NICRA News

Monthly e-Newsletter on Climate Resilient Agriculture

July 2012









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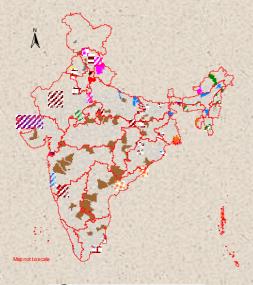
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From the Research Front





The second High Level Monitoring Committee meeting was held under the Chairmanship of Dr S Ayyappan, Secretary, DARE and Director General, ICAR during the first week of the month. Several issues related to project implementation were put forth before the committee seeking guidance. The project is getting full support and guidance from the learned members of the Committee.

Installation of instruments for strengthening the basic and strategic components is going on across the project sites. With this, the ability of the project to produce data would increase significantly. The lead centre is visiting and reviewing the progress at each of the partner institutes to so that the installed equipment is best made use of. So far we have completed such reviews in PDFSR, Modipuram, NCIPM, New Delhi, CAZRI, Jodhpur and CRIDA & DRR in Hyderabad. Other institutes such as, IARI and IIHR, NDRI and others will be taken up during the next two months.

Walk-in growth chambers and CO_2 chambers have been procured and installed in CRIDA during the month. These facilities will ease the process of carrying out controlled experiments to quantify the impact of increased CO_2 concentration and temperature on dryland crops.

B. Venkateswarlu
Director, CRIDA

From across the KVKs

















The current monsoon situation in Gujarat, Karnataka, Maharashtra and Rajasthan is alarming and in the rest of the country, things are only a better. The initial delay in the onset of monsoon was carried further and in many places except in the north east there was shortfall in the rainfall. Though delayed, sowings have been mostly completed in most of the NICRA villages in other states. However, NICRA KVKs of Zone V, VI and VIII have been facing delay/shortage in rainfall and sowings are being completed only now. In Zone V, Anantapur received rainfall only in the 3rd week of July and groundnut sowings have been mostly completed. In Kurnool, the rainfall received is just about 100 mm so far and most of the dry crops like sorghum, foxtail millet and maize have been completed. In Khammam, the situation is a shade better. It has received around 260mm rainfall and cotton, maize and pigeonpea have been sown already. West Godavari where rice is predominantly cultivated, transplanting of rice has almost been completed. Baramati in Maharashtra had not received any rain worth a mention until the 30th and 31st July. So far, only around 50 mm of rainfall has been received and sowings are yet to take place. Amravati, Ahmednagar, Nandurbar and Gondia are much better. Over 350 mm of rainfall has been received in Amravati, while it was nearly 800 mm in Gondia. Ahmednagar and Nandurbar have received over 200 mm rainfall so far. Sowings of major crops has almost been completed in these NICRA sites. The situation in KVKs of Zone VI comprising of Gujarat and Rajasthan has been of great concern. So far, no rainfall has been received and no sowings have been taken up in the NICRA villages. In Zone VIII as well the rainfall has been grossly inadequate. For instance in NICRA village Tumkur (Karnataka) only 27 mm rainfall was received until 31st July. However, farmers who have some irrigation support have taken up sowing of ragi and some pulses. In Namakkal (Tamilnadu), of the 150 mm normal summer rains, only 40 mm was received and of the 200 mm normal SW monsoon, only 50 mm has been received so far. Pulses sown have dried and the predominantly livestock economy is facing acute fodder shortage. Farmers have been advised to reduce livestock by 25% and feeding of non-conventional fodder including tree loppings and tapioca along with conserved dry fodder is being promoted. The situation is grim and certain general guidelines have been issued to farmers in NICRA villages where they are being asked to avoid paddy crop and save groundwater for human and cattle needs. Further, wherever possible, short duration drought resistant crops are being promoted. Farmers are encouraged to harvest green grass from the common land and field bunds and use the same for silage making.

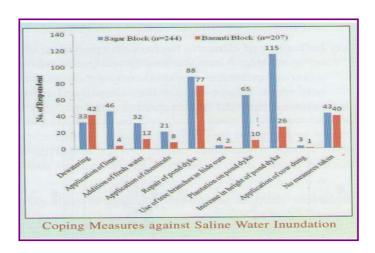
This is indeed a challenging situation but there are no shortcuts to make overnight improvement in it. However, these are definitely those times that have a lot of lessons to offer. It will be worth taking stock of what worked and what did not, at end of the season.

