#### **Armenia – Innovation Performance Review**

# Chapter 7 - Innovation and international economic integration

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Yerevan, 14 November 2014

#### Situation in brief

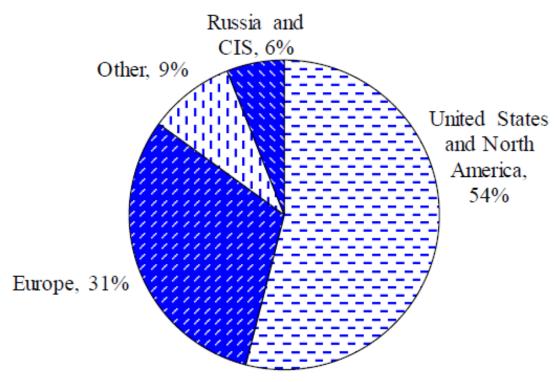
- the country is well-linked internationally (EU and CIS countries, USA)
- a strong diaspora, which offers many opportunities for cooperation
- Strategic thinking done strategy for export led growth, strategy on development of science (specialisation within ERA)
- Potential for foreign students
- But limitations:
  - geopolitical situation, weak infrastructure for education and R&D, low investment into R&D, emigration of qualified staff

#### **Trade:**

- Strategy of Export-led growth established
- ICT as good practice of a know-how intensive export sector
- limited natural resources and a small domestic market
- trade with neighbouring countries limited by geopolitical factors
- Production and export of innovative goods is rather limited.

**Trade:** 

Figure 21. Export destinations of the Armenian ICT sector



Source: Armenian ICT Sector, State of Industry Report 2012

#### **Recommendations 7.1 – trade:**

 Extending the existing strategy for export-led growth to include other knowledge intensive sectors beyond information and communication technologies (ICT).

**Promising sectors should be identified systematically** through appropriate screening, the assessment of potential niches and foresight studies.

**Specific sector strategies** should be elaborated and implemented;

#### **Recommendations 7.1 – trade:**

- Identify and prioritise sectors where the procurement of innovative goods and services from abroad is more needed in order to facilitate access to these goods and services;
- Improving the linkages between companies from promising export sectors and research organisations, including through support to joint projects that serve to better use the research potential and encourage collaboration.

### Diaspora:

- diaspora is a strong asset for national economic development, a source of financing, expertise and contacts
- diaspora relevant for innovation in areas such as relatively knowledge-intensive ICT sector, education and research;

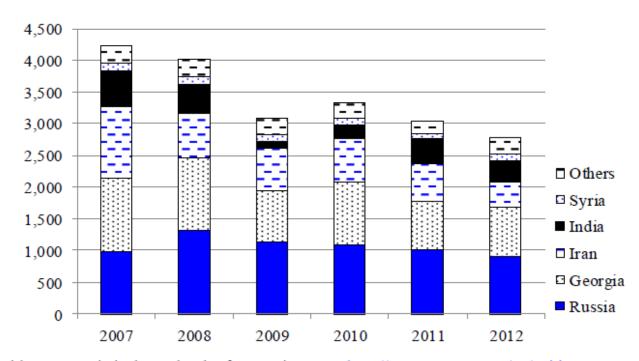
## **Recommendations 7.2 – diaspora:**

- Develop mobility schemes for temporary stays of diaspora researchers in Armenia and establish international research groups between diaspora researchers and colleagues in Armenia;
- Target, in particular, cooperation with diaspora researchers
  who are active in applied research and have good experience
  with innovation;
- Attracting students from the diaspora communities to study in Armenia through enhanced information and promotion measures.

#### **Education:**

University sector can attract foreign students.

Figure 23. Main countries of origin for foreign students



Source: Table 105, Statistical Yearbook of Armenia, 2013, <a href="http://www.armstat.am/en/?nid=45">http://www.armstat.am/en/?nid=45</a>

#### **Education:**

- Competitive advantages: moderate living costs, affordable student fees, well-established reputation in certain areas such as medicine.
- Degrees comparable and internationally recognized through links to US and Russian universities, and through the Bologna process

#### **Recommendations 7.3 – education:**

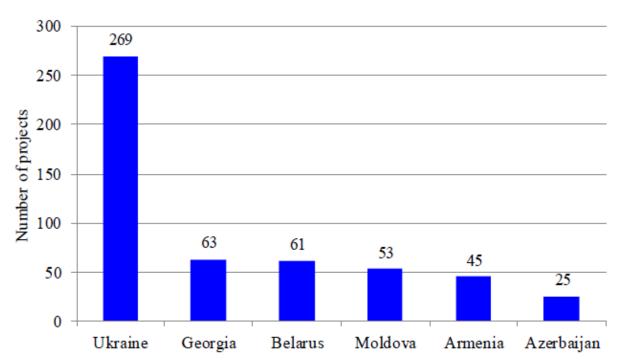
- Improve the quality of education, through upgrading of equipment, investment in infrastructure, and curricula development, including through cooperation with international partners or companies;
- Address the educational needs of particular industry branches, in cooperation with industry representatives, building on the experiences of the ICT sector;
- Try to attract foreign students beyond medicine, in other promising areas such as natural sciences

#### **Research:**

- Armenia embraces and encourages international R&D cooperation
- efforts to internationalize evaluation via diaspora scientists
- Instruments to support bilateral R&D cooperation established, but mostly small scale
- main source of international funding: EU FP7 / H2020 Association to the EU's Horizon 2020 programme envisaged.

#### **Research:**

Figure 25. Eastern Partnership countries' participation in FP7 funded projects



Source: Thierry Devars, Eastern Partnership: cooperation status in FP7 and perspectives in Horizon 2020, presentation at EEP 2013 Lithuanian Presidency Conference, Vilnius, 30 September 2013

#### **Recommendations 7.4 – research:**

- Prioritise research and innovation in Armenia's cooperation with the EU, leading to more intensive use of instruments such as the European Neighbourhood and Partnership instrument, the Technical Assistance and Information Exchange instrument (TAIEX) and twinning;
- Develop skills and mechanisms to fully use a possible association to the EU's Horizon 2020, including information and training for researchers and innovators, matchmaking and networking and use of mobility programmes to prepare Horizon 2020 projects;

#### **Recommendations 7.4 – research:**

 Consider joining EUREKA and EUROSTARS and participating in selected European Research Area Net (ERA-NET) projects and other EU instruments;

#### **Recommendations 7.4 – research:**

- Building closer links with the innovation agencies of the countries of the Customs Union (Belarus, Kazakhstan and the Russian Federation), including the possibility of developing bilateral funding instruments with these agencies;
- Studying the experience of other CIS countries in innovation support, in particular in areas such as start-up funding, attracting remittances for public-private co-funding schemes, technology transfer and innovation vouchers.

#### **Recommendations 7.4 – research:**

- Screening the participation in international programmes and informal research cooperation in order to identify niches of excellence and the existence of competitive teams in certain areas. This screening should be the basis of a strategy to nurture and develop these niches;
- Upgrade infrastructure and equipment to make domestic research institutions more attractive for international research cooperation.

Thank you for your attention!

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