Sub: Minutes of the Review Meeting of R&D Projects under NMOOP–reg.

Sir,

I am forwarding herewith a copy of the minutes of the review meeting of R&D Projects under NMOOP held on 13th August, 2016 at GBPUAT, Pantnagar for your information (enclosed list of projects).

Yours faithfully,

(Dr. Anupam Barik)
Addl. Commissioner (Oilseeds)

Encl. As above

Distribution:

1. Dr. J.P. Singh, Director, Directorate of Experiment Station, GBPUAT, Pantnagar
2. Dr. B.S. Mahapatra, Prof. Agronomy & P.I., GBPUAT, Pantnagar
3. Director Research, Directorate of Research Services, IGKV, Raipur
4. Dr. Rajendra Lakpale, Pr. Scientist, Agronomy, IGKV, Raipur
5. Sh. David Bergvison, Director General, ICRISAT, Hyderabad
6. Dr. P. Janila, Sr. Scientist, Plant Breeding, ICRISAT, Hyderabad
7. Director, ICAR-IIOR, Hyderabad
8. Dr. G.D. Satish Kumar, Sr. Scientist, Agril. Extension, ICAR-IIOR, Hyderabad
9. Dr. Anil Kumar, Director, ICAR-CAFRI, Jhansi
10. Dr. Uthappa, Pr. Scientist, ICAR-CAFRI, Jhansi
11. Dr. A.H. Mughal, Assoc. Prof., Faculty of Forestry, SKUAST, Srinagar
12. Director, Department of forestry & Environmental Science, KUMAUN University, Nainital
13. Dr. Ashish Tewari, Asst. Prof., KUMAUN University, Nainital
14. Dr. Ch. Srinivasa Rao, Director, ICAR -CRIDA, Hyderabad
15. Dr. G. Rajeshwar Rao, Pr. Scientist, Agro-Forestry, ICAR-CRIDA, Hyderabad
16. Dr. Naresh Bhatnagar, Dean (R&D), IIT, Delhi
17. Dr. S.N. Naik (Prof., R&D), CRDT, IIT, Hauz Khas, New Delhi-110016

Copy to:
18. PPS to Agriculture Commissioner, DAC&FW, Krishi Bhawan, New Delhi
19. PPS to Joint Secretary (Oilseeds), Krishi Bhawan, New Delhi
20. Asstt. Director General (O&P), ICAR, Krishi Bhawan, New Delhi
21. Asstt. Director General, Agro-Forestry, ICAR, Pusa, New Delhi
22. Director, Directorate of Oilseeds Development, Himayatnagar, Hyderabad-500029
23. Programme (oilseeds) section, Krishi Bhawan is requested to upload this matter on website of DoC&FW.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Project</th>
<th>Implementing Agency</th>
<th>Duration of Project</th>
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<tr>
<td>1</td>
<td>Productivity enhancement of rapeseed-mustard crops through technology implementation and their refinement under farmers field conditions in the state of Uttarakhand.</td>
<td>GBPUA&amp;T, Pantnagar</td>
<td>2015-16 to 2016-17</td>
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<td>2</td>
<td>Integrated development of Jatropha, Karanja &amp; Mahua.</td>
<td>ICAR-CAFRI, Jhansi</td>
<td>2015-16 to 2016-17</td>
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<td>3</td>
<td>Block demonstrations and training of raised bed technique of soybean cultivation.</td>
<td>IGKV, Raipur</td>
<td>2015-16 to 2016-17</td>
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<td>4</td>
<td>Bridging the production gaps in potential districts of sunflower and sesame through dynamic technology transfer.</td>
<td>ICAR-IIOR, Hyderabad</td>
<td>2015-16 to 2016-17</td>
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<td>5</td>
<td>Evaluation of different genotypes of wild apricot for oil yield under temperate conditions of Kashmir Valley.</td>
<td>SKUAST, Srinagar</td>
<td>2015-16 to 2016-17</td>
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<td>6</td>
<td>Promotion of Cheura and Wild Apricot through plantation and trainings in Kumaun region of Uttarakhand.</td>
<td>Kumaun University, Nainital</td>
<td>2015-16 to 2016-17</td>
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<td>7</td>
<td>Fast Tracking Release of High Oil and High Oleic Groundnut Varieties and Promoting their Adoption by Farmers for Enhanced Production and Quality of Groundnut Oil- (Phase II).</td>
<td>ICRISAT-Hyderabad</td>
<td>2016-17</td>
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<td>8</td>
<td>Evaluation &amp; upscaling of Karanja &amp; Simarouba.</td>
<td>CRIDA Hyderabad(AP)</td>
<td>2016-17</td>
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<td>9</td>
<td>‘Design and development of low cost post harvest equipments for Simarouba Seeds’.</td>
<td>CRDT, IIT Delhi</td>
<td>2016-17</td>
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Proceedings of the Review Meeting of R&D Projects under NMOOP held on 13th August, 2016 at GBPUAT, Pantnagar

The review meeting of R&D projects under National Mission on Oilseeds and Oil Palm was held on 13th August, 2016 at GBPUAT, Pantnagar under the Chairmanship of Dr. S.K. Malhotra, Agriculture Commissioner, DAC&FW, GOI. The list of participants is annexed.

