

# NATIONAL CONFERENCE ON AGRICULTURE FOR

#### **KHARIF CAMPAIGN – 2013**

at

National Agriculture Science Centre (NASC), Pusa Complex, New Delhi  $6^{th} - 7^{th}$ March, 2013

## **AGENDA NOTES**

For Group Discussions on 6<sup>th</sup>March, 2013

Government of India

Ministry of Agriculture

Department of Agriculture & Cooperation

Krishi Bhawan, New Delhi

### **CONTENTS**

S. No.	TOPIC				
1	Adoption of Farming Systems Approach in Rainfed areas	1-5			
А	Integrated Farming System; Crop Diversification; Upscaling Bovine Component; Promotion of Dryland Horticulture; Watershed based Interventions; Integrated Extension Delivery System	1			
В	Reducing Yield Gaps between Irrigated and Rainfed Agriculture; Cooperative/Group Farming /FPOs; Organic Farming				
С	State Specific Issues – Gujarat, Karnataka, Haryana, Jammu & Kashmir, Odisha, Chhattisgarh, Jharkhand, Arunachal Pradesh, Manipur, Goa, Andaman & Nicobar Islands, Daman & Diu	2-5			
2	Strategy for the ensuing Kharif Crops & Strategies for increasing Pulse production to 19+ million tons	6-12			
А	National Food Security Mission (NFSM) - Major Activities, Outcomes, Discussion Points	6-8			
В	Bringing Green Revolution in Eastern India (BGREI) – Outcome, Allocation of Funds in 2012-13, Initiatives taken during 2012-13	8-9			
С	Initiative for Nutritional Security through Intensive Millets Promotion (INSIMP) – Issues for follow-up with States				
D	Mini Mission-II of Technology Mission on Cotton (TMC) – Strategy for Kharif, Issues for Consideration	10-11			
E	Mini Mission-II of Jute Technology Mission (JTM) – Strategy for Kharif, Issues for Consideration	11-12			
3	Best practices/Special initiatives by States	13-18			
A	Tamil Nadu— AGRISNET; Maharashtra; Andhra Pradesh - Technical Facilitators and Agriculture Consultants & AGRISNET; Gujarat - E-Krishi Kiran and Krishi Mahotsav; Karnataka - Raitha Sampark Kenda (RSK); Rajasthan — Mass Extension Approach	13-15			
В	SMS Gateway for all States; Display Boards in every Village; Pico/ Ultra- Light Portable Projector + Low Cost Films; Kala Jathas, Certified Crop Advisors and Other Innovative Methods; Farmers Portal	15-18			

#### **Group-I : Adoption of Farming Systems Approach in Rainfed areas**

#### I. Integrated Farming System

There is need for revival of rainfed farming systems as it provides an opportunity for development and integration of multiple components of agricultural system such as crops, horticulture, livestock, fishery, agro-forestry with agro-based income generating activities and value addition.

#### **II.** Crop Diversification

A judicious demand side management such as diversification into less water consuming cultivation practices is required through alternative but economically remunerative crops or commodities that can help in reducing water and energy intake.

#### III. Upscaling Bovine component in the farming systems

To make the rainfed farming systems more sustainable and economical, it is necessary for upscaling the livestock component through introduction of higher milch yielding breeds, better livestock production management techniques and provision of feed and fodder to augment the requirement during off season.

#### IV. Promotion of Dryland Horticulture

The introduction and development of dryland horticulture is an intervention that assumes great significance in the rainfed farming system across the states. Efforts are to be initiated for planting and raising fruit trees and other trees to be perpetual across the farming systems irrespective of the farm size and the states. This can help in mitigating the risk, providing alternative income and nutritional security.

#### V. Watershed based interventions

The economic livelihood of farming community in the rainfed areas is predominantly monsoon dependent. Hence effective management of available water, increasing water use efficiency and establishment of additional sustainable water sources are key factors for sustainable agriculture growth in rainfed areas. Creation of inventory of land resources based on scientific land use and soil surveys is very much essential to ensure proper management and allocation of resources. There is need for a strong and reliable data base on land and soil characteristics to facilitate adoption of comprehensive and sustainable soil health management practices for enhancing productivity.

