

**GOVERNMENT OF INDIA
PETROLEUM AND NATURAL GAS
LOK SABHA**

UNSTARRED QUESTION NO:6869
ANSWERED ON:17.05.2012
PRODUCTION FROM MUMBAI HIGH
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Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) the date of commencement of production of crude oil from Mumbai High;
- (b) whether any decrease in production of crude oil has been noticed in Mumbai High as its oil wells are very old;
- (c) if so, the details thereof and the decrease in production of oil in percentage; and
- (d) the corrective steps taken or being taken to increase the oil production in Mumbai High?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS (SHRI R.P.N. SINGH)

(a) to (c) Oil and Natural Gas Corporation Ltd. (ONGC) had discovered Mumbai High (erstwhile Bombay High) field in 1974 and the Crude oil production from Mumbai High started in May 1976. Oil production in Mumbai High during 1976-77 was 0.410 Million Metric Tonne (MMT).

Plateau production from Mumbai High field had been maintained at around 18.5 to 19.5 Million Metric Tonne Per Annum (MMTPA) between 1984-85 to 1990-91. The field peaked at about 20.085 MMT in 1989-90, after which it entered the natural decline phase (a natural process in the production life of oil fields). Thereafter, there was a gradual decline in production till 1993-94, when the crude production from Mumbai High was 10.966 MMT.

The details of crude oil production from Mumbai High and percentage growth/decrease over previous year since inception is detailed in Annexure.

(d) The corrective steps included gas and water shut-off jobs, side-tracking of poor producers, enhancement of water injection support for voidage compensation, gas-lift and infill drilling. All these inputs helped to arrest the decline to some extent for some time.

Further, to ensure maximum longevity of Mumbai High field and to increase the recovery factor, major initiatives in the form of redevelopment schemes were launched with the induction of state of art technologies in the areas of drilling, characterization, well completions, etc. by ONGC in 2000-01.

These redevelopment schemes for Mumbai High North and South (Phase-I) were completed in December 2006 and May 2007 respectively. Another major scheme i.e. Additional development of A1 layer L-III reservoir of Mumbai High North (MHN) was also completed in March 2008.

With the success of these schemes, the next phase i.e. 'Re-development of Mumbai High South (MHS) Phase-II and Re-development of Mumbai High North (MHN) Phase-II' Projects were initiated in October 2007 and January 2009 respectively and are now nearing completion. The redevelopment of MHS Phase-II scheme envisages incremental oil gain of 18.31 Million Metric Tonne (MMT) and 2.70 Billion Cubic Meter (BCM) gas by March 2030. The estimated project cost is Rs. 8813.41 Crore with the completion schedule of March 2013.

The redevelopment of MHN Phase-II scheme envisages incremental oil gain of 17.354 MMT and 2.987 BCM gas by March 2030. The estimated project cost is Rs. 7133.39 Crore with the completion schedule of September, 2013.

In order to further improve recovery and move towards higher recovery factor, Phase-III redevelopment of Mumbai High has been conceptualized as part of rolling development plan. As part of these initiatives, development of Western Periphery of Mumbai High South field has recently been approved by ONGC Board.

To maintain/augment production from brown fields is very challenging and requires additional development & use of new technologies and healthy reservoir practices. In addition to focus on repair of existing wells, artificial lift and stimulation of wells, various efforts are being made/planned for enhancing oil production in the Mumbai High field.

Further, ONGC is taking various actions for maintaining the reservoir health of Mumbai High fields with the assistance of domain experts of international repute.

