Minutes of Meeting of the webinar on 'Need of a targeted Policy Framework for spurring innovation & collaborative R&D

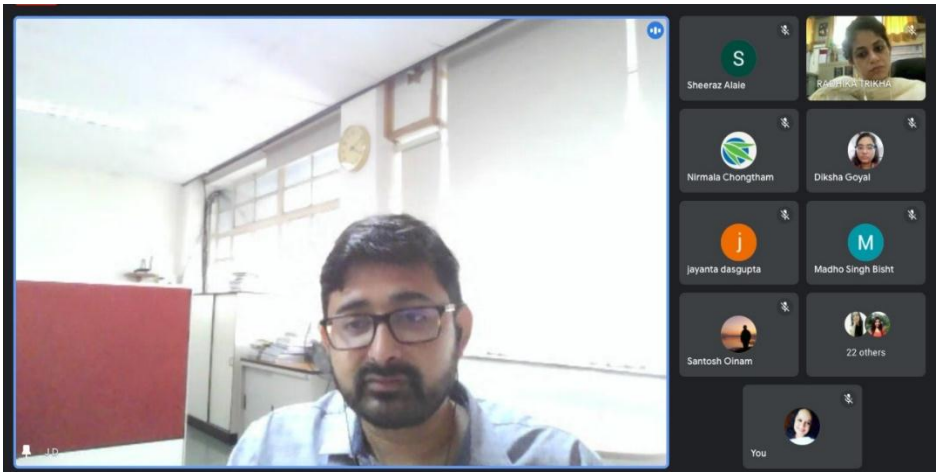
Date: 26th August 2021

Organized by

DST-Centre for Policy Research (CPR) at Panjab University, Chandigarh.

Speaker: Mr. Jibak Dasgupta, Director & Head CII Naoroji Godrej Centre of Manufacturing Excellence Confederation of Indian Industry (CII), Mumbai.

A webinar to spread awareness about the correlation between policy recommendations and their implementation challenges with innovation was conducted by DST-CPR on 26th August 2021. The webinar aimed at sensitizing the industrialists, academicians, researchers and policymakers about the significance of targeted policies aiming at innovations with simultaneous management of risk behaviour and challenges tackled during policies implementation. The objective of the webinar was to understand the role of innovation policies and the role of collaborative ideas and various clusters associated. Prof. C. Nirmala (Coordinator, DST-CPR) officially welcomed all the participants and the keynote speaker for sparing his valuable time to make significant contributions to this webinar.



Mr. Jibak Dasgupta initiated his talk while emphasizing the idea and various aspects of innovation. It covers invention, discovery, commercialization, Intellectual Property Rights (IPR), R&D, Process and Business models. He emphasized that innovation is a nonlinear function of success and time because it does not guarantee success over time and is perturbed by various policy implantation paradigms.

The Salient Points of the talk are as mentioned below:

- The most significant parameter of innovation is its commercialization and associated actors, i.e. industries, academia, policymakers, community, etc.
- The national innovation system inculcates innovation for growth and transformation change.
- While citing the example of Chloro Fluoro Carbons (CFC), he mentioned that this technology vanished and failed because it was launched when the ozone layer depleted.

Therefore, it clearly depicts the impact of transformational change in innovation, which can lead to market failure.