#### VI. Integrated extension delivery system

The organization of extension services from the beginning has been on sectoral lines through formation of sectoral line departments. It is necessary to streamline the technology delivery system to the requirements of the farmers by integrating extension

delivery system at the district level. There needs to be a concerted campaign to reshape consumption/demand, especially for dryland agricultural products, based on their nutritive and non-chemical aspects. Necessary skill development and capacity building measures should be taken to equip the farmers for localised seed production and exchange systems to support diversified farming system.

#### VII. Reducing Yield Gaps between irrigated and rainfed agriculture

The productivity of rainfed areas is about 1 ton/ha which is much less than irrigated areas (about one third of the average productivity of irrigated land). This gap needs to be reduced through appropriate water management and farming systems.

#### VIII. Cooperative/Group Farming/FPO

Most of the farmers in the rainfed region are individualistic, lacking in bargaining power, have limited scale of operations and are vulnerable for exploitation by the external forces. Hence, to empower the farmers in the rainfed region, help build their capacity and improve the scale of operation to make a dent on the market; it is necessary to bring them together in a group approach based on commodities or specific activities in the form of farmer's interest groups and organizations.

#### IX. Organic Farming

Soil nutrient management should be with organic rather than inorganic matter. This will help conserve precious moisture in the drylands and prevent the ecological damage that inorganic fertilisers could cause.

#### **State Specific Issues**

#### Gujarat

- Large extent of arid and semi-arid areas
- Frequent drought
- Zinc deficiency
- Low irrigation potential
- Low ground water table and some areas in critical zone
- Any other issues

#### Karnataka

- Frequent drought
- Zinc deficiency
- Low irrigation potential
- Yield gaps between irrigated and rainfed areas
- Any other issues

#### Haryana

- Ground water depletion
- Water logging and soil salinity
- Storage and Marketing of produce
- High water intensive cropping system
- Boron & sulphur deficiency
- Potassium balance is a matter of concern as consumption is very low
- Any other issues

#### Jammu & Kashmir

- Low irrigation potential
- High soil erosion
- Problem of salinity and alkalinity
- Difficulty in timely availability of inputs
- Low productivity compared to national average
- Storage & value addition particularly for fruits
- Any other issues

#### Odisha

- Large extent of acid soils
- Natural disasters like drought, flood and cyclones
- Large part of the state is covered under mono cropping
- Shift in cropping pattern
- Micro nutrient deficiency like zinc and sulphur
- Scope for effective utilization of ground water
- Low productivity compared to national average
- Yield gaps between irrigated and rainfed areas
- Any other issues

#### Chhattisgarh

- Large extent of rainfed areas as irrigation potential is low
- Large portion is Naxal affected
- Large tribal population with low literacy
- Low use of HYV seed, fertilizer, mechanization.
- Rural credit and input supply system weak
- Infrastructure and transport bottlenecks
- Large part of the State is underlain by hard rocks being tapped mostly by dug wells.
   Low recharge due to poor specific yield
- Yield gaps compared to national average

Any other issues

#### **Jharkhand**

- Large extent of small and marginal land holdings
- Large extent of rainfed areas as irrigation potential is low
- Large portion is Naxal affected
- Large tribal population with low literacy
- Low use of HYV seed, fertilizer, mechanization.
- Rural credit and input supply system weak
- Infrastructure and transport bottlenecks
- Large part of the State is underlain by hard rocks being tapped mostly by dug wells.
   Low recharge due to poor specific yield
- Yield gaps compared to national average
- Any other issues

#### **Arunachal Pradesh**

- Soil erosion due to rapid deforestation especially in hill slopes
- Large areas under acid soil
- Low productivity compared to national average
- Primitive methods and implementation
- Inadequacy of Irrigation facilities
- Low cropping Intensity
- Problems of marketing of agricultural products.
- Any other issues

#### Manipur

- High soil erosion due to shifting cultivation
- Large extent of acid soil
- Scattered and fragmented land holding system
- Hilly and difficult terrain
- Low productivity compared to national average
- Low irrigation potential
- Infrastructure bottlenecks
- Any other issues

