

February 2006

# Policy Framework for Innovation and Entrepreneurship Support in MENA

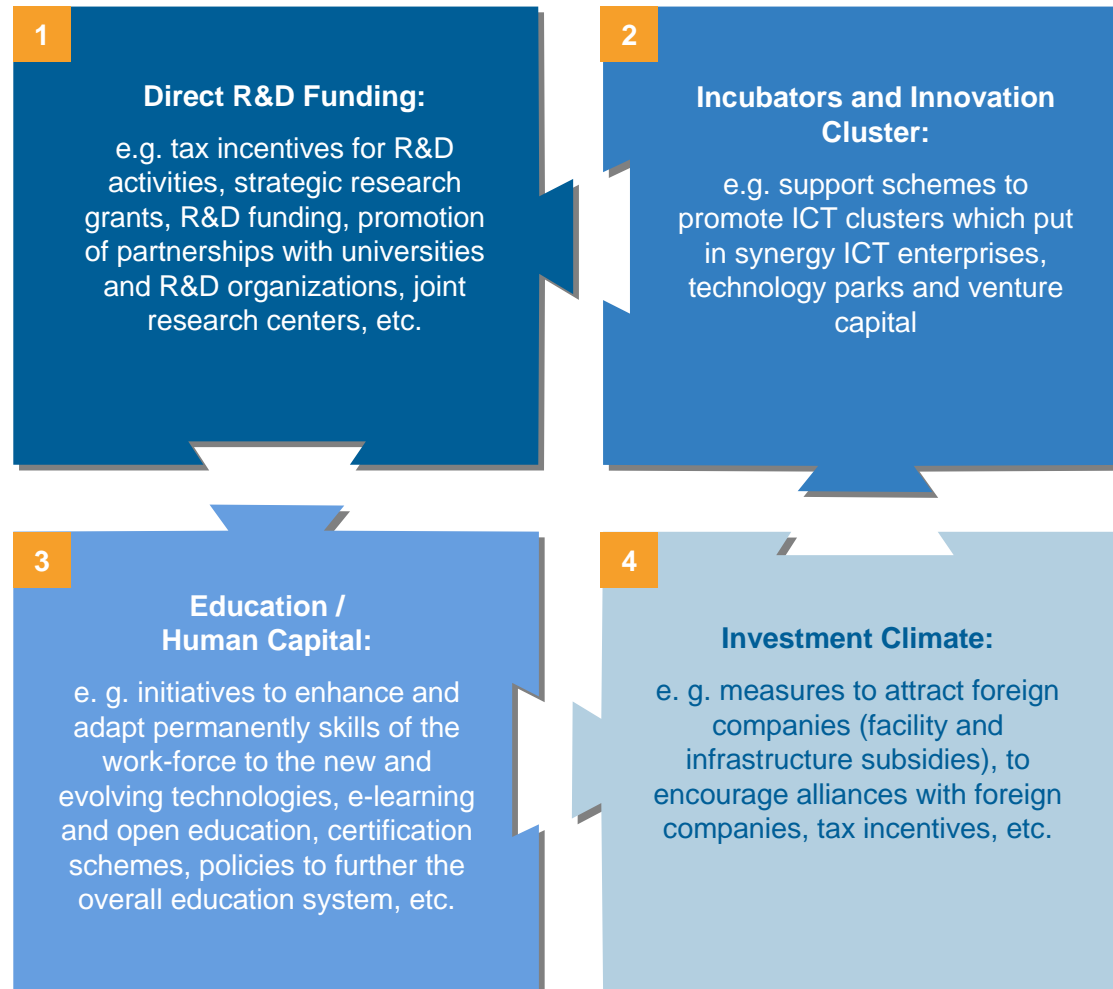
 *Overview of Key Policy Dimensions*

## Promoting Innovation and Entrepreneurship in The Middle East and North Africa

Strategies and Partnerships  
January 31 to February 3, 2006  
Casablanca Technopark  
Casablanca, Morocco

