



# **Enhancement of University – Industry Collaboration at Alexandria University**

**Role of Technology Transfer Industry Collaboration office (TTICO)**

By

**Seddik Abdel Salam, M.D**

**Vice President of Graduate Studies and Research**

**Alexandria University - EGYPT**

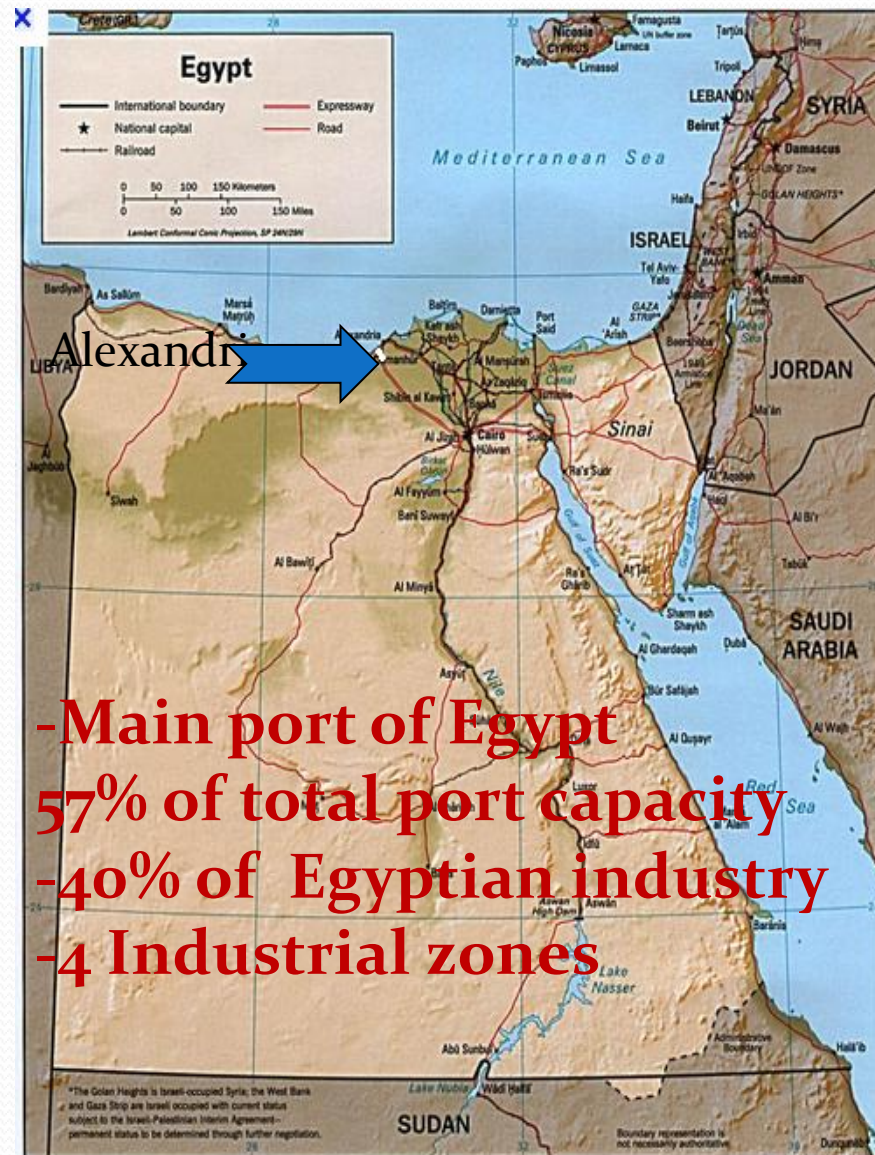
# Introduction

- One of our great challenges in Egypt is bridging the gap between academia and industry.