#### Goa

- Low irrigation potential
- Infrastructural Bottle necks
- Yield gaps between irrigated and rainfed areas

• Any other issues

#### **Andaman & Nicobar Islands**

- Low irrigation potential
- Land locked areas
- Infrastructural Bottle necks
- Yield gaps between irrigated and rainfed areas
- Any other issues

#### Daman & Diu

- Low irrigation potential
- Land locked areas
- Infrastructural Bottle necks
- Yield gaps between irrigated and rainfed areas
- Any other issues

#### **Group-II**: Strategy for the ensuing Kharif Crops

ጼ

#### **Group-IV: Strategies for increasing Pulse production to 19+ million tons**

#### **National Food Security Mission (NFSM)**

The aim of the Mission was to increase production of rice, wheat and pulses through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy to restore confidence of farmers of targeted districts. During XI Plan, NFSM-Rice was implemented in 144 districts of 16 States, NFSM-Wheat in 142 districts of 9 States and NFSM-Pulses in 468 districts of 16 States.

From the year 2012-13, Six NE States viz Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Sikkim have been included under NFSM-Rice and two Hill States viz Himachal Pradesh and Uttarakhand under NFSM-Wheat. Thus, the NFSM is being implemented during 2012-13 in 27 States of the Country.

#### **Major Activities**

The Major interventions/activities covered under NFSM include cluster demonstration on direct seeded rice/line transplanting / SRI, cluster demonstration on hybrid rice, cluster demonstration on Swarna Sub-I, SahbhagiDhan, cluster demonstration on drainage management in waterlogged areas on Rice-Wheat system, demonstrations on front-line technology on hybrid varieties, distribution on improved varieties/hybrid, need based plant and soil management, resource conservation techniques / energy management, efficient water/application tools, cropping system based trainings and local initiatives; award for best performing districts; mass media campaign; international exposures for technical knowledge enrichment and project management team.

Accelerated Pulses Production Programme (A3P) has been launched under NFSM-Pulses from Kharif 2010 for Demonstrations of Production and Protection Technologies on Village Level Compact Blocks for enhanced production of pulses as well as motivating Farmers.

In addition to above, Govt. of India has implemented Special Plan to achieve 19+million tonnes of Pulses production during Kharif 2013 in 16 States for activities like utilization of new areas through intercropping, improving planting techniques and irrigation use efficiency for inclusive water management and use of important critical but low cost inputs like sulphur and weedicides and productivity boosters.

#### **Outcomes**

Mission has helped to widen the food basket of the country with significant contributions coming from the NFSM districts. The focussed and target oriented implementation of

mission initiatives has resulted in bumper production of wheat, rice and pulses. The production of wheat has increased from 75.81 million tons in 2006-07 to 93.90 million tons during 2011-12 i.e. nearly 18.00 million tons against the envisaged target of 8 million tons. Similarly, the total production of rice has increased from 93.35 million tons to104.32 million tons in 2011-12 with an increase of nearly 11.00 million tons against the target of 10 million tons. The total production of pulses has also increased from 14.20 million tons during 2006-07 to 18.24 million tons during 2010-11 with an increase of 4.04 million tons against the envisaged target of 2.0 million tons. During 2011-12, production of 17.21 million tons of pulses is achieved. Moisture stress in states of Maharashtra, Karnataka and parts of Andhra Pradesh impacted pulses production in Kharif, 2011.

