



Andhra Pradesh Drought Mitigation Project

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Summary of the Initiative

Andhra Pradesh Drought Mitigation Project (APDMP), an IFAD and GoAP funded programme, is a concerted and coordinated effort to address the overarching problem of repeated drought, strengthen the drought resilience of 95,000 farm households and to improve the incomes. The project aims at strengthening the adaptive capacity and productivity of agriculture in the worst affected 315 drought prone gram panchayats located in 105 blocks (identified as clusters) of Ananthapuramu, Chittoor, Kadapa, Kurnool (the Rayalaseema region) and Prakasam districts of southern AP.

Situation before the Initiative

The recurrent spell of drought during past six decades has plagued agriculture and allied sectors in the most rain-fed areas of southern Andhra Pradesh (AP) i.e., Ananthapuramu, Chittoor, Kadapa, Kurnool and Prakasam districts simulating an unpredictable climatic condition causing vulnerable situations leading to migration of 80% of the farmers to cities for low paid jobs.

Nature of the Initiative

Through 105 Farmer Producer Organizations (FPOs) established in 105 blocks covering 315 Gram Panchayats of southern region of AP, the project has majorly promoted minor millet varieties like foxtail, little, barnyard, kodo, brown top millets etc.

Some of the initiatives undertaken by project are the following:

- Crop Diversification to Millet Cultivation: In the baseline survey of the project, the extent of millet cultivation in the project areas was about 19,337 hectare. The farmers were trained about the cost benefit ratio of millets over groundnut and other crops and to explore the marketing opportunities with the Government, local buyers and exporters at a remunerative price. High yield and quality millet seeds are also distributed to interested farmers at subsidized prices under project activities like Navadhanya multi-cropping system and crop diversification and also under various schemes of Agriculture Department, AP.

Improved Package of Practices on Minor Millets

Name	Foxtail Millet	Brown top Millet	Sama (Little Millet)
Rainfall (in mm)	500-750 mm	500-750 mm	500-750 mm
Season	Kharif: July- August, Rabi: December – January, Summer: January	June to August	Kharif: June-July
Soil	Light soil, red loams, alluvial and black cotton soils	Grows well in shallow soils.	light soil, red loams, alluvial and black cotton soils
Variety	Suryanandi, SiA 3085 and local varieties	Local Varieties	Local varieties & OLM 20, OLM 36, OLM 203 and CO ₂
Duration	Early duration varieties: 70-75 days and Medium duration varieties: 80-85 days.	70-80 days	100-105 days
Seed rate	5 kg/ha for line Sowing, 10 kg/ha for broad casting	Line sowing: 5 Kg/ ha Broadcasting: 10-12 Kg/ha	8 kg/ha for line Sowing
Spacing	25 * 10cm	45*15cm	25 * 10 cm
Fertilizer	20N + 30P + 30K kg/ha Top dressing after (30 days crop): 20 N kg/ha	20:20:20 NPK Kg/ha	Basal: 20N + 20P + 20K kg/ha,
Weed Management	2-3 inter cultivations with one hand weeding	2-3 intercultivations and one hand weeding	2-3 inter cultivations with one hand weeding
Important Pests	Army worms, Cut worms and Leaf scraping beetles: Spray chloripyriphos 2.5 ml or quinalphos 2 ml/l	Army worm and grass hopper	Shoot fly is the major problem to overcome shoot fly infestation better go for early sowing.

Disease	Blast, Brown spot and Rust	Blast, Brown spot and Rust	Grain smut is major disease very often occur. Seed treatment with Carbendazim @ 2g /kg seed.
Yield	25-30 q/ ha and 1-2 t/ha straw	Grain: 18-20 q per ha	10-15 q/ha

- **On-Farm Demonstrations supporting natural farming practices:** Millet promotion awareness campaigns are organized in project villages conducting 315 millet onfarm demonstrations in 1 acre/gram panchayat with a financial assistance of Rs.3300 for purchase of improved seed varieties and application of bio-inputs like Ghana Jeevamrutham, spraying kashayams provisioned from Bio Resource Centers setup by young entrepreneurs under aegis of APDMP, providing protective irrigation and organizing field days. These are monitored by the technical and facilitating agencies, District Project Management Units (DPMUs).
- **Promoting local household consumption of millets:** The project has promoted processing of millets for the poorest women, using inexpensive micro-millet dehuller. These are developed by WASSAN Foundation, Secunderabad in Chittoor district where the millet cultivation is more to reflect the consumption of millets by the local community. The project has organized training sessions in collaboration with KVK, Yagantipalle for women FPO working on millets. Nutritive, tasty and easily marketable millet recipes like rotis, biscuits, paayasam (kheer), chikkis, laddus, jantikalalu etc. using foxtail and brown top millet were developed and sold in the local markets. At FPO level, storage godowns are being planned to store the agricultural produce with the MGNREGS convergence under 100% assistance and proposals were sent to Department of Panchayat Raj & Rural Development. The project has connected millet producing FPOs with private processing units like M/s. Sattva Millets and Food Products, Renadu a Millet Processing Unit, Nandyal, Kurnool district. The State Agriculture Department, is in discussion with GoAP for inclusion of millets in Public Distribution System (PDS), 2 day/week nutritive millet consumption in mid-day meal and in Anganwaadi centers.
- **Exploring sustainable output markets connecting farmers to local markets:** The project has successfully collaborated with various commodity market players like AP Mark Fed, APEDA, NeML, e-NAM, Reliance Retail, Big Basket, etc. to connect farmers to potential buyers through various digital platforms. The project is in discussion with Samunnati Financial Intermediation and Services Private Limited, Chennai to explore the possibilities in providing credit linkages to potential buyer ready FPOs for aggregation of millet produce from farmers, process them as per the requirements of buyers and sell the output to buyers. This will not only benefit the farmer to receive a remunerative price for their output but also the FPO to gain reasonable profits for marketing.

Impact of Initiative

Increase in millet production area under the project

District	Millet area before Project Inception (in ha)	Millet area by Kharif 2020 (in ha)	% Increase
Ananthapuramu	6,086	9,188	51.0
Chittoor	5,169	7,395	43.1
Kurnool	4,392	6,072	38.3
Kadapa	1,192	1,668	39.9
Prakasam	2,498	3,527	41.2
Total	19,337	27,850	44.0

- Due to the above initiatives, the extent of millet area increased by 44%, from 19,337 hectare to 27,850 hectare, in the project area, and also ensured nutritional security among the rural communities.
- The cost of cultivation minimized and the production has constantly increased.
- The FPOs of APDMP sold 98 MT of Foxtail Millet and 99 MT of Brown top millet to M/s Manyam Grains, Visakhapatnam.
- Two FPOs in Kurnool district made farming agreements with M/s Sattva Millets and Food Products, Anupuram (V) Panyam(M) Kurnool (Dist), with a buyback agreement of Little Millet & Barnyard millet produce from 150 acres.
- FPOs are well versed with the utilization of electronic platforms in exploring markets for their output sale.
- Increased the consumption of millets locally by utilizing the micro millet dehuller.
- The project has planned to establish 35 millet processing units for processing the millets to ready-to-use ingredient by cleaning, removing husk using millet processing units/machines to encourage the farming community to cultivate millets more and to get the remunerative price.

Source : State Missions and Initiatives to Promote Millets 

Source: <https://data.vikaspedia.in/short/lc?k=MS74bcQojlM2a5TtL0KFmw>