# **Drivers of Alexandria University- industry collaboration**

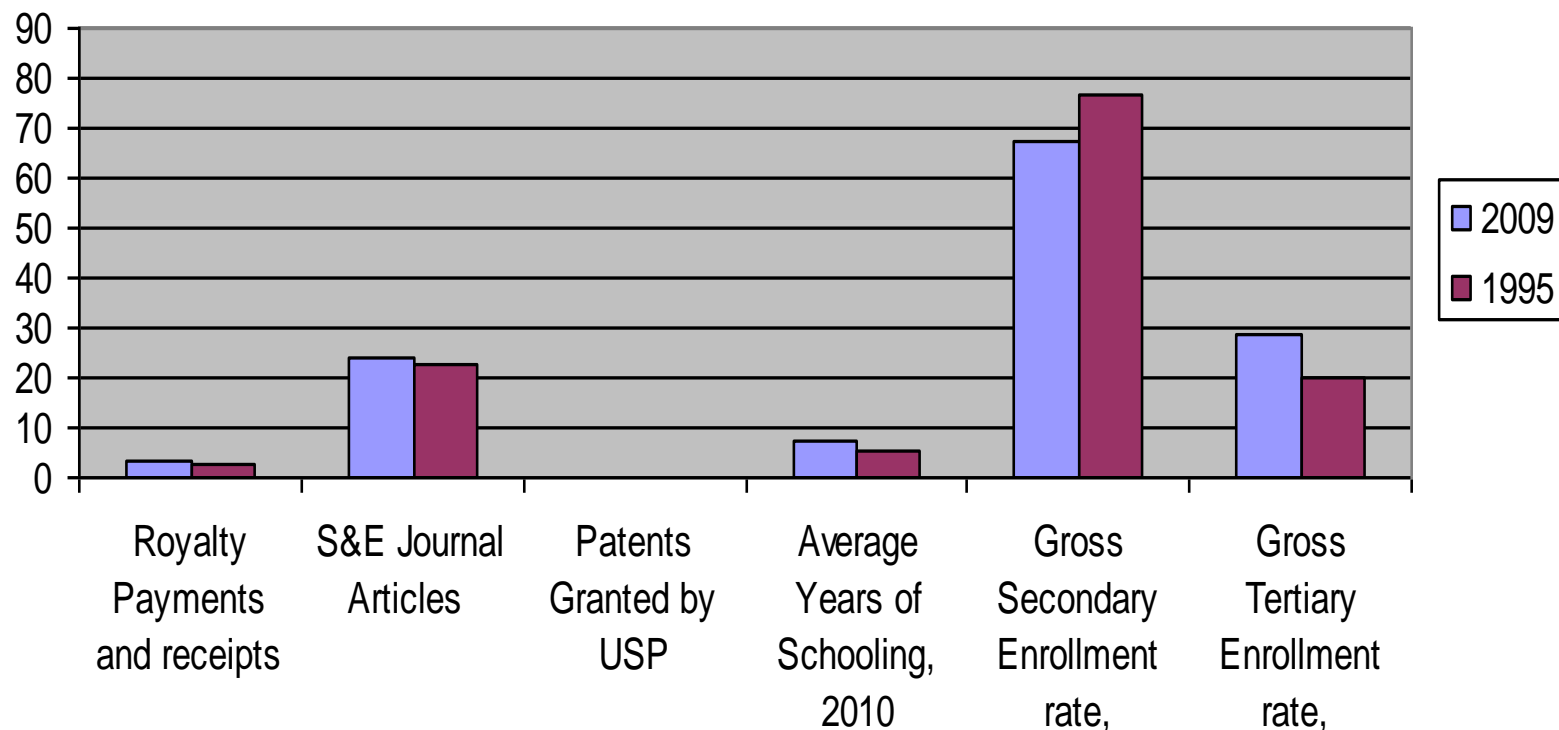
- 1- The importance of the city of Alexandria in the Egyptian economic activity.
- 2-The high potential for improvement in the knowledge economy indicators reported by the World bank.

