- was allowed to be recovered on contract area basis and development and production cost on field-wise basis.
- (xiv) Companies, including ONGC/OIL to be paid international price for oil discoveries made in the blocks offered under NELP.
- (xv) Pre-tax sharing of profit oil based on investment multiple achieved rather than post-tax sharing as at present.
- (xvi) A revised model contract has been prepared.
- (xvii) The NELP to be implemented straight away for the offshore areas as for this no consultation is required with the State Government. However, for the onland areas, the NELP will be implemented after obtaining the concurrence of the concerned State Government.
- (xviii)To process for effecting the necessary change in the relevant Acts and Rules to implement the above proposals.
- (xix) An Empowered Committee of Secretaries comprising Secretary (PNG), Finance Secretary and Law Secretary will *inter-alia*, consider bid evaluation criteria, conduct negotiations with bidders, wherever necessary and make recommendations to the CCEA on award of blocks.
- (xx) This regime will apply only against contracts signed under NELP.

The decisions herein contained will come into force with immediate effect and will remain in force until further orders.

## Order

Ordered that a copy of this Resolution be communicated to all the State Governments/Union Terriroty Administration, Lok Sabha and Rajya Sabha Secretariat and the concerned Ministeries and Departments of the Government of India.

Ordered also that the Resolution be published in the Gazette of India for information.

## Decline in domestic production of oil and gas

1876. SHRI RAJ BABBAR: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) whether the oil and gas production in the country has dropped significantly over the past three years;
  - (b) if so, the details thereof and the reasons therefor;
- (c) the steps taken by Government to increase the production of oil and natural gas to cut down the import bill and foreign exchange expenditure;

- (d) whether the public sector oil companies are engaged in exploration of crude oil for other countries; and
- (e) if so, the details thereof and the reasons therefor along with the companywise manpower involved in these projects?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI DHARMENDRA PRADHAN): (a) and (b) Crude oil and natural gas production in the country during last three years was as under:

	2012-13	2013-14	2014-15
Crude oil (MMT)	37.866	37.788	37.460
Natural gas (BCM)	40.68	35.406	33.657

The main reason for lower crude oil and gas production is due to natural decline in production from the ageing fields of ONGC and OIL. In addition, there was lower natural gas production from Krishna Godavari Basin.

- (c) In order to reduce import dependency on crude oil, Government has taken/ is taking a number of initiatives to increase domestic production of crude oil and to promote conservation of petroleum products.
  - (i) Enhance production from the existing field by adopting Improved Oil Recovery (IOR)/Enhanced Oil Recovery (EOR) measures using latest technology.
  - (ii) Bring into production new discoveries at the earliest. For this a policy framework for early monetization of hydrocarbon discoveries under PSC regime has been approved by the Government.

This policy has addressed rigidities in the timelines of the PSC and has allowed the contractors to start production at the earliest.

- (iii) Facilitate enhanced exploration activities through following measures:
  - Appraisal of about 1.5 million sq km un-appraised area of the Indian Sedimentary Basins and acquisition of geo-scientific data under Multi client and non-exclusive policy.
  - 2. Re-assessment of Hydrocarbon Resources.
  - 3. Setting up of National Data Repository Policy approved for exploration and exploitation of Shale Gas/Shale Oil resources by National Oil Companies under the nomination regime.
  - Government approved the Policy on Testing Requirements for Discoveries in NELP blocks on 29.04.2015. The Policy would help in monetization of discoveries in five NELP blocks.

Besides, Petroleum Conservation Research Association (PCRA), under the Ministry of Petroleum and Natural Gas, has been given the mandate to promote conservation of petroleum products in the major sectors of economy like transport, industry, households and agriculture through direct technical assistance, R&D educational and training programmes and mass awareness campaigns. PCRA's activities cover conservation of all energy sources, development, evaluation and commercialization of efficient equipment and additives, popularizing production of bio-fuels, environment protection etc.

(d) and (e) Oil and Gas companies in India continue to pursue acquisition of equity oil and gas abroad. The companies aim at acquiring a balanced portfolio of producing assets and those in development/exploratory phase. While most of the assets overseas are co-ordinated by the Corporate Office of the concerned companies, a skeletal strength is maintained at the assets which varies based on the actual requirement at field level. Details of overseas projects of oil and gas PSU's are given in the Statement.

Statement

Overseas projects/assests

Sl.	Country	Name of Project	Participating companies
No.			along with P.I.
1	2	3	4
1.	Vietnam	Block 06.1 (Offshore)	OVL 45%, TNK-35%
			(Operator); PetroVietnam 20%
		Block 128 (Offshore)	OVL 100%
2.	Sudan	GNPOC (Onland)	OVL 25%; CNPC 40%
			Petronas 30%; Sudapet 5%.
			(Jointly Operated)
3.	South Sudan	GPOC (Onland)	OVL 25%; CNPC 40%;
			Petronas 30% Nilepet 5%
			(Jointly Operated)
		SPOC (Block 5A),	OVL 24.125%; Petronas
		Onland	67.875%; Nilepet 8%.
			(Jointly Operated)
4.	Russia	Sakhalin-I (Offshore)	OVL 20%; ENL 30%
			(Operator) Sodeco
			30%; SMNG-S 11.5%
			RN Astra 8.5%

