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GOVERNMENT OF TANZANIA



WORLD INTELLECTUAL
PROPERTY ORGANIZATION


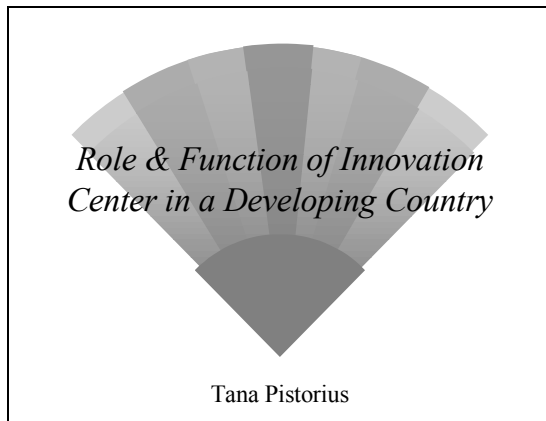
**REGIONAL SEMINAR ON THE BENEFITS OF THE
INTELLECTUAL PROPERTY SYSTEM FOR UNIVERSITIES,
UNIVERSITY RESEARCHERS AND RESEARCH
AND DEVELOPMENT ORGANIZATIONS**

organized by
the World Intellectual Property Organization (WIPO)
in cooperation with
the Ministry of Science, Technology and Higher Education
of the United Republic of Tanzania

Dar es Salaam, June 20 to 22, 2000


**NEEDS FOR ESTABLISHING INNOVATION AND INVENTION SUPPORT
STRUCTURES OR SERVICES IN UNIVERSITIES OF DEVELOPING COUNTRIES;
ROLE AND FUNCTION OF AN INNOVATION CENTER IN
A DEVELOPING ECONOMY**

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Problems of New Ventures

- ▶ Products or services
- ▶ Cash flow
- ▶ Sales & marketing
- ▶ The entrepreneurial team
- ▶ Growth problems




Business failures

- ▶ Real-world environment that lacks
 - certainty, predictability, stability, smoothness.
- ▶ Risks & uncertainty, paradoxes, contradictions, multi-dimensional influences & market imperfections = the rule, rather than the exception




Policy Considerations

- ▶ Turn the statistics around & increase survival rate of start-ups lead to tremendous economic leverage
- ▶ Challenge: To identify new ventures with great promise, provide the assistance they need & help them achieve their potential



UNDP Definition

- ▶ Business Incubator
- ▶ Controlled work environment: foster growth
- ▶ Characteristics - Collegial climate for training, support & development of successful small entrepreneurs and profitable businesses



Characteristics

- ▶ Careful early selection of firms with potential for growth
- ▶ Designated work spaces for each tenant
- ▶ Shared facilities necessary for business
- ▶ small management team
- ▶ access to critical professional services
- ▶ Affordable rent & fees
- ▶ Business “graduating” after 3/4 years

Different Incubation Approaches

- ▶ University Associated Incubators
- ▶ Non-profit Incubators (gov sponsored)
- ▶ For-profit Incubators:
 - Venture Capital Incubators
 - Corporate-affiliated Incubators
- ▶ Other Categories:
 - Targeted Population Incubators; Hub Incubators; The Virtual Incubator; Regional/Rural Incubators etc.

Effectiveness of Business Incubation

- ▶ Low cost of developing & operating
- ▶ Quality management
- ▶ Market for goods & services
- ▶ Development as a part of larger strategy or organization

5 Forces on Successful Business Incubation

- ▶ Local entrepreneurial market
- ▶ Physical characteristics of incubator facility
- ▶ Funding
- ▶ Degree of local co-operation supporting entrepreneurial development
- ▶ The incubator manager & management philosophy

University-Sponsored Incubators

- ▶ Local near/on campus
- ▶ Formal relationships: part of University structure
- ▶ Informal relationships: independent entity
- ▶ Specific Technology
- ▶ Graduation policy flexible

Advantages to University

- ▶ Mechanism for commercialization of University research
- ▶ Helps University Patake in economic development
- ▶ Provides an opportunity in entrepreneurship & business development
- ▶ Opportunity for graduate students


Economic Effectiveness of Incubation

- ▶ Enterprise creation
- ▶ Employment creation (85 000 jobs in transitional economies)
- ▶ Cost effectiveness
- ▶ Location after graduation
- ▶ Non-quantifiable benefits
 - capacity building
 - technology transfer & commercialization




Local Experience

- ▶ SBDC's Hives of Industry independent "workstations" honeycomb
- ▶ Technology Development Incubator - CSIR
- ▶ Technology Development Incubators
 - Stellenbosch Innovation Center
 - CSIR Technology Development Incubator
- ▶ Capricorn Project
- ▶ Pre-competition University Technology Incubator



Pre-Competition Incubator

- ▶ University of Pretoria;
- ▶ Expose students to:
 - management, innovation, manufacturing, social, economic & other factors of entrepreneurship
- ▶ On-campus training
- ▶ "Graduates" - Persequor Trechnopark



Conclusion

- ▶ Incubators can be vital to economic development
- ▶ Best when implemented with other development schemes
- ▶ Private sector need to get involved
- ▶ Where resources are limited, co-operate national or international level

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