#### **Discussion points**

- 1. Physical and Financial achievements up to March, 2013 under Rice, Wheat, Pulses, A3P, Special Plan of Pulses Kharif and Additional Area Coverage under Pulses components of NFSM.
- 2. The comparative consumption figures of seeds, lime/gypsum/micro nutrients, machinery etc. of Pre-NFSM and Post-NFSM year i.e. 2006-07 to 2011-12 in the mission districts should be submitted by the state so that the impact of the mission on the seed replacement rate, micro-nutrient consumption etc. could be assessed.
- 3. The APY figure of NFSM districts and non NFSM districts for the year 2011-12 is expected from all NFSM states.
- 4. Advance planning for the procurement of recommended varieties of seeds as per targets streamlining the procedures for procurement and supply of soil ameliorants (gypsum/lime /micronutrients) and machinery (zero till seed drill, seed drill, multi crop planter, rotavator, pump sets, etc.) is essential for the physical targets.
- 5. Saving status under Rabi and Kharif A3P units to implements E-pest surveillance in A3P units of 2011-12 and 2012-13 is awaited.
- 6. Online data uploading of E-pest surveillance on NCIPM website is expected from the states.
- 7. SAUs should recommend effective post emergence weedicides for different pulses crops. The state should extend subsidy to farmers to make their use popular.
- 8. The measures to be taken by the states for control of blue bull by bio-fencing using cactus, solar power wire fencing.
- 9. Audited UCs in GFR-19 Form along with audited statement of accounts for the years 2008-09 to 2011-12.
- 10. Online submission of Status of district wise progress using MIS.
- 11. Documentation of results of cluster demonstration, best practices/success stories should be done.
- 12. Action Taken Report about monitoring of NFSM by NLMT-NFSM during 2011-12.

- 13. Status of Crops due to recent rains in the month of January and February, 2013.
- 14. Losses due to hail storm and other calamities in the States in January-February, 2013.
- 15. Status of Concurrent evaluation of the programme is the planned activity of the Mission to be conducted by the State Statistical Department through designed format for data collection pertaining to different interventions of Mission aiming at impact on productivity of crops and the income of the farmers.

#### **Bringing Green Revolution in Eastern India (BGREI)**

"Bringing Green Revolution to Eastern India" is being implemented in 7 States (Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh and West Bengal) to address the constraints limiting the productivity of "rice based cropping systems" in eastern India. An amount of Rs.1000 crores was allotted during 2012-13. Under this programme, the main focus was given to the activities of Block demonstration of rice and wheat; Asset building activities for water conservation & utilization; and Site Specific Activities (construction/renovation of irrigation channels/electric power supply for agriculture purposes).

A three tier monitoring structure involving Central Steering Committee; State Level Monitoring Team (SLMT);and District Level Monitoring Teams (DLMT) has been created to ensure the delivery of intended technologies to the farmers. CRRI is the nodal agency for monitoring the programme. Apart from this, a scientist of ICAR is allotted for each district for extending technical backstopping and monitoring the programme.

#### Outcome

With increase area under rice and planned cluster approach, and line sowing, participation of small & marginal farmers, distribution of hybrid rice and cultivation of some submergence tolerant varieties resulted in the record production of rice i.e. 552.72 lakh tone during 2011-12 in Eastern India. All states showed increase in rice production substantially except a marginal decline in Odisha due to flood/drought. The maximum gain was recorded in Jharkhand followed by Bihar, Uttar Pradesh and West Bengal. The major share of rice production from Eastern India in national rice production may be attributed to BGREI and NFSM and other crop development programme.

#### **Allocation of Funds**

The State wise allocation and release of funds under BGREI during 2012-13 is as under:

Sl.No.	State	Allocation	Release(as on 7.2.13)
1	Assam	95.50	47.75
2	Bihar	119.25	119.25

	<b>Grand Total</b>	1000.00	868.03
	Gol	3.00	1.03
	Total States	997.00	867.00
7	West Bengal	269.00	269
6	Uttar Pradesh (Eastern)	105.50	52.75
5	Odisha	217.25	217.25
4	Jharkhand	59.00	29.50
3	Chhattisgarh	131.50	131.50

