

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

UNSTARRED QUESTION NO:3497  
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NEW INVENTION PROJECTS BY CSIR  
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**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

(a) the details of new invention projects carried out by and Council of Scientific and Industrial Research (CSIR) and the manner in which it is likely to benefit the common people; and

(b) the details of invention projects by CSIR in Gujarat during the last three years and the current year?

**Answer**

MINISTER OF THE STATE IN THE MINISTRY OF PLANNING MINISTER OF THE STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (ASHWANI KUMAR)

(a) CSIR developed innovative technologies in some key economically important sectors such as: drugs and pharmaceuticals; food & food processing; water; innovative farm machinery; housing & construction; infrastructure engineering including roads; glass & ceramics; agrochemicals; aromatic & medicinal plants; leather; petroleum & petrochemicals; mining, minerals & metals which are benefitting the common people in a significant manner.

As a socially conscious organization, through CSIR 800 programme, CSIR is strategically providing S&T needed for the masses at the base of economic pyramid, so as to enhance their quality of life and remove drudgery. There is special focus to train rural women so as to generate self employment opportunities for them through desired S&T intervention and enhance family income.

Some recently developed technologies benefitting the masses include: Streptokinase (a drug for cardiovascular disease); Soleckshaw (an innovative rickshaw to remove drudgery of rickshaw pullers); Wood without trees (an innovative material from agri and plastic waste); Liquid fertilizer from sea weeds; Ashwagandha variety (released to farmers for enhancing their income); Terafil (an innovative very low cost water filter for the rural masses); Products based on aromatic and medicinal plants such as nutraceuticals, deodorants, biofertilizers and disinfectants; Lavender Park set up in J&K (helping women in a significant manner); Organized mushroom cultivation introduced in North-Eastern states; Post harvest technology centres in Mizoram and Arunachal Pradesh; and Leather products.

(b) In Gujarat, the focus of continuing research through CSIR constituents is on: affordable healthcare; enhancing potability of water; sustainable energy solutions; specialty chemicals; salt; potash; glass & ceramics; leather products; and value added products from sea weeds.

Through a unique public-private partnership in the domain of affordable healthcare, CSIR has developed and commercialized a drug named Risorine for tuberculosis. Risorine is a cost effective drug which has characteristics of enhanced bioavailability and low toxicity. CSIR has developed a technology for vitrified tiles which has led to replacement of the Ukraine clay and major reduction of import of the Ukraine clay, thus saving the foreign exchange. A process for sulphate of potash – a novel technology for self reliance has been developed. Presently muriate of potash is totally imported in the country. Commercialized carbon fiber technology has been developed to create indigenous capacity. The carbon fiber is a strategic material used in defence and space applications. The recent high impact making technologies commercialized in the State of Gujarat are provided as under:

S.No. Name of Technology Name of the Company

1. Risorine Cadila Pharamceuticals Ltd., Ahmedabad

2. Carbon Fibre Technology Kemrock Industries and Exports Ltd., Vadodara

3. Vitriified Tiles A large number of small and medium enterprises