# Governments have relied on a set of instruments and policies to foster innovation and entrepreneurship

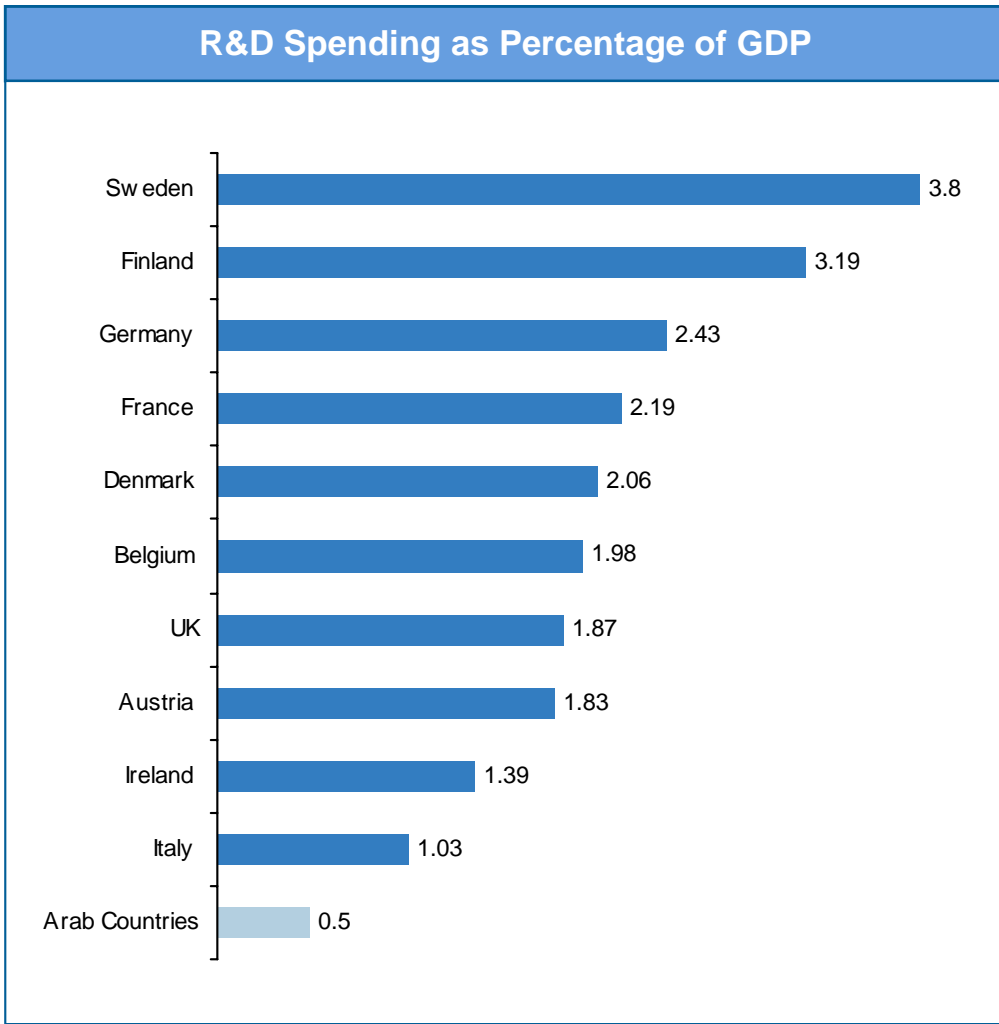
## Innovation and Entrepreneurship Key Drivers



Source: Adapted from B@HOME, 2005

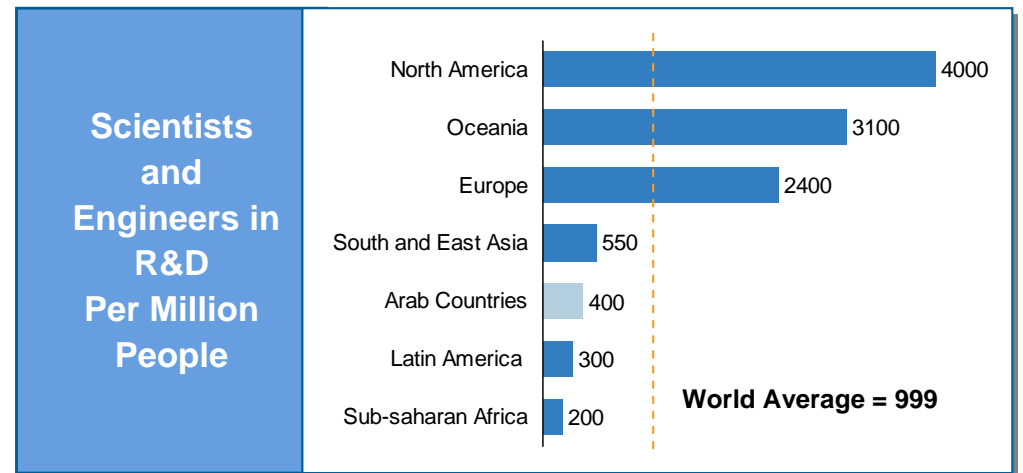
# Arab Countries have done very little in terms of R&D funding when compared to advanced countries, the

