



NICRA News

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Contents

[From the Research Front](#)

[From across the KVKs](#)

[Project launch events](#)

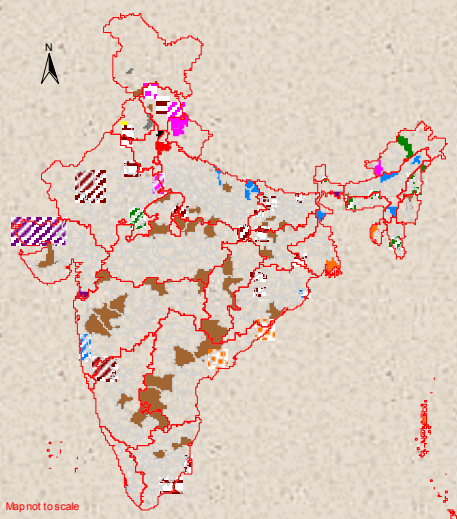
[Special Events](#)

[Technology Demonstration Component](#)

[KVKs](#)

[AICRPDA](#)

[Photo gallery](#)



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From the Research Front



Training cum workshop on Real Time Pest Surveillance (RTPS) for rice & tomato crops was organized at NCIPM, New Delhi during this month (20th January). Scientists from RTPS centres participated in this workshop. During the workshop, issues such as Architecture of the software developed under the project for data capture from RTPS centres of rice and tomato were discussed. Features and use of Geographical Positioning System (GPS) were demonstrated. Hands-on training was imparted on software required for RTPS.

A review of progress by all RTPS centres was carried out during this period. Crop coordinators and team leaders of rice and tomato summarised the progress. Work plan for the XII plan relating to RTPS was also discussed. This process of conducting need based training and reviewing the requirements, can be followed by other research groups as well under NICRA.

B. Venkateswarlu
Director
CRIDA

From across the KVKs



January, 2012 was yet again a month of several activities in terms of launch workshops, demo programmes and review programmes. During this month, we kept on monitoring the expenditure and progress of intervention. We also forged linkage with the Directors of Extension of SAUs in the monitoring of NICRA-KVKs. Followed by the Zonal level review of progress in Zones V and II other zones also took initiative to schedule review meetings. These reviews are helping us to understand different types of implementation issues faced by KVKs. Keeping these issues in mind, the TDC NICRA Coordination unit has compiled a set of frequently asked questions and their answers which is shortly going to be posted on the NICRA website. TD Component of NICRA has brought a new enthusiasm and energy among the KVKs across the country. This is providing the KVKs with unique opportunity to address NRM and institutional issues. The farmers are particularly happy and are acknowledging the benefits reaching them through this project. This was evident from a farmer visiting CRIDA all the way from Sanora village in Datia, Madhya Pradesh to complement the efforts being made in implementing the project. As per the feedback we are getting custom hiring centers are attracting a lot of farmers and addressing their farm mechanization needs. Systems are being put in place to make these centers user-friendlier. Besides, rainwater harvesting measures taken up by several KVKs have been received with great enthusiasm. It is enabling farmers to go for assured rabi cropping even if in smaller patches. However, there is still a long way to go to register tangible outcomes from this project.

Sreenath Dixit
Coordinator
Technology Demonstration Component

Tilapia fishes respond to higher temperature

Mesocosm pilot study conducted at International Centre for Ecological Engineering, University of Kalyani, Kalyani, Nadia-741 235, West Bengal by Dr. B. B.Jana and team within and outside the polyhouse showed about 124 % increase in chlorophyll and phytocarbon content of microalgae due to 3oC rise in water temperature (32oC; light intensity- 20400 ± 17300 lux) in tanks placed within the polyhouse compared to those outside the polyhouse (29.oC; light intensity -12300 ± 7900 lux). An exciting observation was that the fish tilapia held in closed polyhouse tanks bred and produced offspring, whereas no such breeding activities were noticed in their counterparts held outside the polyhouse. However, fishes like rohu, bata and paku were not found suitable as their growth was reduced with rise in temperature in the closed polyhouse. The outcome of the study i.e., the benefit of the closed polyhouse may be profitably used by the fish farmer for enhancing the hatching rate of common carp spawn in hatcheries during winter as well as for enhancing the growth of carp and other tropical fish during winter and colder region of the country in general.



