Smart Specialisation and Entrepreneurial Discovery Process: Republic of Moldova

Ministry of Education, Culture and Research
10.10.2019
Agenda 2030 in Moldova
Legal Framework for STI

- **Law no. 190 of 21.09.2017** for the amendment and completion of some legislative acts started the process of reforming the fields of research and innovation.

- **Government Decision no. 691** of 30.09.2017 on the organization and functioning of the Ministry of Education, Culture and Research who is responsible of the national policies in the fields of research and innovation.

- **Code of Science and Innovation of the Republic of Moldova**, approved by Law no. 259 of 15 July 2004 amended, which specifically stipulates in art. 27 the elaboration of the National Program in the field of Research and Innovation.

- **The National Program** in the field of Research and Innovation approved by Government Decision No. 381/2019 is the main policy document whereby the Government sets development priorities and objectives in the field of research and innovation for 4 years and ensures synchronization with the strategic development program of the country, the sectorial strategies and the research framework programs of the European Union.
At the same time, in order to achieve (realize) SL4. of Chapter 24 "Cooperation in the field of research, technological development and demonstration activities" of the National Action Plan for the implementation of the Moldova-EU Association Agreement between 2017-2019, approved by the Government Decision no. 1472 of December 30, 2016 (Official Monitor of the Republic of Moldova, 2017, No. 103-108, art. 271, as amended), smart specialisation is one of the priorities of the National Program in the fields of Research and Innovation.
Priorities:
• STI to be used to achieve SDGs
• Smart specialisation used to identify R&I investment priorities

S3 – in the context of national policies

National Development Strategy Moldova 2030

R-I Policies / National program for R-I 2020-2023

Regional development / urban development

Industrial Policy

Policies / Initiatives of SMEs development

Education / VET

Attracting investments and promoting exports
S3 – in the context of national policies

• The main mechanism for increasing incomes from sustainable sources and attenuate economic inequalities is to increase the country's competitiveness, including through the country's *smart specialisation*. (National Development Strategy Moldova 2030)

• In the context of the purpose to enhance the impact of research and innovation results' activities on the business environment and society as a whole, the National Program aims to adopt and transpose the principles of *smart specialisation*. (National program for R-I 2020-2023)
What was done:

- Capacity building and training
  - "Conference on Smart Specialisation and Territorial Development" September, 24-28, 2017, Seville.

- TAIEX MultiCountry Workshop on Smart Specialisation in the Enlargement and Neighbourhood Regions, 5-9 November, 2018, Bruxelles.
## PREPARATION FOR THE EDP

<table>
<thead>
<tr>
<th>Study</th>
<th>Author/Institution</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping of economic, innovative and scientific potential in the Republic of Moldova</td>
<td>Dr. Hugo Hollanders</td>
<td>2017</td>
</tr>
<tr>
<td>Characterisation of preliminary priority areas for smart specialisation in Moldova</td>
<td>SIRIS Academic S.L.</td>
<td>2018</td>
</tr>
<tr>
<td>First National Survey on Innovation activity of enterprises in the Republic of Moldova in the years 2015-2016</td>
<td>NSB</td>
<td>2018</td>
</tr>
</tbody>
</table>
Preliminary economic priority areas

**North**
- **Industries**
  - Agriculture and Food processing
  - Cement, lime and plaster
  - Electrical equipment
  - Wiring and wiring devices
  - Electricity, gas, steam and air conditioning supply
- **Clusters**
  - Apparel
  - Lighting and Electrical Equipment
  - Food Processing and Manufacturing
- **Emerging industries**
  - Mobility Technologies

**Centre**
- **Industries**
  - Agriculture and Food processing
  - Forestry and logging
  - Textiles
  - Basic pharmaceutical products and pharmaceutical preparations
  - Other non-metallic mineral products
  - Cement, lime and plaster
- **Clusters**
  - Livestock Processing
  - Textile Manufacturing

**South**
- **Industries**
  - Agriculture and Food processing
  - Gas; distribution of gaseous fuels
- **Clusters**
  - Environmental Services
  - Food Processing and Manufacturing

**Gagauzia**
- **Industries**
  - Agriculture and Food processing
  - Coke and refined petroleum products
  - Refined petroleum products
  - Glass and glass products
  - Gas; distribution of gaseous fuels
- **Clusters**
  - Apparel
  - Environmental Services
  - Food Processing and Manufacturing

**Chisinau**
- **Industries**
  - ICT
  - Paper and paper products
  - Chemicals and chemical products
  - Machinery and equipment
  - Furniture
- **Clusters**
  - Business services
  - Marketing, Design and Publishing
- **Emerging industries**
  - Advanced Packaging
  - Creative Industries / Digital Industries / Experience Industries
PRELIMINARY PRIORITY DOMAINS
/SIRIS ACADEMIC (2018)

