PROGRAMS SUPPORTING INNOVATION IN MALAWI, INCLUDING TISCs

Presented by Chifwayi M.K. Chirambo, Chief Assistant Registrar General (IP), TISC National Focal Point at the WIPO Workshop on the Development of the Technology and Innovation Support Center (TISC) Network in Malawi, Protea Hotel by Marriot, Blantyre Ryalls, June 12 to 14, 2018

PRESENTATION OUTLINE

- Who are we?
- Where are we located?
- o Our Mandate
- Research, Innovation and National Policies
- o The Malawi TISC Network
- A Synopsis of the 2017/18 Annual TISC Report
- Challenges

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WHO ARE WE?

- A Government Department in the Ministry of Justice and Constitutional Affairs responsible for the administration of Industrial Property Rights (IPRs)
- ⊘ WE ARE THE NATIONAL INTELLECTUAL PROPERTY OFFICE
- Headed by The Registrar General, who is assisted by the Deputy Registrar General and a team of Assistant Registrars General
- ø www.registrargeneral.gov.mw

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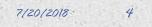
Where are we located?

 We have the following offices across the country: BLANTYRE: HEADQUARTERS
3rd and 4th Floor Fattima Arcade, Haile Sellassie Road
P.O. Box 100, BLANTYRE, Malawi.

LILONGWE: CENTRAL REGIONAL OFFICE Ground Floor Pagat House, Off Paul Kagame Highway P.O. Box 1780, LILONGWE, Malawi.

MZUZU: NORTHERN REGIONAL OFFICE 2nd Floor IK House,

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WHO ARE OUR KEY PARTNERS AND STAKEHOLDERS?

- Ø Business Sector, Universities and Research Institutions
- USERS OF THE NATIONAL IP SYSTEM Legal Practitioners (IP Agents) and Industry
- OTHER GOVERNMENT AGENCIES NCST, COSOMA, ENFORCEMENT AGENCIES
- **O** OTHER GOVERNMENT MINISTRIES
- COOPERATING PARTNERS ARIPO and WIPO (and, by extension, all their cooperating partners)
- AND, OF COURSE, THE GENERAL PUBLIC

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OUR MANDATE

- To administer, amongst other laws, the following Industrial Property legislation:
- A. The Trademarks Act (Cap. 49:01);
- B. The Patents Act (Cap.49:02); and
- C. The Registered Designs Act (Cap.49:05)

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RESEARCH, INNOVATION AND NATIONAL POLICIES

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1. NATIONAL SCIENCE AND TECHNOLOGY POLICY

"Nevertheless, the country still experiences many problems in the development and effective utilization of science and technology. The major problems it faces include lack of a well-developed industrial environment and lack of well-defined policies and plans for national science and technology development. The capacity of national institutions to undertake scientific and technological research and development in the country is inadequate. The country's fiscal, financial, institutional and statutory incentives are insufficient to promote the participation of the private sector in technological development. At the same time, allocations for research and development from public resources fall below the average for countries at the same level of development." - National Science and Technology Policy

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General Policy Objectives

The general policy objectives that will facilitate the achievement of the overall policy goals are to:

- Establish and strengthen national capacity to research, evaluate, select, acquire, adapt, develop, generate, apply, and disseminate technology;
- Develop and raise the national productive capacity and improve competitiveness through the efficient application of technologies;
- Promote and develop traditional, endogenous, new and innovative technologies; and
- Create knowledge and S&T awareness to improve and develop the scientific and technological culture of Malawians.

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Specific Policy Objectives

Within the context of the guiding principles; overall policy goal; and the general policy objectives, the specific science and technology objectives are, among other things, to:

- Improve the allocation and availability of financial, human and physical resources to S&T institutions;
- Enhance multi-disciplinary R&D programmes through the establishment and strengthening of the multidisciplinary research-oriented R&D institutions and programmes;

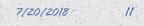
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Cross Cutting Strategies

Cross Cutting Strategy 3: Technology Development and Transfer:

The policy proposes a viable strategy for technology development and transfer involving the designation of a national focal point for technology assessment, monitoring and forecasting of foreign technology in order to promote selective development of endogenous technology.

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Specifically, creation of a framework to:

- Assess Malawi's needs and capabilities based on the state of its S&T and national resource endowment (human, material and institutional) and integrate specific S&T components into socio-economic development planning;
- Monitor imported technology by establishing national capacity to screen technology agreements, search and select imported technology, negotiate, bargain and acquire the technology; adapt the technology; and assimilate and diffuse the technology; and
- Foster selective development of endogenous scientific and technological capacity in order to undertake or promote the assessment of S&T needs and their prioritization;
- Promote innovation at the firm level including development of indigenous S&T and introduction of new products and processes and encourage the conduct of R&D and commercialization of the R&D results at the enterprise level

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Cross Cutting Strategy 5: Extension, Diffusion and Commercialization of Technologies

- In order to promote the extension, diffusion and commercialization of technology, the following strategies will be adopted:-
- Promote contracting-out by Government of technology extension, diffusion and commercialization services to local S&T institutions;
- Encourage tripartite research designed to bring together the research efforts of R&D institutions, industry and Government

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Cross Cutting Strategy 7. Basic and Applied Research

Strategies to promote basic and applied research include taking action to:

- Enhance stakeholder participation in the identification of areas for technological research and development and planning the implementation of specific R&D programmes;
- Develop innovative methods for ensuring adequate funding for R&D activities focusing mainly on technological research without neglecting scientific research;
- Promote private sector funding of R&D activities through the provision of specific incentives;
- O Develop science disciplines in the university system that would lead to the establishment of journals specific to those disciplines such as a Malawi Journal of Chemistry for Chemistry as a science discipline; and
- Establish and strengthen professional associations and societies to enhance discipline-oriented R&D.

