

Adoption of IOFS

655. DR. SASIKALA PUSHPA RAMASWAMY: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether 'One acre Integrated Organic Farming System' (IOFS) model has been developed with the objective to generate more than 80 per cent of inputs required for organic farming within the farm itself;
- (b) if so, the details thereof;
- (c) whether Government has received any suggestions/inputs from the farmers regarding the feasibility of this model; and
- (d) if so, the details thereof and the reaction of Government thereto?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) to (d) ICAR-Indian Institute of Farming Systems Research, Modipuram has developed One acre Integrated Organic Farming System (IOFS) models under the scheme *All India Network Programme on Organic Farming (AI-NPOF)*. Further, a model for Sikkim was also developed by Regional centre of ICAR-Research Complex for North Eastern Region, Gangtok, Sikkim.

Kerala: The IOFS model comprising of Crops (Turmeric, Coconut, Fodder, Yam, Banana, Tapioca and Vegetable cowpea) + livestock (2 cows) has been developed at Calicut (Kerala). The-model could generate net income of ₹ 1,23,00 lakhs/acre and 89% of the seeds/planting materials and nutrients required within the system.

Meghalaya: One acre IOFS model comprising of crops and cropping systems rice-lentil, rice -pea, maize + soybean - trench bean, vegetables (tomato, cabbage, cauliflower, broccoli, brinjal, chilli, spinach, carrot, pumpkin, bitter gourd etc.), fruits (Assam lemon, papaya, peach, guava) and fodder crops, livestock (1 milch cow and 1 calf), fishery in 0.046 ha has been established at Umiam (Meghalaya). Net income of ₹ 73,903/- year was recorded. The model could also generate 80% of the seeds/planting materials, nutrients required within the system.

Sikkim: A 1.25 acre IOFS model comprising of cropping systems (rice – vegetable pea, rice – potato – dhaincha, rice – toria – dhaincha, rice – cabbage – dhaincha, maize–soybean – buckwheat, coriander – radish – broccoli – fenugreek and cauliflower –

pea – beet root – spinach), 2 cows and 50 poultry birds has been developed for Sikkim. Net income of ₹ 1, 37,000/- year can. be obtained from this model.

Tamil Nadu: One acre Integrated Organic Farming System (IOFS) model comprising of cropping systems okra + leaf coriander-maize + cowpea (fodder), green manure-cotton-sorghum, and fodder grasses (CoCN4 and desmanthus)+ agroforestry (Sesbania grandiflora, Thespesia populnea, Lucaena leucocephala)+ dairy (2 cows+vemricompost+ boundry plantations (desmanthus, banana, glyricidia)+ supporting area (manure pit, threshing floor) has been established at Coimbatore (Tamil Nadu). The IOFS model could generate net return of ₹ 1,68,669/acre. The system generates 84% of the organic inputs such as seeds/planting materials, nutrients and botanical formulations for insect-disease management within the system.

The State-wise details of number of farmers visited these models durine the last 4 years and feedback/suggestions are given in Statement (*See below*).

Need based trainings are also given to develop integrated organic farming system models.

Statement

State-wise details of number of farmers visited these models during the last 4 years

Sl. No.	Location	Number of farmers visited the IOFS model					Farmers Feedback/ suggestions
		2015-16	2016-17	2017-18	2018-19	Total	
1	2	3	4	5	6	7	8
1.	Calicut (Kerala)	10	23	45	60	138	Appreciated the integrated organic farming system and informed successfully practiced by marginal farmers'. Technical and financial support at the initial stage is required for establishment of the model.

1	2	3	4	5	6	7	8
2.	Umiam: (Meghalaya)	379	535	448	513	1875	IOFS model for NEH region should also involve pig as component.
3.	Coimbatore (Tamil Nadu)	1550	1340	1140	1175	5205	Cattle shed wash recycling through drip irrigation system can be integrated to save water and supplement nutrients.
TOTAL		1939	1898	1633	7218		

Scientific agricultural practices

656. SHRI MD. NADIMUL HAQUE: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether the Ministry is focusing on developing scientific and sustainable agricultural practices;
- (b) if so, the details thereof;
- (c) the details of hi-tech hubs and custom hiring centres set up in the last three years, State-wise; and
- (d) the total expenditure incurred on setting up the facilities and maintenance in the last three years?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) and (b) Yes, Sir. National Agricultural Research and Education System of the Country comprising of 103 ICAR Research Institutes, 75 Agricultural Universities and 82 All India Coordinated Research Projects/Network Projects is engaged in developing location specific, cost effective, eco-friendly technologies for conservation and management of natural resources to ensure food, nutritional, environmental and livelihood security in the country. Efforts are made for the development of new high yielding, nutrient fortified, resilient and/or stress tolerant varieties of field and horticultural crops, high producing and climate resilient breeds of