

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:4543
ANSWERED ON:25.04.2005
AGRO CLIMATIC ZONES
Oram Shri JuaI

Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the Indian Council of Agricultural Research (ICAR) has developed any new technology for the agricultural and allied activities for different agro-climatic zones in the country;
- (b) if so, the details thereof; zone-wise and
- (c) the steps taken for the application of such technology?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA)

- (a) Yes, Sir. Location specific technology generation and its periodic upgradation in light of changing scenario is a continuous process in the ICAR system.
- (b) The ICAR has divided the country into 20 agro-climatic zones and 60 sub zones for agricultural research and planning. For each zone profitable, sustainable and eco-friendly crops, cropping systems, fruits varieties, animal breeds, farm implements and cultural practices have been developed. The zone wise details of new technologies and practices are given in Annexure I.
- (c) The location specific technologies developed are disseminated through the All India Coordinated Research Projects in different zones through on-farm participatory research, frontline demonstrations, Institute Village Link Programmes and Krishi Vigyan Kendras. Some of the technologies are also being commercialized in collaboration with industries.

Annexure - I

ZONWISE/STATEWISE TECHNOLOGIES DEVELOPED

Sl. No. Name of the technology States / districts / agro-climatic zones where it is applicable

Rainfed Rice Based Production System

1. Sequence cropping of vegetables, pulses and oilseeds in rice fallows Chhattisgarh, M.P and Orissa
2. Intercropping of upland rice + pigeonpea Chhattisgarh, Jharkhand and Orissa (5:2)
3. Pigeonpea + groundnut intercropping system (2:6) Jharkhand and Orissa
4. Rainwater harvesting and recycling Chhattisgarh, Orissa and through dabriss (5:2)Orissa
5. Utilisation of excess rainwater in medium and low lands for second crop and fish culture Dhenkanel and Mayurbhunj districts of Orissa
6. Mango + upland rice agri horticultural system districts and also Ranchi and Palmau districts of Jharkhand Koraput and Jagdalpur
7. Mango + ginger/turmeric agri horticultural system district of Orissa Koraput and Phulbani
8. Rice-fish-duck/pig farming system Ranchi district of Jharkhand and Midnapore district of West Bengal
9. Improved upland rice varieties for aberrant weather varieties like Vandana with greater adaptability to uplands provides stability of yield during drought in Orissa
10. Integrated nutrient management Orissa and Jharkhand

- with incorporation of legume
intercrop in rainfed rice
11. Management of parasitic diseases (nematodes and trematodes) in buffaloes Orissa and Chhattisgarh
 12. Use of bullock drawn puddler 99 for improved yield of rainfed rice in low lands Orissa and Chhattisgarh
 13. Integrated weed management in upland rice Jharkhand and U.P.
 14. Integrated pest management in rainfed rice Assam, Manipur, Orissa and West Bengal
 15. Improved biasi method of cultivation Chhattisgarh and Jharkhand
 16. Storage of paddy in RCC ring bin Assam, Manipur and Orissa
 17. Inter row crop seeder for rice and green manure crop Orissa and Assam
 18. Sprouted rice seeder Orissa and Chhattisgarh

Oilseeds Based Production System

19. Cultivation of non spiny varieties of safflower Maharashtra and Karnataka
20. Use of safflower (multicrop) harvester Karnataka and Maharashtra
21. Improved technology for storing soybean seeds to increase viability M.P.
22. Improved technology for production of eri silkworm Assam and Manipur
23. Feeding of livestock with sunflower head based complete feed states All sunflower growing
24. IPM modules for sunflower, safflower, mustard and groundnut Sunflower, Safflower, mustard and groundnut growing states
25. INM in oilseed based cropping systems All oilseed growing areas
26. In situ moisture conservation technology in castor and groundnut Drought prone districts of India
27. Production technology for castor, groundnut, safflower and linseed for U.P. saline and sodic soils A.P., Maharashtra, Gujarat and
28. Integrated management of groundnut stem necrosis A.P.

Pulses Based Production System

29. Liquid Rhizobium inoculant for pulses Pulse growing states of India
30. Non pesticidal control of soil nematodes U.P.
31. Management of MYMV in mung bean and urd bean Orissa, A.P. and Tamilnadu
32. Use of improved mini dal mill Pigeon pea growing states
33. Pitfall trap for monitoring and control of pulse beetle Pulse growing states
34. Integrated crop management technology for pigeonpea based intercropping systems Pigeonpea growing states
35. Bio intensive IPM modules for pigeonpea and chickpea growing states Pigeonpea and chickpea

Cotton Based Production System

36. Rainwater management in cotton on toposequences in a watershed Maharashtra, Karnataka and A.P.
37. Improved arboreum varieties of cotton A.P., Karnataka and Maharashtra

Nutritious Cereals Based Production System

38. Establishment and management of live fences around the crop fields Can be adopted in all states
39. Integrated management of blast disease in finger millet Karnataka
40. Finger millet based intercropping systems with legumes for improved returns A.P., Karnataka and Tamilnadu
41. Cultivation of dual purpose sorghum variety CSV-15 applicable in all Sorghum growing states
42. Improved production technology for rabi sorghum Maharashtra and Karnataka
43. Rain water management technology in maize based cropping system H.P. Rajasthan and Gujarat
44. Establishment of improved silvi pasture systems for small ruminants Arid areas
45. Moisture conservation and nutrient management technology for pearl millet Semi arid and arid pearl millet growing districts
46. Feeding of poultry with substitute rations to reduce the cost of production Applicable in all states
47. Technology of physiological harvesting Maharashtra and A.P.

- and grain drying in kharif sorghum
48. Cultivation of high yielding sweet sorghum genotypes and Tamil Nadu A.P., Karnataka, Maharashtra
49. Preparation of value added products like syrup, jaggery and cake from sweet sorghum All relevant states
