



Kenya Industrial Research and
Development Institute



Patent Information for Research Institution in a Developing Country Example of Kenya

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**A Regional Forum on The Role of Patents and Patent
Cooperation Treaty in Research in Developing
Countries**

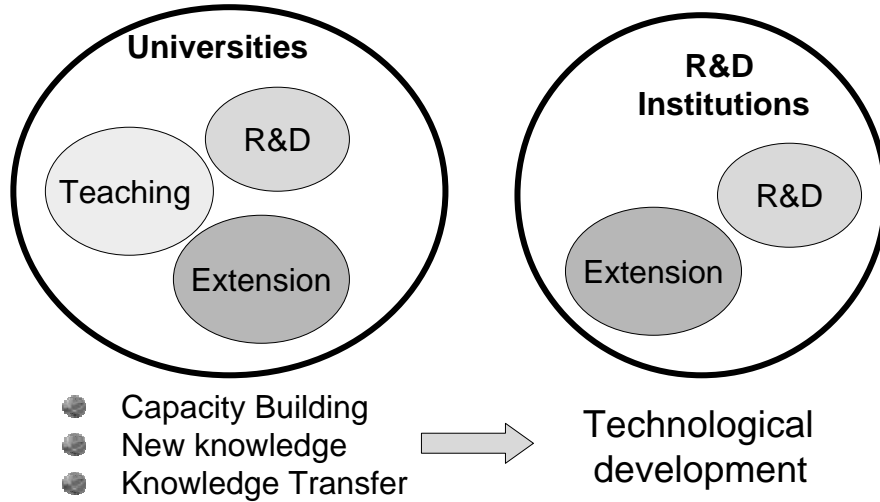
**Wednesday, 1st April 2009
KENYA**

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KIRDI**
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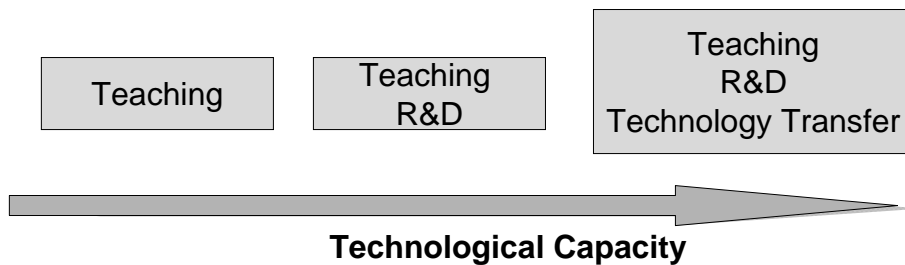
KIRDI's R&D Strategy

1. Mandates of Universities and R&D Institutions



KIRDI's R&D Strategy

2. Changing Emphasis



KIRDI's R&D Strategy

3. KIRDI's R&D Products

The direct product of our R&D

- New Technology
- New Product
- New Process
- Improvement in existing product, process or technology

KIRDI's R&D Strategy

4. KIRDI's R&D Objectives

- KIRDI's R&D is only useful if its products can lead to
 - Economic development
 - Industrialization
 - Job creation
 - Poverty Reduction

