

1	2	3	4
East Champaran	0	29159	183931
West Champaran	0	0	228430
Kaimur	0	0	16995
Katihar	121	0	27621
Jamui	0	1978	228943
Munger	0	2019	58089
Madhubani	0	74358	197432
Muzaffarpur	0	47673	204007
Nalanda	0	0	119813
Nawada	0	0	172240
GRAND TOTAL	2879	214362	6175808

*Note* - NAIS: National Agricultural Insurance Scheme.

MNAIS: Modified National Agricultural Insurance Scheme.

WBCIS: Weather Based Crop Insurance Scheme.

(Above details are as on 9.12.2014)

#### **Development of liquid form of chemical fertilizers**

†2216. SHRI RAM NATHT HAKUR: Will the Minister of AGRICULTURE be pleased to state whether scientists of Indian Agricultural Research Institute, Pusa have developed the liquid form of chemical fertilizers, if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. SANJEEV KUMAR BALYAN): No Sir, the scientists of Indian Agricultural Research Institute (IARI), Pusa have not developed the liquid form of chemical fertilizers.

However, Scientists of the Indian Agricultural Research Institute (IARI), Pusa, have developed liquid form of biofertilizers formulations for farmers' use. The details are given below:-

1. *Rhizobium*: provides 20-30 kg. N/ha.
2. *Azotobacter*: provides 15-20 kg. N/ha.
3. *Azospirillum*: provides 5-10 kg. N/ha.

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†Original notice of the question was received in Hindi.

4. Phosphorus solubilizing bacteria: provides 15-20 kg.  $P_2O_5$ /ha.
5. Potash solubilizing bacteria: provides 5-10 kg. K/ha.
6. Zinc solubilizing bacteria: improves Zn nutrition
7. NPK (Nitrogen, Phosphorus and Potash) providing formulation: Inoculation with this single product can help to augment 15-20 kg N, 15-20 kg.  $P_2O_5$ /ha. and 5-10 kg. K/ha.

These formulations are available in 100 ml bottles, which can be applied directly on the seed and are sufficient for one acre field.

#### Structural changes in land holding

2217. SHRI C.M. RAMESH: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that structural changes in land holdings cast adverse effect on agricultural productivity and performance which in turn are making agriculture a most unremunerative activity; and

(b) if so, details of the structural changes in land holding pattern that have occurred over the years and steps taken by Government to solve the problems?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (DR. SANJEEV KUMAR BALYAN): (a) As per the evidence available from various studies there is inverse relationship between farm size and productivity and profitability. It has been demonstrated that in India per hectare productivity is highest at lower size farm holding and lowest in the large size holding among different size classes. A table is given below to indicate performance of different farm size categories:

*Agricultural output per household, per hectare and per capita on different farm size categories, 2002-03*

Farm size class: Hectare	House hold size: Number	Per capita land: hectare	Output value (Rupees)		
			Per household	Per capita	Per hectare
1	2	3	4	5	6
0.01-0.4	5	0.04	4783	965	25173
0.4-1.00	5	0.12	12563	2364	18921
1.01-2.00	6	0.24	23292	3801	16780