## Direct R&D Funding



### Comments

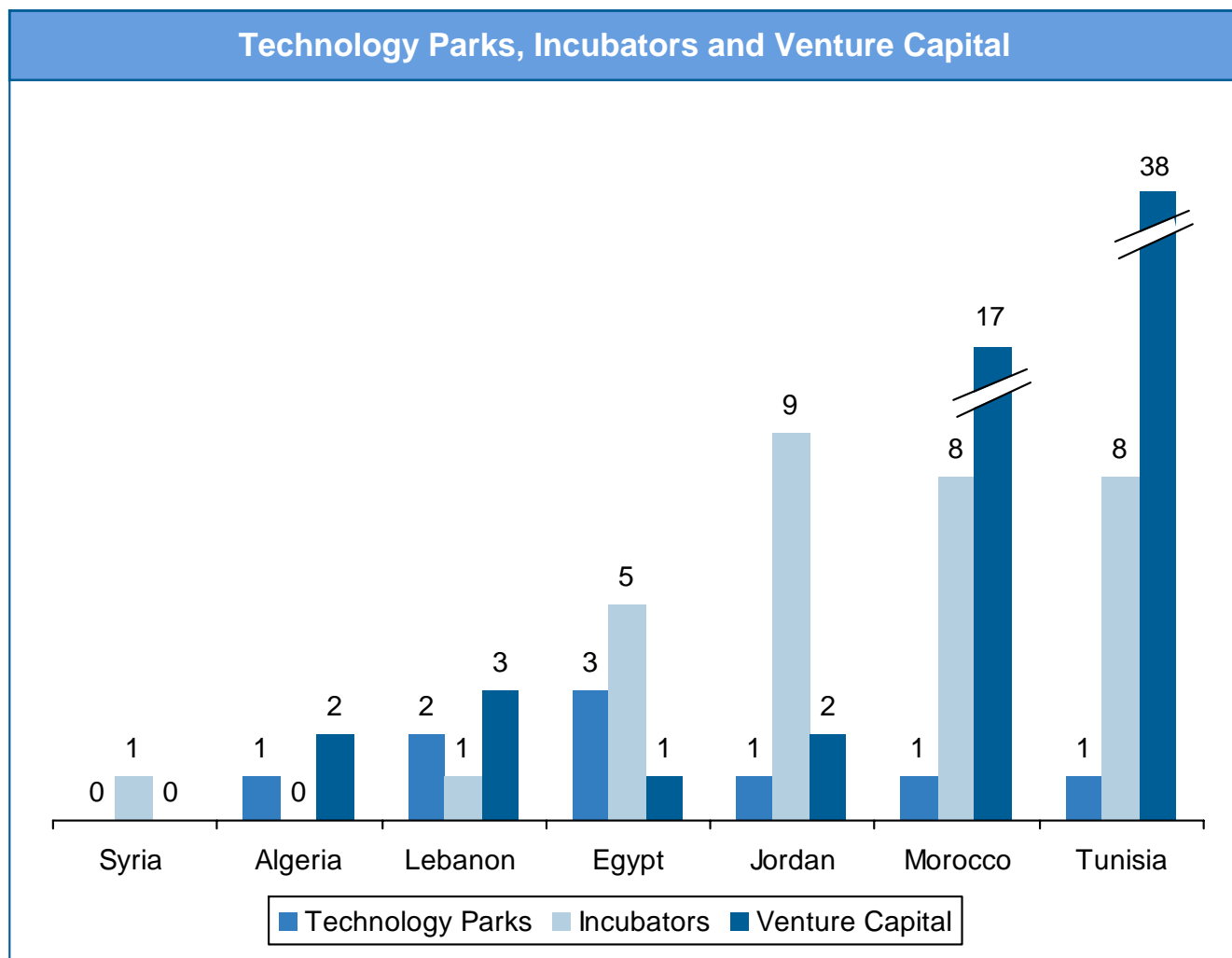
- ❑ R&D is a key instrument to stimulate innovation and entrepreneurship
- ❑ Arab countries have done very little to encourage the inflow of funds to stimulate R&D
- ❑ Some like Jordan have tried to compensate internally for the lack of R&D funding by injecting public sector funds
- ❑ In the case of Jordan the, the private sector's contribution to R&D accounts for a mere 4% of the public sector's budget



