

Reflections from experts across the world

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I will raise a couple of issues that are a little more generic, that are related to the knowledge economy, and that are of relevance also for Kerala. The issues are highly relevant for the future of the knowledge economy in Kerala, particularly for policy actions that will be necessary to realize objectives in this field.

I want to place my comments in the context of what I call activities or functions in innovation systems. As I see it these activities are the following:

1.R&D, 2. Education and training, 3. Formation of new product markets, 4. Articulation of quality requirement, 5. Creating and changing organizations, 6. Interactive learning, 7. Creating and changing institutions, 8. Incubation, 9. Financing of innovation processes and 10. Consultancy services

These activities are the hypothetical determinants of the development and the diffusion of innovations. Together they may be said to define an innovation system.

This is a very wide definition of a system of innovation. It may be noted that policy is not a separate activity - but a part of all ten activities. Today, I want to deal briefly with two things that have been neglected very much in research and policy related to innovations, innovation systems and innovation policy. And one of these is education and training. In the literature on innovation systems, you will not find much about education and training. So, education and training is a very important thing to focus upon - which you are obviously doing here in Kerala, as we have also heard from other speakers in this consultation.

But another thing that also has been highly neglected in innovation studies and innovation policy is the demand side. And that's number three and four in the list, i.e., "formation of new product markets" and "articulation of quality requirements".

Activities three and four include what I call functional public procurement. This is an enormously neglected issue in policies in the field of the knowledge economy and innovations in basically all countries of the world. Public procurement is around 15% of the global GDP, i.e., an enormous sum. This means that public procurement is much more important than global Research and Development (R&D). These enormous resources are being used by the public sector to buy things from private firms. This made me interested in how this could be used as a policy measure for getting more innovation dynamism in the economy. And I found out that this 15% of GDP is almost not at all used to enhance innovations. The reason is that when public sector agencies buy things from the public sector, they describe a product and they get the exact that product. And it cannot be an innovation because you cannot describe an innovation - since it does not (yet) exist. What they should do instead is that they should describe a problem that they want to get solved by means of the products which they buy. If they describe a problem instead of a product, then they get many proposals for how that problem can be solved, and some of the proposals are innovations. This is potentially a very important thing. We argue that such functional procurement is potentially the most important public innovation policy instrument that can be used in all countries.

All the 10 activities listed above: R&D, education, demand side, institutions, organization, financing - are all necessary for a dynamic innovation system to operate. From a policymaker point of view, it's a matter of identifying those activities that are not working well. If something is working very well, the policymakers do not need to do anything about it and should instead concentrate on those things that are not working well.

Some people call this market failure. That's a too narrow term coming from economics and I think it should be used in a wider sense and it could be called policy problems, that should be addressed by innovation policy. That is being done to some extent. But in many cases public policy is just duplicating what private actors are doing. And that's not needed. That's not a good use of resources. Public policy should be additional to what private actors are doing. In pursuing innovation policy, it is important to make a distinction between policymakers and politicians. And it's the politicians who are pursuing innovation policies. I want to conclude by mentioning the establishment of a new kind of actor that has been created in Sweden: The National Innovation Council (NIC), chaired by the Prime Minister and including four additional ministers and 10 external advisors.

Thank you very much.