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Cross Cutting Strategy 8. Cooperation, Collaboration and Networking

- The situation in Malawi is characterized by low-level cooperation between researchers largely because of the sectoral affiliation of R&D institutions in spite of limited national resources allocated to R&D.
- Cooperation, collaboration and networking at both national and international levels, is essential for successful development and transfer of technology
- International cooperation has the advantage of securing the greater value from expenditure on R&D in that:
- i. It reduces unnecessary duplication of efforts;
- ii. Shortens the lead times preceding the operational stage of research;
- iii. In addition, it increases credibility of research findings, promotes greater concentration of scientific and technological publications, and makes available skills that do not exist in a given country.
- At the international level, cooperation, collaboration and networking are supported by Governments because of the rapidly increasing cost of R&D endeavours, the limited financial resources and the slow growth of national expenditure devoted to R&D.

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Strategies to promote cooperation, collaboration and networking will include taking action to:

- Promote the establishment of professional associations such as the Malawi Academy of Sciences;
- Establish a research funding mechanism that fosters and encourages collaboration and networking among local researchers
- Evaluate and maximise benefits from Malawi's membership to regional and international groupings that promote coordination and integration in science and technology; and
- Encourage the establishment of and strengthen mechanisms that promote collaboration and networking for R&D.
- Policy objective promotion of inter-disciplinary research activities.

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Cross Cutting Strategy 9. Role of the Private Sector

- The private sector has been identified as the engine for economic growth and is responsible for creating demand for S&T programmes and services.
- Technology, and its judicious application in the productive sector, has the potential of enhancing and accelerating economic growth by, for example, improving productivity and competitiveness.
- The private sector should also contribute to the development of technological skills by going into contract research arrangements with local S&T institutions in R&D projects aimed at providing specific services to the sector.
- These services include technology sourcing, transfer, adaptation, assimilation and dissemination.

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In order to motivate the private sector to play a leading role in creating demand for local S&T services, Government will consider putting in place some <u>fiscal incentives including tax relief.</u>

- Strategies to promote the participation of the private sector in local S&T development will include taking action to:-
- i. Establish legislation that makes private sector investment in local S&T development tax deductible;
- ii. Encourage the private sector to subcontract to local S&T institutions and researchers their technology and research development programmes; and
- iii. Invite the private sector to contribute towards the development of S&T policies and strategies so that it influences the application of S&T in national socio-economic development

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Cross Cutting Strategy 12. Intellectual Property Rights

- Patents form an important indicator of the performance of a national R&D system and find systematic use in economic analysis.
- Patent documents form an important source of technological information essential for project identification and commercialization of technologies.
- Consequently, the National Science and Technology Policy endeavours to promote the use of patents for upgrading technology in the Malawian economy with special emphasis on the industrial sector.

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The strategies for achieving this will include taking action to:

- Set up sound and user-friendly patent information services that would readily exploit patents as a source of technological information for the benefit of the economy;
- ii. Encourage and follow-up the review of intellectual property legislation in Malawi to make it consistent with international practice;
- iii. Encourage the establishment of a Malawi Association of Inventors to enhance interaction between Malawian inventors and inventors in other countries;
- iv. Train staff of selected R&D institutions in the use of the international patent classification in general, and the use of patents as sources of technological information, in particular; and
- v. Enhance collaboration with regional and international patent offices.

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 2. DRAFT NATIONAL INTELLECTUAL PROPERTY POLICY
STRATEGIC PILLAR 8
Enhancing the use of Intellectual Property (IP) for economic development and establishment of IP support structures

O TISC Network fits here

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THEMALAWITECHNOLOGICALINNOVATIONSUPPORTCENTRESNETWORK

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OBJECTIVE

Promotion of access to scientific and technological information in universities and research institutions, and its appropriate use in research, by facilitating the setting up of Technology and Innovation Support Centres (TISC) where various databases can be accessed by researchers

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MALAWI TISC NETWORK

University of Malawi, Chancellor College, Zomba Malawi University of Science and Technology (MUST), Thyolo ♦ Mzuzu University (MZUNI), Mzuzu

National Commission for Science and Technology (NCST), Lilongwe

UNIVERSITY OF MALAWI



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MZUZU UNIVERSITY

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2017/18 ANNUAL REPORT

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NATIONAL COMMISSION FOR SCIENCE AND TECHNOLOGY Institution with scientifically and technologically led sustainable growth and development

1. The National Commission for Science and Technology (NCST)

- TISC program did not have a budget line of its own owing to low budgetary ceilings from the Government.
- ✓ High demand for access to HINARI and ARDI although the databases experienced a critical problem of firewall blockages and this affected the patronage of the centre.

