

(a) whether the survey for construction of Feroke-Nilambur line in Kerala has been completed, and

(b) if so, the details thereof and the estimated cost of the project?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MAL-LIKARJUN) (a) No, Sir

(b) Does not arise

#### Promotion of Naturopathy and Yoga

2178 SHRI GANGADHARA SANIPALLI Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state

(a) whether the Government propose to set up a separate Directorate for promotion of Naturopathy and Yoga and

(b) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRIMATI D K THARADEVI SIDDHARTHA) (a) No, Sir

(b) Does not arise

#### Technology Upgradation of Indigenous Locomotives

2179 SHRI AMAL DATTA Will the Minister of RAILWAYS be pleased to state

(a) the domestic capacity for manufacture of electric locos in terms of quality and quantity,

(b) whether any effort is being made for upgradation of the technology of the product as well as of the process of production,

(c) if so, the details thereof,

(d) whether new technology for upgra-

dition of electric locos have been imported, and

(e) if so, the nature of technology and how it is proposed to be absorbed?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MAL-LIKARJUN) (a) Electric locomotives of 3900 HP rating & 1960 vintage technology are being manufactured in the country. The present manufacturing capacity of Chittaranjan Locomotive Works (CLW) is 100 Electric Locomotives per year. The capacity is being augmented to 120 locos per year. Further a proposal to increase capacity upto 150 locos per year has been included in 1992-93 budget proposals.

An order for manufacture of 35 Electric Locomotives of similar design, as produced by CLW, has been placed on BHEL in Sept 86. Receipt of locomotives against this contract has been as under

1988-89	—	5 Nos
1989-90	—	6 Nos
1990-91	—	7 Nos
1991-92	—	8 Nos

(Upto Feb 92)

(b) and (c) Yes, Sir. This is a continuous process. However, some of the important development of technology upgradation taken up during the last few years are -

(i) Manufacture of traction motors of higher rating (840 HP) & higher class of insulation under technology transfer from Hitachi/Japan. Matching Modern facilities have also been provided to upgrade the process of production.

- (ii) Technology of existing TAO-659 (770 HP) traction motor, earlier established (in late 60s and early 70s) with technology transfer from Alstom, has also been upgraded by use of Kapton covered conductors, induction of process of vacuum pressure impregnation and TIG welding process.
- (iii) Technology for manufacture of cast steel bogies is also being upgraded under transfer of technology from Rockwell U.S.A.
- (iv) Design of bogies for high speed passenger locos has been upgraded. Fabricated bogies for service speed upto 140 KMPH, of Shatabdi Express, have been manufactured by CLW to the design developed by RDSO.
- (v) CLW is developing prototype of Electric Loco of 5000 HP rating (against existing 3900 HP). For prototype manufacture of upgraded locomotive, design and development of bogies, transformer of 5400 KVA & associated equipment is in hand.
- (vi) Use of thyristor control with electronic slip detection for improved adhesion is also being planned.

(d) and (e). Efforts are on to import new technology of electric locos, not available indigenously, to upgrade the H.P. and speed capacity of locomotives for meeting the growing traffic requirements. In this context, Indian Railways have taken the following steps:-

- (i) 18 prototype freight electric locos of 6000 HP, with thyristor convertor & microprocessor control, have been obtained. These are of 3

designs (12 Nos. of 2 designs from Japan & 6 Nos. of one design from Sweden) and are under service trials.

- (ii) A tender, for import of 6000 HP Locomotives (freight - 20 Nos. and high speed passenger - 10 Nos.), with 'state of the art' energy efficient 3 phase drive, advanced GTO thyristor & microprocessor control along with technology transfer, under financing from ADB & Exim Bank Loan, is in process.

This is with a view to take up series manufacture of 6000 HP Locomotives indigenously, with technology absorption.

[Translation]

#### Central Universities

2180. SHRI UPENDRA NATH VERMA: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

- (a) the names and number of General Universities in the country; State-wise;
- (b) the criteria adopted to declare any university as Central University;
- (c) whether the Government propose to convert any university of Bihar particularly the Patna, Both Gaya and Ranchi Universities into Central Universities; and
- (d) if so, the reason therefor?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI ARJUN SINGH): (a) to (d). There are at present 147 Universities in the country of which only following 10 are Central Universities:-

- (1) Aligarh Muslim University in Uttar Pradesh.