INNOVATION PERFORMANCE REVIEW OF TAJIKISTAN 2015
GOALS

- Estimate the clarity of state-of-the-art to a non-expert in the specific country situation
- Focus attention on critical points of the subject
- Suggest additional recommendations
CHAPTER 6 Innovative Entrepreneurship
Why Innovative Entrepreneurship?

- Schumpeter (1912): The role of entrepreneur is to "reform ... the mode of production by searching for inventions ... or untested technological capabilities".

- It drives the development of economy by finding new and better ways of producing goods, delivering services, organizing business.

![Diagram showing the evolution of economic development with time, from factor-driven to efficiency-driven, and finally to innovation-driven. The graph has axes for Value Added and Value Spent, with a timeline on the x-axis and stages of economic development on the y-axis.](Image)
KEY CONSTRAINTS FOR INNOVATIVE ENTREPRENEURSHIP IN TJ

Knowledge

- Corruption & bribery
- Unclear and contradicting laws
- Frequent revision of legislation
- A large number of sublaws
- Law enforcement
- Red tape
- Quality of public services

Rules

- Technical readiness
- Higher education and training
- Innovation management skills
- Skills for business internationalization
- Competencies of policy-makers and policy-implementers

Financing

- High instability of financial sector
- Access to financing
- Tax rates and regulation
- Loan collateral

Infrastructure

- Electricity connection
- Connectivity and digital divide
- R&D infrastructure
KEY CONSTRAINTS FOR INNOVATIVE ENTREPRENEURSHIP IN TJ: INSTITUTIONS

- Corruption & bribery
- Unclear and contradicting laws
- Often change of legislation
- Law enforcement
- Red tape
- Quality of public services
- Government effectiveness

IMPLEMENTATION OF REFORMS
- Business associations not adequately involved
- Ministries and agencies do not feel ownership of the reforms
- Insufficient assessment of funding required for implementation of new laws

Transaction costs!

Competencies of policy-makers
- More training at both high and local level
- National Strategy for Innovative Development
- Empowerment of bodies to fulfill + allocation of resources, also for training

- Invest more in preparatory work, feasibility studies, survey of related stakeholders
- Field studies and pilot testing of new policies

- Knowledge
- Financiering
- Infrastructure
- Rules
KEY CONSTRAINTS FOR INNOVATIVE ENTREPRENEURSHIP IN TJ:

INFRASTRUCTURE

- Corruption & bribery
- Unclear and contradicting laws
- Often change of legislation
- Law enforcement
- Red tape
- Quality of public services

Internet will be the unique chance for development of international entrepreneurship given the weak industrial basis, low technological development capacities and low primary capital accumulation by population!
KEY CONSTRAINTS FOR INNOVATIVE ENTREPRENEURSHIP IN TJ: KNOWLEDGE & TECHNOLOGIES

- Technological readiness
- Higher education and training
- Innovation management skills
- Skills for business internationalization
- Competencies of policy-makers & implementers
- Analytical and evaluation capabilities to assess the innovation policy performance
- Poor professional education for civil services
- Brain-drain of ministries’ staff, low incentives
HIGH INSTABILITY OF FINANCIAL SECTOR:
- Inflation
- Low trust in bank system
- Low deposits of population, including labour migrants
- High dollarization of deposits
- Low share of firms using bank system

TAX RATES AND REGULATION

Bring inflation to natural level. This is a critical condition for passing from bank credits and foreign investments to domestic financing of innovative start-ups.
KEY CONSTRAINTS FOR INNOVATIVE ENTREPRENEURSHIP IN TJ: FINANCING

BANK LOANS FOR TECHNOLOGIES ADOPTION & INNOVATION:
- Bank loans too expensive and short-term
- Insufficient skills & tools to assess borrower risk
- Lack of transferable land-use rights
- Very high loan collateral requirements
- Neither land nor movable property can be used as a collateral

VARIETY OF FINANCING SOURCES:
- No venture capital
- No financing through local equity market
- Microfinancing, credit guarantee scheme, subsidised credit lines are available but their resources are insufficient
STARTUP FINANCING CYCLE
REQUIRED SET OF SUPPORT TOOLS FOR RSOs: EVOLUTIONARY APPROACH

**incubation stage:** assistance to innovators in establishment of their network including seed capital via presentation of their business idea to potential investors and business angels

**preincubation stage:** helping academic researchers to get practice in entrepreneurial activity prior to start of a legal process of firm foundation

**Market penetration:** assistance in getting access to specific services as development of a patent strategy, recruiting of highly qualified engineers, legal advice, etc.

**Intellectual property rights:** systematization of experience and dissemination of it to relevant stakeholders.

- **Start-up and networking**
- **Maturity and expansion**

**Time**
CHAPTER 7 The Role of Innovation in International Economic Integration
WHY INTERNATIONAL ECONOMIC INTEGRATION FOR INNOVATION?

**Resources:**
- access to lacking knowledge and competencies;
- access to new technologies;
- labour;
- capital

**Processes:**
- creation of new workplaces for researchers;
- stimulation of distribution of tacit knowledge

**Results:**
- targeted results of joint R&D;
- by-products of scientific research

«Soft» factors of future cooperation development:
- accumulation of combinatorial knowledge (experience => efficiency growth);
- long-term institutional linkages;
- personal networks of researchers

Source: Экономический потенциал инновационного развития стран в интеграционных процессах СНГ, ЕвразЭс и ЕЭП / А.И. Поболь // Евразийская экономическая интеграция / Евразийский банк развития. – 2012. – № 1 (14). – Р. 59-76
FURTHER RECOMMENDATIONS

- Apply the “smart specialization” concept (D. Foray, 2011) as a framework to assess and prioritise subindustries with international competitive advantage for the targeted industrial and innovation policy.

- “Partisan” strategy for enterprises in the international market: find empty niches and maintain leadership there

- Continue attracting foreign investors by developing an inward FDI-strategy that would target FDIs’ activity to shape the advanced technological structure of economy:
  - incentives to come to the country (framework conditions + specific stimuli like taxation incentives),
  - orient into specific industries and innovation-intensive activities,
  - make knowledge transfer and training an obligatory condition.
FURTHER RECOMMENDATIONS-3

- Establish links with **MNCs** (those already invested in TJ and those not present in the country but possessing competencies in the subindustries selected according to the “smart specialization” framework) for **students internships** at Master and PhD level, i.e. starting with Presidents’ International Scholarship Programme.

- Promote links of **TJ enterprises with foreign academic institutions** in R&D and modernization projects, including from ex-Soviet Union countries, using them:
  - as a source of inexpensive technological solutions that can be tailored to the needs of Tajik enterprises (“technology localisation”);
  - as a source of all types of training;
  - for twinning and joint application for EU funds.
FURTHER RECOMMENDATIONS-3

- Approach China for cheap solutions and all types of training, incl. innovation management and international marketing, capital and networks to VCs and MNCs
- Approach Scandinavian countries (esp. Finland and Sweden) for infrastructure development projects and rural areas support
- Approach USA for developing the state registries and information systems for combating illegal traffic and terrorism, including electronic IDs; for support of innovation projects and start-ups in agriculture, food and water safety, and energy provision
- Approach Belarus for machine-building, metal processing, construction and oil processing technological solutions
THANK YOU!

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