At the outset, Dr. B.S. Mahapatra, Prof. Agronomy, GBPUAT welcomed the Chairman and other officials of DAC&FW and participants from various research organizations of the country attending the meet. In the introductory remarks, Dr. J.P. Singh, Director Research, GBPUAT, Pantnagar, outlined the objective of the meeting and thanked the DAC&FW for choosing the University as the venue for organizing this important meeting.

Chairman, Dr. S.K. Malhotra, Agriculture Commissioner in his opening remarks emphasized that oilseeds is a priority area as huge gap exists between the demand and availability of edible oils in the country. He said that after two consecutive years of drought, the prospect of oilseeds is encouraging this year owing to favourable monsoon. Area expansion and productivity enhancement are the two pillars through which production of oilseeds can be increased. Oilseeds being largely grown as rained crops need special commitment by the researchers and development agencies for achieving targeted production. During the current year, an allocation of Rs. 500.00 crores, has been earmarked for oilseeds development programme including large scale cluster demonstrations through KVKs of ICAR. These demonstrations may play a catalytic role in faster adoption of technologies. The R&D projects can play important role in development and demonstration of critical technologies for their up-scaling in close collaboration with State Departments of Agriculture for wider adoption by the farmers.

The technical session started with the presentation by Dr. B.S. Mahapatra, P.I. of the R&D project at GBPUAT. He informed that the project on rapeseed-mustard has been implemented in all three regions viz. Tarai, Bhabhar and Hill regions of the state. Rice-Yellow sarson-Summer rice has come up as a promising cropping system in Tarai area of Kumaun. The yield of yellow sarson variety Sweta has been recorded upto 17.0 qtl/ha on farmers field and that of mustard variety Pant Rai 20, more than 18.0 qtl/ha. In the hill region, where toria and mustard demonstrations were undertaken, average yield of 7.0-10.0 qtl/ha has been recorded. Chairman suggested that the university should introduce sprinkler irrigation system wherever feasible for effective management of protective irrigation during scarcity period and bio-intensive pest management should also be promoted.

Dr. P. Janila, Sr. Scientist, ICRISAT, Hyderabad in her presentation informed about identification of 13 high oil containing lines (17-22% higher) of groundnut which are in pre-release testing stage in various states. The entry ICGV 03043 is likely to be released from the CVRC and 3 others lines are likely to be released from the SVRC. Presently, 65 groundnut lines
combining high oil (46-52%) and high oleic acid (67-86%) have been developed and are under multi-location evaluation. The high oleic lines have great export potential. Procurement of essential equipment like NIR and quality publications are other highlights of the Phase-I of the project funded by DAC&FW. Chairman advised that the lines/genotypes developed through this project may be brought in the process of release at the earliest and final report be submitted.

Dr. Rajendra Lakpale, Pr. Scientist, Agronomy, IGKV, Raipur informed that introduction of raised-bed-furrow maker or BBF specially designed by the University with ridge maker on two sides, has been a good success in improving soybean yield in Chhattisgarh. Although yield level was low during kharif 2015 due to prevailing drought situation, 22.5% yield increase was observed under BBF system of planting over the farmers' practice. The highest yield of soybean obtained was 14.10 qtl/ha. During the current kharif season-2016 continuous rains during sowing time has discouraged soybean planting and some area has been shifted to pigeon pea and rice cultivation. Chairman advised that the prototype machine developed by the university should be popularized through Sub Mission on Agricultural Mechanization (SMAM) in the states.

Dr. G.D. Satish Kumar, Sr. Scientist, Agril. Extension, ICAR-IIOR, Hyderabad informed about analysis of 474 soil samples and conduct of 514 demonstrations on BMPs of sesame and sunflower in 4 states namely Karnataka, Andhra Pradesh, Telangana and West Bengal. Comparative yield performance of BMPs revealed upto 47.6% and 57.1% yield increase in sunflower and sesame, respectively over farmers' practice. Capacity building through 10 training programmes to farmers and extension personnel, 4 field days and development of 20 voice advisories were undertaken. Marketing of white sesame in West Bengal was an issue that needs to be resolved in consultation with project scientists at Kolkata.

Dr. Vimala Devi, Ex-Sr. Scientist, ICAR-CAFRI, Jhansi presented the results of progeny trials in Karanja. The genotype NRCP-92 (55.48 qtl/ha) was the highest seed yielder while NRCP-11 (43.0%) was the high oil yielding line. Variation between years and germplasm lines was too high, indicating lack of stable performance by the genotypes. 1000 seedlings of 2 karanja genotypes have been raised. Two trainings, one each for the farmers and trainers, were organized. It was suggested that clonal propagation of selected mother plants may be attempted for future comparison.