#### Initiatives taken during 2012-13:

- State-wise Action Plans were prepared and communicated to States.
- Action Plans prepared by States were discussed during the meeting held on 25.4.2012 under the Chairmanship of Secretary (A&C).
- To review the preparedness of Kharif, 2012 of BGREI States, meetings were also organized in each of the implementing States under the Chairmanship of Secretary (A&C) in the months of May and June, 2012.
- Secretary (A&C) has written a letter to Chief Secretaries of concerned States to implement and monitor the programme vigorously.
- A Committee of Chief Ministers of implementing States and Secretaries of concerned Departments of Central Government has also been constituted under the Chairmanship of Hon'ble AM to boost the implementation of the programme.
- Hon'ble AM has also written a letter to Chief Ministers of the concerned States regarding first meeting to be convened shortly.
- Brainstorming Session on Rice Productivity in West Bengal and Bangladesh was held on 26.7.2012 at Kolkata.
- A Review Meeting with BGREI States was organized on 26.7.2012 at Kolkata.
- First meeting of the Committee of Chief Ministers on "BGREI" held on 26.9.2012 under chairmanship of Hon'ble Agriculture Minister.
- An Apex Committee on Agriculture for Eastern India has been constituted under the Chairmanship of Hon'ble Prime Minister with a view to ensure coordinated delivery of services to the farmers in the 7 Eastern States and provide necessary impetus to the on-going efforts of the Ministry of Agriculture under BGREI and other programmes/schemes aiding agricultural development in the region.
- A Preliminary meeting of the Apex Committee involving concerned Ministries/Departments for formulation of Agenda Notes was held on 14.12.2012 under the Chairmanship of Secretary (A&C).
- States will make necessary arrangements for the procurement of rice in collaboration with FCI.

#### Initiative for Nutritional Security through Intensive Millets Promotion (INSIMP)

In order to promote cultivation and consumption of millets based food products, the Government has announced this as a sub-scheme under RKVY in 2011-12 with an allocation of Rs.300 crore. The aim of the programme is to demonstrate the improved production and post-harvest technologies in an integrated manner with visible impact to catalyze increase in production of millets in the country. Besides increasing production of millets, the Scheme through processing and value addition techniques is expected to generate consumer demand for millet based food products. The implementation of the scheme has been allowed with an allocation of Rs.175 crores during 2012-13 with targeted area coverage of 7.23 Lakh ha under production programme of millets and establishment of 287 PHT units. The Scheme is under implementation in 16 States.

#### Issues for follow up with the States

- Despite shortage of quality of seeds particularly small millets, due attention has not be given by the States for seed production, except in Andhra Pradesh, Chhattisgarh, Jharkhand, Maharashtra, Tamil Nadu and Uttarakhand.
- Capacity building is a core activity for effective crop management particularly of Millets grown under harsh condition. However, majority States have not given due attention on organizing crop specific farmers training.
- Process of setting up processing units has also has been very slow in majority of the States except Andhra Pradesh, Karnataka, M.P. The States are, therefore, advised to complete the setting up of processing units before 31<sup>st</sup> March, 2013.
- As a result of Ministry of Agriculture's follow up with the Ministry of HRD, it has been decided to include Millet grains under Mid-Day-Meal Scheme. The Chief Secretaries of all INSIMP States were requested for inclusion of Millets under Mid-Day-Meal Scheme. Government of A. P. (Mehboobnagar), Karnataka (Kolar) and Maharashtra (Pune) have launched Millet based Mid-Day-Meal in one district each on 26<sup>th</sup> January, 2013. Other States may indicate their action plan in this regard.

#### Mini Mission-Ilof Technology Mission on Cotton (TMC)

To increase the production and productivity of cotton, a Centrally Sponsored Scheme on 'Mini Mission-II of TMC' with an allocation of Rs.15 crore is under implementation in 13 States viz. Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal and Tripura.

#### **Strategy for Kharif 2013**

- Increasing availability of treated quality seeds with an emphasis on delinted seeds.
- Covering more area under hybrids and thrust for evolving area specific production technology.

- Popularization of Integrated Pest Management and insecticides Resistance management methods to minimize the use of pesticides through farmers' participatory approach based on the FAO model of farmers Field School (FFS).
- Increasing irrigated area and efficient use of irrigation water through drip and sprinkler.
- More focus on transfer of technology to farmers through Front Line Demonstrations & upgradation of technical skills amongst farmers and extension workers through Farmers Field School and trainings at State & national Level.