1	2	3	4
		Imperial Energy (Onland)	OVL 100%
		License 61	Petroneft: 50% (Joint Operator); OIL: 50% (Joint Operator)
5.	Colombia	MECL (Onland)	OVL 25-50%; SIPC 25-50%; Ecopetrol 50% (Jointly Operated)
		Block RC # 8 (Offshore)	OVL 40% – (Operator), Ecopetrol – 40%; Petrobras – 20%
		Block RC # 9 (Offshore)	Ecopetrol – 50% (Operator), OVL – 50 %
		Block RC # 10 (Offshore)	OVL - 50% (Operator), Ecopetrol - 50%
		CPO-5 (Onland)	OVL - 70% (Operator), Petrodorado - 30%
		SSJN-7 (Onland)	PSE 50% (Operator), OVL 50%
		Gua off-2 (Offshore)	OVL - 100%
		LLA-69 (Onshore)	OVL - 50%, SIPC - 50%
6.	Syria	AFPC (Onland)	SSPD (Operator) 62.5-66.67%, HES BV 33.33 to 37.5%
		Block 24 (Onland)	OVL 60%, IPR 25% (Operator), TOM (15%)
7.	Venezuela	Sancristobal, PIVSA (Onland)	OVL 40%, PDVSA 60% Jointly operated
		Carabobo Project-1 (Onland)	PDVSA - 60%; Repsol - 11% Petronas - 11%; OVL - 11% OIL - 3.5% IOC - 3.5% (Jointly Operated)
8.	Brazil	BC-10 (Offshore)	OVL 27 %; Shell 50% (Operator) and Petrobras 35%
		BM-SEAL-4 (Offshore)	Petrobras – 75% (Operator), OVL – 25%

1	2	3	4
		Espirito Santo/Brasil	Petrobras – 40-70%, IBV Brasil* – 30%, Anadarko– 0-30%
		Campos/Brasil	Anadarko – 30%, IBV Brasil*– 25%, BP – 25%, Maersk – 20%
		Sergipe/Brasil	Petrobras – 60%, IBV Brasil*– 40%
		Potiguar/Brasil	Petrobras - 30%, BP - 30%, IBV Brasil* - 20%, Petrogal - 20%
9.	Azerbaijan	ACG	OVL-2.7213%; BP:-36% (Op) SOCAR-12%, Chevron-11% INPEX-11%, Exxon-8%, Stat Oil-8%, TPAO-7%, ITOCHU-4%
10.	Myanmar	Block A-1 (Offshore)	OVL 17%, GAIL 8.5%, Daewoo 51% (Operator), Kogas 8.5%, MOGE 15%
		Block-A3 (Offshore)	OVL 17%, GAIL 8.5%, Daewoo 51% (Operator), Kogas 8.5%, MOGE 15%
11.	Iran	Farsi Offshore	OVL 40% (Operator), IOC 40%, OIL 20%
12.	Mozambique	Rovuma Area-1 (Offshore)	OVL 16%, OIL 4%, Anadarko 36.5%, PTTEP 8.5%, BPCL 10%, ENH 15%, MITSUI 20%
13.	Libya	Block 43 Contract Area (Offshore)	OVL 100%
		Area 86	OIL-50% (Operator) IOC-50%
		Area 102/4	OIL-50% (Operator) IOC-50%
		Area 95-96	Sonatrach-50% (Operator) OIL-25%; IOC-25%

1	2	3	4
14.	Gabon	Block Shakthi	OIL-45%(Operator) IOC-45% Marvis Pte Ltd-10%
15.	Iraq	Block 8 (Onland)	OVL 100%
16.	Bangladesh	Block SS-04 and SS-09	OVL-45% (Operator), OIL-45%, BAPEX-10%
17.	Nigeria	Block 285 {Block 279, 29}	OMEL(O): 64.33% Total: 25.67% EMO: 10%
		OML 142	Summit Oil–30% (Operator) Suntera Nigeria 205 Ltd–70%* *Suntera–50% OIL–25% IOC–25%
18.	Kazakhstan	Satpayev	OVL-25%, Kazmunaygaz-75% (Operator)
19.	East Timor	JPDA-06-103	Oilex (10%), Japan Energy (15%), Videocon (20%), GSPC (20 %), BPRJPDA (20%), Pan Pacific Petroleum (15%)
20.	Canada	Pacific Northwest LNG Project	Progress Energy Canada Ltd. (77%, Operator), Japex (10%), Petroleum Brunei (3%), IOC (10%)
21.	Australia	EP 413	Norwest Energy NL(27.945%), BPRL (27.803%); ARC Energy Limited (44.252%)
		T/L1 and T/18P	HPCL's PI 11.25% and 9.75%
22.	Indonesia	Nunukan	BPRL Venture Indonesia BV (12.5%), Pertamina (35%); MEDCO (40%); Videocon (12.5%)
23.	USA	Niobrara Shale JV Asset	Carrizo Oil and Gas Inc., USA (60%)

## Potential for gas hydrates in bay of Bengal

1877. SHRI MANI SHANKAR AIYAR: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) India's assessment of the potential for gas hydrates in the Bay of Bengal; and
- (b) the progress made, and prospects for, undertaking exploitation of these resources?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI DHARMENDRA PRADHAN): (a) and (b) The National Gas Hydrate Programme (NGHP) Expedition – 01 has established the presence of gas hydrate on the east coast deep water basins of Krishna Godavari, Mahanadi and Andaman in the Bay of Bengal. Presently, there is no assessment of gas hydrate potential in Bay of Bengal. However, Hydrate Energy International has estimated resource potential of gas hydrate in India at 933 tcf.

The NGHP Expedition-02 carried out drilling and coring operations recently. The preliminary results of the NGHP Expedition - 02 in the Krishna Godavari Basin are encouraging.