

Economic Development and the National System of Innovation Approach

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Have innovation systems anything to say about development?

“To a little boy with a brand new hammer the whole world looks like a nail”

However, the aim is to
Identify weaknesses in the SI approach and
find ways to improve it.

We need to understand better:
The formation of innovation systems
The openness of national systems
The role of power relationships (conflict
aspects of learning)
The broader institutional context supporting
competence building.

Why Applying NSI to the South?

Some common roots:
Friedrich List, Albert O Hirschman, Gunnar
Myrdal
Institutions matter, linkages matter,
cumulative causation

But SI is a vague concept, which comes in different varieties
(Defined geographically, sectorally, narrowly and broadly)

Coming from a small university, in a small country, in a small continent it seems natural to prefer a broad definition including many different types of learning and innovation.

Common characteristics between different SIs points at a potential for development studies:

- (1) The structure of production and knowledge depend on each other and change rather slowly.
- (2) Important aspects of knowledge are localized
- (3) Focus on interaction and institutions

The rapid diffusion of the SI concept

A result of overselling?

Overselling in relation to the South?

Weaknesses in the SI approach

Vagueness? Lack of theoretical rigor? Too descriptive?

(A certain lack of consensus on this particular point in the present group of authors)

Diversity of approaches is to be preferred.

New tendencies in development thinking.

(1) Increasing focus on capabilities rather than resource endowments

(2) A new focus on knowledge as development factor

(3) Institutions as “root causes” of development

These three dimensions may be integrated into the NSI-approach and this, in turn, may result in a broadening of the approach that makes it more relevant for development studies.

The missing capability.

Enhancements of the “capabilities people have to live the kind of lives they have reason to value” (Amartya Sen, 1999) have both instrumental and substantive value in development.

Includes political freedoms, economic facilities, social opportunities, transparency guarantees and protective security.

But not learning capabilities.

Learning capabilities have both instrumental and substantive value.

Missing:

A focus on learning capabilities as a whole; the many different kinds of learning, in different places.

How are individuals, communities, firms and organizations geared to learning and innovation?

Is there a ‘learning culture’? (or rather, what kind of learning culture is there?)

Is there an adequate institutional and infrastructural underpinning of learning?

How are broadly based learning capabilities formed and developed?

Which institutions are important?

The World Bank and The IMF are, increasingly, focusing on institutions.

But mostly on how institutions

Channel information,

Define and enforce property rights,

Regulate competition,

Contribute to “good governance” and restrict corruption

– I.e. mostly on transaction costs.

Important – yes. But what about the institutional underpinning of learning and innovation?

A broad definition of national systems of innovation fits with both the new focus on capabilities and the focus on institutions.

Abroad spectrum of socially based inter-linked capabilities is necessary for well performing innovation systems.

A broad definition includes different kinds of innovation (minor, major, etc., introduction as well as diffusion, etc.), rooted in different sectors, in different, organizations and networks, and in different activities.

Adaptation of the SI approach to the South

System construction and promotion

Local systems

National systems / local systems / globalization

Learning, forgetting, conflicts and power

Institutional tangles and knots

Learning opportunities and capabilities

‘NSI’ is a fancy concept not called-for in the South?

The need for a “double focus” on basic needs and competence building. (Learning is a basic need?)

The need for a “double focus” on utilizing local knowledge and borrowing and adapting technologies from the technological lead countries.