

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

UNSTARRED QUESTION NO:2035

ANSWERED ON:09.03.2016

MoU for Technology Transfer

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

- (a) whether the Department of Scientific & Industrial Research has signed Memorandum of Understanding/ Agreement with other countries/ within country regarding technology transfer;
- (b) if so, the details in this regard;
- (c) whether the National Research Development Corporation (NRDC) has entered into a Memorandum of Agreement (MoA) with the Indian Association for the Cultivation of Science (IACS) recently for commercialization of technologies/ intellectual properties;
- (d) if so, the details thereof and the terms and conditions of MoA; and
- (e) the number of licensed technologies provided by NRDC to entrepreneurs/ companies so far?

**Answer**

MINISTER FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(Dr. HARSH VARDHAN)

(a) The Council of Scientific & Industrial Research (CSIR) and NRDC, which are a part of DSIR, have signed Memorandum of Understanding/ Agreement with other countries/ within country regarding technology transfer.

(b) CSIR signs around 300 agreements and MoUs each year with Indian and foreign companies for R&D activities and technology transfer activities, and NRDC has signed 455 license agreements in the last ten years.

(c) Yes, NRDC has signed MoA with IACS on 14th December 2015, which is valid for a period of 5 years.

(d) The MoA has been signed for development of technologies and their successful transfer to industry for commercial exploitation and socio-economic benefits.

IACS would assign mutually agreed technologies to NRDC for licensing to industry, and would provide all requisite technical information related to the technologies to enable industry to take up commercialization of the same.

NRDC would provide wide publicity and identify suitable industries for licensing of the technologies, and would also provide value-added services such as market data/profiles, pre-feasibility reports and feasibility reports to promote licensing and commercialization of the technologies.

70% of the premia and royalties received by NRDC from its licensees would be remitted to IACS.

(e) During the last ten years, NRDC has signed 455 license agreements as per details given below:

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
No. of License agreements concluded	39	44	41	36	41	40	33	66	68	47

Some of the major technologies licensed are as below:

• Super absorbent Hydrogel, a semi-synthetic super absorbent polymer for water saving and higher crop yield, developed at IARI, New Delhi.

• Extraction of Azadirachtin, a bio-pesticide from neem seeds developed at IARI, New Delhi.

• Potassium Humate from Lignite, used as a fertilizer to obtain higher yields and better product quality, developed at Neyveli Lignite Corporation, Neyveli.

• Low cholesterol ghee developed at NDRI, Karnal. The process has been developed by which cholesterol content has been reduced by 80%.

• Bacillus Thuringiensis (BT) based Mosquito Larvicide formulation, a bio-control agent for mosquito, developed at Vector Control Research Centre (VCRC), Pondicherry, an ICMR institution.

• Solekshaw, a battery operated rickshaw chargeable by solar power, developed at CSIR-CMERI, Durgapur.

• Test Kit for testing the microbiological quality of drinking water developed by DRDE, Gwalior, a DRDO institution.

• Various sericulture related technologies developed by Central Silk Board, Bengaluru, under the Ministry of Textiles.

• Para-Pheromone trap, developed at Indian Institute of Horticultural Research (IIHR), Bengaluru, an ICAR institution, for management of flies in fruit crops.

• Micronutrient foliar spray formulations for different vegetable, horticulture and spice crops, developed at IIHR in association with Central Sericultural Research & Training Institute (CSRTI), Mysore, an institution under the Ministry of Textiles.

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