

(b) and (c) As per available estimates, about 1.73 million ha. of areas in the States of Haryana, Punjab and Uttar Pradesh are affected by alkalinity and salinity. Main reason of such problem is excess use of irrigation water, imbalance use of chemical fertilizers and non adoption of recommended crop rotation.

(d) and (e) According to the definition of land uses, barren land includes all lands covered by mountains, deserts, etc. which cannot be brought under cultivation except at an exorbitant cost. As such, there is no comprehensive programme for development of barren land into fertile land. However, Government of India is implementing various watershed development programmes for development of degraded land in the country and parts of such developed land are put to cultivation for various crops including food crops.

### **ILL effects of excess use of fertilizers and pesticides**

555. SHRI VIVEK GUPTA: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government is aware that excessive use of fertilizers and pesticides is adding excessive carcinogens in both land and food produce which is causing irreparable damage to the health of the land and the people;

(b) the steps being taken by Government to prevent such practices;

(c) the amount of fertilizer subsidy disbursed during last five years, State-wise and district-wise; and

(d) whether Government has commissioned a survey to study the ill effects of excessive use of fertilizers, if so, the details thereof and if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI SUDARSHAN BHAGAT): (a) and (b) There is no scientific evidence that balanced and judicious use of fertilizers and registered pesticides is adding carcinogens in land and food produce.

The Government is promoting adoption of soil test based site specific Integrated Nutrient Management envisaging conjunctive use of both inorganic and organic source of plant nutrients like, bio-fertilizers and locally available organic manures like Farm Yard Manure (FYM), Compost, Vermi-Compost and Green Manure to ensure judicious use of fertilizers.

‘Soil Health Card’ (SHC) Scheme assists all State Governments to evaluate fertility in all 14 crore farm holdings and issue soil health cards to farmers regularly

in a cycle of 2 years. Soil Health Cards provide information to farmers on nutrient status of their soil along with recommendations on appropriate dosage of nutrients to be applied for improving soil health and its fertility.

Indian Council of Agricultural Research (ICAR) is recommending split application and placement of fertilizers, use of slow releasing N-fertilizers and nitrification inhibitors, inclusion of legumes in cropping system and adoption of Resource Conservation Technologies (RCTs).

Under the Central Scheme 'Monitoring of Pesticides Residues at National Level (MPRNL), Government is monitoring pesticides residues in various agricultural commodities. The annual report of MPRNL is being shared with all State Governments in order to sensitize about the areas of likely pesticides over use.

In addition, the Government is implementing 'Strengthening and Modernization of Pest Management Approach in India' through 35 Central Integrated Pest Management Centres (CIPMCs) of Directorate of Plant Protection Quarantine and Storage established across the country with an aim to promote Integrated Pest Management (IPM) approach. CIPMCs *inter alia*, produce biological agents for release in the fields, conserve natural bio-control agents, promote bio-pesticides as an alternative to chemical pesticides and advocate judicious and safe use of chemical pesticides as a last resort.

(c) Fertilizer subsidies are paid to manufactures/importers of fertilizers. Accordingly, the amount of fertilizer subsidy disbursed during last five years on various fertilizers are as under:

(Amount in crore)

Year	Imported Urea	Imported P and K	Indigenous P and K	Indigenous Urea
2011-12	17475.00	16571.92	20237.49	20285.42
2012-13	20016.00	14576.10	16000.00	20000.00
2013-14	15353.30	13926.86	15500.00	26500.00
2014-15	16200.00	8667.30	12000.00	38200.01
2015-16	16400.00	9968.56	11969.00	38200.00

Details showing sector-wise/unit-wise subsidy paid on indigenous urea during the year 2011-12 to 2015-16 are given in the Statement (*See below*).

(d) The Indian Council of Agricultural Research (ICAR) under All India Coordinated Research Project on 'Long-Term Fertilizer Experiments' has assessed the impact of long term use of chemical fertilizers in different soil types (fixed locations) under dominant cropping systems. The investigation over the last few

decades indicated that even in NPK fertilized system, nutritional disorders in terms of deficiency of micro and secondary nutrients surfaced after few years affecting soil health and crop productivity. Only use of organic manure along with optimal dose of NPK maintained soil health/quality with higher crop productivity.