# Economic activity in Alexandria

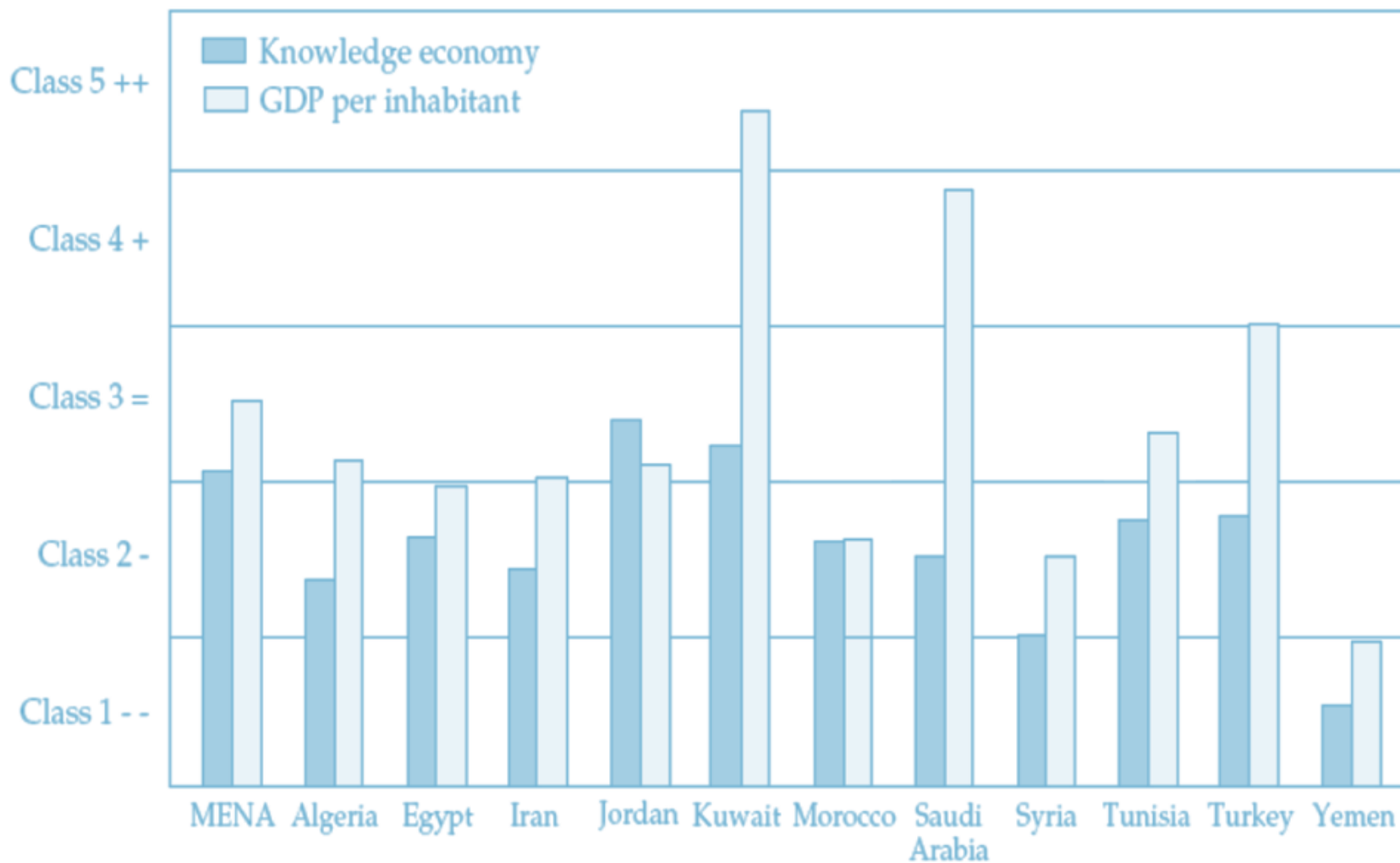


# Knowledge Indicators : The case of Egypt

Selected Knowledge Economy Indicators



*Figure 4.2. Countries' Relative Position in the Knowledge Economy and GDP Per Inhabitant*



Source: World Bank, WDI, and Institut de la Méditerranée.



