(c) As on 31st March 2016, TDB has signed a total of 316 agreements (since its inception in 1996) with industrial concerns at a total project cost of ₹ 6207.43 crore involving TDB's commitment of ₹ 1521.84 core. TDB has since then disbursed ₹ 1297.56 crore. The details of the same are:

(i) Soft Loans to industrial concerns with a total disbursement of ₹ 883.64 crore

(ii) Equity Investments with a total disbursement of ₹ 34.19 crore.

(iii) Equity Contribution in VCFs with a total disbursement of ₹ 241.80 crore

(iv) Grants to various projects with a total disbursement of ₹ 137.93 crore

Some of the success stories of TDB include production of Hepatitis-B by M/s Shantha Biotech and M/s Bharat Biotech Ltd.; India's first battery operated electric Car by M/s Reva Electric Car Company Pvt. Ltd.; development of Light Commercial Vehicle by M/s Eicher Motors Ltd.; generation of power from Municipal Solid Waste by M/s Selco International Ltd. and M/s Shriram Energy System Ltd.; variants of Indica Car by M/s Tata Motors; India's first light transport Aircraft (SARAS) by National Aeronautic Ltd. (NAL), CSIR etc.

Funding of project for development of new varieties of cereals

1852. SHRIMATI RENUKA CHOWDHURY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Department of Biotechnology has funded a project to develop new varieties of cereals which use nitrogen more efficiently and produce more, if so, the details thereof; and

(b) the steps taken by Government to translate developmental biology into innovation in nitrogen use of Indian farmers by connecting developmental research, crop breeding, agri-technology and extension work?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI Y. S. CHOWDARY): (a) and (b) Yes, Sir. The Department of Biotechnology in collaboration with Biotechnology and Biological Sciences Research Council (BBSRC), UK under the Newton Bhabha Programme has funded four Virtual Joint Centres in Agricultural Nitrogen with an aim of optimizing usage of Agricultural Nitrogen and thus contributing to sustainable and eco-friendly agricultural practices. Optimized use of Nitrogen will contribute in enhancing the income of farmers by reducing cost inputs of fertilizers. The Virtual Joint Centre on Agricultural Nitrogen will address agronomic nitrogen use efficiency, biological nitrogen use efficiency and biological nitrogen fixation. The target cereal crops are rice, wheat, sorghum and

millets (foxtail, pearl millet). Efficient Nitrogen utilizing varieties will be identified and optimal requirement of Nitrogen quantified and standardized for each variety.

Under the programme, soil microbes which efficiently colonize cereals and increase bioavailability of Nitrogen to plants as well as with increased Nitrogen fixing in soil are also being tested and explored for use as bio-fertilizers.

Information on Nitrogen efficient varieties, bio-fertilizers and optimal Nitrogen requirements will be passed to farmers through extension networks which will lead to lower fertilizer/farm inputs and higher farm output in form of productivity/yield and will help in increased income of farmers.

Introduction of Bt. and non-Bt. cotton seeds

1853. SHRI DEVENDER GOUD T: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that Council of Scientific and Industrial Research (CSIR) is planning to introduce 21 varieties of Bt. cotton seeds and 8 varieties of non-Bt. cotton across the country, if so, the details thereof; and

(b) how above seeds are different from the existing Bt. cotton seeds and how cost effective they are?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI Y. S. CHOWDARY): (a) and (b) No, Sir. Council of Scientific and Industrial Research (CSIR) has no plan to introduce Bt. Cotton seeds and non-Bt. Cotton seeds across the country.

Number of patents applied

1854. DR. VIKAS MAHATME: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the reasons why in India, the number of patents applied as far as research is concerned, is less as compared to China, UK and USA and whether the condition is same for patents certified;

(b) what steps Government is going to take to improve the performance; and

(c) how it would be monitored and whether continuous changes in policy would be made till we reach comparable to China, UK and USA?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI Y. S. CHOWDARY): (a) Sir, the reason for lesser number of patents applied in India could be due to the provision of less Gross Expenditure