Innovation and Development

Fachbereich Wirtschaftswissenschaften (Dr. Astrid Szogs)

Summer Term 2015

Time and location

Time: Monday, 8.15-11.30h
Location: Moritzstr. 18 Campus Center - Room 1117, Seminarraum 4
First meeting: April 20, 2015 (followed by May 11th, June 1st, 15th, 29th and July 6th).

Overview

This course aims to describe, discuss and conceptualize key issues related to innovation (understood in a broad sense and embracing capability building) as important ingredient for development. After a thorough introduction to concepts and theories of innovation, the challenge of measuring innovation (and the policy relevance of measurements) will be discussed. Special emphasis is given - throughout several modules – to a variety of aspects related to innovation for and by low- and middle income groups and directed towards inclusive development. The outlined lectures will combine overviews of the respective topics with detailed discussions of methods and findings of exemplary, empirical material from recent studies. For some lectures students are expected to apply the analytical tools introduced to them at the beginning of the course to analyze cases of their own choice.

The course combines a lecture part (about 60% of the total time) with seminar sessions in which students present and discuss own work related to the course topics. Some lectures will also involve elements of group work.

Requirements (6 ECTS Credits):

- Successful completion of a mid-term exam (pass/fail)
- Seminar paper (about 15 pages; due date September 30, 2015) plus oral presentation (about 20 minutes)
- Attendance and active participation in the seminar sessions (dates will be announced)

Registration and choice of topics by E-Mail to astrid.szogs@uni-kassel.de (starting immediately; please name two preferred topics).


Innovation and Development

1. Introduction: Innovation systems and economic development

- Setting the scene: background, definitions and key concepts (modes of innovation)
- Approaches to innovation (innovation systems in regional, national and global context)
- Characteristics of innovation systems in low-income countries

**Literature:**


2. Innovation for inclusive development

- What is inclusive development?
- Characteristics of business conditions and economic life at the bottom-of-the pyramid
- Case evidence from the UNIID – Africa project

**Literature:**


3. Public Procurement and the development agenda

Guest lecture by Associate Professor Max Rolfstam, Aalborg University, Denmark.

- Public procurement as a means to stimulate innovation
- The role of institutions in shaping innovation
- Development Aspects of public procurement


4. Measuring innovation

- The challenge of measuring innovation in developing countries
- The development of indicators in catching-up countries
- The need for indicators to guide and assist in development processes (the role of innovation policy)

**Literature:**


5. **Frugal innovation and consumer innovation at the bottom-of-the-pyramid**

Guest lecture by Dr. Rajnish Tiwari, Center for Frugal Innovation, Technical University Hamburg-Harburg, Germany

- Conceptual foundations of user innovations
- User Innovation in a resource-scarce setting
- Opportunities for frugal innovations and implications for development


6. **Foresight for inclusive development**

- Foresight and innovation (systems)
- The multiple functions of foresight
- Tools for strategically guiding and assessing future potentials and risks of emerging trends


Topics for Seminar Papers:

For all seminar papers you can use literature provided in this course outline and add any additional, relevant literature of your own choice to support your arguments. Please name two preferred topics for your seminar papers of the list below and email them to astrid.szogs@uni-kassel.de

1) Innovation for inclusive development

   a) A discussion of inclusive development in the context of the regional innovation system of Nordhessen.

      Including information on science, technology and innovation in the region and it’s socio-economic context. Information on key organizational actors in the system, such as producers of scientific output in a national comparison, output as such, and STI policy. Identification of strength and weaknesses, or challenges, of the region and based on this assessment a discussion of the need and usefulness of the concept of inclusive development in Nordhessen.

   b) An analysis of a specific case of an inclusive innovation.

      Identification and description of the inclusive character of a concrete innovation (from any continent and country of your choice)

      Analysis of the potential as well as challenges for scaling-up the innovation with reference to the local specificities.

2) Measuring innovation

   a) Patents as indicator of technological innovation

      A discussion of patents concerning their usefulness and appropriateness of measures for technological innovation also with respect to least developed countries.

   b) Measuring innovation in Africa

      A discussion of the concept and definitions of innovation linked to the collection of data on innovation for statistical purposes. Examine a number of challenges with measuring innovation in an African context and conclude with some recommendations.
3) Foresight for inclusive development

a) Foresight experiment
Experiment with a foresight process by choosing a specific potential innovation and conduct a scenario planning, including a description of the identified forecasting methods and an analysis of e.g. potentials, risks, uncertainties (You may find inspiration on www.foresight-solutions.com and/or innovation.io/playbook/).

b) Innovation-system foresight
“Innovation-system foresight” (ISF) is seen as a tool for strategically guiding innovation system transformations. Discuss “social inclusion” as a precondition rather than an obstacle for transformation with specific reference to the role of competence-building. Embed your discussion in a case of a sector foresight in a given country of your choice (a comparative approach is also possible).