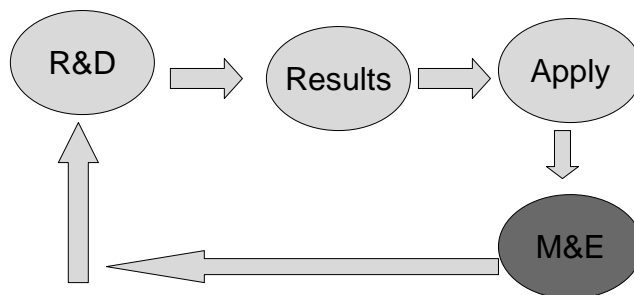
KIRDI's R&D Strategy

5. KIRDI's R&D Target

Micro
Small
Medium
Manufacturing Enterprises

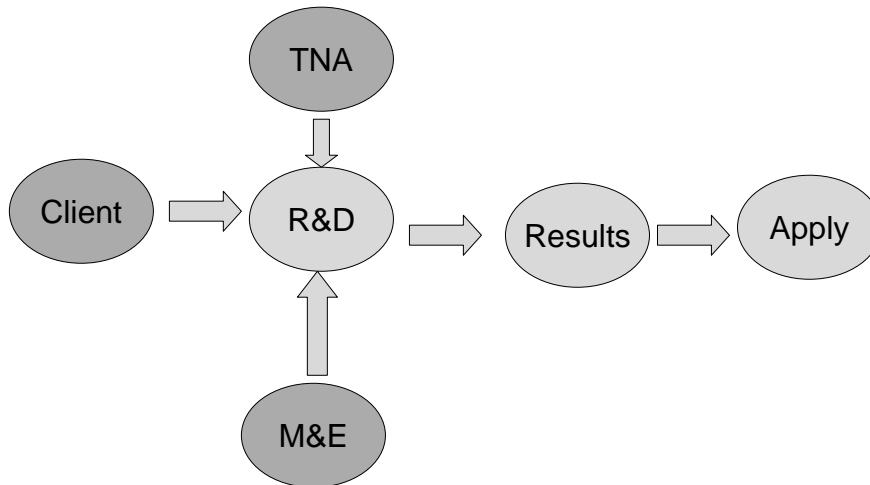
KIRDI's R&D Strategy

6. KIRDI new R&D model



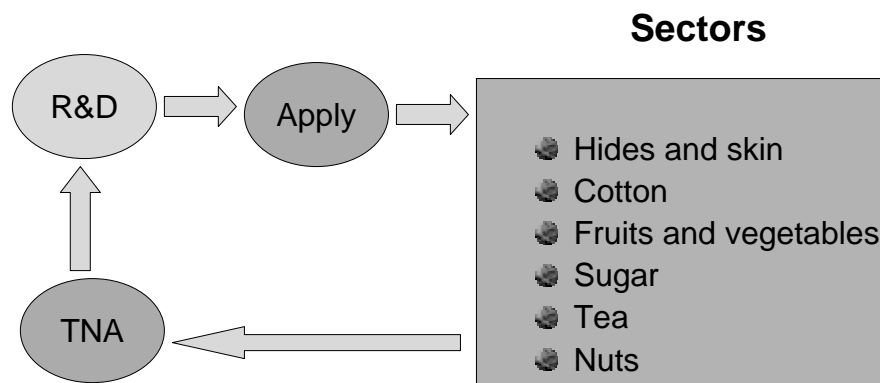
KIRDI's R&D Strategy

7. KIRDI new R&D model



KIRDI's R&D Strategy

8. KIRDI new R&D model



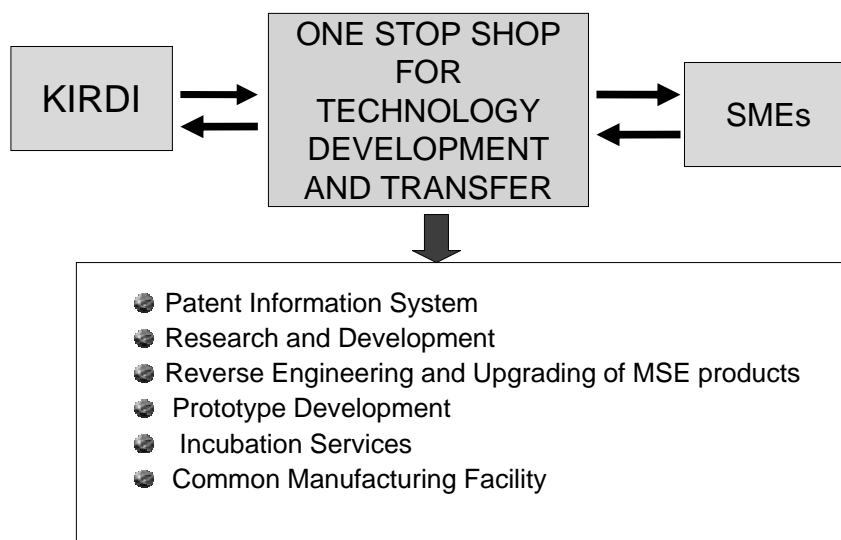
KIRDI's R&D Strategy

9. Evaluation of the outputs of KIRDI's R&D Efforts

In terms of numbers of :

- Technologies generated
- Patent applications
- Technologies transferred
- Enterprises created
- Companies supported through consultancies and capacity building
- Jobs created based on intervention of KIRDI
- Increase in sales of companies working with KIRDI's technologies

