Science, technology and Innovations (STI) Indicators

Stakeholder consultation meeting

Held on Thursday 22nd April, 2021

Garden Court, Kitwe

Zambia

1. Introduction

This report summarises key discussions at the Zambian stakeholder consultation meeting on STI which was held in Kitwe, Zambia. Participants where drawn from Universities, Research Organisations, NGOs and government.

The purpose of the meeting was to seek stakeholder inputs and perceptions on the science technology and innovation (STI) indicators for the continent and their applicability to Zambia.

In Zambia, there are a number of institutions which are both producers and consumers of STI. The mains institutions are the National Institute for Scientific and Industrial Research (NISIR), the Ministry of Higher Education, Universities, government agencies and research institutes.

Although several agencies and institutions engage in STI, coordination and collaboration among the various stakeholders is lacking. There is no central database and guidelines for sharing of data which affects reporting. Stakeholders where elated by the scoreboard as a tool that has great potential to inform decision making as it provides an opportunity to use the web-based system as a convening tool where agencies interact and harmonize their STI efforts.

2. Stakeholder's perception on indicators

The various indicators developed where considered important although it was felt that currently, most indicators where developed by international agencies and there seem to be lack of national dialogue and identification of key measures of progress in STI. After assessing the various indicators identified for Zambia, stakeholders noted that most of the indicators were not updated and therefore lack pertinent information required for decision making. This is attributed to challenges at the institutional level, capacity issues as well as methodological challenges and limitations in the collection, aggregation of the STI indicators.

Stakeholders observed the following on the various categories of indicators for Zambia:

a. There is need to attach value to research and development (R&D) and its role in decision making.
b. The best indicators had been data collected by foreign agencies.
c. There are several institutions that collect data however updating of information is poor. For example, stakeholders did not agree with the Tuberculosis (TB) indicators falling under the worst indicators as there is available data at various levels including district levels. Several studies have been completed on TB and therefore there is sufficient information available which requires updating in national databases.
d. Although Zambia has highlighted the need for diversification from mining into agriculture and entrepreneurship, there seem not be sufficient indicators to track these them.

There is lack of government institutions that look on the effectiveness of indicators. Stakeholders revealed that currently efforts of collecting data are relatively ad-hoc and one-off and lack of a fully operational system in terms of an STI data collection framework and long term follow up mechanisms– thus the need for web-based system that captures key operational elements e.g. data sources, data organization, management and usability as well as greater sustainability structures (e.g. specific capacity support, partnerships among others). There is an opportunity to use the web-based system as a convening tool where agencies interact and harmonize their STI efforts.

3. Challenges

Stakeholders identified a number of challenges among them capacity gaps and lack of coordination and collaboration and information sharing among agencies. Further, most STI national agencies are not sufficiently funded, are understaffed (both in terms of numbers and variety of required skills). This therefore potentially reduces follow up and the tracking of indicators already organized in a web-based format. There is need for capacity building of institutions and individuals on collecting and aggregating data and stored   Data is often stored on personal computers. It is imperative that access to data is enhance by investing in developing ICT infrastructure which can allow institutions to regularly submit data. Zambia has several institutions which deal with STI which are however fragmented and lack coordination. There remains disintegration among agencies in the way the country approach STI indicators for decision making.

4. Conclusion and recommendations

Indicators for STI in Zambia require strengthening and regular updates so that they can inform decision making. The scoreboard is a very innovative tool that will be useful in decision making so that decision makers can easily refer to it in the process of making their decisions. It was noted that for the Zambia case, there is need to ensure that various STI agencies deposit data in a central repository. It is imperative that a framework be developed to ensure the sustainability of data collection, management, communication, and feedback.

Stakeholders noted the need to collect quality and reliable data to feed into the scoreboard. For a functional scoreboard, there will be need to strengthen structures in terms of human/institutional capacity for data collection, management and establishment of a working community of practice to support the process. Institutional coordination and collaboration among various agencies in Zambia is poor. Information sharing is therefore lacking. Sectoral and interagency collaboration and coordination is important and should be promoted to reduce conflicts. There is further need to come up with a country's data management policies to guide and legitimize the process of scoreboard development, management and decision process.

Some of the indicators that can be included on the scoreboard include indicators for:

- Economic diversification
- Maternal mortality
- Research and development
- Access to safe drinking water
- Value addition
- Country capacity to attract talent
- Reliability of Electricity (Access, Quality)