# Institutional Enablers:

- 1- *Alexandria University Mission* states that Industry Academia Partnership is one of its top priorities.
- 2- *Organizational Structure* includes a vice-president for community services who is responsible for the link between the university and industry.

# **Mechanisms of Collaboration:**

- 1- The head of the chamber of commerce is a member of the University Council for Community Services.
- 2- The university committee of scientific research includes two members from the business community.



# Mechanisms of Collaboration

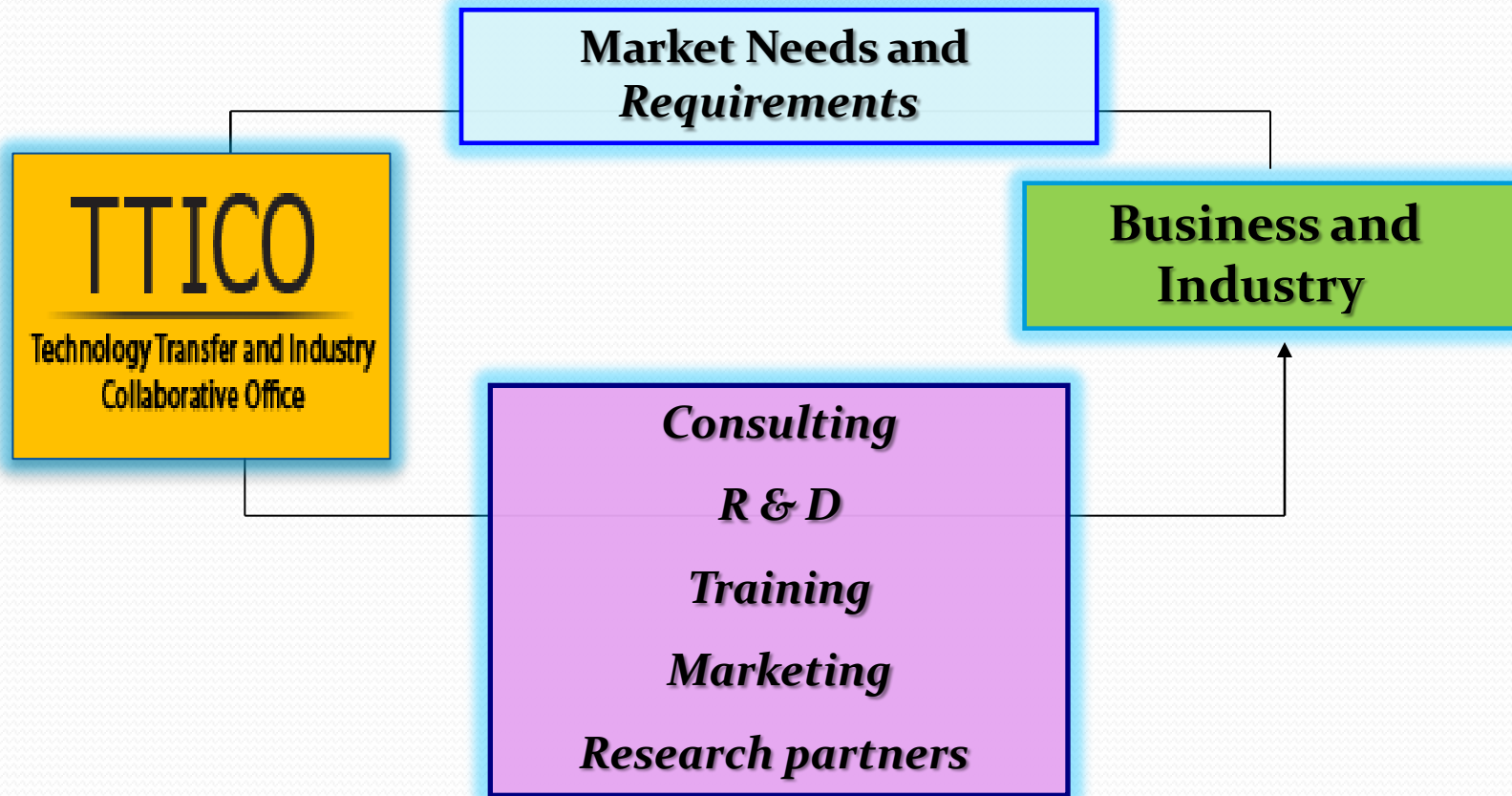
## (cont.):

