



# Views on potential effects of automation technologies on segments on population in developing countries?

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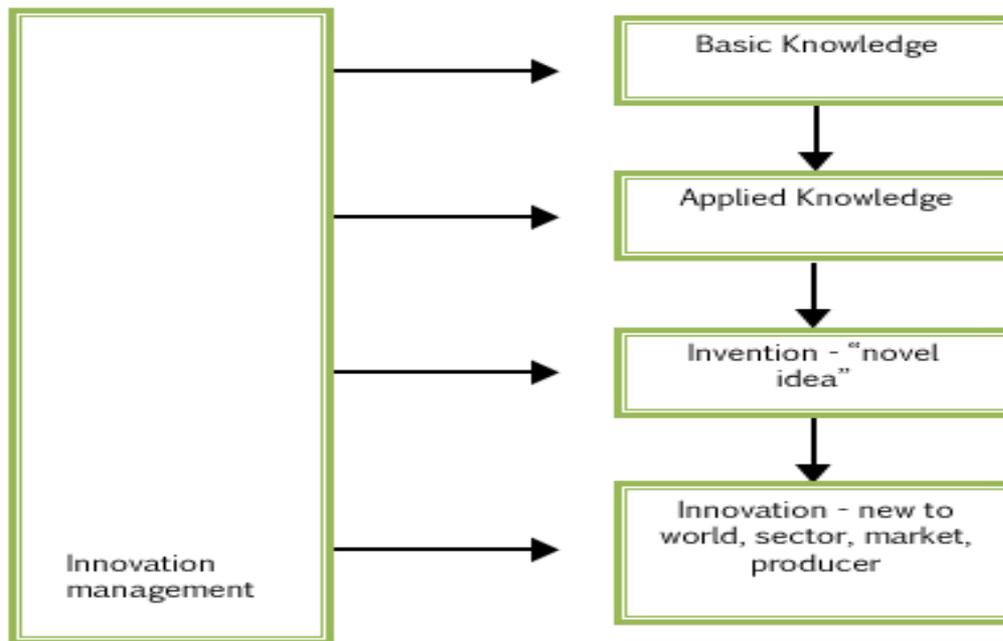
# Introduction

- Inequality or inclusivity are concepts that run across all if not most of the SDGs.
- Indeed enhancing inclusivity is the pathway through which transformation for all will be achieved towards sustainable development.
- Goal 10 speaks directly about reducing inequality within and among countries
- Goal 5 – achieve gender equality and empower all women and girls
- To link inequality and/or inclusivity to emerging technologies or innovation – I propose doing this under Goal 9 which encompasses three important aspects of sustainable development: infrastructure, industrialization and **innovation**.
- Hence start to think about inclusive innovation in relation to development

# Innovation & innovation cycle

The phrase "innovation" is generally used in two ways:

1. To refer to **the whole cycle from development of knowledge or a new idea to its widespread application in society as in the term 'the innovation cycle'** and;
2. To refer to **a specific stage** in this innovation cycle.



The different stages of the innovation cycle often involve very **different actors** and thus require **different competences** and **different forms of policy support**.

Individual firms and countries can be strong in one component of the innovation cycle, and weak in others.

# Innovation and exclusion/inclusion

- Exclusion of much of the world's population from the fruits of economic growth is both **relative** (an unequal sharing of the gains) and **absolute** (outside of China, the numbers living globally in absolute poverty have remained stubbornly large).
- Whilst we have a broad understanding of the contribution of innovation to economic growth, our understanding of the **contribution of innovation to exclusion** is less understood.
  - We have very few studies that provide evidence about impact of innovation on socially disadvantaged segments of the society. Some evidence is suggesting that innovation has potential to enhance exclusion
- Unless inclusivity is addressed, most innovation processes will often discriminate against the opportunities for certain social groups like women to participate in, and benefit from innovation processes (Crowden, 2003).

