

GOVERNMENT OF INDIA
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
DEPARTMENT OF HIGHER EDUCATION

LOK SABHA
UNSTARRED QUESTION No. 188
TO BE ANSWERED ON 30.11.2015

Quality of Technical Education

188. SHRI PRAHLAD SINGH PATEL:

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

- (a) the salient features of Technical Education Quality Improvement Programme (TEQIP) implemented by the Government;
- (b) whether the Government has signed any Memorandum of Understanding (MoU) with foreign Governments to get advance technical information in order to improve the quality of Technical Education in the country and if so, the details thereof;
- (c) the number of centres established for improving technical educational quality in the country;
- (d) whether the Government proposes to ask industrial companies to adopt the centres to influx the quality as well as innovation into the technical education system in the country and if so, the number of companies are likely to ask to adopt the centres, State-wise;
- (e) whether the Government considers to give incentives to the companies those who are adopted the technical centres in the country and if so, the details thereof and if not, the reasons therefor; and
- (f) the number of steps taken by the Government through TEQIP for producing high quality engineers for the industry?

ANSWER

MINISTER OF HUMAN RESOURCE DEVELOPMENT
(SMT. SMRITI ZUBIN IRANI)

- (a) In 2002-03, the Government of India with the financial assistance from the World Bank launched Technical Education Quality Improvement Programme (TEQIP) as a long-term Programme of 10-12 years, to be implemented in three phases for systemic transformation of the Technical Education System with focus on Degree level Engineering Education. The salient features of Technical Education Quality Improvement Programme may be seen at **Annexure-I**.

- (b) No. However, a Letter of Intent (LoI) has been signed between MHRD & Mitacs Inc. a Canadian Not-for-Profit Corporation for implementation of student exchange programme with a view to promote Research, Consultation & Exchange of Experience, Capacity Building and Training within Joint Research Project between Canadian Universities and India.
- (c) To improve the quality of technical education in the Country a total of 191 institutions (127 State Govt. funded/ aided, 38 private unaided institutions and 26 centrally funded technical institutions) are being supported under the project. 30 Centres of Excellence have been established in 27 project institutions.
- (d) No.
- (e) The Project provides support to the Technical Institutions participating in the Project for enhancing their linkages with the industry for various academic activities. However no direct support / incentives are being provided to the industries.
- (f) The steps taken by Government of India for producing high quality engineers under TEQIP-II may be seen at **Annexure-II**.

ANNEXURE-I AS REFERRED TO IN REPLY TO PART (a) OF THE LOK SABHA UNSTARRED QUESTION NO. 188 FOR 30.11.2015 ASKED BY SHRI PRAHLAD SINGH PATEL, HON'BLE MEMBER OF PARLIAMENT REGARDING QUALITY OF TECHNICAL EDUCATION.

Salient feature of Technical Education Quality Improvement Programme (TEQIP)

▪ **TEQIP (Phase-I) :**

The first phase of TEQIP commenced in March 2003 and ended in March 2009, covering 127 institutions in 13 States. Through competitive funding, each participating institutions implemented a set of reforms that promoted academic and administrative autonomy. The bottom-up approach empowered the institutions to improve curriculum, teaching, and assessment, according to the demand for skills and newest research. Further, TEQIP invested in faculty development, encouraged participation in national and international conferences, and it financed necessary purchase of modern labs and research instruments.

▪ **TEQIP (PHASE-II) :**

Building upon the satisfactory completion of the first phase of TEQIP, its second phase (TEQIP-II) is presently being implemented as a “Centrally Sponsored Scheme” (CSS) in 191 competitively selected engineering institutions to improve quality of Technical Education through institutional and systemic reforms. The second phase boosts efforts to prepare more post-graduate students to reduce the shortage of qualified faculty, and to produce more R&D in collaboration with industry with following objectives:

- Strengthening Institutions to produce high quality engineers for better employability,
- Scaling-up postgraduate education and demand-driven Research & Development and Innovation,
- Establishing Centers of Excellence for focused applicable research,
- Training of faculty for effective Teaching, and
- Enhancing Institutional and System Management effectiveness.

ANNEXURE-II AS REFERRED TO IN REPLY TO PART (f) OF THE LOK SABHA UNSTARRED QUESTION NO. 188 FOR 30.11.2015 ASKED BY SHRI PRAHLAD SINGH PATEL, HON'BLE MEMBER OF PARLIAMENT REGARDING QUALITY OF TECHNICAL EDUCATION.

Steps taken by Government of India for producing high quality engineers under TEQIP-II

1. Strengthening participating institutions through:
 - faculty and staff development;
 - pedagogical training at IITs;
 - enhancing interaction with the industrial sectors;
 - improving institutional governance, and management and administrative practices that are conducive to academic autonomy;
 - implementing relevant institutional reforms;
 - improving teaching, training and learning facilities;
 - providing academic support to weak students;
 - increasing enrolment in post-graduate programmes, and enhancing research and consultancy activities;
 - modernizing libraries and other means to access knowledge resources;
 - enhancing research and development;
 - developing research interest among degree students;
 - sharing resources through collaborative arrangements;
 - modernizing and expanding laboratories; and
 - establishing inter-disciplinary centers of excellence that conduct applicable thematic research and development in collaboration with industry and other knowledge users, converting research results into applicable technologies and enhancing collaborative activities with national and international institutions.

2. Improving system & management through:
 - establishment and operation of Project management units at the National and State levels;
 - carrying out of stakeholder satisfaction surveys, performance and fiduciary audits, & impact assessment studies, and
 - organizing management enhancement trainings at IIMs.

3. Establishment of Quality Circles and Knowledge Incubation Centres at IITs : Quality circles/ Knowledge Incubation Centres have been established at 8 IITs to bring faculty and students of different engineering disciplines on a common platform on specific academic subjects and to provide Pedagogy Training to project institutions.

4. Quality Enhancement in Engineering Education (QEEE) programme by IIT Madras : The QEEE program consists of live-lectures, remote tutorials, remote labs, open courses, e-books, MOOCs and remote quizzes amongst others.

5. Management Capacity Enhancement Programme/ Leadership Development Programme at IIMs : Management Capacity Enhancement Programme/ Leadership Development Programme is being implemented with an object of Capacity building to strengthen management of project institutions.