Fry of tilapia bred in closed polyhouse

Project Launch Event

Banaganapally KVK organized awareness cum convergence workshop on 10 January 2012 at Yagantipalle. Dr P Gidda Reddy, Director of Extension, ANGRAU, Hyderabad and Dr Padma Latha, Associate Director of Research, RARS, Nandyala attended the program besides representatives of the line departments and program coordinators of other KVKs of the neighboring districts. Automatic weather station and the small weathers stations, vermicompost unit and the custom hiring centers were inaugurated during the event. The dignitaries visited the silage and VCRMC building in the village. Also discussed with the farmers about the progress of the project. They also visited sites where recharging of the bore wells is being attempted. The project coordinator shared with the dignitaries the success of promoting foxtail millet, which was a big success when other crops of the region like cotton and sorghum failed.



Incorporation of Crop Residue Demonstrated

Farmers in Nandyala gudem village in Nalgonda district cultivate cotton and burn the stalks after the harvest of the crop. Earlier farmers used dry cotton stalks as fuel. Off late, due to labour shortage farmers are burning the stalks to clear the field. This is a harmful practice leading to increased CO₂ emissions besides depriving crop residues to the impoverished soils. In order to encourage farmers to change this practice, a demonstration was conducted on 31st January, 2012 by using tractor operated shredder and rotavator to incorporate dried cotton stalks into the soil. Tractor operated shredder cleared half acre every hour and consumed 3 ½ liters of diesel while leaving stubbles of around 10 cm in the field. Whereas, the rotavator cleared one acre every hour using the same quantity of diesel as the shredder. This also left about 10 cm long stubbles in the field. However, farmers were impressed with the performance of the latter. But expressed apprehension that the residual stubble might interfere with sowing operations during kharif. They suggested to make a few modifications to the machinery so that no stubble is left on the field while all the stalks are shredded and mixed thoroughly in the soil. This demonstration has given confidence that farmers too want to return the crop residues to the soil but for lack of proper machinery.



Hybrid Maize helps farmers to cope with drought, Bhoimunda (Odisha)

The Project adopted the village Bhoimunda, operating under KVK, Jharsuguda (Odisha) which is mainly drought prone area. The farmers of the village were in search of short duration & profitable crops suitable to moisture stress condition. Basing on this problem, demonstration on hybrid maize variety Bisco-740 was conducted in 4 ha of area under NICRA project .The performance of this variety was excellent compared to local variety as expressed by the maize cultivators. The demonstrated Maize variety Bisco-740 gave a yield of 162 q/ha of green cobs and the weight of each green cob is 200-250 gm, which is the motivating criteria to put more area under maize cultivation. To spread the success of the technology, a field day & an exposure visit were organised where the successful maize cultivators of Bhoimunda village interacted with the other area farmers of villages like Sialrama, Gudigaon and Kanaktura in the district during the exposure visit. The visiting farmers expressed their extreme willingness to cultivate Bisco-740 in the next season in their area. The other farmers of the NICRA village were also inspired during the field day to cultivate this variety in at least 10 ha of area in next year.



Technology Demonstration by AICRPDA Centre

NICRA, AICRPDA, BIJAPUR

In the recent years, early withdrawal of monsoon has been a challenge to farmers in Bijapur district, Karnataka. This poses serious concerns for raising successful chickpea, a prominent rabi crop in this area. Keeping this in view, in-situ rainwater harvesting was promoted through compartment bunding over 32 ha (75 acres) covering 30 farmers in Koulagi village under NICRA Project. Out of the 30 farmers, 18 were small, 8 were marginal and 4 were medium holders. Cycle operated seed drill and cycle operated weeders were used in 8 and 10 ha respectively. Bio-fertilizers and improved varieties of chickpea (JG-11) were also promoted in these fields. Yield realised by farmers with compartment bunds was 20 percent higher. This practice has been widely accepted as a climate resilient measure by chick pea farmers of the village.

Chickpea yield (kg/ha)

Crop	Compartment bunding	Without compartment bunding
Chickpea	900	750



Photo Gallery



Trench cum bunding, soil trapped in trenches (inset)



Farmer sowing the seed um fertilizer drill



Bumper harvest of redgram variety, LRG-41, Nacharam village, Khammam



Making of silo from shredded maize



FMD vaccination to small ruminants in KVK, Nandurbar



Cotton crop growing under drip, Khammam