



# **The Higher Council for Science and Technology**

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## **Framework of South-South Cooperation in Technology Transfer**

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# Background

- In 2006, The HCST explored the advisability of establishing technology management offices at Jordanian universities and its staffing needs to handle intellectual property rights and transfer of technology.
- A number of events/awareness campaigns were conducted to promote technology transfer in Jordan (e.g., international conferences on "Fundamentals of Technology Transfer" in 2008, and "Technology Transfer: Accelerating the Knowledge Economy through the Commercialization of Research and Development" in 2009).

## Technology Transfer (TT) Program in Jordan



- National Technology Transfer Programme was developed and initiated in 2010 under the EU funded "SRTD and Innovative Initiatives in Jordan"

### **a) A TT network was established and consisted of:**

- Intellectual Property Commercialisation Office (IPCO) at El Hassan Business Park.
- 11 Technology Transfer Offices (TTOs).

#### **Research TTOs**

- University of Jordan
- Jordan University for Science and Technology
- Yarmouk University
- Mut'ah University
- Jerash University
- National Centre for Agricultural Research and Extension

#### **Business TTOs**

- Jordan Enterprise Development Corporation
- Amman Chamber of Industry
- Jordan Industrial Estates Corporation
- King Abdullah II Design & Development Bureau
- Al Urdonia Lil Ebda

# Technology Transfer Program in Jordan



## IPCO's role:

- Encourages academic institutions to expand their commercial patent portfolio by supporting the TTOs in the disclosure of new inventions, protection of intellectual property and provide guidance in commercialization of patents best practice.
- Assists researchers and businesses in matching business needs with research capabilities.
- Provides a forum for the private sector to identify potentially useful IP and start a dialogue with the IP owner.

# Technology Transfer Program in Jordan



## Research TTOs role:

- Identify research output of commercial potential, managing the disclosure and protection of related IP and raising the awareness among researchers (patent first, then publish).

## Business TTOs role:

- Identify industrial sectors/businesses that could benefit from research efforts.



## **b) Capacity Building of TT Network Members**

### **➤ Provision of training**

IP protection and exploitation, IP policy & incentive schemes, business planning, project management, marketing and finance and utilising research output.

### **➤ Expedition of participation in international events on TT**

### **➤ Development of administrative instructions for TTOs**



## **C) Main Achievements of TT Network**

- In 2010, 15 patents have been registered by TT network and institutions of El Hassan Science City.
- IP policies were either adopted or developed by the institutions that have TTOs.

## Euro-Mediterranean Cooperation in TT



- A study was performed in 2009 among MIRA project partners\* which aimed at developing an overview of the national technology transfer structures, policies and strategies in Euro-Mediterranean countries in order to identify key technology transfer concepts, tools and methods of priority interest for the partners.

*\* Institutions in Spain, Morocco, France, Tunisia, Egypt, Germany, Italy, Greece, Algeria, Turkey, Malta, Jordan, Germany, Algeria, Lebanon, Palestine, U.K. and Portugal.*

## Euro-Mediterranean Cooperation in TT



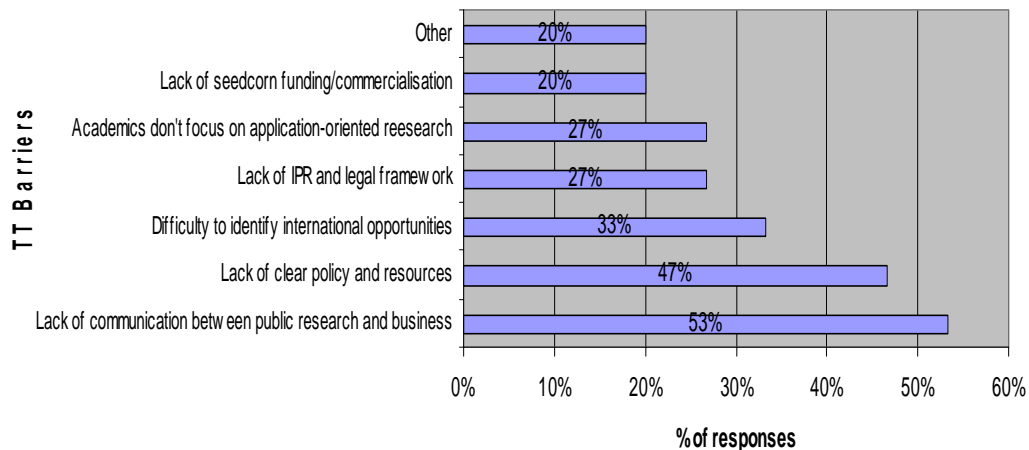
The study revealed important insights in relation to:

1. Barriers hampering technology transfer and innovation which are shared among EU and Mediterranean countries.
2. Training needs in technology transfer tools and methods.
3. Training capabilities in terms of available institutions and expertise.



# Euro-Mediterranean Cooperation in TT

## 1. Barriers hampering TT



# Euro-Mediterranean Cooperation in TT

## 2) Training needs

### a) Individual needs

- Organizational and framework issues in the academia
- Technology and process upgrading in classical sectors
- Managing a research pipeline to support leading technology sectors
- Cross innovation
- Technology requirements
- International technology transfer centres
- Innovative or technology-based-start ups



## **Euro-Mediterranean Cooperation in TT**

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### **b) Shared needs**

- Supply-side and demand-side policies and strategy
- Systemic approaches (linear vs non-linear)
- IPR
- Entrepreneurship
- Technology Transfer and knowledge acquisition
- Regulations
- Regional TT
- Sectoral TT



## **Euro-Mediterranean Cooperation in TT**

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### **3) Training capabilities**

- Institutions (universities, consulting firms, TTOs .....)
- Expertise (incubation, VC funds, spinouts, measures, schemes, networks, strategy, policy .....)

## **Framework of South-South Cooperation in TT**

- Key players
- Priority areas of cooperation
- Mechanisms

## **Key Players**

- Based on the North-South-South cooperation model, the North can play a catalytic role in South-South cooperation.
- South-South cooperation is not a replacement to North-South cooperation rather a complement.





## Priority Areas of Cooperation

In prioritizing global drivers of change in the third millennium in the case of Jordan a national consensus was reached that water, energy and food security resp. are of top priority.

These priorities are certainly shared by the countries of the south.



## Mechanisms

- Industry-academia links and PPPs
- Clear policy framework
- Standards and regulations
- Professional skills sets identification and development
- Clusters
- Mature venture capital sector with high skills and returns



## Mechanisms

- Effective legislations to increase TT and business innovation
- Alternative models for TTO legal frameworks and organization structures
- Lead markets and innovative procurement
- IPR portfolio management, valuation, marketing and contracting
- Trans-border networks and good bilateral links
- FDI Promotion



Thank you