# **Editorial**

# The current state of research development in Namibia

Namibia has a number of unique features including history, the landscapes, a diversity of cultures, and the small population. All these attract researchers and thus create a need for a liberating yet ethical and stable research environment. The need for research support structures and mechanisms, and multi-disciplinary research teams working across institutions within the country cannot be debated.

The main structure coordinating research in Namibia is the National Commission on Research, Science and Technology (NCRST). The government also has different research units that differ in the magnitude and extent of research carried out, and these include: small units within directorates that are responsible for information gathering, storage and interpretation; units within directorates that are responsible for carrying out the research, sometimes considerable, as part of the drafting of legislation; directorates within ministries whose main function is research and development; clearly defined institutes within ministries that operate from purpose built facilities that offer essential services to a wide variety of clients and whose research is an essential component of the services [1]. Both the University and the Polytechnic of Namibia are the main institutions given the task of producing the future research community. There are several private and non-government organization (NGO) sector research institutions conducting contract, commissioned, and community awareness research within the country.

## **Research Support mechanisms**

The research support mechanisms offered by the government of Namibia are concentrated mainly in the Council for Research and Industrial Innovation (CRII), which assists with Data access, Permits and research facilitation, Promotion of the work of affiliate institutions, Staff development, Research Ethics, Promotional Activities, Patents, copyright and intellectual property rights, marketing and development, and quality control issues. These include assisting the National Library to strengthen its key central role in providing access to research data generated throughout government; offering ICT services to both the National Library and Archives to offer a high quality online data access service to the research community. The National Museum is seen as a key institution to take the lead in the process of popularizing

research results. Activities such as the 'insectathon' that the Museum has promoted in the past are seen as valuable models that can be developed to include other areas and activities such as the Young Scientist competition [1]. Both the University and Polytechnic of Namibia have well established research support mechanisms.

### Type of research conducted

Houghton [2] concludes that research as a mode of knowledge acquisition and transfer is increasingly characterized by greater emphasis on interdisciplinary, multidisciplinary, trans-disciplinary approaches; enhanced diversity in the locations of research activities; an increasing focus on problems, rather than techniques; and more emphasis on collaborative work and communication. Currently most research centers/institutions engage more in subject specific rather than multidisciplinary research.

The main research fields identified in the draft national research policy include: Agriculture, Archaeology and Anthropology, Arts and culture, history and religion, Biology and biotechnology, Community development, Education, Environment, Geology, Law, Marine, Medical, Physical Sciences, Social and political sciences [3].

According to Sayed et al [4], the country produced a total of 480 publications during the 2001- 2007 period in the following fields: Astronomy and astrophysics, marine sciences, environment, chemistry of the earth, discovery and innovation, and agriculture and geology.

### Dissemination of research findings

There is a general 'scarcity' of Namibian research output in recognized dissemination media. However, researchers in Namibia source material for conducting research from a variety of scholarly outputs. These include journals, conference papers, monographs, book chapters, books, working papers, research and technical reports and databases. Journals remain the preferred means of communicating scholarly work. Conference participation and the delivery of papers at these gatherings of academics and professionals is another important medium for accessing cutting-edge research, while at the same time providing the opportunity to engage with peers and communities (Abrahams, et al [5]). The current status of dissemination through ISI journals is given in Table 1 below comparing Namibian ISI journal output to selected Sub-Saharan countries.

Tanzania

Zambia

Zimbabwe

80.90

30.10

111.60

92.90

28.60

96.70

122.80

35.90

80.10

Country Name	2001	2002	2003	2004	2005	2006	2007
Botswana	50.60	60.40	66.50	63.60	48.40	67.10	61.60
Lesotho	2.40	2.40	2.60	2.80	0.80	5.70	3.00
Malawi	44.20	48.50	43.10	42.30	40.50	46.70	62.90
Mozambique	14.30	12.60	9.10	12.90	24.20	20.90	23.90
Namibia	17.30	21.60	19.70	12.30	23.40	20.60	14.10
South Africa	2,291.40	2,328.00	2,204.80	2,319.50	2,395.40	2,642.70	2,804.60
Swaziland	2.40	3.50	5.70	2.00	2.80	1.40	4.30

76.30

22.00

86.80

107.00

30.90

62.20

128.20

39.60

63.20

88.80

25.60

63.80

Table 1: Number of Scientific and Technical Journal Articles (source: <a href="https://www.worldbank.org">www.worldbank.org</a> [6])

The low rate of research output indicates low knowledge generation and diffusion. Investigators argue that publications in ISI-journals are not necessarily the best indicator of research activity in a country, especially in developing countries, where there are many "informal" research institutions who produce research findings in various non-standard dissemination media. Also, it is well documented that journals in most African countries, are not well-represented in ISI-indexes. Unless one also takes into account scientific production in local African journals, one still has a very biased and restricted view of research in such countries (Mouton, [7]).

Most of the research institutes within the country seem to be disseminating their findings in other media like conferences, reports, books, and non-ISI journals. The extent of dissemination is mostly national and regional (mainly reports), with a few international media.

Frequency of dissemination is also a good indicator of active research in a country. Most institutes publicize their results annually, rather than quarterly and monthly. The low frequency of dissemination also indicates low knowledge generation within the country.

# **Research Funding**

If the Vision 2030 (Joining the ranks of high-income Countries) is to be realized, Namibia needs to improve on the current state of research by among other things, implementing the NDP3 which include (1) increasing the supply

of graduates in skill areas in high demand; (2) strengthening the institutional capacity and quality of tertiary education; and (3) increasing training of both undergraduates and postgraduates abroad in areas not available in Namibia (Sayed, [8]). Currently, Namibia does not have a nation-wide research funding mechanism. The ministry research units, and the market they serve, both tend to be too small to be able to sustain viable independent units that could exist, in the main, from income generated from the services that they offer.

The sources for research funding are mainly limited only to internal University budget, and research granting agencies outside Namibia (UNAM, [9]). The Research & Publications Office (RPO) for University of Namibia, and the Institutional Research and Publications Committee (IRPC) of the Polytechnic of Namibia administer budgets that cater for Research Projects, Conference attendance and Publication charges within their respective institutions.

#### **Conclusion Remarks**

The current state of research within the country can be improved through development of sustainable national funding structures and mechanisms, encouraging and supporting presentation of research papers at regional and international conferences, reporting of research findings in appropriate media, keeping a frequently updated research database and formation of research linkages/networks nationally and within the region.

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Editor: Nnenesi Kgabi, Pr.Sci.Nat.