

Panel Discussion

How similar or different are policies to foster learning and innovation in Developing Countries and Transition Economies? To what extent can actors and their interaction differ between innovation systems in these economies?

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Issues for the debate

Research in science, technology and innovation studies has been slowly and surely finding resonance in the research on development economics field. Amartya Sen's capability theory from development economics can be synthesised with the theory of productive power from the studies on innovation systems. Far from innovation being outside the strategies of developing and transitional economies, it is slowly edging to occupy centre-stage in linking innovation research with development economics research.

The key to the concept of innovation is an understanding that it is an evolutionary process where knowledge and new information come together to create new products, processes and services. Such an understanding is helpful to understand also economic development processes. The creation of new products have to go through a market or non- market validation or selection process depending on what kind of economic coordinating mechanisms dominate in a given developing and transitional economic situation. The question of the roles of key actors in the innovation system of developing and transitional economies is critical to develop insights on the capability, competence, learning capacity of all those interacting in the system such as research labs, corporations and universities that do both research and development that can stimulate the generation of products, processes and services.

Actor interaction with in the innovation system includes the individuals, organisations, their interactions, the feedback system, the co-evolutionary dynamics, the selection processes and impact on specific policy goals.

Key actors that have influence on innovation system besides Government in developing countries are universities, financial institutions, publicly funded research institutes, businesses, science academies and scientific advisory boards.

How do the key actors interact? How strongly and weakly do they communicate with each other to align, become and establish effective pillars and support for a system of innovation for generating measurable development impacts on economy, society, governance, and knowledge?

What are the developing country innovation system key actors? What are their evolving roles in the process of changes, challenges and opportunities in developing country system of innovation? What

are the mechanisms for their interactions? How effective are their interactions for the generation of developmental impact? Are there systemic gaps and constraints in the linkages actors are able to forge? What are their learning strategies regarding the way they combine local and global knowledge sources?

What is the international actor linkage within the developing and transitional economies? Is there a difference between inter developing system of innovation actors with those from the developed world? Some countries follow a sort of self- contained NSI where they rely on national sources for research and development primarily. Others like China have opened up by allowing in their NSI the interaction of foreign multinationals. China's Government sees NSI as critical to create the sustainable and harmonious society. India seems to depend more on multinational companies than China where it has attracted software labs from most IT companies to Bangalore. Its own companies- Infosys and Tata Consultancy have become global actors. There are weaker developing economies that depend on the Donors' budget support and research funding. There are thus different types of interaction by different countries where the system of innovation actors for development differ considerably.

Themes for the Panel:

- What are the conceptual issues in defining the system of innovation actors in the context of developing and transitional economies?
- How different are the system of innovation actors interaction within the BRICIS economies?
- How different is the interaction within the local- and international between different countries that have varying strengths of their system of innovation?
- What kind of research is necessary for a better understanding of system of innovation actors in poor developing and transitional economies?
- What are the gaps, barriers and myopias in developing country system of innovation actor's capabilities to interact, learn and build competence and capacities?
- What is the STI policy implication of the system of innovation actors interaction in different countries with different levels of development?