#### Issues for consideration

- 1. Monthly Progress Report has not been received from implementing agencies. The implementing agencies are requested to submit Monthly Progress Report regularly by the 10th of the following month as per targets approved by GoI.
- 2. The States are requested to issue State Level Sanction immediately after the receipt of Administrative Approval of the scheme from Government of India and make available funds to the field functionaries. Copy of the State Level Sanction needs to be sent to this Department as well Directorate of Cotton Development, Mumbai.
- 3. The States suitable for Extra Long Staple (ELS) Cotton should focus for increasing production of such cotton under the scheme. The States need to be vigilant to check supply of spurious seeds particularly of Bt Cotton.
- 4. During 2013-14, States need to make separate budgetary allocation of funds for SC, ST and Women farmers separately.
- 5. States should submit their pending bills against the allocated funds, if any.

#### Mini Mission-IIof Jute Technology Mission (JTM)

A Centrally Sponsored Scheme of Jute Technology Mission (JTM) an allocation of Rs.10 crore is under implementation in 10 States, viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Meghalaya, Nagaland, Orissa, Tripura, Uttar Pradesh and West Bengal to increase production and quality of raw jute.

#### **Strategy for Kharif 2013**

- Distribution of certified seeds/ Minikit of jute, mesta&sunhemp and distribution of ramie rhizome.
- Production of breeder, foundation and certified seeds.
- Popularization of implements (multi row seed drill, wheel hoe, ribboners and sprayer)
- Development of post-harvest operations like retting facility, distribution of culture, Decorticator and degumming unit for ramie.

- Technology demonstration and IPM demonstration, supply of essential nutrients and soil ameliorants.
- To organize farmer's training, farmer's field schools and training to extension workers.

#### **Issues for consideration**

- 1. The implementing agencies are requested to submit Monthly Progress Report regularly by the 10th of the following month as per targets approved by GoI.
- 2. The States are requested to issue State Level Sanction immediately after the receipt of Administrative Approval of the scheme from Government of India and make available funds to the field functionaries. Copy of the State Level sanction needs to be sent to this Department as well as to Directorate of Jute Development, Kolkata.
- 3. During 2013-14, the States need to make separate budgetary allocation of funds for SC,ST and Women farmers separately.
- 4. States should submit their pending bill against the allocated funds if any.

#### **Group-III**: Best practices/Special initiatives by States

#### I. Tamil Nadu AGRISNET

- Farmers' basic details are collected and used in all the transactions pertaining to the farmer. There are 41 fields about the farmer and a unique code is generated for each farmer
- The soil test results are furnished online by the Soil Testing Labs
- Farmers can see the quantity of fertilizers to be applied through a dynamic calculation
- Farmers can see the availability of seeds/fertilizers anywhere any time
- Information about various schemes and details of assistance given under various schemes
- The details of beneficiary farmers listed online for use by the public as a measure of transparency

#### II. Maharashtra

- ATMA Technological Week: ATMA and KVK jointly conducting ATMA technological week from 2009-10.
- During the technological week, demonstrations on field crops, high value crop technology, forage crops and demonstration of agricultural implements, are demonstrated in one field itself. Technological seminars are arranged on all days.

#### III. Andhra Pradesh

- Support to Extension System: Support through Technical Facilitators and Agriculture Consultants
  - One Technical Facilitator (Diploma in Agril./Horti./A.H. etc.) for every 5 CIGs and One Graduate Agricultural Consultant for every 10 CIGs, and these CIGs are periodically trained in relevant areas.
  - FFS (called locally 'Polambadi'), including organic polambadi, since 2004 benefiting the farmers with 30-40 percent increase in knowledge.
  - Farmer-to-Farmer Extension Approach: 'AdarshaRythus'. They Cover 200-250 farm holdings, through RythaMitra Groups (RMGs)
  - Practicing farmer, at least 10th pass, less than 40 years are the Link between Extension System and Farmers
  - Special diaries & registers to each AdarshaRyathu to record soil type, cropping pattern, land holding, credit details etc. are provided
  - Mandal level meeting of AdarshaRythu on 3rd Monday- Interaction with department officials

- Agriculture magazines of the departments distributed to AdarshaRythu, one lakh copies printed & distributed
- o Honararium of Rs.1000/month to AdarshaRythu is provided