- 3- Many of the Faculty (schools) councils at Alexandria University include members from the business community.
- 4- Technology Transfer Industry Collaboration Office (TTICO) was established in 2008, as funded through Research, Development and Innovation ‘RDI’ program aiming to transfer *inventions and knowledge* to industry for the benefit of society.

# Bridging the gap between Industry and Academia



# How the Process goes?



# Objecives of TTICO:

1. *Research and development* activities
2. *Technology commercialization*
3. *Training needs assessment*
4. *On-the-job training*
5. Marketing *promotion for innovative ideas.*

# **Key Performance Indicators of TTICO:**

- TTICO has been successful in providing grants for funding a number of projects that helps in solving industrial problems and supports technology transfer.
- TTICO has expanded its geographic scope beyond the boundaries of Alexandria through collaboration with other universities and governorates in national projects.

# Some examples of Academia Industry collaboration in Alexandria University:

Project	Faculty	Industry/NGO
Modernization of Ports (5)	Engineering	Port authorities in Alexandria, Noweba, AlAdabeya, Hurghada and Safaga
Urban planning in the cities of Alexandria, Marsa Matrouh and Damanhour		
Architecture of the Japanese University in Alexandria		The Japanese University
Consultancy for oil companies (2)		Oil companies operating in Alexandria

Project	Faculty	Industry/NGO
Water Resources and Environmental Management of Al-Burullos Coastal Lake	Engineering	Coastal research institute
Rapid detection and removal techniques of pesticide residues from fruits and vegetables	Agriculture	Institute of new materials and advanced technology
Assessment of Potential Climate Change Impact on Nile Delta and Developing Adaptation and Mitigation Strategies	Agriculture	- Coastal protection research institute /ministry of water resource -national center for social and criminal research



Project	Faculty	Industry/NGO
Breast cancer (3) Colorectal cancer Cancer related pain	Medicine	Local and multinational pharmaceutical companies  World Health Organization (WHO), Switzerland
Bipolar disorders		NAMRU-3 Regional Center for Women Health and Development
Hepatitis		
Pulmonary embolism		
Strokes (2)		
Diabetes(2)		
Others (23)		

# **TTICO Performance indicators:**

## **2011/2013**

### **Ongoing Projects:**

1. “Technical training for youth to be qualified for working in Food Industry Sector” funded by Sawiris Foundation for Social Development”.
2. “Training Based Employment” funded by USAID”

