

Promotion of indigenous research

†2151. MS. SAROJ PANDEY: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state whether Government is considering to promote indigenous research, if so, the steps taken by Government in this regard so far and the details thereof?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI RAMESH POKHRIYAL 'NISHANK'): Yes, Sir. Government has taken several steps to promote indigenous research in the country:-

- (1) Ministry of Human Resource Development (MHRD) has taken following steps:-
 - (a) Research Parks: Under Startup India Initiative in Higher Education (SIIHE) Scheme, Research Parks have been instituted with a propose to catalyze collaborative research between industry and academia and enable technological innovation and nurture entrepreneurship. MHRD has approved five new Research Parks at IIT Delhi, IIT Guwahati, IIT Kanpur, IIT Hyderabad and IISc Bangalore at a Total cost of ₹75.00 crore each; research park at IIT Madras is already operational. Approval has also been accorded for continued funding of two already approved Research Parks at IIT Bombay and IIT Kharagpur at a cost of ₹100 crore each.
 - (b) IMPRINT: Impacting Research, Innovation and Technology (IMPRINT) Scheme provides solution to the most relevant engineering challenges by translating knowledge into viable technology (products or processes) in 10 selected technology domains i.e. health care, energy, sustainable habitat, nanotechnology hardware, water resources and river systems, advanced material, information and communication technology, manufacturing, security and defence and environmental science and climate change. These projects are funded jointly by MHRD and participating Ministry/DST/SERB. 318 projects at a Total cost of ₹ 466.47 crore were approved under IMPRINT Scheme.
 - (c) IMPRESS: Impactful Policy Research in Social Science (IMPRESS) Scheme has been launched with a view to support research in higher education institutions and to enable research to guide policy making at a Total cost of ₹ 414 crore till 31.03.2021. The objective of the scheme is to focus

†Original notice of the question was received in Hindi.

research on 11 (eleven) thematic areas such as (i) State & Democracy; (ii) Urban Transformation, (hi) Media, Culture & Society, (iv) Employment, Skills & Rural Transformation, (v) Governance, Innovation & Public Policy, (vi) Growth, Macro-Trade & Economic Policy, (vii) Agriculture & Rural Development, (viii) Health & Environment, (ix) Science & Education, (x) Social Media & Technology, (xi) Politics, Law & Economics.

(d) STARS: Scheme for Transformational and Advanced Research in Sciences (STARS) has been launched with a objective of providing extra mural funding to India centric research projects in basic sciences which are inter-disciplinary and translational in outcomes. With the key objective of supporting social relevant research, the basic 6 thrust domains of the scheme includes Physics, Chemistry, Biological Science, Nanosciences, Data Sciences & Mathematics and Earth Sciences. A Total budget of ` 250 crore has been allocated for the scheme.

- (2) National Research Foundation (NRF): Government is working towards increasing the spending on research and innovation in the country through the creation of National Research Foundation as per its Budget Announcement in 2019-20. NRF will fund, coordinate and promote research in the country. NRF will ensure that the overall research eco-system in the country is strengthened with a focus on identified thrust areas relevant to our national priorities and towards basic science without duplication of effort and expenditure.
- (3) Department of Science and Technology (DST) has also taken multifaceted activities including implementation of individual centric competitive research programmes, research fellowships, building sophisticated research infrastructure etc. Fund for improvement of S&T infrastructures in universities and higher educational institutions (FIST) to build research infrastructure for enhancing research capabilities, Core Research Grant, Research fellowships such as JC Bose and Swarnajayanti etc. are some of the schemes in this direction. Special attention has been given to young scientists through schemes like Start-up Research Grant, National Postdoctoral Fellowship etc. for making them independent and motivates them to undertake indigenous research in the country. Technology Development Programme (TDP) of DST is aimed to promote R&D towards indigenous technologies, such as Science & Heritage Research Initiative (SHRI), Waste

Management Technologies (WMT) Programme, Advanced Manufacturing Technology (AMT) Programme, Biomedical Device and Technology Development (BDTD) and Device Development Programme (DDP). Through Technology Mission programme, DST supports technologies aimed at generating clean energy (smart grids, off grids, clean coal, methanol, solar energy) and water. These initiatives are aimed at strengthening indigenous research. The Research Park at IIT Gandhinagar at a Total cost of ₹90 crore is being funded by the DST.

- (4) India's ranks 52nd (as against 57th in 2018) in the Global Innovation Index (GII) report 2019 and India filed 30,036 patent applications in 2019. In terms of Total Research publications, India stands fifth in the world as per Elsevier Research Agency.

Skill development in students at school level

†2152. CH. SUKHRAM SINGH YADAV:
SHRI VISHAMBHAR PRASAD NISHAD:
SHRIMATI CHHAYA VERMA:
SHRIMATI SAMPATIYA UIKEY:

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

(a) whether Government is pushing towards imparting skill developing training to the students along with the education at the school level itself so that they are capable of self employment;

(b) the details of the courses being run in the school along with the education by which the students are passing out as a skilled person; and

(c) the steps taken for the skill development based education at the school level during the last five years?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI RAMESH POKHRIYAL 'NISHANK'): (a) to (c) The Government is implementing the scheme of Vocationalisation of School Education under the umbrella of 'Samagra Shiksha - an integrated scheme for school education', a Centrally Sponsored Scheme. The scheme

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