The experience of the Puglia Region

Bari, 12 Feb 2013
Adriana Agrimi
Introduction of Puglia Region

Main regional data:

• Surface: 19,363 KM²
• Inhabitants: 4,090,402 = 7% Italy pop.

• GDP = 4,5% of Italy GDP
• Average GDP growth rate 2000-2007 = 0,7% (Italy = 1,1%)
• GDP/capita = 66,0% of Italy (2012 forecast)
• Regional exports = 2,2% of Italy exports (2011) = 8,159 mln €
• Regional exports variation rate 2010-2011 = 17,9%
Economy Structure

Which are the historical specialisations?

Agriculture/ Agro – food industry
Export leader in olive oil, wheat, tomatoes

Manufacturing
Strong presence of traditional “made in Italy” sectors (furniture, textile, shoes...)
Economy Structure

Current developments

Manufacturing
automotive sector, high value-added sectors (energy, ICT, aerospace)

Agriculture
Research- driven agro-food cluster DARE

Services: Tourism 8% of regional PIL (2011) only 3% in 2006
The Regional System of Innovation

5 Universities
More than 30 Public and Private Research Centers
6 Inter-regional Centres of Competence
3 Enterprise Incubators
7 Industrial Liaison Offices
21 Public Research Infrastructures
6 Technological Districts
17 Productive Districts
<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of technological excellence poles</td>
<td>Weak link between universities and enterprises</td>
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<tr>
<td>Development of original R&amp;I sectors</td>
<td>Low demand for real services</td>
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<tr>
<td>Presence of services providers</td>
<td>High specialization in traditional industry</td>
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<td>Growth of informatics and research industry</td>
<td>Low propensity to technological transfer towards the final product</td>
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<tr>
<td>Good propensity to process innovation</td>
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<tr>
<td>Growing interest and demand for informatics and networks among young people</td>
<td>Families low propensity to innovative services consumption (culture, leisure)</td>
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<td>Growing demand for innovative services in the field of cultural and environment resources</td>
<td>Moderate presence of young people with medium-high level education</td>
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<tr>
<td>Regional propulsive role in realizing policies for innovation development</td>
<td>Public Administration inadequate instrumental endowment</td>
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<tr>
<td>Elaboration of the regional strategy for scientific research</td>
<td>Reduced R&amp;D expense, with the aim of pursuing an important economic growth</td>
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<td>Local administrations growing need for networking</td>
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</table>
Regional R&I strategy (2009)

GOVERNANCE
Steering Committee for ELP, Productive Districts Observatory

INSTITUTIONAL CAPACITY
Coordination of policies (education, employment, r&i and development)
ARTI, InnovaPuglia, PugliaSviluppo, www.sistema.puglia.it
### AXE 1 – Supporting the innovation demand of regional companies

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Diffusing entrepreneurship and innovation culture</td>
</tr>
<tr>
<td>1.2</td>
<td>Supporting industrial research</td>
</tr>
<tr>
<td>1.3</td>
<td>Integrated innovation projects</td>
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</tbody>
</table>

### AXE 2 – Empowering the technological offer of the regional public research system

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
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<tbody>
<tr>
<td>2.1</td>
<td>Empowering the strategic scientific-technological areas</td>
</tr>
<tr>
<td>2.2</td>
<td>Strengthening the scientific research centres</td>
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</table>

### AXE 3 – Qualifying the innovation demand-offer match

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>3.1</td>
<td>High technology Districts</td>
</tr>
<tr>
<td>3.2</td>
<td>Public-private laboratories networks</td>
</tr>
<tr>
<td>3.3</td>
<td>Regional network of Industrial Liaison Offices</td>
</tr>
<tr>
<td>3.4</td>
<td>Innovation Poles</td>
</tr>
<tr>
<td>3.5</td>
<td>North-South exchange initiatives</td>
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### AXE 4 – Improving human capital in research and innovation

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<th>Description</th>
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<tr>
<td>4.1</td>
<td>Qualifying human resources</td>
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</table>
The Regional R&I Strategy has identified in 2009 the following thematic priorities:

- Aerospace;
- Agro industry;
- Cultural heritage;
- Biotechnology and life science;
- Energy and Environment;
- Logistics and Production technology;
- Mechanics and Mechatronics;
- New materials and nanotechnology;
- Information and Communication technology.
Entrepreneurial dynamics

• **Regional Industrial Liaison Offices network** (spin offs, patents, TT agreements, individual innovations needs)

• **Alliances for Innovation** (collective needs, open innovation approach)

• **Productive Districts** (stable S-I networks for innovation)

• **Technological Districts** (stable S-I networks for industrial research)
## From Large Companies ....