**Statement**

*Details showing sector-wise/unit-wise subsidy paid on Indigenous Urea during the years 2011-12 to 2015-16*

(₹ in crores)

Sl. No.	Unit	State	Subsidy Paid (recovered)				
			2011-12	2012-13	2013-14	2014-15	2015-16
1	2	3	4	5	6	7	8
<b>Public Sector</b>							
1.	RCF-Thai	Maharashtra	708.51	954.80	1498.15	2342.37	2595.28
2.	RCF-Trombay	Maharashtra	232.53	219.05	287.99	456.81	613.73
3.	MFL	Tamil Nadu	1768.74	1427.26	1492.63	1675.85	933.28
4.	NFL-Bhatinda	Punjab	1107.87	1201.50	1364.51	1042.48	1763.11
5.	NFL-Panipat	Haryana	1213.97	1193.59	1433.86	3015.71	1594.57
6.	NFL-Vijaipur-I	Madhya Pradesh	408.54	413.43	677.59	966.22	1098.84
7.	NFL-Vijaipur-II	Madhya Pradesh	502.98	583.53	932.43	1053.59	1364.55
8.	NFL-Nangal	Punjab	1270.69	1123.71	1345.93	660.94	1661.96
9.	BVFCL-Namrup-III	Assam	59.22	104.63	109.29	157.82	268.20
10.	BVFCL-Namrup-II	Assam	119.06	65.71	80.57	94.55	101.48
11.	GNFC (State Government)	Gujarat	196.83	134.64	200.33	318.53	311.13
12.	GSFC (State Government)	Gujarat	878.30	858.82	1119.54	1285.97	1558.47
TOTAL			8467.24	8268.67	10542.82	13070.84	13864.60
<b>Cooperative Sector</b>							
1.	KRIBHCO	Gujarat	591.75	660.01	1216.62	2336.81	2935.68
2.	IFFCO-Phulpur-II	Uttar Pradesh	907.11	981.90	1651.10	1863.02	1951.45
3.	IFFCO-Phulpur-I	Uttar Pradesh	583.99	804.39	1004.36	1409.72	1120.92

1	2	3	4	5	6	7	8
4.	IFFCO-Kalol	Gujarat	382.09	359.69	375.54	562.36	869.92
5.	IFFCO-Anonla-I	Uttar Pradesh	439.11	539.56	953.58	2166.77	1547.07
6.	IFFCO-Anonla-II	Uttar Pradesh	481.44	528.02	682.75	978.40	1591.22
TOTAL			3385.49	3873.56	5883.95	9317.08	10016.26
<b>Private Sector</b>							
1.	NFCL-I	Andhra Pradesh	397.75	307.12	527.88	640.87	386.32
2.	NFCL-II	Andhra Pradesh	387.33	344.50	466.87	457.32	630.28
3.	CFCL-I	Rajasthan	689.51	701.45	1205.46	1997.36	1375.82
4.	CFCL-II	Rajasthan	751.38	889.10	1144.19	1607.43	1620.19
5.	Tata Chemicals	Uttar Pradesh	643.26	606.89	937.77	1567.91	1619.97
6.	ZACL	Goa	781.21	1101.68	1263.14	1533.95	1439.63
7.	SFC	Rajasthan	277.47	274.31	314.19	508.06	536.34
8.	Indogulf	Uttar Pradesh	717.68	648.40	1388.03	1613.43	1623.85
9.	SPIC	Tamil Nadu	2164.66	1477.96	791.90	1814.82	1137.22
10.	LSFL	Uttar Pradesh	452.42	614.02	609.91	1052.57	1433.84
11.	MCFL	Karnataka	1170.02	880.34	1221.53	1463.99	760.19
12.	KFCL	Uttar Pradesh	0.00	0.00	202.36	1554.38	1755.49
TOTAL			8432.69	7845.77	10073.23	15812.09	14319.14
GRAND TOTAL			20285.42	20000.00	26500.00	38200.01	38200.00

### Projects under ICAR

556. SHRI VIVEK GUPTA: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) the details of allocation and utilization of funds for the Indian Council of Agricultural Research (ICAR) during the last five years, year-wise and project-wise;

(b) whether Government is aware that completion deadlines of several projects under ICAR have been extended midway during project execution;

(c) if so, the details of such projects along with the reasons for extension of their completion period and the cost overrun thereof, project-wise; and

(d) the details of projects initiated but not completed till date along with the date of initiation and the expected date for their completion, project-wise?