Major achievements:

- Provision of technical resources (e.g. databases);
- Reports through meetings with the Registrar General coordinator, Ms Ada Kasopa;
- Capacity Building: the TISC Cordinator attended the 2017 CIDA-PRV funded training program in Stockholm, Sweden;
- Procurement of a brand new computer for accessing TISCs databases; and
- Creating visibility of the TISC Centre.

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2. Mzuzu University

The number of people using the TISC facility is increasing every month, though the official launch of the centre is still awaiting the arrival of the university's new Vice Chancellor.

- The centre is strategically located, easily accessible by the general public and housed in a spacious room that can accommodate up to sixty people in a single sitting.
- The Centre currently has fifteen computers and expects to receive an additional ten from World Bank through a differennt initiative.
- The fifteen computers have an excellent internet connectivity.
- The Centre also houses a mini library for intellectual property publications.

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3. Malawi University for Science and Technology (MUST)

The main challenge which the MUST TISC faces is lack of resources to support communication through webinars and video conferencing with the IP Office and the other institutions on the Malawi TISC Network due to budgetary constraints.

- Situated in the MUST Library, otherwise known as the Bingu wa Mutharika Library and Information Resource Centre, to support MUST's Industrial Research Centre activities.
- The library's webpage has online information links and databases, such as WIPO's PATENTSCOPE, which provide access to patent documentation and publications.
- the centre enjoys the MUST Library dual fibre internet infrastructure to the Blantyre Internet nodes.

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4. University of Malawi, Chancellor College

- The Center is also assisting members of staff and students on how they can file for patent protection Eg. Dr. P. Mpeketula and Mr. Steven Wandale have each filed aplications
- The Centre has a policy approved goal of evolving into a Technology Transfer Office (TTO)

- Organized a display at the Senior Common Room, which was meant to sensitize members of staff on Intellectual Property Rights (IPRs).
- had a pavilion at a conference organized by the National Commission for Science and Technology (NCST) targeting researchers and academic scholars who were attending the conference.
- the Ministry of Agriculture, Irrigation and Water Development invited Chancellor College to the Official Joint Commemoration of the 2017 World Food Day and Africa Day for Food and Nutrition Security at Sangadzi Full Primary School Ground, in Mangochi District. The TISC was also preset with the main aim of sensitizing people on the available technologies that can assist in fighting hunger and improve farming methods and food security.
- Is also working with the newly established Inventors Association of Malawi (IAM) through the provision of IP advice and direction to the members of the association.

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Opportunities for Expansion of the Network

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- The Malawi TISC Network still has room for growth
- Expressions of interest have been received from University of Malawi in respect of the College of Medicine, Kamuzu College of Nursing and The Polytechnic
- The Polytechnic, for instance, undertakes a lot of R&D and reverse engineering work through its Design Studio and Innovation Hub.

CHALLENGES

- a. Administrative and teething issues: at least two of the four centres are facing administrative and teething issues which are affecting the speed at which they are growing. MZUNI has had no Vice Chancellor for over a year now, leaving operations in a policy limbo and slowing down implementation. MUST has relocated the centre a few times before settling it under the Library and Information Services;
- b. Resource Constraints: most of the centres have faced challenges with the implementation of their very ambitious three year strategic plans due to resource unavailability which stems from the fact that the centres were unbudgeted for in the current and previous financial years. This has negatively impacted efforts to improve their visibility within their respective institutions;

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c. Capacity Building: there is need for a continuous training and re-training program, especially in centres which have experienced staff turnovers or added to the initial team of dedicated TISC staff;

d. Connectivity and Communication challenges: lack of video conferencing equipment in the centres has hindered them from participating in webinars and video conferences which form the bulk of capacity building initiatives offered to them by WIPO.

e. Most centres have also been affected by firewall blockades which leave them unable to access the databases for lengthy periods of time. These are largely caused by attempts to access the databases from a different location which, according to them, is unavoidable since researchers work from various location. They have proposed a solution that allows access on the basis of a list of pre-approved IP addresses as opposed to passwords only as a solution.

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TALKING POINTS ON POSSIBLE SOLUTIONS

- NATIONAL INTELLECTUAL PROPERTY POLICY AND IMPLEMENTATION STRATEGY adoption long overdue
- Need for better and stronger inter-disciplinary research initiatives and networks
- Institutionalization of the TISC Project into the budget lines of the various institutions to graduate it from a project into a program

A LAW REFORM INITIATIVE:

- TRADEMARKS ACT Act No. 2 of 2018, assented to by H.E. The State President on 24th January, 2018. Not yet in force, however, awaiting gazetting of implementation regulations
- 2. PATENTS ACT currently at expert consultation phase of the Zero Draft.
- 3. REGISTERED DESIGNS up next.
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THANK YOU FOR YOUR KIND ATTENTION.

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