- Protect and manage intellectual properties generated in the system and its commercialization/distribution for public benefit.
- Marketing, production, and popularization of ICAR's products, processes and technologies.
- Providing skilled services from ICAR, such as consultancies, contract research.
- Setting up research and development farms and assist in setting up production units outside India.
- Public-private partnerships in research and education.

(g) to (i) ICAR has initiated a three-tier Intellectual Property and Technology Management system wherein the Institute Technology Management Units in each Institute have begun technology commercialization activities. These Units are supported by five Zonal Technology Management and Business Planning and Development Units to help, wherever necessary, in matters related to IP management and technology transfer/commercialization including programmes for skill development. However, these activities require professional inputs and a very different set of skills from those which the scientists with a R&D organization possess. The Company, as an independent commercial outfit, is mandated to provide the required platform where these efforts would converge.

Imbalanced use of pesticides

†4655. SHRI SHIVANAND TIWARI:
SHRI RAMCHANDRA PRASAD SINGH:
Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that the National Human Rights Commission has expressed concern on the spread of diseases like cancer among farmers due to imbalanced use of pesticides in farming;

(b) if so, whether Government has found out facts regarding this concern;

(c) if so, the details thereof; and

(d) the names of States in the country where use of these harmful pesticides have been banned/balanced so far?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HARISH RAWAT): (a) to (d) The National Human Rights Commission (NHRC) had taken *suo-moto* cognizance of a news report under caption "Crippled Kerala

†Original notice of the question was received in Hindi.

villagers cry for Endosulfan ban" published in the Hindustan Times dated 16.11.2010.

It is pertinent to mention that *vide* an ad-Interim Order dated 13.5.2011, the Hon'ble Supreme Court of India put a ban on production, use and sale of Endosulfan all over India till further order in Writ Petition filed in Supreme Court of India Writ Petition (Civil) No. 213 of 2011 against Union Govt. of India and others by Democratic Youth Federation of India on the basis of human health concerns.

Hon'ble Supreme Court has appointed a Joint Committee headed by the Director General of Indian Council of Medical Research (ICMR) and the Agriculture Commissioner, Deptt. of Agri. and Cooperation, Ministry of Agriculture to conduct a scientific study on the question whether the use of Endosulfan would cause any serious health hazard to human beings and would cause environmental pollution.

However, conditional export has been allowed to the extent of 1090.596 MT. The matter is still *sub-judice.*

Protocol for conducting study is under preparation in the ICMR.

Besides, Govt. is popularizing the concept of Integrated Pest Management (IPM) for control of pests, diseases and weeds on various crops which envisages use of non-chemical methods like cultural, mechanical, biological, use of biopesticides and need based and judicious use of chemical pesticides.

Central and State Governments and Pesticide Industries are imparting training to the farmers for safe use of pesticides. Farmers are advised to use registered pesticides at recommended dosage and observe the required precaution and other instructions as given in Labels and Leaflets.

Production of BT. Cotton

4656. SHRI RAMCHANDRA PRASAD SINGH:
SHRI RAVI SHANKAR PRASAD:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that there has been increase in the acreage of Bt. Cotton production out of total cotton production land in the country since 2004-05, till now;

(b) if so, the acreage of Bt. Cotton production land in 2004-2005 and 2011-2012, separately;

(c) the productivity of Bt. Cotton per hectare in the above said periods, separately; and