#### AP AGRISNET

- An icon driven GUI Interface even for illiterate farmers
- Text is read out for benefit of farmers who are not fully literate or have an impaired hearing. Audio response generated when cursor is placed on text.
- o Completely in vernacular except for last level links in English
- o Rich audio, video and animation content
- Excellent response at Call Centre with Google like search interface for the Agent

#### IV. E-Krishi Kiran Gujarat

- Analysis of soil of all the villages of the state and Soil Health Card
- Recommendation for fertilizer usages for each farm, based on soil analysis
- Suggest alternate cropping pattern based on moisture availability index.

Farmer's Record, Soil Fertility Data (N,P,K, EC, pH), Soil Characteristics (Type, Depth), Crop Cultivation Practices



Soil Health Card, Crop, Planning / Reco., Package of practices, Research Recommendations for the Farmers, Model Action Plan, FAQ

#### Krishi Mahotsava for Multi-stake holder Extension for Mass Awareness

- Month-long, pre-kharif awareness campaign
- Gram sabhas organised prior to kisanrath to prioritize the issues to be addressed
- Kisan Raths, one in each taluk, visit 2-3 villages a day, cover all 18600 villages
- One lakh officials of 15 departments involved in the programme
- 700 agriculture scientists from SAUs, KVKs, participate and have direct interaction with farmers
- Committees to monitor kisanraths at state, district, taluk and village level.
   Hon'ble CM involves
- Technology transfer in wider area in short time: Over 50lakh farmers benefited
- Water harvesting, achieved the aim of public private partnership: Over 53932
   Boribandh, 20517 check dams, 9084 village ponds, 1850 farm ponds, 15771
   watersheds developed
- Soil Health Card (SHC)

- Web-based Gujarati application, secured access with ID No.
- o 16.52 lakh soil samples results uploaded in the website
- Target 15 samples in each village during 2008 krishimahotsav
- Awareness created for Balanced use of fertilizers
- Awareness created for Organic farming, Quality production
- Data based connectivity at Taluka Place
- SHC programme is a Knowledge Center in which farmers get the information for crop planning and package of practices

#### V. Karnataka

#### RaithaSamparkKenda (RSK)- Farmers Contact Centres

- RSK at sub-block (Hobli) level
- Each RSK has one AO, 1 to 6 AAOs, 2 to 16 AAs depending on the geographical area of a sub-block
- Infosys Foundation has supported the RSKs in 2 districts by supporting IT and library materials
- RSKs provide updated crop production know-how, agricultural inputs, seed and soil testing facilities, and arrange interface with private and public sector technologies

#### VI. Rajasthan

#### **Mass Extension Approach**

- Kharif Abhiyan& Krishi Yojana ApkeDwar –Pre Kharif Panchayat level campaign to reach out to farmers with special focus on productivity enhancement
- JalChetnaYatra Campaigns during Pre-Rabi
- "NAVANKUR", a weekly TV program telecast on Thursdays (7.30 to 8.30 pm) Produced by Department
- "KhetiRiBatan" a live daily Radio program with farmer-friendly format-phone-in, success stories, farmers interviews - Broadcast by all Kendras of AIR between 7.45 to 8.15 pm.

#### VII. SMS GATEWAY (For all States)

- An interface for registration of farmers for receiving SMS advisories has been developed and related module for sending advisories in regional languages is expected to be finalized very shortly.
- Kisan Call Centres (KCCs) to send by SMS gist of advisories (given during conversation with the farmer) using the same SMS Gateway(s)in language of the State

