repair, renovation and restoration of water bodies. Activities relating to water conservation and water harvesting are also funded under National Rural Employment Guarantee Scheme (NREGS).

Gyspa Hydro electric project

3027. SHRIMATI VIPLOVE THAKUR : Will the Minister of WATER RESOURCES be pleased to state:

(a) whether it is a fact that Gyspa Hydro-electric project on Chenab basin in Lahaul and Spiti of Himachal Pradesh has been declared a project of National Importance by Government;

(b) whether it is also a fact that it was decided that Central Water Commission and Government of Himachal Pradesh would jointly prepare DPRs for Gyspa Project and State Government would provide manpower and CWC would provide funds;

(c) if so, the details thereof;

(d) whether despite many request from Government of Himachal Pradesh, required fund of Rs. 35 crore have not been released by CWC so far; and

(e) if so, reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) The project has been included as a National Project.

(b) and (c) In a meeting between officials of the Central and State Governments, a decision was taken that Central Water Commission (CWC) and Government of Himachal Pradesh would work out the details of investigation and preparation of Detailed Project Report (DPR) of Gyspa hydroelectric storage project and the funding would however be made by CWC.

(d) and (e) CWC made a suggestion to the State Government to the above effect further indicating that joint working would be cost effective and within the funds sanctioned to CWC for investigation and preparation of DPR. Himachal Pradesh State Electricity Board (HPSEB) has however conveyed its view to engage some reputed international consultants/firms to prepare the DPR of the project. HPSEB has further indicated that the total estimated amount (Rs. 32.50 crore) for preparation of DPR would not be required in single instalment but would be phased out and submitted to CWC. However, the requisite source for such funding of preparation DPR is not available with CWC.

Consumable sea water

†3028. SHRI RAJ MOHINDER SINGH MAJITHA:
SHRI SHIVANAND TIWARI:

Will the Minister of WATER RESOURCES be pleased to state:

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†Original notice of the question was received in Hindi.

(a) whether it is a fact that a Government institute situated in Chennai has achieved success in making sea water consumable;

(b) if so, the details thereof;

(c) whether after this success, Government has prepared any scheme at national level to extend the said scheme; and

(d) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF EARTH SCIENCES (SHRI PRITHVIRAJ CHAVAN): (a) Yes, Sir.

(b) The National Institute of Ocean Technology (NIOT) an autonomous body of the Ministry of Earth Sciences has indigenously designed developed and demonstrated the desalination technology for conversion of sea water into potable water based on Low Temperature Thermal Desalination System (LTTD). The LTTD is a process under which the warm surface sea water is flash evaporated at low pressure and the vapour is condensed with cold deep sea water. An LTTD plant with a capacity of 1 lakh liter per day production of fresh water was developed and installed in May 2005, at Kavaratti, Lakshadweep Island. Since then the plant has been effectively working since then and catering significantly to the needs of the local population. The plant has so far produced over 120 million liter of fresh water. The Lakshadweep Islands have the advantage of ocean depth (~500 m) available within few hundred meters from the coast and hence, land based plants are possible. NIOT is in the process of setting of 3 more plants in the islands of Lakshadweep of 1-lakh liter per day capacity, one each in Agatti, Androth, and Minicoy which are in the advance stage of commissioning. The target for completion of one of the plants at Agatti is September 2009 and for the other two plants is December 2009. Another LTTD Plant of 1-lakh litre per day capacity was also established at Northern Chennai Thermal Power Station, Chennai in March 2009, which uses the waste heat discharge from the power plant. Besides, NIOT has also demonstrated an offshore barge mounted 10-lakh liter per day capacity plant about 40 kms off Chennai in April 2007, as a part of scaling up plants for the coastal region of India. The initial estimated cost of production of Kavaratti Plant was 10 paise per litre depending on the charges of power/electricity. Besides, the technology is environmental friendly and the bi-products associated with LTTD technology would also benefit the coastal community. The estimated cost of production of demonstration plant is inclusive of capital and other fixed costs.

(c) Yes, Sir.

(d) A scheme is also being formulated for large scale desalination plants in the coastal areas including at the coastal power plants. Currently efforts are underway to take up the project of designing of a 10 MLD plant which will be an offshore plant primarily to cater to the needs coastal mainland India. A Public Private Partnership is being solicited for commercialization of the technology.