

Summary of deliberations

National Level Workshop on
Taluka level Action Plan for
Climate Resilient & Sustainable Agriculture
3 November 2012

NASC

Supported by Planning Commission, Govt of India

Specialists & Insights

- 34 presentations
- 143 Specific points
- 41 Important points **29 are critical.**

Logical Framework 1

Spoke about

1. Model Taluka / Area / Village level action plans
2. Agro meteorology correlates
3. River basin considerations
4. Monitoring mechanisms
5. Integrating with
 - Contingency & Mitigation plan
 - National Sustainable Livelihood mission
6. Science & technology
Communication Opportunities
7. Important deliberations at the CoP in Qatar / Doha December 2012

Noted NICRA & MoES initiatives

- Strategic research on adaptation and mitigation
- Technology demonstration
- Human resource development
- Roadmaps

Logical framework 2

Wanted to take stock of learnings & opportunities for synergies

- **Climate change related agriculture productivity with special reference to Taluka level systems and opportunities / challenges**
- **Examine implications for adaptation planning emphasizing livelihood, nutrition and food security and sustainable management of natural resources &**
- **Action oriented training and capacity building needs of communities and elected / non - elected leaders to strengthen action at the local level**

Logical framework 3

14 main & cross cutting dimensions

1. Soil systems and their responses
2. Physical, chemical and biological profiles
3. Water availability, access and quality
4. Specific species that appear to be resilient
5. Main crops and associated crops / weeds within a cropping schedule
6. Well known and expected impacts on crops
7. Sustainability of control measures
8. Diseases / Vectors in crops and weeds
9. Chemical ecology
10. Animal resources
11. Stress responses
12. Access to nutrients
13. Diseases
14. Local level institutions and community initiatives

Important insights: Convergence

1. Look at convergence with the New Mission on Technology & Extension & take the good work of NICRA into account

- Climate change is not explicit in NMSA. NICRA has however addressed this aspect.
- Slow and progressive adaptation is an important point of consideration.
- How do we therefore carry out agriculture, change / help change suitably?
- Solve the generic problem before going to the specifics

Linkages with other plans

2. Comprehensive District Agriculture Plans have to be tapped (CDAP)
3. Block Action Plans (BAPs) can be re - oriented for better micro level impacts
4. Equity and justice through ecologic and economic rewards for farmers
5. Chemical ecological considerations have to be mainstreamed in planning

Three forecast perspectives

In times of calamities safety nets are operated. Seeds are provided and insurance cover operates.

6. Need robust models that can help foresee adversities.

7. Take note of Concurrent climate impact analysis of recent decades is needed for better management through greater spread and depth of local level empirical evidences.

- Most important

8. Soil health analysis should guide remedial and preventive measures to bridge observed & optimum yields following climate impacts

Focus on poor farmers immediately.

9. CDAP needs to integrate these aspects in its framework.

A Model Action Plan

9.

18 Parameters for detailed plan including

- Crop wise production per hectare
- Detailed land use patterns covering 10 parameters
- Soil types and health analysis
- Sources of irrigation and quality of irrigation water
- Sowing time
- Agricultural credit
- Agri inputs
- Extension activities
 - Identify gap between average and optimum productivity
 - Strengthen extension
 - Age of transplantation, density, IPM, IWM schedules
 - Field mechanization
 - Package of practices

We need

10. Block level forecasts through IMD
11. High resolution data,
12. Consolidate soil moisture data
13. To ask if local plans grow in a iterative manner or do the experiments and learnings flow back to improving plans?

Take note of

14. Unique field-wise soil features

15. Nutrient deficiency in soils

16. Moisture Availability Index & 13 other parameters at the village level WRT Village Agricultural Plan Vs Individual Agricultural Plan

17. Knowledge network that resolves dilemmas is critical to avoid confusing the farmer.

One lesson

18. Timeliness is critical because alternatives should be readily available.

19. Help farmers know the science of interventions so that they can act better.

20. **Lessons from Compliance Assistance Programme of Montreal Protocol**

Classic effort

21. RBM

- Can agriculture help mitigation through resource efficiency?
- Variations in yield evident 10 – 40% for agri & 25 – 40% for cattle productivity.mas covering 180 hectares, 14, 712 beneficiaries
- 47 check dams made

State level insights

22. Micro nutrients are less in soils. Tackle this immediately. (Punjab)

23. Metrological data at the village level is needed, much as the headquarter level data is available. This is critical for NE in particular. This is needed especially for paddy. (NE)

24. Due to lack of such data and erratic rainfall proper planning was not possible. Water / river basin resources management needs urgent help (NE)

25. Moisture availability index is equally important (NE)

26. Acidic soils of NE need urgent attention (NE)

27. Rigorous awareness is needed in the NE immediately. (NE)

State level contd

28. Village / Taluka level network for agro meteorological advisories needed urgently. Data is not available.
29. District level advisory committees needed.
30. Can we have an aggregated Taluka level plan covering several sectors that are crucial for food and economic development (Maharashtra)

NICRA's insights

- 31. There are intermittent droughts for a week – 15 days. This calls for careful planning.
- 32. NICRA's approach How do we prevent “backsliding”?
- 33. seedling production is a good option.
- 34. Advance planting date to escape heat stress

IMD insights

- 35. Integrated agro met services of the MoES introduced**
- 36. Urgent need for personalized services Village level forecast is not easy. Now reached district / block level.**
- 37. Convergence needed with 3 - 9 km resolution forecast**
 - WOTR collaboration Pilot; Climate Smart Villages in Bihar; NABARD initiative
 - Want to scale up these tasks
- 38. Need one station in each district for actual success (with KVK)**
- 39. Generate District Level Weather Forecast for a 5 – day scale**
 - AAS Units – AMFU – DAMU under KVK & a 6 – tier system involving District Agriculture Officer at the grass root level & the District Met Offices
- 40. Village level info delivery is a major challenge (NIC – Farmers e mail addresses)**
- 41. How to tag with taluka level planning?**