

Summary of Proceedings Public Hearing

Held on Wednesday March 24th, 2021 from 10:50 a.m. to 12:43 p.m.

Venue: Virtually Via the Zoom Platform

Subject Matter: An Inquiry into the role of NIHERST as it pertains to the development of the STEM sector in Trinidad and Tobago

Objectives of the Inquiry

The objectives of the inquiry are as follows:

- 1. To examine the role of NIHERST in the development of Science Technology and Innovation (STI) policy to facilitate economic diversification
- 2. To assess the challenges faced by NIHERST in fulfilling its mandate.
- 3. To examine the extent to which NIHERST has influenced the development of tertiary education and training in STEM

Committee Members

The following Members were present:

Dr. Varma Deyalsingh Chairman

Mr. Esmond Forde, MP Vice- Chairman

Mrs. Lisa Morris – Julien, MP Member Ms. Khadijah Ameen, MP Member Mr. Nigel De Freitas Member Ms. Jayanti Lutchmedial Member

The following Members were excused:

Mrs. Ayana Webster-Roy, MP Member Mrs. Renuka Sagramsingh-Sooklal Member

Witnesses Who Appeared

The following officials appeared before the Committee:

Ministry of Education (MOE)

Mr. Kurt Meyer Permanent Secretary (Ag.)
 Mrs. Lisa Henry-David Chief Education Officer (Ag.)

National Institute of Higher Education, Research, Science and Technology (NIHERST)

• Mrs. Marlene Lord-Lewis President

• Ms. Nandi Ogiste Registrar (Ag.)

• Ms. Lovaan Superville Vice President, Science and Technology (Ag.)

Mr. Pedro Britton Senior Accountant
 Ms. Julie David Senior Policy Analyst

Key Issues Discussed

The following are the main issues highlighted during discussions with the **Ministry of Education** (**MOE**):

MOE's Vision for NIHERST

- 1. The Ministry of Education's vision for NIHERST is:
 - a. for the organisation to be a key driver in pushing a Science, Technology, Engineering and Mathematics (STEM) agenda in Trinidad and Tobago; and
 - b. the use of technology in the current virtual learning environment provides further opportunities for school-aged children to develop an interest in STEM.
- 2. The Ministry therefore sees NIHERST as a vehicle for brining technology into the classroom setting for all students from Early Childhood Centres to Secondary Schools.

Collaboration between MOE and NIHERST

- The MOE is concerned about under-performance of students in the sciences and other
 areas. The Ministry is in the process of providing support for these students. They require
 additional research on the issues affecting teaching and learning in order to develop
 solutions for these challenges.
- 2. There is room for the Ministry to work more closely with NIHERST to incorporate STEM in the national curriculum.
- 3. CXC is in the process of introducing new subject areas. As such, there must be consistent communication between the MOE and CXC in order to inform curriculum development at the national level.
- 4. The MOE will seek to increase consultations with tertiary institutions to align STEM programmes with the skills required in the labour force.
- 5. The MOE intends to work with NIHERST to facilitate training of teachers in the use of technology to conduct virtual tours virtual field trips.

Oversight

1. A Cabinet note to appoint the NIHERST Board of Governors is currently with the Ministry of Finance. As such, the Board should be appointed shortly.

The following are the main issues highlighted during discussions with the **National Institute of Higher Education, Research, Science and Technology (NIHERST):**

Policy Environment

- 1. The draft National Science and Technology Policy was completed in 2014 but it was recently submitted to the MOE in March 2021, following a request from the JSC to provide a copy of the document in prior to the public hearing. An undertaking was given that the Policy will be revised within a six months period.
- Given the de-linking of NIHERST from the then Ministry of Science and Technology, there is a need for a revision of this policy to align with its current operations under the Ministry of Education.
- 3. Science, Innovation and Technology is the engine of growth for economic prosperity.

Stakeholder Engagement

- 1. NIHERST prepared a strategic plan for the period 2019-2022. This strategic plan included development of a virtual platform.
- 2. Due to the Covid-19 pandemic, plans to use and develop the virtual platform have been accelerated. Some of the planned initiatives include virtual camps and virtual field trips.
- 3. NIHERST works with students enrolled in the formal educational system. It also engages in community outreach to engage youth outside of the formal school system.
- 4. NIHERST offers plans to reach out to the Ministry of Youth Development and National Service to engage youth in under-served communities.
- 5. They also use social media as part of their marketing strategy
- 6. The Digital Fabrication Lab (Fab Lab) is located at the National Science Centre in Maloney and was established to stimulate entrepreneurship in Trinidad and Tobago.

Plans for training includes topics such as Intellectual Property, Project Management and Computer-Aided Design (CAD).

- 7. The Fab Lab has provided virtual training during the Covid-19 pandemic.
- 8. NIHERST aims to expand the scope of the Fab Lab to become a Fab Academy, which will reach a wider range of entrepreneurs who are equipped to develop innovative products and prototypes.

Staffing and Funding

- 1. NIHERST has experienced a significant decline in funding.
- 2. Loss of quality staff has had a negative impact on NIHERST's ability to support research and planning for the MOE and other government Ministries
- Staff health and safety during Covid-19 has been a priority. Staff are therefore rostered
 on a rotational basis. NIHERST would like to explore a work from home model for the
 future.
- 4. NIHERST has the capacity to hire staff but must receive approval from the MOE.
- 5. There are currently 102 people employed, the majority of whom are employed on a contractual basis. There are 54 permanent staff approved under NIHERST's establishment.

Collaboration and Partnerships

- 1. There is currently no formal relationship with the Public Service Academy to provide training for Public Servants in research methodologies and practice. However, this is something NIHERST is willing to explore.
- 2. Members of the public, educational institutions and other entities interested in partnering with NIHERST can contact their Marketing and Communications Unit.
- 3. NIHERST has partnered with the Water and Sewerage Authority (WASA) in developing rainwater Harvesting Systems for water-scarce communities.
- 4. NIHERST plans to meet with the Ministry of Planning and Development to discuss conducting a manpower audit of the STEM sector in Trinidad and Tobago with a view to identify future employment prospects in the industry.

- 5. NIHERST is working with the Intellectual Property Office of the Ministry of Trade and Industry to treat with Intellectual Property-related issues and have developed a draft MOU to address the same.
- 6. The work of NIHERST complements the national curriculum developed by the MOE.
- 7. NIHERST collaborates with the University of Trinidad and Tobago (UTT) in an informal manner, however, an MOU was drafted to address further collaboration and corporation.
- 8. NIHERST has not collaborated with the College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTAATT).

Future Plans

1. The Institute desires a home base as the current Science Centre is not suitable.

The hearing can be viewed on our YouTube channel via the following link: https://www.youtube.com/watch?v=JnguyEzuS9E

Contact the Committee's Secretary

You may contact the Committee's Secretary at <u>jsclasasc@ttparliament.org or 624-7275 Ext.</u> 2277/2627/2282

Committees Unit March 29, 2021