Natural Resources Management)
- Dr. A.K. Singh, DDG (Agriculture Extension)
- Shri M.R. Garg, General Manager (AN), National Dairy Development Board
- Shri Ravindra Kumar, Deputy Director (Dev.), Directorate of Cashewnut and Cocoa Development
- Dr. Biswajit Bera, Director (Research), Tea Board
- Shri G.K. Meena, Executive Dir., Central Wool Development Board
- Shri Anurag Purohit, Supervisor, Central Wool Development Board
- Shri Susant Pal, Chief Operation Officer, National Jute Board
- Shri B.N. Mitra, Manager (Extn.), Tobacco Board.
- Shri R. Jnanadevan, Deputy Director, Coconut Development Board
- Shri Jayaramraju, Scientist D, Central Silk Board
- Shri Y. C. Thampi Samraj, Project Director, RGCA, MPEDA
- Dr. K. U. Thomas, Joint Director, Rubber Research Institute of India, Rubber Board
- Shri U. Gopala krishna, Joint Director (Extension), Central Coffee Research Institute, Coffee Board
- Shri Rajendra Babu, Coir Board
- Shri J.K. Shukla, PRO, Coir Board
- Shri P.K. Singh, Deputy Managing Director, National Horticulture Board
- Pushpendra Arya, Deputy Director, National Horticulture Board
- Dr. Dinesh Singh Bisht, Scientist, Spices Board
- Shri Ravinder G. Singh, Agrinnovate India Ltd.
- Shri Dipal Roy Choudhury, Joint Registrar, PPVFRA
- Mr. Sunil Kumar, General Manager, APEDA
- Dr. B.B. Singh, ADG (O&P), ICAR
- Dr. S D Singh, ADG (Inland Fisheries), ICAR
- Dr. G. Venkateshwarlu, ADG (EQR), ICAR
- Dr. MB Chetti, ADG (HRD), ICAR
- Dr. K.L Khurana, Pri. Sci., Education Division, ICAR
- Dr M.K. Agnihotri, COE (Exam), Education Division, ICAR
- Dr. K. P. Tripathi, Pri. Sci. Education Division, ICAR
- Dr. Vanita Jain, Pri. Sci., Education Division , ICAR
- Dr. DevenderDingra, Pri. Sci. Agril. Extn, ICAR
- Dr N. Rana, Pri. Sci., Education Division , ICAR
- Dr. Nidhi Verma, Pri. Sci., Education Division , ICAR
- Dr. P. S. Pandey, ADG (EP&HS), ICAR

The proceedings will be forwarded to all the SMDs/ Institutes and SAUs and Boards for further necessary action.