- There are challenges in the growth phase of innovations and differ significantly for developing and developed countries. For example, in developed countries, having high incomes can invest in high levels of R&D in contrast to developing countries lacking resources for investment. Similarly low adsorption capacity and inadequate infrastructure in developing nations lack incentives for innovations. Developed countries have developed ample skills and environment to protect scientific and technical knowledge and developing countries are deprived of such advantages.
- To remove the disparity between developed and developing countries, we have the National Innovation System (NIS), phase 2 which involves shifting from a linear model to an interactive model. The major challenge in innovations is that there is no feedback taken from general social actors and associated stakeholders. Therefore, there is an imperative need to create a network between industry research and university research as per the desired market demand. Cluster policy approach and triple helix models are such examples emphasizing the significance of
- Phase 3 of innovation is the transformation change, which is a complex one because it clubs 1^{st} and 2^{nd} phases and involves multiple stakeholders and its influence by the policy governance.
- Social feedback is imperative for Mission Orientation Innovation Policies (MOIP): He explained this quote while citing the example of Japan's innovation policy transition system. In Japan, when they became leaders and developed infrastructure, they amended the policies and also started funding basic research. This is because basic research gives an edge for applied research. The 5^{th} basic plan of Japan policy focuses on society and the various SDG goals.
- MOIP is extremely targeted and time-framed as it inculcates a) Strategic orientation, b) Policy coordination and c) Policy implementation.
- While demonstrating MOIP of Japan, he emphasized on inclusion of societal issues while drafting policies that integrate significant value into it. For instance, in Japan, if a project fails, it is not wasted but taken up by another team, worked upon, modified, innovated and thereafter implemented.
- While citing examples of Carbon capture storage products in Norway, he mentioned the requirement of an appropriate body, agencies and infrastructure for project implementation.
- He also demonstrated the key features of the STIP 2021 policy, while correlating the innovation phases with the chapters of the policies. For instance, Chapter lines up with Phases 1&2, Chapter 2 with phases 1 & 2, Chapter 3 with phase 3, Chapter 4 with phases 1, 2 &3, Chapter 7 with phase3 and Chapter 10 with Phase 2.

The advantages and disadvantages of collaborative R&D are:

(a) Access advantage

(b) Network advantage

(c) Cost advantage (Saving transaction cost and reducing R&D cost)

(d) Challenges lie in different bodies while undergoing joint governance lack of faith and trust due to undefined and uncertain outcomes.

Attributes of successful R&D collaborations:

a) Feedbacks from associated stakeholders from time to time.

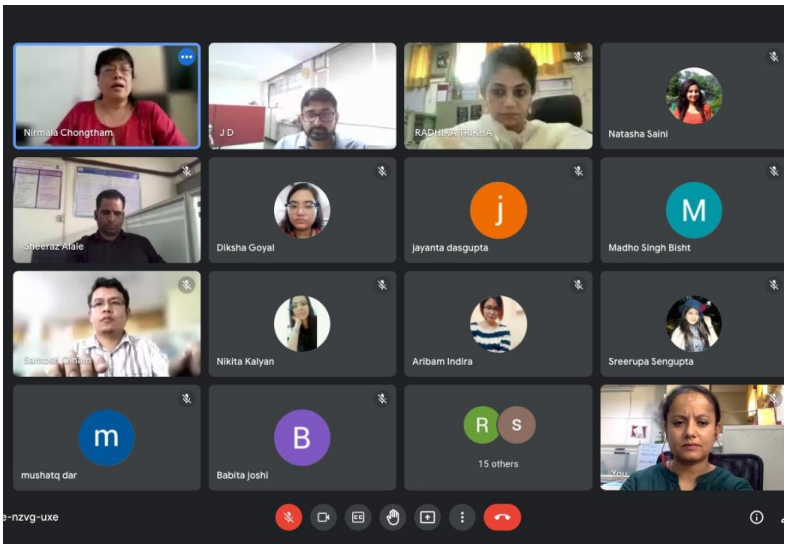
b) Transparent IPR sharing agreement is required.

Examples of collaborative R&D schemes in STIP 2020 are:

a) Visiting Advanced Joint Research (VAJRA) and GIAN

b) Collaborative research centres

c) STI collaborative funding model



He concluded his talk by stating that, infrastructure and policies are set in India but appropriate channels need to be followed for innovation implementation. Investing time of all associated stakeholders is imperative for effective collaboration.

Prof. C. Nirmala, Coordinator, DST-CPR thanked the speaker for sharing his valuable thoughts regarding innovation policies, challenges and their implementation. She also discusses the various pros and cons of innovation implementation mechanisms in India in comparison to other countries. She emphasized the need of sensitizing young researchers towards innovation policies to integrate value into their research.