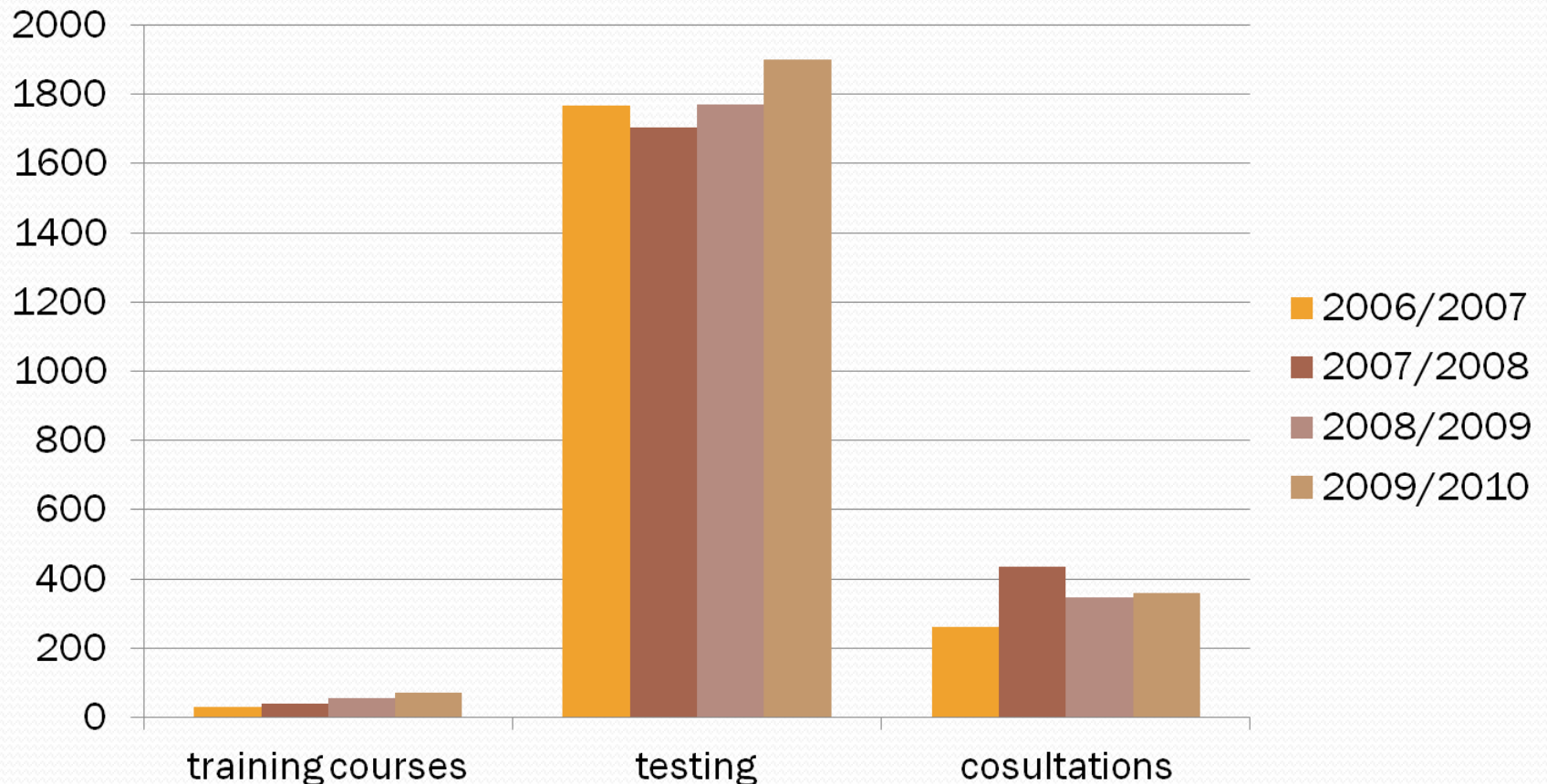
# **TTICO Performance indicators:**

## **2011/2013**

### **Activities:**

1. International Conference on “Research Promotion, Technology Transfer & Business Creation”
2. Innovation & Entrepreneurship Day
3. 25 Awareness sessions

# Main Activities; Engineering consultation services, Engineering training courses, Laboratory testing services for industry



# **The Future of TTICO:**

- More university - industry collaboration is planned to overcome post revolution economic crisis.
- More international cooperation is required in the area of technology transfer.
- More faculties and more researchers should participate in TTICO projects.
- Sending some promising young staff abroad to get degrees in special fields e.g. Commercialization of Research, Entrepreneurship and IPR (Intellectual Property Rights)





**Thank You**