GOVERNMENT OF INDIA NEW AND RENEWABLE ENERGY LOK SABHA

UNSTARRED QUESTION NO:1927 ANSWERED ON:04.12.2014 PROMOTION OF BIOFUEL Khadse Smt. Raksha Nikhil

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether the Government proposes to establish research laboratories in public sector research institute/unit to find out an alternate fuel in place of the presently used fossil fuels which have very limited availability in the future;
- (b) if so, the details thereof; and
- (c) the steps proposed to be taken by the Government for the use of ethanol/ bio-diesel as alternate fuels and to increase the production of crops /cultivation of agriculture produce from which the ethanol/ bio-diesel can be extracted?

Answer

THE MINISTER OF STATE FOR POWER, COAL & NEW AND RENEWABLE ENERGY (INDEPENDENT CHARGE) (SHRI PMUSH GOYAL)

- (a)&(b): Department of Biotechnology (DBT) has supported setting up of three Bio-energy centres to develop ethanol / bio-diesel as alternate fuels. This includes one centre set up at a Research and Development Centre of a Public Sector Undertaking namely Indian Oil Corporation Limited, at Faridabad, Haryana. The objectives of these centres are:
- i. to conduct a multi-disciplinary bio-energy research involving biology, chemical science and material science etc.,
- ii. to develop technology for second generation biofuel; and
- (iii) to deploy biofuel technologies with existing capabilities to scale up; and
- iv. to perform cutting edge research using synthetic and systems biology approaches towards the development of novel technology for biofuel production.
- (c): For increasing the use of ethanol and biodiesel, the Government has decided on 03.7.2013 that the Oil Marketing Companies (OMCs) should procure ethanol only from domestic sources to achieve the mandatory requirement of 5% ethanol blending with petrol by October, 2013 in parts of the country where sufficient quantity of ethanol is available. In other parts of the country, blending of ethanol would be increased progressively depending upon the availability of ethanol to reach the 5% mandatory level. For enhancing the production of biofuels i.e. bioethanol and biodiesel, research and development (R&D) is being supported for production of bioethanol from ligno-cellulosic biomass and for improving the yields of Tree Borne Oilseeds (TBOs) for production of biodiesel. Ministry of Agriculture has initiated the National Mission on Oilseeds and Oil Palm from the year 2014-15 for promoting plantation of TBOs including Jatropha and Karanja which can be used for extraction of biodiesel. Department of Biotechnology has been supporting R&D to develop the quality planting material and have supported the Jatropha Network Program, under which germ-plasm of Jatropha was collected, selected, screened, characterized and evaluated to improve the genetic material available in the country. Besides, a number of R&D projects have been initiated with focus on improvement of oil quality & yield, identifying important novel genes involved in oil biosynthetic pathway, identification of elite varieties using molecular markers, etc. Studies on biotechnological interventions are also being supported through Algal Network Program for selection of promising strains for biomass production as alternate feedstock for biodiesel production.