



उच्च प्रौद्योगिकी केन्द्र

(पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय, भारत सरकार)

Centre for High Technology

(Ministry of Petroleum & Natural Gas, Govt. of India)

स.उ.प्रौ.के./प्रशा./3.17/1499

दिनांक: 5.2.2019

अनुभाग अधिकारी (ओआर-II)

पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय,

भारत सरकार, शास्त्री भवन,

नई दिल्ली - 110001

विषय: दिनांक 11.2.2019 का लोकसभा अतारांकित प्रश्न डायरी सं. 1307

(संदर्भ: एथनोल प्रॉडक्शन)

महोदय,

कृपया आप अपने पत्र दिनांक 05.2.2019 का अवलोकन करें जो कि लोकसभा के पटल पर 11.2.2019 को रखा जाना तय हुआ है।

लोकसभा अतारांकित प्रश्न डायरी संख्या 1307 के प्रश्न का उत्तर देने हेतु अनुपूरक सामग्री उच्च प्रौद्योगिकी केन्द्र द्वारा प्रेषित की जा रही है।

धन्यवाद,

भवदीय

(सत्यवीर सिंह)

संयुक्त निदेशक (एच आर)

संलग्नक: यथा उपर्युक्त

का. प्रति:

- कार्यकारी निदेशक
- निदेशक

Centre for High Technology
(Ministry of Petroleum & Natural Gas)
NOIDA

February 5, 2019

Ref: MoP&NG e-mail dated 5.2.2019 – Lok Sabha Unstarred Question No. 1307 for 11.02.2019 regarding Ethanol Production

The reply to the relevant part (e) of the LSQ is given as under;

Q(e) whether the Centre for High Technology initiated a project to create renewable crude and liquid hydrocarbon fuels from algae and if so, the details thereof along with the executing agencies involved therein and the current status of the said project including the total cost of the project?

Ans.: The project on Renewable crude and liquid Hydrocarbon fuels from Algae was undertaken in March, 2017 based on recommendation of Scientific Advisory Committee on Hydrocarbons of MoP&NG (SAC). Chennai Petroleum Corporation Limited (CPCL) is the executing agency along with International Centre for Genetic Engineering and Biotechnology, New Delhi (ICGEB) and M/s ABAN Infrastructure Limited, Chennai.

The aim of the project is to demonstrate technical and economic feasibility of an integrated process for cultivation of microalgae and production of microalgal bio-crude, suitable for production of renewable fuels using existing refinery infrastructure.

The project was recommended by SAC under two phases:

Phase-1: Cultivation of algal consortium in open pond and scale up studies in larger ponds to assess biomass productivity (with a target yield of 25 g/m²/day) with GM algal strains to enhance the yield by 20-30%

Phase-2: Process to handle 110 kg algal slurry / day

The current project is for Phase-1 only at a cost of Rs 434.52 lakh. All the facilities have been created and cultivation & harvesting of the algae has been started. The Phase-1 is expected to be completed by August, 2019. The Phase-2 of the project shall be taken up subsequently. The project is monitored by SAC, headed by eminent scientist Dr Anil Kakodkar, on regular basis.



Ministry of Petroleum and Natural Gas
(Parliament Cell)

LOK SABHA

UNSTARRED QUESTION NO. 1307

TO BE ANSWERED ON : **11th February, 2019**

DESK/ SECTION CONCERNED JS(R)/DIR(S&CC)/SO(CC)

Ethanol Production

1307. SHRI A.P. JITHENDER
REDDY:
SHRIMATI POONAM
MAHAJAN:

Will the Minister of PETROLEUM
AND NATURAL GAS

पेट्रोलियम और प्राकृतिक गैस मंत्री

be pleased to state:

(a) whether the Government has undertaken any study to ascertain that ethanol production in the country is viable *vis-a-vis* the country's water footprint and the stress of ethanol on country's water resources and if so, the details thereof, if not, the reasons therefor;

(b) whether the Government has undertaken any study to calculate required increase of net sown area for ethanol-producing crops, to meet the production target and if so, details thereof;

(c) whether the Government has undertaken any study to understand the effect required for increase of net sown area of ethanol-producing crops on other crops and on food prices due to reduction of net sown area for food crops given Government's bio-fuels policy that stipulates fuel requirements must not compete with food requirements and if so, the details thereof and if not, the reasons therefor;

(d) whether the targets of ethanol blending petrol has been fixed for the next four years and if so, the details thereof along with the annual capacity of bio-refineries in the country since 2014; and

(e) whether the Centre for High Technology initiated a project to create renewable crude and liquid hydrocarbon fuels from algae and if so, the details thereof along with the executing agencies involved therein and the current status of the said project including the total cost of the project?