

AICRP for Dryland Agriculture (AICRPDA) launched in 1970 with the assistance of Canadian International Development Agency (CIDA), has now the network of 22 centres (19 main, 3 sub) and 8 ORP centres spread across arid, semi-arid, sub-humid and per-humid rainfed agro ecologies.

MANDATE

- Optimize the use of natural resources, i.e., rainfall, land and water, and minimize soil and water loss and degradation of environment
- Evolve simple technologies to substantially increase crop productivity and profitability
- Increase stability of crop production over years by providing improvements in natural resources management, crop management systems and alternate crop production technologies matching weather aberrations
- Develop alternate and sustainable land use systems
- Evaluate and study transferability of improved dryland technologies to farmers' fields

MISSION

Developing location-specific doable rainfed technologies

VISION

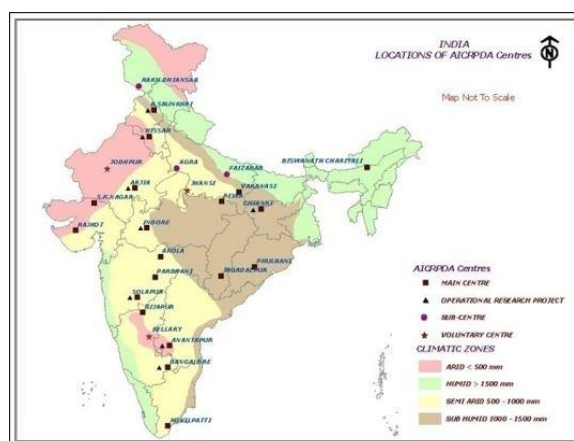
Sustainable production systems in rainfed regions for enhanced income and livelihood security to farmers and landless

SIGNIFICANT ACHIEVEMENTS

- Location-specific *in situ* moisture conservation practices for diverse rainfed agro-ecologies i.e. rainfall (<500 mm to >1500 mm) and soil types (Entisols, Inceptisols, Vertisols, Alfisols, Aridisols)
- Rainwater harvesting methods for diverse rainfall and soil types
- Risk resilient and productive intercropping/strip cropping systems for diverse rainfed agro-ecologies i.e. rainfall (<500 mm to >1500 mm) and soil types (Entisols, Inceptisols, Vertisols, Alfisols, Aridisols)
- Development and real-time implementation of contingency measures for agricultural drought management

- Carbon positive nutrient management practices including residue recycling, green manuring and use of enriched compost for major rainfed cropping systems
- Development, testing and popularization of cost effective and energy efficient tractor / animal drawn and hand-operated implements for timely and precision agricultural operations and drudgery reduction
- Developed dryland horticulture, agri-horti, agri-silvi, silvi-pastoral and agri-silvi-pastoral systems for higher productivity, profitability and risk minimization
- The action/adaptive research and demonstrations through ORPs resulted in technology assessment and refinement, impacted horizontal spread of doable rainfed technologies in convergence with national/state programmes
- Documentation & validation of ITKs and their upscaling in farmers' fields

LOCATIONS OF AICRPDA CENTRES



In addition, during XII Plan, five new centres to be established at ARS, Darsi, ANGRAU, Prakasam Dt, Andhra Pradesh; MRS, Raichur, UAS Raichur, Karnataka; ARS, Aklera, Agricultural University, Kota; BAU, Sabour, Bihar and CAU, Imphal, Manipur

FIVE BEST TECHNOLOGIES/PRODUCTS

- Rainwater management including *in-situ* moisture conservation through compartmental bunding, conservation furrow, broad bed and furrow, and standardization of farm pond sizes with lining for efficient utilization of rainwater with crop diversification
- Developed crop and contingency plans based on rainfall, drought intensity, soil type and rainfed

production system and multiple inter-relay cropping systems

- Identified cost effective and energy efficient implements viz. Anantha aqua planter, bullock drawn seed drill, two bowl ferti-seed drill, improved ridge seeder, Phule sheti yantra etc.
- Developed risk resilient and productive alternate land use systems including tamarind/sapota/aonla/mango/ guava/custard apple/Hanuman phal based agri-horti systems, leucaena based silvi-agri systems etc.
- Developed location-specific integrated nutrient management practices for dominant rainfed crops

NEW INITIATIVES

- Real time contingency implementation for delayed onset of monsoon and early/mid season drought
- Conservation agriculture for resource conservation and higher productivity and profitability in dominant rainfed production systems
- Development of location-specific IFS modules as drought resilient technology
- Strengthening of small farm mechanization
- Strengthening of collaborative network research with AICRPs of NRM Division and crop AICRPs

COLLABORATIVE PARTNERS

AICRPDA has established strong linkages with national and international organization DST, SAUs, State line departments, ICAR institutes and other AICRPs etc.

FLAGSHIP PROGRAMMES

- Catchment-storage-command relationship for enhancing water productivity in micro-watershed, including minimizing evaporation losses, lining, micro-irrigation and crop diversification
- Development of risk resilient and productive rainfed farming systems with matching production technologies
- Real time contingency planning for adaptation to climate change/variability supported with suitable farm mechanization

THRUST AREAS FOR XII PLAN

- Continue to address location specific problems of rainfed agriculture through strategic/adaptive/action research
- Climate change research for developing adaptation and mitigation strategies

- Promote cost-effective rainwater harvesting *in-situ* and *ex-situ* for supplemental irrigation and drought-proofing of rainfed crops
- Develop cost-effective, location specific soil and nutrient management options for sustainable production
- Develop alternate and sustainable land use systems, and integrated farming system modules
- Evaluate the performance of dryland technologies on farmers' fields
- Up scaling of doable rainfed technologies in convergence with national and state programmes/schemes

STAFF STRENGTH

| | Sanctioned | Filled | Vacant | % vacant |
|----------------|------------|------------|------------|-------------|
| Scientific | 128 | 94 | 34 | 26.6 |
| Technical | 260 | 142 | 118 | 45.4 |
| Administrative | 60 | 31 | 29 | 48.3 |
| Supporting | 68 | 41 | 27 | 39.7 |
| Total | 516 | 308 | 208 | 40.3 |

QRT

Period: 2006 to 2010

Chairman: Dr. H. P. Singh

Next QRT due for: 2011 to 2015

PUBLICATIONS (PREVIOUS YEAR)

No. of papers in NAAS rated journals:

- (a) No. of paper in score < 6: 36
- (b) No. of papers in score > 6: 28

FINANCIAL OUTLAY (Rs. in lakh)

| FINANCIAL OUTLAY (AICRP-DA) (Rs. in lakh) | | | | | |
|--|----------------------------|-----------------|----------------------------|--------------------|---------------|
| | XI Plan actual utilization | XII Plan Outlay | Last year budget (2015-16) | | |
| | | | RE | Actual expenditure | % utilization |
| Plan | 8135.00 | 14205.05 | 2571.83 | 2560.98 | 99.00 |
| Non-plan | 151.08 | 305.08 | 48.00 | 46.86 | 97.00 |
| Total | 8286.08 | 14510.13 | 2619.83 | 2607.84 | 98.00 |

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