Webinar on 'The French Innovation Process for Technology Transfer – Funding and Guidance' Date: July 31, 2020 (03:00 pm - 05.00 pm)

Minutes of Meeting

DST-Centre for Policy Research at Panjab University, Chandigarh kick-started its webinar series with its inaugural seminar 'The French Innovation Process for Technology Transfer – Funding and Guidance'. The talk was given by a distinguished speaker of the event Dr. Jean-Luc Kouyoumji, Scientist, Institute of Technology (FCBA), France. Dr. Jean-Luc Kouyoumji is a research engineer since 1997 at FCBA. Institute of Technology, France. He has a Ph.D. in "Civil engineering and Building Sciences", from Savoie University. He was project manager or coordinator for over 30 R&D projects (both private and public) and has written over 25 papers for international congresses and scientific reviews on acoustics and building energy.

The webinar started with a welcome address by Prof. C. Nirmala, Coordinator, DST-Centre for Policy Research at Panjab University, Chandigarh. Prof. Nirmala introduced the Centre and briefly stated the mandate of the Center. She highlighted the importance of technology development and transfer for invigorating the innovation ecosystem in the country. She formally welcomed Prof. Raj Kumar, Vice-Chancellor, Panjab University, Chandigarh, and the distinguished speaker of the webinar Dr. Jean-Luc Kouyoumji.

The keynote address was presented by Prof. Raj Kumar, Vice-Chancellor, Panjab University, Chandigarh. He welcomed Dr. Jean for accepting the invitation for webinar talk. He emphasized the role of technology in national growth. He focussed on the conversion of IP into a market product. He talked about the stages of technology development and its reach to the market. The webinar was attended by faculty and young researchers. Down the schedule, Dr. Jean delivered his talks.

Dr. Jean-Luc Kouyoumji presented the mechanisms of technology transfer employed in France in a presentation entitles 'The French Innovation Process for Technology Transfer'. This presentation gave us an overview of the guiding mechanisms and funding protocols in France that enable the translation of academic research into commercial entities. Subsequent to introducing his Institution, Technological Institute Forest Cellulose Wood-construction Furniture, Dr. Kouyoumji spoke about the long standing effort of French government to devise a policy that supports innovative SMEs and entrepreneurs. He iterated the different ways in which funding support is provided and which all agencies provide financial support. Further he spoke about the different stages of innovation cycle at which funding support is available in the French innovation ecosystem. Following is a snapshot (Figure 1) from his presentation referring to the types of funding, funding agencies and the stages of financial support.



Figure 1: Funding Instruments in the French Innovation Ecosystem

Going further he elaborated the characteristics of each of the funding measure, i.e. the subsidies, tax measures, credits, loans, etc. and also mentioned that what sort of measure is available at what stage of innovation cycle.

Dr. Kouyoumji stressed upon, along with support from the governments and its allied ministries, in France a specialized agency called as the Bpifrance also supports innovative activities through providing financial aid. It especially supports entrepreneurial activity and growth by offering loans, providing guarantees and awarding buyer credit and supplier credit to encourage business abroad. He informed that in the year 2018, Bpifrance financed over 80,000 companies and provided over 6000 investment loans and 50,000 short term loans with a total production of 19 billion euros. Additionally, Bpifrance helps accelerate the growth of companies through accelerator programs, consulting services for executives and training for CEOs, events that encourage networking between entrepreneurs, and international missions to help businesses discover markets abroad.

He further iterated about the National Research Agency (ANR) and its Investments for Future Initiative (PIA), under which France has invested highly for the cause of upgrading its research facilities and laboratories. In his discussions he highlighted the French National Research Strategy 2015-20 and its two major objectives – 'Maintenance of competitiveness of France in scientific research globally, and 'Fostering research that answers scientific, societal, environmental and technological challenges of the 21st century'. He mentioned that it is envisaged to be setting up, under PIA, interdisciplinary technological research institutes can be set up as public-private partnerships, with a view of becoming world-class campuses for technological innovation and enhancing cluster ecosystems. In addition to its funding for collaborative research, ANR has introduced 'Industrial Chairs' programme to support collaborative research on strategic issues for French industry. He discussed how the presence of intermediary and facilitating organizations/institutions has worked in the favour of advancement of France.

The next topic of discussion was the Innovation Facilitators, i.e. the instruments such as Carnot institutions, Technopoles, Industrial Technical Centres, Centres of Technological Resources (CRT), Technological Research Institutes (IRT), Technology Transfer Accelerator Offices (SATT), etc. To enhance the global competitiveness of the French system of public research valorisation (validation) through the creation of local "one-stop services" which will allow for the augmentation of service supply for research and business fraternity, the French government initiated the SATT programme. Conceived under the PIA, the SATTs intend to collectively promote university sites and terminate the system of structure fragmentation. The SATTs, which are in close contact with the PRIs, dedicatedly work for transferring technologies and drive the inventions to the maturation stage from the PRIs (Figure 2).



Figure 2: SATT Initiative and its objectives

Dr. Jean-Luc pitched that presently there are nearly 14 SATTs and nearly 160 PRIs have entrusted the evaluation, transfer and valorisation of their research results to SATTs. The SATTs offer the researcher with a simplified and single contact point for transferring their research without having to put in too much effort into other details like evaluation of product, market analysis, pricing etc. The companies also find it easier to contact one single point for novel technologies, know-how etc. The SATTs have dedicated teams and personnel for undertaking various processes of technology transfer and valorisation. These teams aptly evaluate a research outcome, develop it into an offer (license, technology brick, service etc.) and be an adjunct to them until they are transferred to a company. It was voiced that developing countries like India can take away a few learning points, such as -

- Developing and providing common platform for transfer of technologies and also develop a common portfolio of technologies.
- Developing partnerships through sharing resources (tech, transfer services, legal services, business/marketing services, etc.)
- Develop strong inter-networking and sharing knowledge, i.e. effectively communicating.



Figure 3: Evolution of the SATT initiative

Knowledge flows and commercialization of public sector research were main topics of discussion of the webinar. The offering of commercialization services by establishments such as SATT and other intermediary organizations will definitely aid is enhancing the conversion of public sector research into commercial entities. As all the activities related to commercialization, valuation, market assessments/surveys, IP management, etc. can be taken up by these validation organizations it will decrease the burden, of finding suitable industrial partner, marketing approach, etc., of the researcher.

Subsequent to the talk by Dr. Jean, an open question and discussion session was moderated. The discussion focussed on what kind of policy framework is functional in France to support local technology development and its deployment. Dr. Jean discussed various policy interventions for technology development and its utilization through government support and amalgamation of public and private sectors for pursuing technology development in a collaborative form. He emphasized the impacting the role of SATT in promoting a collaborative role. The discussion on the importance of international S&T engagements for technology development was also carried out. Dr. Jean emphasized on exploring the avenues for international collaboration between India and France for pursuing collaborative research. He also touched upon the role of virtual integrated platforms for connecting with various stakeholders of the STI ecosystem keeping in mind the scenario emerging out of COVID-19.

The webinar discussion focussed on the relevance of industry-academia collaboration for building a strong base for technology development and technology transfer. On the SATT model of France, India can take pointers for strengthening industry-academia interactions for generating collaborative research and opening viable avenues for taking up research carried out at the universities by the industries and then to the market.

The webinar concluded by the formal vote of thanks to the distinguished speaker and keynote address. Dr. Jean agreed to give future support to the Centre for coming up with policy recommendations on strengthening the technology transfer ecosystem in academic institutes.
