

The Department of Agriculture, Cooperation and Farmers Welfare is implementing 'Strengthening and Modernization of Pest Management Approach' (SMPMA) Scheme, wherein, *inter alia*, Farmers Field Schools (FFSs) are organized to sensitize farmers on Integrated Pest Management (IPM) approach and to use chemical pesticides as per approved labels and leaflets as last report.

(2) Use of Fertilizers

Manufacture, import, sale and distribution of fertilisers are regulated by Fertiliser (Control) Order, 1985, under the Essential Commodities Act, 1955. Specifications of various fertiliser grades are prescribed under FCO. Clause '19' of the FCO restricts the manufacture/import for sale/stock or exhibit for sale or distribution of any fertiliser which is not of prescribed standard.

As such, there is no harmful effect of chemical fertilizers on soil health with balanced and judicious use. However, imbalanced use of chemical fertilizers coupled with low addition of organic matter over years may cause multi-nutrient deficiencies vis-à-vis decline in soil health. There is also possibility of nitrate contamination in groundwater above the permissible limit of 10 mg NO₃-N/L due to excessive use of nitrogenous fertilizers particularly in light textured soils that has consequence on human/animal health if used for drinking purpose.

The ICAR is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, bio fertilizers etc.) of plant nutrients to ensure judicious use of chemical fertilizers preventing deterioration of soil health and contamination of groundwater. In addition, split application and placement of fertilizers, use of slow releasing N-fertilizers and nitrification inhibitors, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated.

The ICAR also imparts training, organizes front-line demonstrations etc. to educate farmers on all these aspects.

Further, under Soil Health Management Scheme, trainings/demonstrations are imparted for judicious use of fertilizers.

Training programmes by Rajendra Agricultural University

†1303. SHRI RAM NATH THAKUR: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether agriculture scientists used to train and provide necessary advice to farmers for advanced farming 30 years earlier;

† Original notice of the question was received in Hindi.

(b) whether Government is contemplating to make this important scheme more effective;

(c) if so, details thereof;

(d) the number of districts of Bihar where training programme has been conducted by Rajendra Agricultural University during last three financial years and number of farmers benefited there from; and

(e) the land in acres of remote villages of 20 blocks of Samastipur district whose soil has been tested and advised for appropriate crop thereafter by scientists of the above University along with the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI GAJENDRA SINGH SHEKHAWAT): (a) Yes, Sir.

(b) Yes, to develop cost effective, eco-friendly and socially acceptable scientific technologies and farming practices in farmers' participatory mode, ICAR, has established and strengthened the network of 102 Research Institutes, 81 All India Coordinated Research Projects/Network Projects and 11 Agriculture Technology Application Research Institutes (ATARIs) across the country. To promote the transfer of various agricultural technologies developed by ICAR and take them from lab to land, the Government of India has created an effective network of 681 Krishi Vigyan Kendras (KVKs) at district level in the country which are being continuously strengthened.

(c) The KVKs are Coordinated at Regional level by ATARIs and are responsible for training and capacity building of the farmers from the concerned district besides conducting technology demonstrations through frontline extension of various agricultural technologies among the farmers, state extension agencies and other stakeholders. Out of the total 681 KVKs at the National Level, 12 KVKs are functional under Dr. Rajendra Prasad Central Agricultural University, Pusa Samastipur, Bihar. As part of their mandated activities, these KVKs are engaged in organizing training and capacity building programmes on various aspects of Agriculture for improving knowledge of farmers on modern agricultural technologies. Broad areas under whom the trainings are organized include; promotion of high yielding and climate resilient varieties and crop management practices of field and horticultural crops, improved breeds/varieties of livestock and fish production and resource conservation technologies, including those on; improved soil health management, enhancing nutrient and water use efficiency, promoting crop diversification, integrated disease, pest and weed management, integrated farming system including agroforestry, management of different biotic and abiotic stresses and development of climate smart agricultural technologies, besides promotion of processes and products to

encourage post-harvest value addition, reduce post-harvest losses, encourage small farm mechanization and improve profitability.

(d) The details regarding the number of training programmes conducted by KVKs during last three years under administrative control under Rajendra Prasad Central Agricultural University, Pusa Samastipur, and the number of farmers benefitted are given in Statement (*See below*).

(e) During the year 2015-16 to 2017-18 (till date), 205 soil samples of 6 blocks of Samastipur district covering an area of 1281.25 acres were tested by KVK, Birauli, Samastipur. Besides, Department of Soil Science, Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur also tested 965 soil samples covering over 2450 acres under 19 blocks of the district during the last 3 years. The farmers were provided soil health cards and necessary advice for taking appropriate crops accordingly.

Statement

Details of training programmes conducted by KVKs under administrative control under Rajendra Prasad Central Agricultural University, Pusa Samastipur

District	2014-15		2015-16		2016-17	
	No. of Training Organized	Farmers trained	No. of Training Organized	Farmers trained	No. of Training Organized	Farmers trained
Begusarai	126	5012	88	2576	95	3380
Darbhanga	200	17189	94	2348	101	3352
East Champaran	122	4632	44	1685	65	2193
Gopalganj	163	5341	73	2034	87	2583
Samastipur	75	2390	65	1422	110	2652
Muzaffarpur	107	3279	137	2839	168	4871
Saran	90	2506	77	1895	171	4234
Sheohar	54	1728	35	927	54	1822
Sitamarhi	60	1747	82	1603	273	3229
Siwan	85	2743	81	2244	115	2770
Vaishali	124	4830	86	1911	35	1421
West Champaran	115	3313	98	2955	51	1850
TOTAL	1321	54710	960	24439	1325	34357