

# Industrial Research & Consultancy Centre

#### Between 2010- 2011



## Background





- ☐ IRCC was established with the help of UNIDO in 1965 as a national, noncommercial centre.
- $\square$  1965 2001 under ministry of Industry
- $\square$  2001 2010 IRCC was affiliated to the Ministry of Science & Technology (MOST)
- From June 2010 back under the umbrella of the ministry of Industry.

























### **Objectives**

- Conducting applied research (R&D) on local raw materials for industrial exploitation.
- Design and technology transfer of Small scale industries to meet the real local needs.
- Conducting feasibility studies of new industrial investment projects for both public and private sectors.
- Consultation services on industrial planning, production management and product design and development.
- Contributing as main player in setting up the national polices and strategies for industrial development.
- Considered as reference laboratory for national standards corporation and some other departments.
- Raise awareness among industrialists, workers and government on industrial development issues.

























#### **Functions**

- Conduct R & D on the exploitation of local raw material for industry.
  Conduct techno-economic feasibility studies on industrial project for the private sector
- Provide consultancy services on industrial planning, process, engineering, production, management, costing, plant efficiency quality control systems & product development
- Participate in laying down national industrial development plans of existing industries in public & private sectors.
- Help identify & transfer of modern technologies and adopting what is appropriate
- ☐ Conduct industrial awareness schemes & programmes.
- ☐ Prepare and market industrial information
- Formulate training programs for employees in the various specializations in industry and supervise the implementation of such programs
- Assist in the preparation of standard specifications for the local industrial products

























#### **IRCC Facilities**

- Fully equipped & integrated Tannery.
- Pilot plant for chemical products research.
- Electronics quality control & testing lab.
- Advanced Industrial information centre.
- Physical Testing Lab.
- Engineering Design Lab.



## IRCC

## From MOST to MOI





























## Some tasks accomplished since return to the Ministry of Industry:

- ☐ Industrial Survey, Khartoum State
- Organization of Commodity Committees
- ☐ Participation in the Higher Council for Manufacturing
- ☐ Committee for modernization and development edible oil industrial sector
- ☐ Committee for modernization and development Leather Industry
- **Industrial Profiles**
- Participation in the Higher Council of Sugar ind.



























## Program for Modernization and development Leather Industry

- The strategic goal of the program is to raise the value addition of the leather industry and maximize exportation of finished leather products to upgrade its contribution of the sector to the GDP.
- ☐ This Program is executed through some projects



## **Projects for Modernization and** development Leather Industry

- Raw Materials development
- Achieve Self-sufficiency of footwear
- Benchmarking of Tanneries
- Production of Hydrated lime
- Production of Sulfurized oils
- Production of Sodium bicarbonate
- Production of tanning agent from local trees (Acacia nilotica)
- Compilation of data base the Sector
- Promotion & new Markets for Sudanese Leather products



























## Program for Modernization and Development of Edible Oil Industry

#### Objectives:

- ☐ To achieve self-sufficiency
- Locate Sudan in a leading rank among edible oil exporters

























## Program for Modernization and Development Edible Oil Industry

The program consists of four axes:

- ☐ Help plan, provide new agricultural schemes and finance the plantation of oil seeds
- ☐ Full utilization of available capacities in the sector (benchmarking)
- ☐ Modernization program of the edible oil sector
- ☐ Full and comprehensive study of the available opportunities



#### **Exhibitions**

- ☐ IRCC organized Exhibition for Sudanese Footwear & Leather products (Khartoum -Oct. 2010)
- ☐ IRCC participated in "All Africa Leather Fair' (Addis Ababa - March 2010).

























### Transfer of Technology

- ☐ Fitting about 10 old Furnaces with digital controllers
- □ Design of a mobile unit for pulping of waste paper in printing presses
- Design of a reactor for making sulfurized oils
- ☐ Design of mobile units for local shoe craftsmen

























## International Conference On Diffusion of ICTs in Academia, October 2010



#### Participation in Thematic Groups

■ Natural products Thematic Group meeting – Nov. 2010 -Pakistan



## National Initiative for Localization of Industrial Design in Sudanese Industries Feb.2011

- ☐ IRCC managed to gather 200 participants from different backgrounds and institutions.
- ☐ Choice of grand design project
- ☐ Formation of Design incubator
- ☐ Formation of design teams
- involving the private sector from the begining



## Capacity Building (Staff):

Description	Number of Workshop	Number of Participants
Internal short term	21	31
External short term	6	6

PhD	6
MSc.	5



























#### Training & Community Development

	No.	Title	Number of Participants	
1		Physio-chemical quality Control of manufactured food	25	
2	<u>)</u>	Cement analysis	6	
3 Leather Handcrafts		Leather Handcrafts	19	
	1	Training of Trainers Leather, food processing,	12	
Ļ	)	Linux	25	





























## Consultancy Works:

Description	Number
Feasibility study	7
Evaluation study	83
laboratory Testing	258



























### IRCC & Sudan Academy of Science

- IRCC is a member of SAS federal Union
- IRCC is a certified collage in engineering research & industrial technologies studies
- IRCC is a training facility in community development programs ( women, craftsmen ..)

























## IRCC & Sudan Academy of Sciences (programs)

**MSc.** Cleaner Production MSc. Mechanical engineering Design MSc. Refrigeration & Air-conditioning Mtech. Electrical Energy Production & Supply

























#### **Publications**

#### **Scientific Publications:**

- Published Papers: 18
- ☐ Presented papers: 16

#### **Publications:**

- ☐ Series of Industrial Directories, Directory of **Dairy Products**
- ☐ Industrial Research, Refereed journal, Vol.7



























### THANK YOU

