

## "All India CSIR Conclave" (Integrated Skill Initiative) (17.02.2023)

1. Delivered two invited talks in the above esteemed conclave comprising the nodal officers of the entire CSIR India Council for Scientific and Industrial Research (CSIR) during 16-17 February 2023 at Sethu-CSIR NIO at Goa under the aegis of apex CSIR-Human Resource Development Centre Ghaziabad, NCR.
2. This highly dynamic and able group of senior officers of CSIR India whom I was invited to interact with in the first such conclave since 2015, are responsible for the skill development in country, contributing immensely towards the Indian Government Skill India initiative skill India Online launched in 2015.
3. This mission is being well complemented by yet another inter-ministerial initiative launched in 2020, the Accelerate Vigyan being steered by SERB DST.
4. My talks centered around the Indian S&T landscape in the country, with special reference to R&D opportunities, and finer details of Accelerate Vigyan (AV).
5. Initially I highlighted the progress our country has made in the arena of S&T:
  - A. Among top five nations in space exploration
  - B. 1,494 Indians among the top 2% scientists
  - C. Among top 50 countries in the GII-2020:
    - a) Ranks 40th for the fifth consecutive year,
    - b) Top positions in quality of scientific publications (21st)
    - c) In quality of universities (22nd)
  - D. 3rd Position in no. of PhDs in science and engineering
  - E. 3rd position in terms of number of Start-ups and many other specific sectorial achievements, which we Indians should be proud of. I did also touch upon our concerns, constraints and challenges (though the current government is making all inclusive efforts to overcome them during the last 09 years):
    - i. Low FTE (<300 per million) but large volume of researchers (>3 lakh)
    - ii. One of the largest pool of experts of international repute but nearly 1.5 times of expertise reside outside India
    - iii. Low citation and less number of publications in high impact factor journals (but over 1.3 lakh publications per annum in SCI journals)
    - iv. Lesser than desirable Inter-institutional collaboration
    - v. Silo growth: lesser than desirable collaborations between Line ministries and S&T ministries
    - vi. Glaring disconnect between Education & Research and Research & Innovation
    - vii. Inadequate linkages between Science & Policy and Science & Society
    - viii. Weak partnership between Public and Private
    - ix. Technological Readiness Level at a premium
6. The specific aspects of the AV to identify, expand and strengthen the research base in the country as well as consolidate the capacity building effort of all the S&T departments in the country under the common roof of Accelerate Vigyan was highlighted. The importance of tracking the research effort and knowledge, and their interconnections was also emphasized. DG CSIR Vigyan Prasar