Sreenath Dixit
Coordinator
Technology Demonstration Component

Research Focus

Coping with sea water intrusion in Sundarbans

An extensive survey was conducted in Sagar and Basanti blocks of Sundarban on the recent impact of Aila: how it has damaged the fresh water ponds by inundation of saline water and the coping mechanisms followed by farmers. The fishponds in all the low-lying areas of both the islands are vulnerable to coastal flooding and sea water inundation which leads to breach of pond dyke, ingression of saline water into fresh water pond, escape of fish stock from the pond, entry of other (often unwanted) fish species, fish mortality etc., risk analysis revealed that in both Sagar and Basanti block, farmers considered breach of pond embankment, mortality of fishes due to saline water ingression as extreme risks; escape of fish stock and diseases as high risk; entry of unwanted species, retardation of growth and deterioration of water quality as medium risks; and damage of pond environment as low risks. The coping mechanism adopted by the farmers as revealed by the survey are increase in pond dyke height; repair and strengthening of dyke; plantation on dyke; dewatering and addition of fresh/rain water; application of chemicals/lime/dung; addition of free branches in pond for hide outs etc.



Review and Planning Workshop at Gwalior

A Review and Planning Workshop of Technology Demonstration Component of NICRA for Zone VII was organized at Rajmata Vijeraje Scindhia Krishi Vihswa Vidyalay (RVSKVV), Gwalior during 24 and 25 July 2012. The workshop was inaugurated by Dr.V.S.Tomar, Hon'ble Vice-Chancellor, RVSKVV on 24th July 2012. Drs.S.S.Tomar, Director of Extension Services, S.R.K.Singh, Sr.Scientist, ZPD, VII and other key officers of the University, besides PCs/SMSs of NICRA KVKs of Zone VII were among the other participants. Vice-Chancellor, Dr. Tomar assured all support for the NICRA project and appreciated the initiative. Followed by this, all the KVKs were reviewed one by one. In the first session, the KVKs of M.P. viz., Satna, Chattarpur, Tikamgarh and Datia were reviewed. Dr.H.S.Yadav, Director of Research Services, RVSKVV chaired the session and gave his inputs. The other two sessions in which KVKs of M.P., Chattissgarh (Guna, Morena, Bilaspur and Dantewada; Bhatapara not represented) and Odisha (Ganjam, Jharsuguda, Kendrapara, Sonepur) were reviewed were chaired by Dr Sreenath Dixit. On the following day (25th), a field visit was organized to village Sanora where KVK, Datia is implementing its NICRA project. The entire team of PCs/SMSs visited the NRM interventions and met with the farmers for an interaction. Though it was raining for the entire day, neither the participants nor the farmers complained. Instead, they villagers were very happy, as it was the first heavy rain of the season.

eason.



Sonitpur suffers from Assam Floods

NICRA village of KVK, Sonitpur is located at a distance of 12KM from Tezpur town. Around 107 ha land of the NICRA village was badly affected by the recent floods. Though the effect of flood is moderate, typically grown local Boro rice cultivars (in low lying areas) in the village were severely affected by the flood.

The extent of loss is about 50-60 per cent as the harvesting stage of local varieties coincided with the flood. However, the demonstration of HYV Boro rice variety Swarnabh under NICRA project could escape the flood due to its short duration compared to the local varieties and proper time of transplanting. In some parts of the village, cucurbitaceous vegetables and okra were also damaged by flood. Most of the grazing field were flooded. The farmers are severely affected due to lack of green grass and fodder. The farmers have started to feed straw, tree leaves etc to their





affected parts of NICRA village.

livestock. The health condition of animals is deteriorating. Most of the fisheries tanks were flooded, because of which fish fingerling escaped. But the NICRA adopted fisheries were protected by Fish Net. KVK Sonitpur has prepared one community nursery with rice variety Kanaklata , for late transplanting of Sali paddy in these flood affected areas . KVK Sonitpur is also possessing seedlings of rice variety Gitesh that can also be used for the late transplanting (up to 60 days old seedlings). A planning has also been made for growing of early rabi crops, particularly vegetables in flood

Deputy Director General (ICAR) Visits Nicra Village

Dr. K.D. Kokate, DDG (Ag. Extn.) ICAR visited Badauchhi Kalan, the village where KVK Fatehgarh Sahib is implementing NICRA. Dr. A.M Narula, Zonal project Director (Zone 1) and Dr. M.S. Gill, Director of Extension (PAU) accompanied DDG. Dr. Harinder Singh, Programme Coordinator Krishi Vigyan Kendra (KVK) facilitated the visit of the dignitaries to the project intervention sites.

Dr Kokate inaugurated the biogas plant constructed at the house of Sh. Baljeet Singh, one of thefive biogas plants established in the village under NICRA project on 50% cost sharing basis by the farming community. He congratulated the farmers and told them about the benefits of biogas plant as it helps in reduction of methane gas from open heap, which is a major green house gas causing global warming. Owing to simplicity in implementation and use of cheap raw materials in villages, it is one of the most environmentally sound energy sources for rural needs. Dr Kokate also inaugurated the model polyhouse established for growing off-season vegetable nursery on community basis. Polyhouse on community basis will provide vegetable nursery in off-season to the farmers of the village which otherwise gets damaged due to frost, rainfall, insectspests and various diseases. He also interacted with the farmers about the changing environmental conditions and its ill effects on agricultural crops. Farmers and the KVK team were inspired by the presence and suggestions of the DDG.