The low number of records in these preliminary priority areas prevents a richer characterisation and can provide unreliable indicators.
EDP PROCESS: THE WAY FORWARD

- Ministry of Education, Culture and Research took the leading role.
- 4 priority areas were selected for the first EDP workshops and conducted in December 2018 – June 2019.
- The findings of the next EDP were included into the Action Plans of the National R&I Program.
Mapping of STI stakeholders
# EDP workshops

<table>
<thead>
<tr>
<th>Priority domains</th>
<th>Subdomains</th>
<th>Number of participants</th>
<th>Venue</th>
</tr>
</thead>
</table>
| Energy           | 1. Energy efficient technologies  
                     2. Alternative energy sources  
                     3. Heating solutions         | 41                        | Chișinău        |
| ICT              | 1. Micro/nanomaterials and electronic engineering  
                     2. Interoperability, open data and e-infrastructures  
                     3. Mobile apps, software development, cloud computing | 44                        | Vadul-lui-Vodă |
## EDP workshops

<table>
<thead>
<tr>
<th>Priority domains</th>
<th>Subdomains</th>
<th>Number of participants</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and food processing</td>
<td>1. Agricultural and horticultural biotechnologies</td>
<td>56</td>
<td>Bălți</td>
</tr>
<tr>
<td></td>
<td>2. Field crops</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Animal husbandry and veterinary medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Processing of agricultural raw material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomedicine and Biopharmacy</td>
<td>1. Biomedicine</td>
<td>48</td>
<td>Chișinău</td>
</tr>
<tr>
<td></td>
<td>2. Biopharmaceuticals</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Bioinformatics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
First round of Entrepreneurial Discovery Discussions launched in four areas:

- Energy
- Information and Communication Technologies
- Agriculture and Food Processing
- Biomedicine and Biopharmaceutical

~ 190 participants reached
## Developing S3: Where are we?

<table>
<thead>
<tr>
<th>ANALYSIS</th>
<th>the analysis of the national/regional context and potential for innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNESS</td>
<td>An inclusive and interactive process focused on entrepreneurial discovery</td>
</tr>
<tr>
<td>COMMON VISION</td>
<td>the production of a shared vision about the future of the country</td>
</tr>
<tr>
<td>PRIORITIES</td>
<td>the selection of a limited number of priorities for national/regional development</td>
</tr>
<tr>
<td>POLICY MIX</td>
<td>the establishment of suitable policy mixes, and</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>the integration of monitoring and evaluation mechanisms</td>
</tr>
</tbody>
</table>
Lessons learned - EDP Moldova - positive

• Successful organisation of the first EDP workshops, focused on S3 design = validation of areas and niches with potential for smart specialization, SWOT analysis, common vision, general objective

• Used clear methodology (JRC) - useful for S3 facilitators

• Involved Q4 representatives - interested in the subject

• Good planning and logistics

• Governance structure for S3 management - dedicated and proactive team

• Useful presentations to set the scene
CHALLENGES

- Attracting representatives from other central public authorities and implementing agencies
- Building trust between the Quadruple Helix actors
- Attracting/motivating business representatives to be actively involved within EDP
- Keeping EDP continuously “alive”
- Putting in place an efficient M&E system
- What comes after EDP? (building a proper mix of policies)
Lessons learned - EDP Moldova – things to be improved

- Attract policy makers in territorial development, competitiveness, health, vocational education and employment, donors and their implementing agencies
- Map available funding schemes for S3
- Develop a mechanism to identify and attract innovative companies, clusters and business hubs in EDP - guidance for interviews
- Develop the web platform for S3 - data repository, reports, presentations - useful to keep EDP community informed
- Expand institutional capacity of MECR and administrative capacity of NWGS3 - use massive open line training programs of JRC (MOOC), identify TA resources for editing S3/road-map
- Run second round of EDP with same agenda - areas with less attendees and new agenda for the rest
Next steps

• Define from the groups of projects and the specific objectives, the interventions (priorities and measures) necessary for S3

• Offer feedback to EDP participants on how to improve their ideas

• Offer possibility to promoters whose ideas were not developed during the EDP to send a detailed description of these using the same Project fiche template (ex. organize a call) and offer feedback to them as well

• Assess the possibility of financing project ideas from existing calls

• Organize a Project Development Lab (PDL) = event aiming to help project promoters in identifying suitable financing sources for their projects

• Define conditions for a call of proposals dedicated to S3 projects
Thank you for your attention!