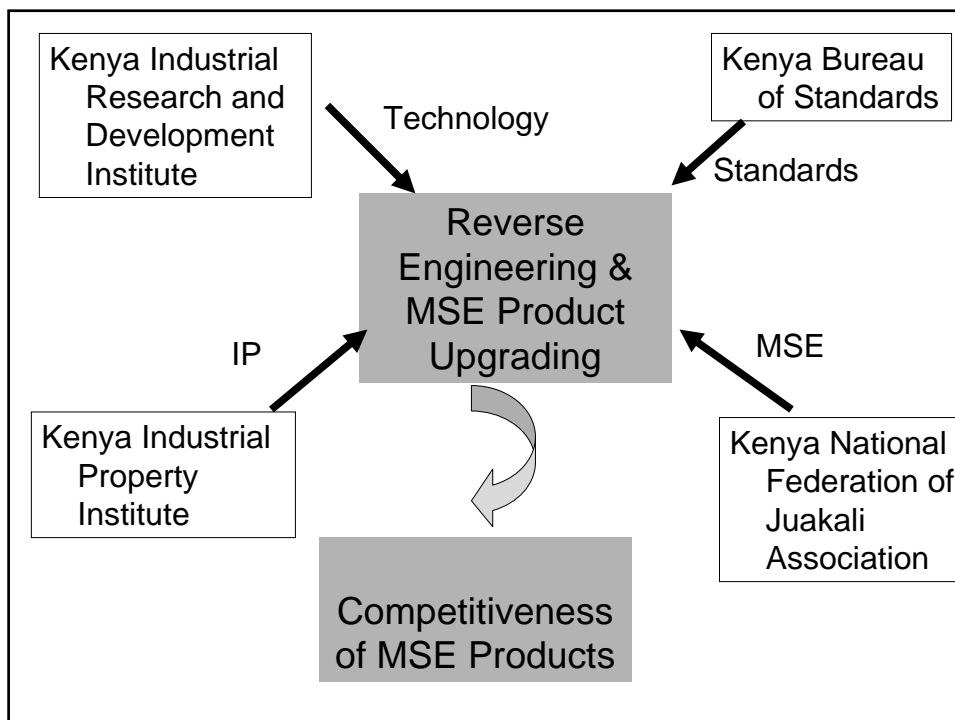
KIRDI's R&D Strategy



KIRDI's R&D Strategy

10. Structure put in Place

- Technology Transfer Office
- IP Policy
- Prototype development policy
- Business incubation services



Reverse Engineering

1. Low efficiency
2. Ugly
3. Unsafe
4. No Name



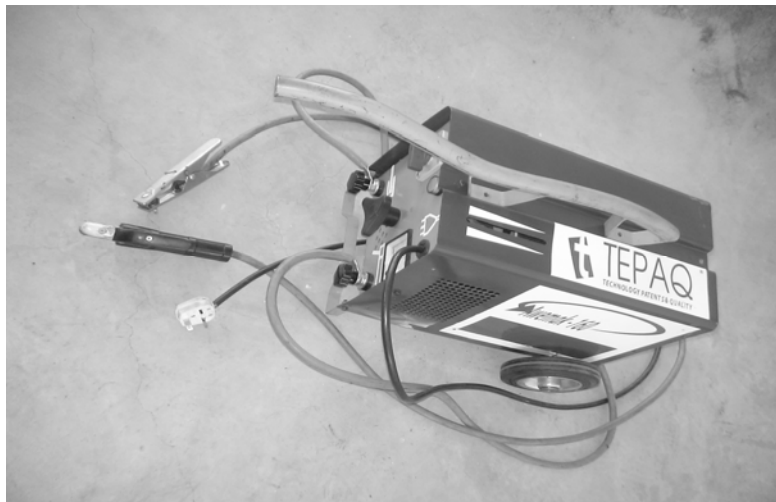
Reverse Engineering

- **Improve on the manufacture of the core electrical part**
- **Introduce meter reading**
- **Improve on casing**
- **Use standards in selecting components**
- **Protect improvement and brand**
- **Reasonable price**

Reverse Engineering



Reverse Engineering



Linking IP Information to research in KIRDI

Use IP information in R&D

1. Source of technological information for research
2. Solution to technical problems
3. Identifying alternative technologies
4. Identifying patentability potential of R&D at earlier stages of development
5. Avoiding the risk of R&D Duplications
6. Monitoring trends in R&D Activities
7. Monitoring the success of funded R&D
8. Reverse Engineering

Linking IP Information to research in KIRDI

2. Source of Technological information for research

- 70 million patents filed
- Majority are first and only publication
- Disclose the invention and how it can be worked out.
- Provide the most current information on the technology
- KIRDI recognizes this potential

Linking IP Information to research

3. Solution to Technical Problem

- A search in Patent Literature can potentially identify solutions to technical problems

KIRDI sees IP infos as potential source of solution

Linking IP Information to research

4. Identifying the patentability potential of R&D activities at earlier stages

A search in Patent Literature will :

- help determine whether the development is likely to be novel (for patenting)
- Or when commercialized is it likely to infringe an existing patent (in case of reverse engineering)

Linking IP Information to research

5. Avoiding Risks of Duplication of R&D

Search for IP Information is important:

- In order to establish the state of the art when a new research is being initiated
- To identify R&D projects that can be funded for innovation

Linking IP Information to research

6. Monitoring Trends in R&D Activities

- Patent Information can be used
 - To monitor technological trends
 - Competitors R&D activities
 - Serve as early warning of future trends in technological fields
- Leather Tanning

Linking IP Information to research

7. Monitoring the success of funded R&D Activities

- No of Patent Applications or grants is a performance indicator of the success of research
- KIRDI is in the last three years filed 7 patent applications

Situation in Kenya

- Current use of IP for R&D is low
- Use of Patent Information depends on
 - Awareness of IP
 - Existence of Technology Transfer Offices
 - IP Policy
 - Technology Transfer Managers

Situation in Kenya

Kenyan institutions are putting in place infrastructure that will promote utilization of Patent Information for Research and Development

- Levels of IP awareness increasing steadily
- 3 universities with IP Policy
- 5 R&D Institutions with IP Policy
- 3 Universities with TTOs
- 2 Universities with Technology Transfer Managers
- 2 R&D Institutions with Technology Transfer Managers
- One R&D Institution has technology business incubator
- One university is developing an Science Park

Examples in Kenya

Generation and Protection of IP

- IP applications in KIPI

	Institution	2004	2008
1.	KEMRI	0	8
2.	KARI	3	6
3.	KIRDI	0	4
4.	ICIPE	3	4
5.	UoN	0	2
6.	JKUAT	0	1
7.	MU	1	2

Thanks for your
Attention