GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:332
ANSWERED ON:25.02.2015
NATIONAL RESEARCH DEVELOPMENT CORPORATION
Boianapalli Shri Vinod Kumar

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) Whether National Research Development Corporation (NRDC) has executed an agreement for commercialization of "A Novel Superab- sorbent Hydrogels" technology to meet the requirements of water productivity in agriculture;

(b) If so, the details thereof; and

(c) the benefits likely to be achieved by using this technology?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (DR. HARSH VARDHAN)

(a)&(b) Yes Madam, National Research Development Corporation (NRDC) has executed license agreements to commercialize the technology on "A Novel Super absorbent Hydrogels" developed by Indian Agricul- tural Research Institute (IARI), New Delhi. NRDC has licensed the technology to seven companies viz., (i) The Sarpanch Samaj (host organization of Krishi Vigyan Kendra), New Delhi; (ii) Madhu Sudan & Company (P) Ltd. Jaipur; (iii) M/s Carbor- undum Universal Limited, Chennai; (iv) M/s Huntin Organics, Faridabad; (v) M/s Nagarjuna Fertilizers and Chemicals Ltd., Hyderabad; (vi) M/s Reliance Industries (India) Ltd., Mumbai and (vii) M/s KCH India Limited, Chennai.

(c) The benefits likely to be achieved by using this technology are: (i) Since Hydrogel absorbs a minimum of 350 times its weight of pure water at 500C, it exhibits absorbency at high temperatures, suitable for semi-arid and arid regions; (ii) Hydrogel's low rate of application (about 1 kg per acre) improves the physical properties of soil such as porosity, aggregate stability and hydraulic conductivity; (iii) Hydrogel is less affected by the presence of salts in its immediate environment; (iv) Hydrogel improves seed germination and the rate of seedling emergence; (v) Hydrogel improves root growth and density; (vi) Hydrogel helps plants withstand pro- longed moisture stress; (vii) Hydrogel reduces nursery establishment period; and (viii) Hydrogel reduces irrigation and fertigation requirements of crops.