<table>
<thead>
<tr>
<th>AEROSPACE</th>
<th>ICT</th>
<th>MECHANICS</th>
<th>CHEMICALS</th>
</tr>
</thead>
</table>
| **Alenia Aereonautica** *(sede Grottaglie)*
  *GSE - Ground Support Equipment Srl* | **CONSORZIO SHIRA**
  Mer Mec S.p.A.
  Mel System S.r.l.
  Planetek Italia S.r.l.
  Sitael Aerospace S.r.l.
  VVN S.r.l. | **EXPRIVIA S.p.A.**
  * FINLOGIC s.r.l.
  * SINCON s.r.l.
  * Sud Sistemi s.r.l.
  * Itel Telecomunicazioni s.r.l. | **GETRAG S.p.A.**
  Chemtex Italia SPA |
| **Alenia Aereonautica** *(sede Foggia)*
  *S.C.S.I. s.a.s.* | **SISTEMI SOFTWARE INTEGRATI S.p.A(2).** | **Network Contacts s.r.l.**
  * WIND TEL. S.p.A. (2) | **MER MEC**
  *MEL SYSTEM** |
| **AVIO S.p.A.**
  * Processi Speciali s.r.l.* | **Objectway S.p.A.**
  * P&P Consulting s.r.l.* | **NUOVO PIGNONE S.p.A.** |
| **AGUSTA S.p.A.**
  * Giannuzzi S.r.l* | **Riunite OSRAM Edison Clerici S.p.A.** |
....to Start Ups!

Festival dell’Innovazione

National Winner 2011
James Dyson Award

PRINCIPI ATTIVI
Characteristics of a productive district:

- A high concentration of enterprises especially of small and medium size, each integrated into a production system with relevant expertise and active support to local economy.

- Presence of social and institutional stakeholders with capacities for supporting the local economy.

Policy objectives:

1. Increase the competitiveness and innovative capacity in order to expand their presence in foreign markets;

2. Enhance the creation and development of new enterprises particularly in activities with high technological content;

3. Intensify the processes of size growth.
Apulian Clusters dynamic

Tourism
Agro-food
Fishing and aquaculture
Flower gardening

Sustainable Building
New energy
Environment and recycling

Creative industry

Logistics
Nautical Mechanics
Aerospace

Fashion
Wood and furniture
Stone quarrying
Communication & publishing

ICT & AAL
Technological districts

The 6 Apulian TD’s

DHITECH - Nanotech
DARe - Technologies for Agrofood
MEDIS – Mechatronics
DiTNE – Renewable Energies
HBio – Human health
DAP – Aerospace

INNOVAAL – Ambient Assisted Living
# National Technological Clusters

<table>
<thead>
<tr>
<th>Apulian Technological District &amp; PPA</th>
<th>National Technological Clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDIS – Mechatronics</td>
<td><em>Intelligent factory</em></td>
</tr>
<tr>
<td>DHITECH - Nanotech</td>
<td><em>Technologies for smart communities</em></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>DARE - Technologies for Agrofood</td>
<td><em>Agrifood</em></td>
</tr>
<tr>
<td>DiTNE – Renewable Energies</td>
<td><em>Energy</em></td>
</tr>
<tr>
<td>HBio – Human health</td>
<td><em>Life sciences</em></td>
</tr>
<tr>
<td>DAP – Aerospace</td>
<td><em>Aerospace</em></td>
</tr>
<tr>
<td>INNOVAL – Ambient Assisted Living</td>
<td><em>Technologies for the living environment</em></td>
</tr>
<tr>
<td>PPA</td>
<td><em>Green chemistry</em></td>
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<tr>
<td></td>
<td><em>Equipment and systems for the mobility of surface land and sea</em></td>
</tr>
</tbody>
</table>
1. Promoting research and innovation is considered as a key policy instrument to enhance competitiveness and job creation, address major societal challenges and improve quality of life and is communicated as such to the public.

2. Design and implementation of research and innovation policies is steered at the highest political level and based on a multi-annual strategy. Policies and instruments are targeted at exploiting current or emerging national/regional strengths within an EU context ("smart specialisation")

3. Innovation policy is pursued in a broad sense going beyond technological research and its applications.

4. There is adequate and predictable public investment in research and innovation focused in particular on stimulating private investment.

5. Excellence is a key criterion for research and education policy

6. Education and training systems provide the right mix of skills

7. Partnerships between higher education institutes, research centres and business, at regional, national and international level, are actively promoted

8. Framework conditions promote business investment in R&D, entrepreneurship and innovation

9. Public support to research and innovation in businesses is simple, easy to access, and high quality

10. The public sector itself is a driver of innovation
A new generation of policies

• A huge effort for coordinating the various regional policies towards the common goal of promoting employment through innovation and human capital development is on the way with the Extraordinary Employment Plan 2011.