Source: IDA 2003, ICT Challenges in the Arab World 2003, UNDP 2002

# Three components are key to the promotion of innovation: technology parks, incubators and venture capital

## Incubators and Innovation Clusters



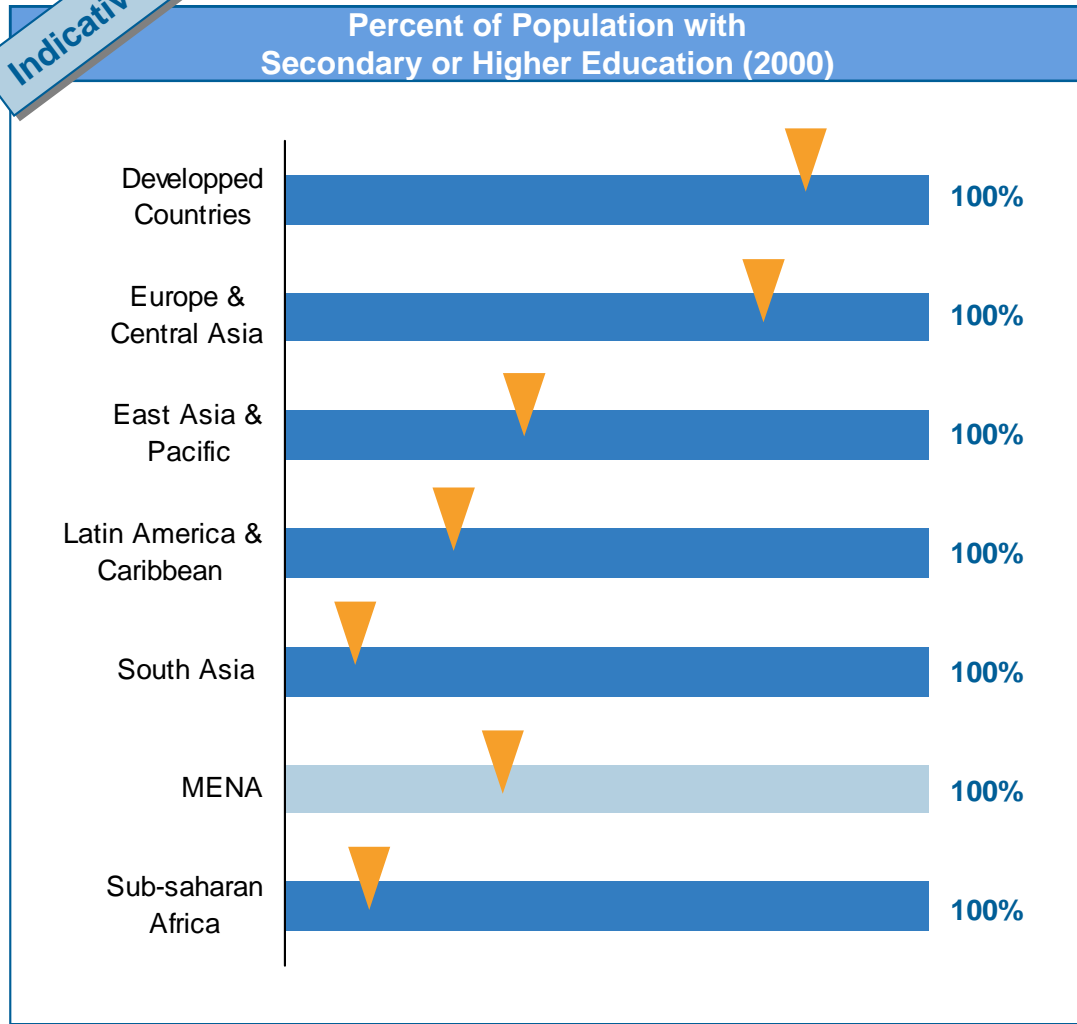
- Comments
- ❑ Three main components are considered to essential to innovation:
    - Technology parks
    - Incubators
    - And Venture Capital
  - ❑ All three combined provide the proper infrastructure to promote innovation and entrepreneurship and provide the needed launching pad for SMEs
  - ❑ The systems of incubators in Syria, Algeria and Lebanon are less well developed
  - ❑ Jordan, Morocco and Egypt have established formal incubator network organizations
  - ❑ The Jordanian national incubator network is NACTIB, in Morocco it is the RMIE and in Egypt it is the EIA
  - ❑ The experience of these three countries in the practice of running incubator-networks provides an opportunity for mutual learning on issues such as
    - The structure and governance of the network,
    - The type of services it can provide to its members,
    - The method of financing