Soil Health Cards distributed in NICRA Village in Datia District

As part of the activities under Module-I: Natural resource Management, Krishi Vigyan Kendra, Datia

organized an awareness campaign during May 2012 for soil sample collection. After this activity, 100 soil samples were collected from Rajpur template of Baroudi Village. Soil Samples were analyzed for pH, OC%, EC and available N, P &K. Soil Health Cards were prepared on the basis of information obtained from soil analysis with recommendations. The recommendation of fertilizer and soil amendments were given for groundnut, sesame, soybean,



black gram, maize and greengram. These cards were distributed to farmers on 4th July 20017 to the hundred farmers who participated in the campaign and shared their soil samples for analysis.

High Level Monitoring Committee Meeting reviews Progress of NICRA

The third meeting of High Level Monitoring Committee of National Initiative on Climate Resilient Agriculture (NICRA) was held at NASC Complex, New Delhi on 05th July, 2012 to review the progress of the project. The meeting was chaired by Dr S. Ayyappan, Secretary (DARE) and Director General (ICAR). Dr AK Singh, DDG (NRM) and co chair of the meeting welcomed the participants and briefed about the progress made under infrastructure development and network research programmes. Prof. YP Abrol Chair of the Expert Committee of NICRA was also presentDr JC Dagar, ADG (Agronomy/Agroforestry), ICAR and Member-Secretary presented the Action Taken Report on the proceedings of the second meeting of HLMC held on 12-13 th December, 2011 at New Delhi. He emphasized about the Technology Demonstration (TD) component and role of KVKs in the present context of climate change. Dr S. Ayyappan, DG (ICAR) emphasized the significance of NICRA project in ICAR in the present climate change context, which is evident in terms of drought and late onset of monsoon. He explained about the role of electronic media for quick dissemination of climate coping technologies to farmers. The role of CRIDA as lead centre of NICRA was appreciated. Dr B. Venkateswarlu, Director, CRIDA made a presentation on progress of the NICRA project under various theme areas encompassing crops, adaptation and mitigation, fisheries, livestock ec., during 2010-2012. Several programme implementation issues involved were discussed. Drs. M Maheswari and Sreenath Dixit provided further details on the strategic research and technology demonstration components respectively. Several suggestions and inputs were received from all DDGs and external experts on future programme and strategies.

Animal Health Camp for Prophylaxis

Bakulahi, Bhatapara District, Chhattisgarh

Animal health camp and vaccination programme (against foot and mouth disease of livestock) was organized by KVK Bhatapara (Raipur) at the NICRA Village- Bakulahi, Block- Bhatapara on 21th June 2012 under the project. A total number of 370 cattle and buffalos were vaccinated against the disease. Ectoparasite and deworming medicine were also used for treatment of 38 goats. Animals (27 no.s) were also treated against different diseases during animal health camp. A training programme was also organized on "Nutrient management for improvement in milk production". The programme was conducted in collaboration with the State Veterinary Department, Chhattisgarh.

Village Rajpur, Datia (M.P)

Krishi Vigyan Kendra, Datia (M.P.), organized an Animal Health Camp on 29th June at a village Rajpur template of Barodi village. Livestock plays an important role in strengthen the rural economy of

Bundelkhand region combining with agriculture during dry conditions. The main aim behind the animal health camp was to make farmers aware about animal health as well as providing necessary treatment to their livestock. The programme was organized with the help of Ste Department of Animal Husbandry, Govt. of MP. During the camp the scientists of the KVK emphasized the importance of the livestock sector



for livelihood security of farmers. They also stressed on the need for improvement in management of housing, feeding and health. More than 50 farmers from Rajpur village attended and received treatment for their livestock. This camp covered treatment of more than 69 cattle, 129 buffalos and 29 goats. Animals were also vaccinated against foot and mouth disease and haemorrhagic scepticaemia. All calves were dewormed against internal and external parasites. The veterinary doctors suggested the farmers to use the balanced feed ration for better growth and productivity of their animals.

Hon'ble Minister of State for Agriculture visits KVK Jharsuguda

DR Charan Das Mahant Hon'ble Minister of State for Agriculture and Food Processing Industries, Government of India visited KVK Jharsuguda. He showed keen interest in knowing the activities of NICRA appreciated various demonstrations on resource conservation technologies including moisture conservation technology in paddy, varietal replacement and crop diversifications with higher yield potential under water stress condition, ancillary activities like mushroom production, vermicomposting, back yard poultry etc. having potential of livelihood security under changing scenario of climate.



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