- There are various options for enrolling farmers for advisories including Database of KCCs, Registration on a Web Portal through Common Service Centers & Internet Kiosks, manually filled form followed by data entry on the portal, Tablet PCs, IVRS etc.
- A message will be sent to all the farmers, who are already registered in the data base of KCCs, asking them to confirm whether they would like to receive advisories and if yes, which sector of agriculture/horticulture/animal husbandry/fisheries and for which crops etc. Five options can be exercised by each farmer in the confirmatory SMS.
- It is clarified that an officer of the Agriculture/Horticulture/Animal Husbandry/Fisheries Department will be able to issue advisories only to such registered farmers who fall within the territorial jurisdiction of such an officer.
- SMS advisory will carry the designation of the scientist / officer issuing the same. Farmers will receive advisories in respect of the crops or animals or birds or fish etc., which they opt for.
- Details regarding priorities of the State in Agriculture and allied sector, location of the offices and designation including short code (e.g. TAO LTUR for Taluka Agriculture Officer, Latur

   there will be a limit of 4 letters for designation and 6 letters for location) can be filled by clicking the link 'Kisan SMS' at http://farmer.gov.in
- Password for your State would be Abcd@2013# where Abcd are first 4 letters in the name of your State (with A in capital).
- These SMSs will be sent in the language of the State with an option of English language for those farmers who opt for the same. For illiterate farmers, text to speech conversion engine or pre-recorded messages are proposed to be used for voice based advisories.
- Reply to specific queries of farmers using interactive messaging (called USSD) is also planned.
- The states are, therefore, requested to have a set of advisories ready at various levels in agriculture and allied departments and have a formal mechanism in place to update the same from time to time.

#### VIII. Display Boards: In Every Village

- These display boards shall indicate the name of the extension worker assigned to the Panchayat and his/her contact number.
- This Board will also contain broad details of main schemes (including their major components, eligibility, subsidy pattern etc.) applicable in that area. Besides Panchayat headquarters, the Display Boards can be alternatively put up in

prominent places in various villages (such as Fair Price Shops, Milk Cooperative Societies, PACs etc.).

#### IX. Pico/ Ultra-Light Portable Projector + Low Cost Films

- Pico projectors (or alternatively ultra-light portable projectors) have been found to be very appropriate in rural areas and these are easier to operate without any laptop.
- It is proposed to provide Pico Projectors at block level to field functionaries for disseminating best agricultural practices during the 12th Plan period.
- These will be used by ATMA BTMs & ATMs during their visits to villages.
- The films would focus on specific themes and preferably directed by farmers themselves so as to have greater acceptability among the audience.
- Video need not be of broadcast quality but will have to be in High Definition Video formats such as .mp4 which can be easily played on laptops or projectors.
- These films will also be made available on the internet for display through e-Panchayats and Common Service Centres.

#### X. Kala Jathas, Certified Crop Advisors and Other Innovative Methods

 Path-breaking and interesting methods such as Kala Jathas, Wall Posters, Extension Buses, Certified Crop Advisors etc. have been tried successfully in some States to deliver the message effectively and informally in an interactive manner.

#### XI. FARMERS PORTAL

- Farmers' Portal is a 'One Stop Shop' for the farmers integrating elements from all web portals/ sites which concern them.
- The farmers can drill down to their Development Block by clicking on GIS enabled maps up to Block level and get all relevant information for their Block / NARP Zone
- Farmers' Portal is now hosted at http://farmer.gov.infor testing and data entry purposes
- In the first phase, the following data is to be entered/uploaded by the States once and then updated periodically:
  - Dealers of Seed, Fertilizer and Pesticides.
  - Machinery manufacturers, their dealers and equipment manufactured by them.
  - Package of Practices.

- Web link for such data entry regarding Fertilizers, Pesticides, Machinery & Tools and Package of Practices is available on the home page http://farmer.gov.in at 'Data Entry by States.'
  - This link also gives access to Machinery & Tools Section for the approving registration of such manufacturers who opt to get approved by the States while entering their contact information and product details.
  - Package of Practices is to be preferably entered NARP Zone-wise. It will be desirable that all 14 components as listed in Annexure are fully entered.
  - Data entry for Seed Dealers will continue to be done at Seed net portal whereas Dealer Information for Fertilizers and Pesticides can be done using the interface available after clicking the link Data Entry by States on the home page of the Farmers Portal and logging in.
- Other inputs in various other portals like beneficiary list under NHM, NFSM, farm school and demonstration details entered under ATMA portal, ACABC details, agro-met advisories, etc. are also being displayed in the Farmers portal.

\*\*\*\*\*