# Inclusive innovation

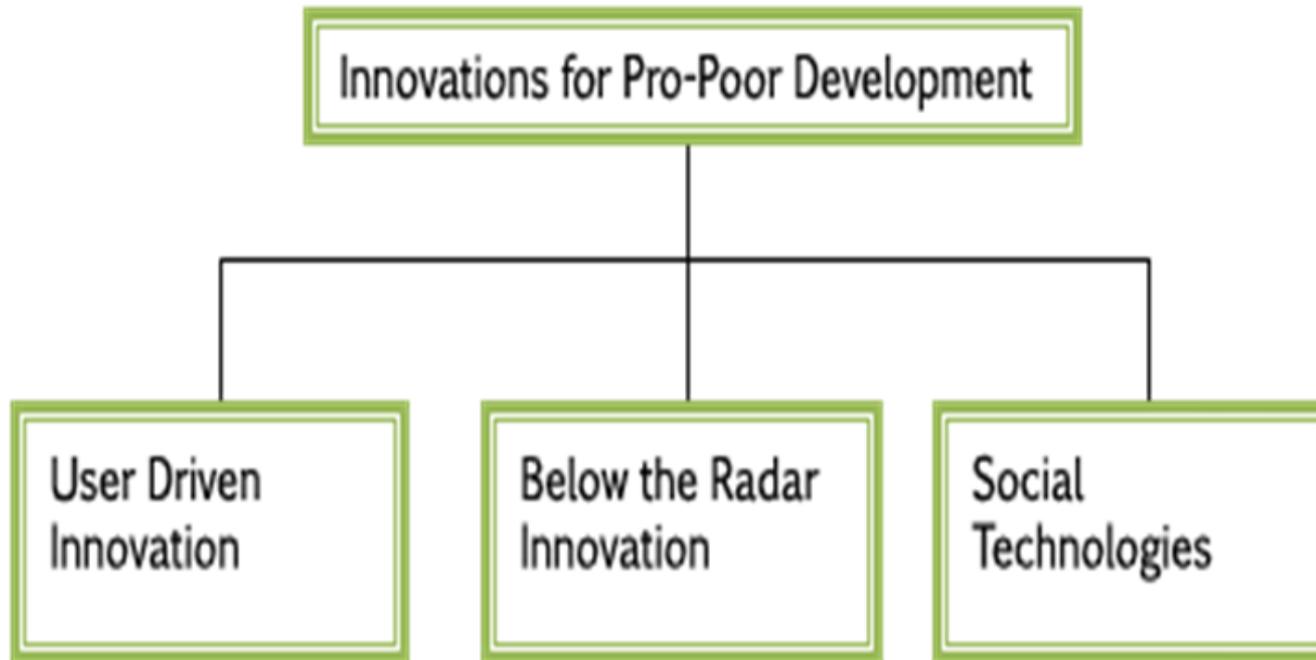
A contentious concept:

- Cozzens and Sutz (2012) suggest that for development to be inclusive, the innovation that drives it has to be inclusive in two ways: inclusive in terms of the **process** by which it is achieved (participation) and inclusive in terms of the problems and the solutions it is related to (sharing of benefits accruing-**products**)
  - The “inclusion at process level is important because it relates to “innovation being inclusive if the excluded group is involved in the development of the innovation”.
- Foster and Heeks (2013:335) define inclusive innovation as “inclusion within some aspect of innovation, of groups who are currently marginalized”.

# Innovation for the poor

- Innovation for the poor should focus on the **needs of the global poor**
- Much of Innovation in a developing country context includes **continuous improvement** in product design and quality.
- Many of the changes which drive efficiency are **informal** - e.g. they include the activities of **small scale entrepreneurs**.
- Most of these innovation activities are **under-recognised**, and are generally falling “**below the radar**”.
- It is the **below the radar nature of innovation (grassroots, social innovation etc)** which **meets the needs of the poor**.

# Innovation for the poor



# Some reflections

So key questions to reflect on are:

- What are the key 'below the radar' issues which should be addressed in the innovation for inclusive pro-poor growth? – **policy, competences and capacity issues, human capital & education curriculum etc**
- What is the nature and significance of innovative activities in developing countries which are **under-recognised** by current input and output measures of innovative activity? – **e.g. are existing metrics and indicators appropriate?**
- To what extent are developing countries below the radar innovation geared to producing **products for the poor** and **developing processes** which incorporate the poor as producers – **inclusive innovation?**

# Trade issues and governance of automotive technologies?

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- Are there governance issues that might emerge? – e.g. genetic engineering technologies?
- How will the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) that sets down minimum standards for many forms of intellectual property (IP) play out?
  - *Intellectual property rights, foreign direct investment and international trade;*
  - *Intellectual property rights, international technology transfer and domestic innovation;*
  - *Intellectual property rights and public health;*
  - *Intellectual property rights, genetic resources and traditional knowledge*
- What is the role of values in development and ultimate use of these technologies?

How will the developing countries participate in the discussions/negotiations because these technologies will affect both developed and developing countries?



# THANK YOU