

**LOK SABHA**  
**UNSTARRED QUESTION NO.4066**  
**TO BE ANSWERED ON 27<sup>th</sup> MARCH, 2017**

**EXPLORATION AND PRODUCTION OF OIL AND GAS RESERVES**

**4066. KUMARI SUSHMITA DEV:**  
**SHRIMATI KIRRON KHER:**  
**SHRI RAJESH RANJAN:**  
**DR. VIRENDRA KUMAR:**

पेट्रोलियम और प्राकृतिक गैस मंत्री

**Will the Minister of PETROLEUM & NATURAL GAS be pleased to state:**

- (a) the details of crude oil and gas reserves available/ discovery made in the Indian Ocean with United States of America along with the percentage of crude oil and gas produced by public and private sector companies and achievements made by them during the last three years and the current year, company/oil field/State/UT-wise;
- (b) whether there are any technical challenges involved in the production of natural gas from the said reserve and if so, the concrete steps taken in this regard;
- (c) the details of survey conducted/proposed to be conducted by public/private sector companies and number of exploratory oil and gas wells discovered/awarded in the country including Assam, Arunachal Pradesh, Karnataka and Gujarat along with quantum and average cost of crude oil/gas produced by the said companies, State/UT/company/oil field-wise;
- (d) the steps taken to cover the pending oil royalty with oil producing companies in the country including Assam and curtail the State deficit, company-wise;
- (e) the efforts made by the Government to conduct new research and technology in the area of oil and natural gas exploration including use of fracking technology to prevent damage to forest cover and possible contamination of ground water; and
- (f) whether seismic survey of 26 basins are proposed to be conducted by the Government to collect accurate data for hydrocarbon fields with a view to address the concerns of the investors and first survey is proposed to be conducted in Mahanadi basin under National Seismic Programme, if so, the details thereof?

**ANSWER**

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री(श्री धर्मेन्द्र प्रधान) (स्वतन्त्र प्रभार)  
**MINISTER OF STATE (I/C) IN THE MINISTRY OF PETROLEUM & NATURAL GAS**  
**(SHRI DHARMENDRA PRADHAN)**

(a) & (b) In collaboration with United States of America and Japan under a Memorandum of Understanding research and exploratory activities have been out in Krishna Godavari and Mahanadi area in sand reservoirs for gas hydrates. As per preliminary estimates, 134 Trillion Cubic Feet of gas hydrates are present in KG-Basin. Further drilling / coring / logging and analytical studies of the subsurface data are required to establish this gas hydrate resource. Gas hydrate programme in the country is at Research and Development Stage.

(c) The details of survey conducted/proposed to be conducted by public/Pvt. JVs alongwith exploratory oil and gas wells drilled including the State of Assam, Arunachal Pradesh, Karnataka and Gujarat are at Annexure-1. The production cost of companies vary from field to field depending upon size of the reservoir, location, logistics, availability of surface facilities etc.

(d) As per the directives issued by the Government of India in May 2008, ONGC and OIL were making payment of royalty to State Governments at post discount price for the period 01.04.2008 to 31.01.2014. However, State Governments of Gujarat/Assam demanded royalty to be paid at pre-discount price. Recently all the stake holders reached an agreement and it was decided that an amount of Rs. 8392 crores and Rs. 6306 crores will be paid by the Government of India directly to the Governments of Gujarat and Assam respectively for the dues of royalty for the period from April, 2008 to Jan, 2014. The payments will also be made to similarly placed States.

(e) Traditionally oil and gas wells are vertically drilled. Technological advancements have allowed operators to save time, reduce operational costs, and lessen their environmental impact. New drilling technologies include the following techniques:

- Horizontal Drilling
- Multilateral Drilling
- Extended Reach Drilling
- Complex Path Drilling

(f) Government of India has started the National Seismic Programme (NSP) which aims to undertake an appraisal of sedimentary basins across India, especially where no/scanty data is available in order to have a better understanding of the hydrocarbon prospectivity. Under this programme Oil & Natural Gas Corporation (**ONGC**) Limited has been entrusted to carry out **40835 LKM** of 2D seismic data acquisition, processing & interpretation (API) in 22 onland Indian Sedimentary basins in 18 States and Union Territories. Oil India Limited (OIL)

has been entrusted to carry out **7408 LKM** of 2D seismic data acquisition, processing & interpretation (API) in the North-Eastern States. The survey started in Mahanadi Basin in Odisha in October, 2016.

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**Annexure-1**

**To be referred in reply of Lok Sabha Unstarred Question No. 4066 to be answered 27.03. 2017**

State	Survey Conducted as on 1.4.2016			Survey work proposed in next three years (2016-19)			No of Discoveries as on 01.01.2017
	2D seismic LKM	3D seismic Sq. km.	Exploratory wells	2D seismic LKM	3D seismic Sq. km.	Exploratory wells	
Andhra Pradesh	40503	10205	474	0	1210	13	80
Arunachal Pradesh	161	114	62	0	0	1	3
Assam	60323	12947	2122	230	520	63	180
Bihar	8989	947	9	0	0	0	0
Chattisgarh	202	0	0	0	0	0	0
Gujarat	112162	17779	2842	0	874	49	201
Himachal Pradesh	4595	0	16	100	0	1	0
Haryana	1038	0	0	0	0	0	0
Jammu & Kashmir	2563	0	4	0	0	0	0
Jharkhand	0	0	0	0	0	0	0
Madhya Pradesh	12360	967	20	0	160	4	3
Maharashtra	476	0	0	0	0	0	0

Meghalaya	205	0	3	0	0	0	0
Manipur	210	0	0	0	0	0	0
Mizoram	1561	613	5	0	1681	2	1
Nagaland	602	6	25	0	0	0	3
Odisha	783	0	0	0	0	0	0
Punjab	4078	0	4	0	100	2	0
Rajasthan	49708	18493	451	0	76	8	56
Tamil Nadu	42740	11033	532	0	0	15	47
Telangana	129	0	0	0	0	0	0
Tripura	7925	897	173	85	185	9	22
Uttar Pradesh	29658	211	10	0	0	0	0
Uttranchal	1522	0	0	0	0	0	0
West Bengal	33602	4187	37	0	0	7	0
Eastern Offshore	343516	201436	512	0	950	13	125
Western Offshore	544225	134761	1069	6000	3610	31	160
<b>Grand Total</b>	<b>1303834</b>	<b>414596</b>	<b>8370</b>	<b>6415</b>	<b>9366</b>	<b>218</b>	<b>881</b>