Source: EMI 2005, EC 2005

# High education levels provide a basic element for innovation and its absence can hamper efforts to innovate

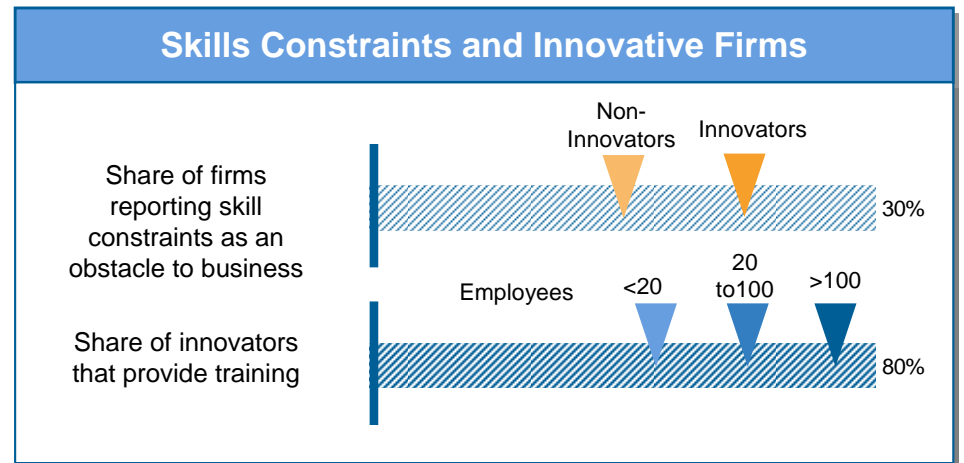
## Education / Human Capital and Innovation

