

Food Security and Diversity of Crops (SRI and **Millets) Rural Livelihoods**

Group: Dr. Seetharama, Kiran & Dinesh

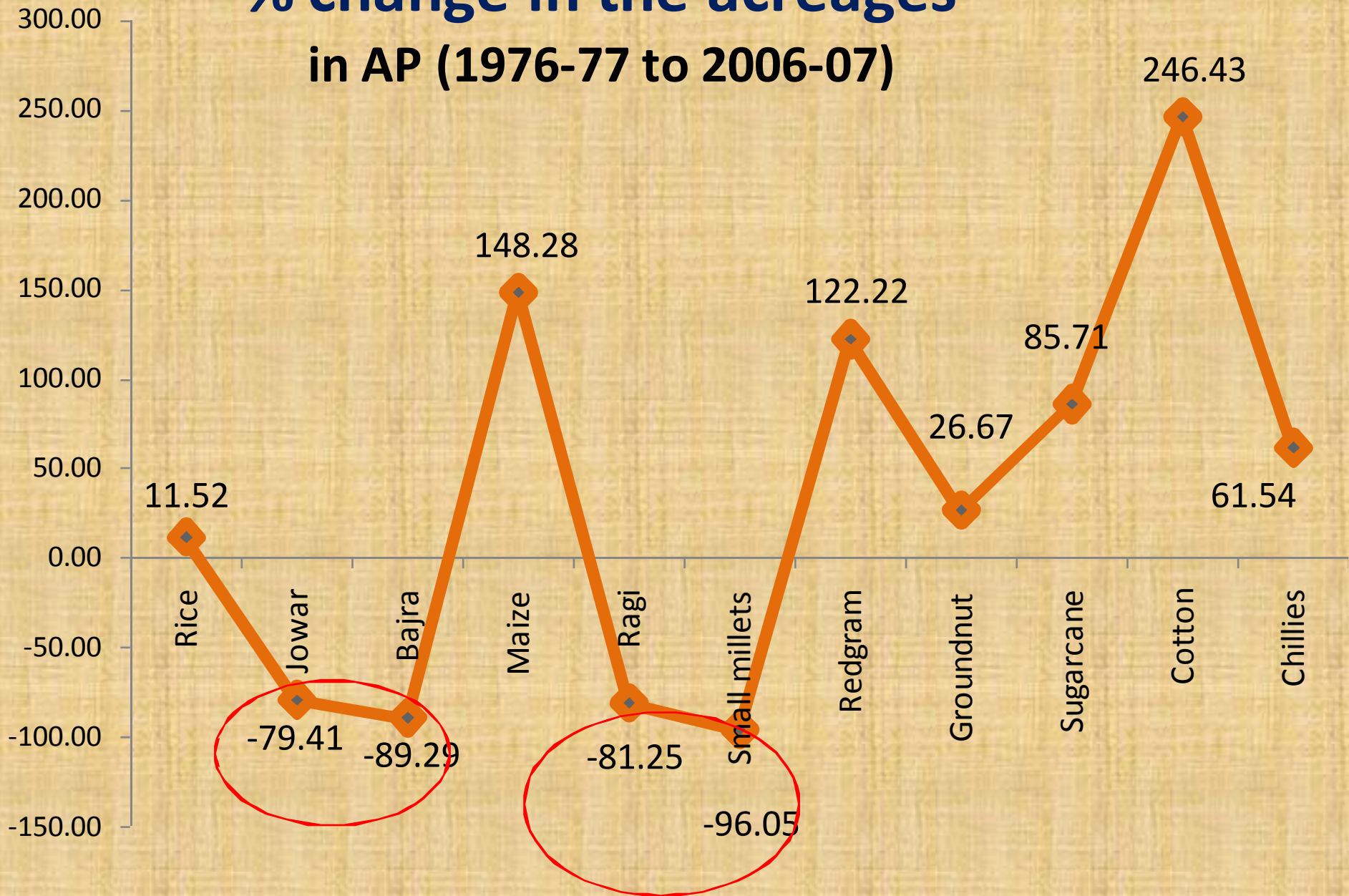
Why Millets

- **Highly nutritious- nutritional security**
- **Requires low external inputs**
- **Almost pest free**
- **Key to reviving Rainfed agriculture**
- **Climate resilient crops**
- **Huge savings on water**
- **Provides good fodder**

Nutritional superiority of millets

Crop	Protein(g)	Carbohydrates(g)	Fat(g)	Fibre(g)	Minerals (g)	Calcium(mg)	Phosphorus (mg)
Wheat	11.8	71.2	1.5	12.9	1.5	41	306
Rice	6.8	78.2	0.5	5.2	0.6	10	160
Sorghum	10.4	72.2	1.9	12.0	1.6	25	222
Bajra	11.6	67.5	5.0	16.0	2.3	42	296
Finger millet	7.3	72.0	1.3	18.8	2.7	344	283
Proso millet	12.5	70.4	1.1	14.2	1.9	14	206
Foxtail millet	12.3	60.9	4.3	14.0	3.3	31	290
Kodo millet	8.3	65.9	1.4	15.0	2.6	27	188
Little millet	8.7	75.7	5.3	12.0	1.7	17	220
Barnyard millet	11.6	74.3	5.8	13.5	4.7	14	121

