Human Capital Investment Towards Innovation and Knowledge Based Economic Development

Submitted by: Russian APEC Study Center
Human Capital Investment towards Innovation & Knowledge Based Economic Development

by Natalia STAPRAN
Director
Russian APEC Study Center

Symposium on APEC Priorities 2015
Manila, Philippines
8 December 2014

Outline

• Objectives & Challenges
• Success stories
• Lessons to learn
• Recommendations
Objectives and Challenges

- to sustain high rates of growth
- to advance in global value chains
- to escape from “Middle-income trap”
- to shift from accumulation-led growth to productivity-led growth
- to develop industry and services sector

Stories of success

- US
- Japan
- Republic of Korea
- Singapore
US

- world leader in leveraging innovation to achieve broader economic aims
- consistently invested heavily in research and development (R&D), higher education, and information and communication technology (ICT)

Japan

- importing advanced capital goods,
- licensing foreign technology,
- encouraging international tertiary education
- investment in commercially oriented R&D
- focus on exports of manufactured products
- high value-added sectors
Republic of Korea

Measures to build a human capital base for knowledge economy:
• rapid industrialization process based on labor-intensive exports
• import of capital goods and licensed technology
• public advanced research institutions for basic and applied research
• rise of R&D as a percentage of gross domestic product (GDP)
• explicit investment in the ICT industry
• coordination across 17 ministries for R&D and the ICT sector
• strong education reforms
• links between tertiary and employer-based training
• government incentives through fiscal and trade policies
• support of private small and medium-sized R&D

Singapore

• 1960–1969 labor-intensive growth,
• 1970–1979 skill-intensive growth,
• 1980–1989 capital intensive growth,
• 1990–1999 technology-intensive growth, and
• 2000 onward knowledge and innovation economy-based growth
Key lessons to learn:

• building R&D capability;
• creating a deeper stock of human capital;
• enhancing competitiveness of knowledge-intensive sectors;
• involving private sector
• government role in the early stages of KBE processes
• improving education systems;
• investments in telecom and ICT infrastructure

Education and Skill Development

• quality employment in knowledge-intensive industries
• “competence” rather than just certified qualifications
• mix of “hard” and “soft” skills
• need for more flexible and responsive programs for market needs
• need for a variety of higher-order vocational and polytechnic degrees and applied degrees
• developing “ecosystems” of technoparks
• linking ICT with education
• The role of tertiary institutions
“Ecosystems” of technoparks

Colocation of high-quality technical universities
Links with KBE stakeholders
- consumers of technologies,
- R&D collaborators,
- venture investors,
- technology transfer intermediaries,
- knowledge-based service providers (branding and advertising)

Global research collaboration
Mastering in particular areas

Tertiary institutions

- commercial incubators of technology and innovation
- financial and strategic support to student and alumni entrepreneurs
- training to undergraduate and graduate students to conduct research
- effective and efficient use of research and development (R&D)
- venture capital investing experience and mentoring
ICT and human resource development

ICT in education
  tools for bringing about improvements in quality, relevance, equity, and transformational pedagogy
  game-based and simulation-based learning
  massive open on-line courses (MOOCs)

ICT infrastructure and network connectivity
Digital literacy programs
  generic ICT skills
  higher-order and targeted skills for the ICT sector

Affordable applications for the mobile phones
High-speed broadband in rural areas

Recommendations for APEC agenda 2015

to review progress made by APEC on inclusive growth agenda
to organize cross-fora meeting (HRDWG, TELWG, SMEWG, PPSTI, PPWE etc.)
  - to focus the activities and best practices
  - to outline challenges and barriers
  - to set objectives and goals

? APEC INCLUSIVE DEVELOPMENT STRATEGY?
THANK YOU!

Natalia STAPRAN
Director
Russian APEC Study Center
natastastapran@gmail.com