Indicative



### Comments

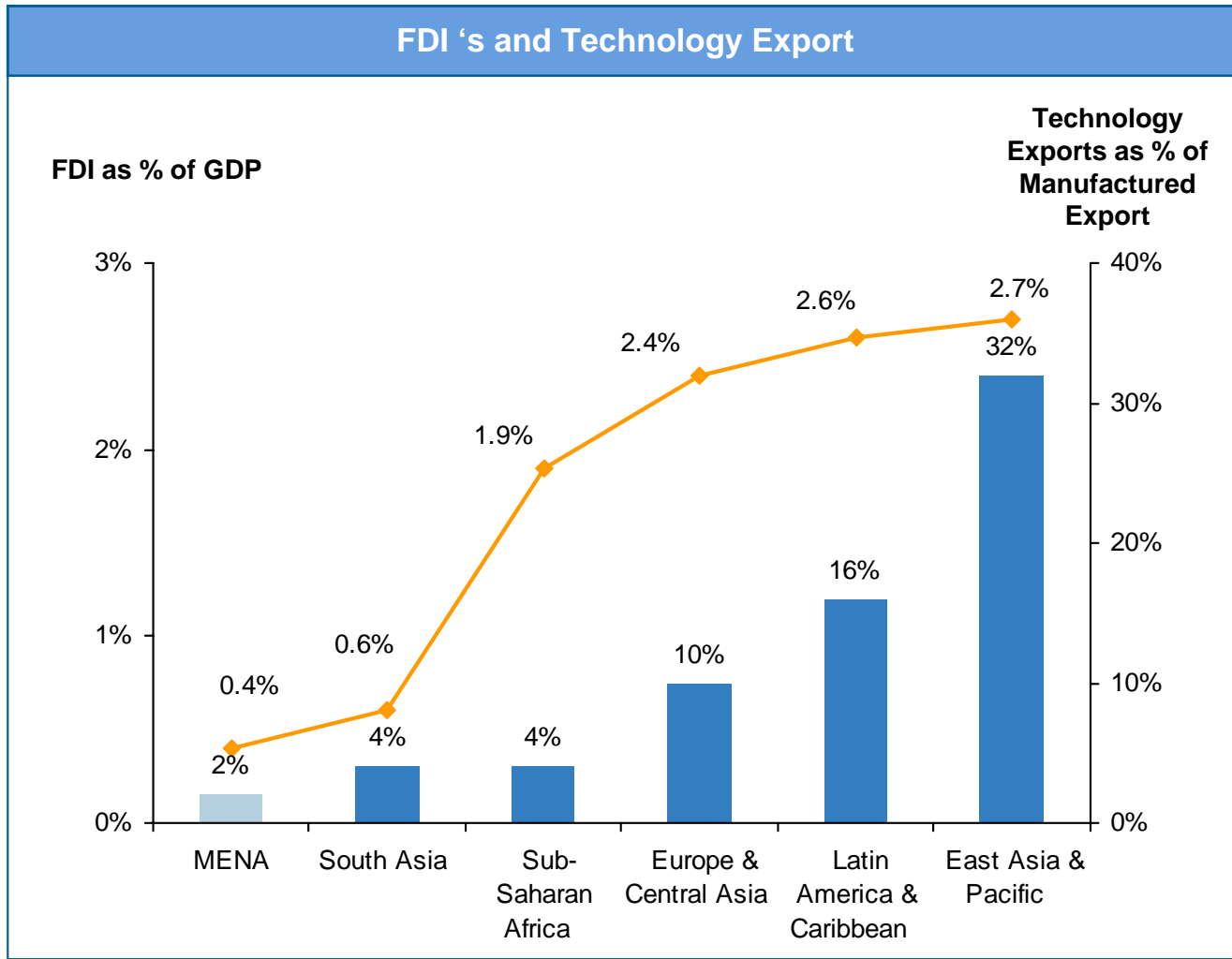
- ❑ Innovation and entrepreneurship relies heavily on the human factor and the levels of education
- ❑ The Middle East and North Africa region is still lagging behind when compared to developed nations
- ❑ The region is also characterized by a poor alignment of academia and industries in need for resources
- ❑ The quality of technical education is also an issue
- ❑ Training needs to be given utmost priority to encourage innovation
- ❑ As shown below, companies considered to be Innovators face more severe skill constraints and they try to compensate by resorting to aggressive training levels almost reaching 80% of the employees



Source: Barro and Lee 2001, World Development Report 2005

# Foreign Direct Investment positively impacts innovation, typically leading to higher exports of technology

## Investment Climate and Technology Exports



- Comments**
- ❑ Countries with high level of innovation would typically manufacture and export advanced technologies
  - ❑ Foreign Direct Investment stimulates the development of high technologies and has also an impact on:
    - Upgrading the skills of the workforce
    - Increasing the technology transfer considered to be fundamental component of innovation
    - Provide needed capital to develop entrepreneurship
  - ❑ MENA countries have only recently started developing policies to attract badly needed FDI
  - ❑ Morocco attracted 28 technology investment projects between January 2003 and March 2005
  - ❑ Among MEDA countries, Morocco accounts for 40% of FDI inflows, clearly signaling a shift in policy
  - ❑ The change is expected to positively impact innovation and entrepreneurship on the medium to long term

Source: World Development Report 2005 - World Bank