Dr. A.H. Mughal, Assoc. Prof., SKUAST, Srinagar presented R&D work done on wild apricot in the university. The centre has identified 75 wild apricot germplasm lines with high oil content such as S-16- Janagash (53.84%), S-17-Ramdhirpura (52.45%) etc. About 300 grafted saplings of CPTs have been raised and are under evaluation. Budding and grafting have been attempted in 1000 seedlings.

Dr. Ashish Tewari, Asstt. Prof., KU, Nainital informed that 400 plants of wild apricot in 1.0 ha area at Lamgara and 250 plants of cheura in 1.0 ha area at Deghat, both in Almora district, have been planted. 1500 seedlings of wild apricot and 1000 seedlings of cheura have been raised in the nursery. One farmers' training and one trainers' training programme have been organized for skill development.
Dr. G. Rajeshwar Rao, Pr. Scientist, Agro-Forestry, ICAR-CRIDA, Hyderabad informed about the superior lines in Karanja and Simarouba identified under the earlier NOVOD funded project. Since the project has been funded by DAC&FW from the current year, work on desired lines through clonal propagation has been initiated in both these species to obtain true to type progenies for evaluation. As a result of efforts made through this project, a good variability has been created. Chairman advised that CRIDA should utilize this variability and evolve suitable true to type propagation technology for mass production of planting material.

IIT, New Delhi who has been granted a project for refinement of post harvest equipment for Simarouba seeds during the current year 2016-17 was not present in the meeting.

Each centre was asked to present the future plan of work for the remaining period of the project i.e. 2016-17 and necessary modifications were suggested for incorporation in the work plan.

In the concluding remarks, Chairman desired that the outcome of the R&D projects should benefit the farming community and achieve the stated objective of increasing oilseeds production in the country. PIs should plan well in advance for timely sowing of experiments so that the performance of treatments is well expressed for drawing meaningful conclusions. The PIs should also work in close collaboration with State Departments of Agriculture/Horticulture for up-scaling of technologies for their wider adoption by farmers.

Actionable points:

- All the PIs of the R&D projects should identify critical technologies and make concerted efforts for scaling up of their demonstrated technologies in collaboration with State Departments of Agriculture/Horticulture and Seed Agencies.

  (Action: Respective PIs of the projects/SDAs/Seed Agencies)

- Since, TBOs have greater potential to be adopted under agro-forestry system efforts should be made to avail possible funding in future from RFS Division of DAC&FW for continuation of the programme as the funding for projects on TBOs may not be continued beyond 31st March, 2017.

  (Action: All PIs of TBOs projects/RFS Division, DAC&FW)

The meeting ended with vote of thanks to the Chair.

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ANNEXURE

List of participants of the Review Meeting of R&D Projects under NMOOP held on 13th August, 2016 at GBUAT, Pantnagar

1. Dr. S.K. Malhotra, Agriculture Commissioner, DAC&FW, Krishi Bhawan, New Delhi
2. Dr. J.P. Singh, Director Research, GBUAT, Pantnagar
3. Dr. Y.P. Dabas, Director Extension, GBUAT, Pantnagar
4. Dr. S.P. Pandey, Director & CEO IPR Cell, GBUAT, Pantnagar
5. Dr. Anupam Barik, Addl. Commissioner (Oilseeds), DAC&FW, Krishi Bhawan, New Delhi
6. Dr. Manoranjan Dutta, Consultant, Oilseeds, DAC&FW, Krishi Bhawan, New Delhi
7. Dr. B.S. Mahapatra, Prof. Agronomy & P.I, GBUAT, Pantnagar
8. Dr. Rajendra Lakpale, Pr. Scientist, Agronomy, IGKV, Raipur
9. Dr. P. Janila, Sr. Scientist, Plant Breeding, ICRISAT, Hyderabad
10. Dr. G.D. Satish Kumar, Sr. Scientist, Agril. Extension, ICAR-IIOR, Hyderabad
11. Dr. Vimala Devi, Ex-Sr. Scientist, ICAR-CAFRI, Jhansi
12. Dr. A.H. Mughal. Assoc. Prof., Faculty of Forestry, SKUAST, Srinagar
13. Dr. Ashish Tewari, Asstt. Prof., K.U., Nainital
14. Dr. G. Rajeshwar Rao, Pr. Scientist, Agro-Forestry, ICAR-CRIDA, Hyderabad
15. Dr. Ram Bhajan, Prof. Genetics & Plant Breeding, GBUAT, Pantnagar
16. Dr. M.S. Khan, Entomologist, GBUAT, Pantnagar
17. Dr. Anil Shukla, Prof., Agronomy, GBUAT, Pantnagar
18. Dr. A.K. Tewari, Prof., Plant Pathology, GBUAT, Pantnagar
19. Dr. M.S. Negi, Prof., Agronomy, GBUAT, Pantnagar
20. Dr. Usha Pant, JRO, Genetics & Plant Breeding, GBUAT, Pantnagar
21. Sh. Ashutosh Pandey, Tech. Asstt. (TBOs), DAC&FW, Krishi Bhawan, New Delhi
22. Mr. Nishant Kumar, Senior Research Fellow, GBUAT, Pantnagar
23. Ms. Meenakshi, Project Assistant, GBUAT, Pantnagar