• Several regional policies have addressed the potential of young people to create entrepreneurship through creativity.

• Social innovation and corporate social responsibility win the scene.

• After the Europe 2020 strategy a new set of policies has been set up: regional innovation partnership, innovation services, living labs, precommercial procurement.

• With the help of its agencies and technical bodies, the regional government is implementing a more effective monitoring system and is moving towards a policy impact assessment.
Our strategic vision for the future

“Sustainable globalization” and creativity for better life and jobs!
Toolbox for building the regional strategy

**Innovation oriented analysis** of the knowledge and value chains methodology

**Monitoring** of the activities and evaluation of the performance of the technological and industrial production districts

Set up of information to perform the **ex-post and impact evaluation**

Apulian ICT Living Labs and related **maps of social needs and catalog of partners** (InnovaPuglia)

**Foresight exercise** in Innovation for employability (ARTI)
Priorities and criteria

Companies in **specific global value chains**

Companies that are active in the **international markets**

Scientific and technological excellence, qualified human capital and industrial capabilities on strategic market sectors (**Technological & Production Districts**)  

**Emerging sectors** for the regional economy and society
Main **statistical data** concerning industry, research and innovation, human capital (ISTAT, Eurostat)

Data concerning the **beneficiaries** of regional, national and EU funding schemes for R&I

**Survey** conducted on 6,000 regional companies about competences/skills needs and innovation behaviour (ongoing), in the following industry sectors:
- Aerospace
- Agro-food
- Biotechnologies for human health
- Energy
- Mechatronics
- New materials and technologies for manufacturing

**Evaluation** of regionally funded Explorative Projects and Strategic Projects (applied research projects leaded by regional research centers and universities and participated by regional SMEs)

**Sector specialization analysis** on patents and scientific publications
Foresight scenario analysis on a group of selected technology fields and industry sectors

Quali-quantitative assessment of the activities carried out by the regional Production Districts

Quali-quantitative assessment of the activities carried out by the regional Technological Districts

Competence mapping through quali-quantitative assessment of:
  - Regionally funded Strategic and Explorative Projects
  - Regional Network of Public Research Laboratories

Value-chain analyses
Governance

• The manager of **Economic development, Labour and Innovation policies Department** assures the coordination with the other regional areas and with the regional council; **Programme Implementation and Industrial Research and Innovation** manage the process

• The **implementing bodies** provide assistance and specific contributions (ARTI, InnovaPuglia, PugliaSviluppo)

• The regional **stakeholders** are involved through their associated expressions and a specific **steering committee** will be set up (February 2013)
• **Peer review** with S3 Platform - *May 2012, Sevilla (IPST)*

• The **political start up of the RIS3** (DGR 1468/2012) – *July 2012*

• An **Open Scenario Building Process** has been launched (with Formez) – *since September 2012*

• An **auto-evaluation exercise with Stakeholders** is ready to be carried out in *February 2013*

• A first set of **Open Data** will support the process of **e-partecipation** with a web-based platform in order to debate and collect feedbacks (by *the end of February*)

[http://www.dati.puglia.it](http://www.dati.puglia.it)
Connecting ...

Technological PPA at regional level “INNOVAAL”

Technological Cluster at national level “TAV”

CORAL and AAL networks (Engaged project)

Regional Productive District “PUGLIA CREATIVA”

ECCL project

Regional Productive District “DTA”

Technological District “DAP”

Technological Cluster at national level “CTNA”, ASI

Nereus network

EIP Active and Healthy Ageing

European Creative Industry Alliance

EU Space Programme, ESA,
Measuring the progress

The Regional Monitoring and Evaluation system

Knowledge paths to be reinforced

Feedback to policy and action planning (policy/measure level)

Feedback to strategic and operational planning (programme level)
Measuring the progress

Output and results indicators

Result indicators:
• Result indicators will allow to monitor the evolution of those variables that the RIS3 aims to influence and will therefore be related to the expected changes to the regional baseline

Output indicators:
• Output indicators will be specific to the adopted RIS3 policy measures/actions and will monitor the direct effects of the related spending
Measuring the progress

Output and results indicators: timeline

**Outputs**: Direct and indirect effects on policy beneficiaries will be constantly monitored thanks to a survey system that is built-in to the regional measures/actions management system (already implemented and running);

**Results**: Result indicators that coincide with context indicators that are made available by statistical bodies (Eurostat, ISTAT) will be elaborated on a yearly base. Two main evaluations of the RIS3 result indicators will be made at mid-term and ex-post, also based on surveys conducted on policy beneficiaries and counter-factual analyses

**Impacts**: Impact assessment will be carried out at mid-term and at the end of the programming period.
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