% change in the acreages in AP (1976-77 to 2006-07)



Decline in millet acreage (National level)

- Sorghum 54%
- Bajra 18%
- Ragi 47%
- Other small millets 75%

(Foxtail, Little, Proso, Kodo and Barnyard Millet)

Reasons for decline in millet acreage



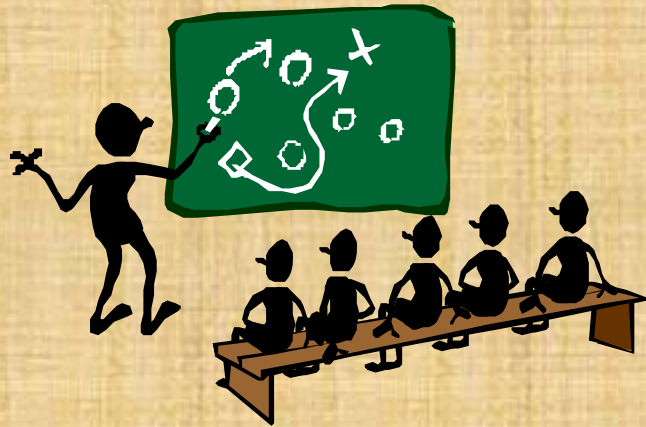
- Green revolution by passed millets
- PDS focused around Paddy rice and wheat supply at low prices.
- Profitability of commercial crops
- No MSP / procurement of millets
- Negligible Research & extension support
- Absence of suitable of processing facilities

Successful initiatives with millets

- **Decentralized production, procurement & distribution through PDS - A PDAI Experiences**
- **Millet PDS by Deccan Development Society**
- **Millet marketing by Timbaktu Collective**
- **Pilot scale millet processing commissioned in Anantapur**

Modalities of APDAI pilot

- ❑ 20 villages, 2500 households population covered ~ 7998
- ❑ Supply of millets through PDS is in addition to rice
- ❑ Millets supplied - Ragi (1kg/person), Jowar (1/4 kg/person), Bajra (Saddalu) (1/2 kg/ person)- Max of 8kg/ house hold
- ❑ Local procurement at farm gate at a prefixed price from the farmers / whole sale market.
- ❑ Revolving fund with Local CBOs for procurement
- ❑ Grains supplied @ Rs.6/kg
- ❑ Millets off take from PDS - 68%



Learnings from the Pilot

- People expect that the price of grain to be low (Price comparison with the subsidized rice).
- Though the uptake was encouraging, children in the families preferred consumption of rice
- Production of Ragi increased in few project villages
- Need to remove the stigma associated with millets
- Unavailability processing facilities - Preference for processed form (rava, Dalia etc)

Up scaling of APDAI pilot

- District admin proposed a scaled up pilot
- Promotion and distribution of millets – **27mandals covering 61 FPS, 21000HHs**
- Total budget – **Rs.173 lakhs**
- Plan to supply in processed form (Flour)
- Total allocation of grain / family/month - 8kg
(4kg Ragi, 2 Kg Jowar and 2 kg Bajra)
- Grain requirement/ year - **Ragi - 810t, Jowar - 408t and Bajra - 408t**
- CBOs / NGOs (2 MMSs, APPS Network, RDT, Timbaktu collective)

Issues in upscaling

- Population to be covered 21,000 House holds**
- Revolving fund for local procurement (Rs. 2.48 Cr)**
- Incentives for local production, procurement, and distribution**
- Support for facilitation to the upscaling partners (Rs.100/ house hold)**
- Policy for decentralised upscaling**

Issues in upscaling

- Market Prices of grains
(Ragi Rs12, Sorghum- 13.50 and Bajra-11.50)
- Subsidy component **Rs 6/kg**
- Sale prices at FP shops
(Ragi- 8.00/kg; Sorghum- 9.50/kg; Bajra- 7.50/kg)
- Handling charges **Rs 3/kg**
- Dealer commission **Rs.0.40/kg**
- Subsidy component **Rs 1.521 cr**
- Promotional expenditure **Rs 0.208 cr**
- **Total Budget required **Rs 1.729 cr****

Recommendations for 12th Five Year plan

- 1. National level campaign to promote millets consumption**
- 2. Procurement support for millets with MSP**
- 3. Include Millets as part of NFSM - Introduce millets in PDS, Mid day meals and ICDS in millet districts**
- 4. Brown Revolution – Initiate Mission on Millets**
- 5. Credit support and crop insurance to millet crops**
- 6. Strengthen the grassroot initiatives in reviving millets**
- 7. Production incentives to farmers**
- 8. Research focus on millet value chains**
- 9. Incentives / Soft loans to entrepreneurs**

