

**Proceeding of the meeting on irrigated systems under CRP on CA at KAB-II on**  
**11<sup>th</sup> May, 2016**

The meeting of CRP on CA called by ADG (SWM) at KAB –II, ICAR New Delhi to finalize the treatment structure and streamline the activities including leadership for irrigated component of CRP-CA as suggested by the Expert and competent authority in the Annual Progress-cum-Review meeting held at ICAR-IISS, Bhopal started at 10.00 a.m. on 11.5.2016 in the Conference Hall of KAB-II under the chairmanship of Dr S.K. Chaudhary, ADG (SWM), ICAR, New Delhi. Representatives from lead centre and cooperating centres, namely, IARI, New Delhi; IIFSR, Modipuram; CSSRI, Karnal and IIWBR, Karnal attended the meeting. Dr. A.K. Biswas, LCPC, briefed about the agenda of the meeting in the context of irrigated ecosystem of CRP on CA. He recollected the observations and recommendations made in the previous two meetings of CRP on CA held at CIAE, Bhopal and IISS, Bhopal. He discussed about the issues raised in the annual progress-cum-review meeting at IISS, Bhopal and also read out the observations and recommendations.

The treatment structure of all centres under irrigated systems was compiled by the LCPC and was presented before the audience, and the concerned centre interjected the purpose of every treatment from the standpoint of conservation agriculture. Presentation of treatment structures for experiments to be undertaken by IARI, IIFSR, IIWBR, CSSRI was made by the respective PIs of the Institutes. The treatment structures were by and large satisfactory except in case of IIFSR, Modipuram. From the presentation of IIFSR, Modipuram, it was observed that none of the experiments being undertaken by IIFSR, addresses the first and second objective of the project. The institute should initiate suitable experiments at farmer's field and on-station to fulfill the requirement of the first and second objective. The experiments recently initiated by the institute do not come under the purview of CA. The progress of work carried out under CRP on CA by the institutes was not satisfactory.

For the Experiment–II to be initiated in the farmer's field at CSSRI, Karnal, ADG (SWM) suggested not to initiate new experiment in farmers' field under the constraints in budget.

Dr. T.K. Das, IARI, New Delhi presented the treatments of CA experiments being carried out at IARI, New Delhi. He informed about the problem of nematodes in DSR rice system under CA. It was agreed that for the Exp. 1, Farmers practice written in the treatment name will be changed. It will be conventional practice. LCPC suggested IARI, New Delhi to carry out study on nutrient dose scheduling for the CA system.

There were threadbare discussions on each experiment to bring about convergence and uniformity in treatments across the institutes. The following decisions were taken in the meeting:

1. All the centres should compile and submit the annual report of the CRP on CA for their respective centers on or before 31<sup>st</sup> May, 2016.
2. IISS, Bhopal will act as the lead centre for the Irrigated Ecosystem under this platform besides being the lead centre for the basic and strategic research. The institute will compile and synthesize results from the other institute's working under irrigated ecology and present the results during the annual meetings.
3. IIFSR, Modipuram will continue to be a centre of CRP on CA and will work under irrigated ecosystem as per their sanctioned programme. The centre has to start new experiments under objectives I and II.
4. The fund allotted for the head quarter for engaging young professionals will be transferred to IARI, New Delhi for the fund utilization.
5. Basic and strategic research component of the irrigated ecosystem will be mainly handled by the IARI, New Delhi and CSSRI, Karnal. IARI centre may engage students for carrying out detailed basic study at IARI, New Delhi and also at CSSRI, Karnal centre.
6. Conservation agriculture effect on water conservation, water retention, pore size distribution, changes in soil hydrothermal regimes, moderation in evaporation, water and nutrient movement, microbial diversity, genomics etc. needs to be evaluated for the irrigated system. Tangible and intangible benefits of CA need to be studied in detail.
7. IARI to carry out basic studies in frontier area of research like, C sequestration & N transformation in soil, changes in the structure of humic and fulvic acid under CA, microbial diversity, metagenomic study, changes in soil physical, chemical and biological health, temperature sensitivity to organic matter decomposition, changes in GHG emissions scenario in all CA experiments, root water uptake model by HYDRUS 2D model.
8. Dr. Sharma, IIWBR, Karnal will compile and finalize the nomenclatures or common coding to be used under CA for the irrigated system and will submit report within the end of this month.
9. ADG (SWM) to discuss with the Directors of NRRI, Cuttak, ICAR-RCER, Patna and IIFSR, Modipuram regarding the progress of their work.
10. Field experiments carried out at the farmer's field may be clubbed with Mera Gao Mera Gaurav activities.
11. Commonalities in treatment structure for a particular crop like, rice is required for comparison of CA practices across different locations.
12. ADG (SWM) emphasized to bring commonalities on treatments to be tested in farmers field in different institutes based on the wisdom developed in the institute.

13. At IIWBR, Karnal, Exp- 2 should include some salinity tolerant variety of wheat in the evaluation of genotypes of wheat trial. Discontinue the CA experiment on herbicide tolerant variety evaluation.
14. For the field experiment –I proposed by NRRI, Cuttack it is suggested to merge the main plot (tillage) and subplot (residue) treatments to increase the number of degrees of freedom of the experiment. Then the sub-sub plot treatment LCC & Nutreint management will be the sub-plot treatment. It is also suggested that the institute will work on genetic screening of rice varieties to be most suitable to grow under CA.

The Chairman, Dr S.K. Chaudhary, ADG (SWM) advised to prepare some good slides, photos etc. from the salient finding of the CRP on CA which will be included in the presentation of the project before DG, ICAR. The information should include the background and need for taking up the platform, criteria for inclusion of the present participating institutes etc.

The meeting ended with vote of thanks formally proposed by the Dy.LCPC, Dr. R.S. Chaudhary, Head, Soil Physics Division, IISS, Bhopal.

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