



Policy Brief
June 2012

Promoting the use of research evidence to inform decision making in Zanzibar

How does R&D contribute to
Poverty Reduction Strategies in Zanzibar?



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Summary

The centralization of research outputs is extremely important for effective planning and developmental policies in Zanzibar. It is therefore important that research is core and a prelude in setting up developmental plans to generate new knowledge that serve to guide what kind of development is required and at what level. Research and development (R&D) has recently gained particular attention in relation to the theories of economic growth with particular focus on technological changes explaining the growth patterns of world economies. This stems from the observation that innovation in technological is often birthed in research and development sectors using human capital and the existing knowledge stock¹. R&D in turn, uses this new technology and innovation, which boosts factors behind long-run growth and to also explain for the differences in growth performances of economies. This brief highlights some key findings with regards to R&D activities in Zanzibar and provides high level analysis of linkages between R&D investments, the use of evidence from research and economic growth. The findings of the study indicate that the institutionalization of research in Zanzibar Government offices calls for robust national coordination framework to reinforce the presence of structures. Also, more work is still needed for future integration of research outputs in Zanzibar governmental policies and strategies to establish evidence-based decisions. It is a significant milestone for the Zanzibar Government to introduce research section in all sectoral ministries. This is a fingerprint of good intention towards good governance and sustainable developmental policies.

¹ Ahmad, J. S. & Seyede M. A. (2009). *R&D and Economic Growth: New Evidence from Some Developing Countries*. *Australian Journal of Basic and Applied Sciences*, 3(4): 3464-3469.

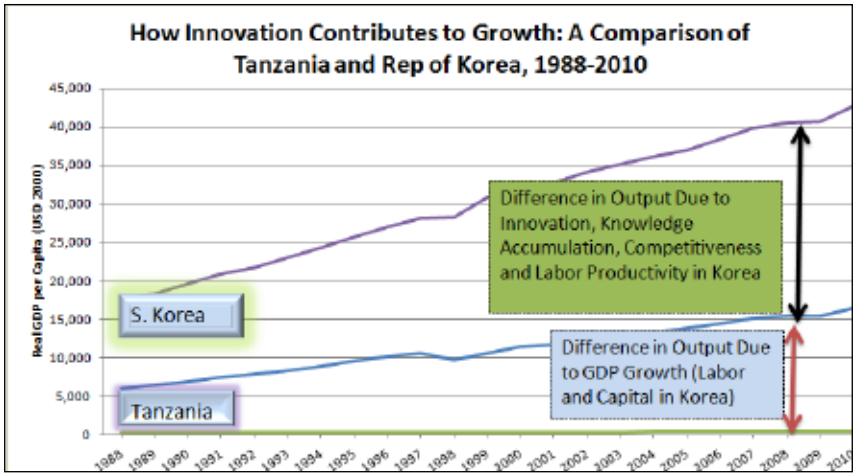
Introduction

Research and Development (R&D) are two broad areas that are closely inter-related and feed into each other. The presence of development usually prompts for research and the presence of research results inculcates new innovations and subsequently planning of new interventions. Development plans and decision-making rely greatly on scientific evidences obtained through researches that are usually undertaken as preliminary activities to assess developmental situations. It is when research information has guided into planning that routine data can be generated out of activities undertaken; which serve to monitor the implemented plans and interventions and eventually use research approaches to evaluate achievements overtime. The recent increase in attention given to R&D is based on the observation that R&D enhances the production of final goods and leads to permanent increases in the growth rate of output. R&D is therefore identified as a key long-run determinant of productivity and economic growth.

Important to note is that most R &D investments still goes to industrialized countries and the United States is the biggest receiving country. The largest cross-border flows of R &D take place between the three main regions: the United States, the European Union and Japan, which may in this case demonstrate the correlation between high levels of R&D investment and economic growth. There has recently, however, been a significant shift of R&D investment from the traditional 'North' to Asian countries, China and India in particular. This shift has resulted in significant levels of economic growth in the region, further illustrating the link between R&D and economic development. However, that being said, the total expenditure of R &D activities in African countries including Tanzania mainland and Zanzibar remains extremely low compared to the rapidly developing Asian countries. However, funding for R&D is expected to improve significantly following the announcement by His Excellency President Jakaya Kikwete in February 2009 to increase the level of funding to reach 1% of the GDP within a short period. For financial year 2010/2011, the government of Tanzania for the first time in the history allocated **TZs. 19 Billion** for R&D activities.

Figure. 1 illustrates the differences in R&D inputs in South Korea as compared to Tanzania. What this analysis reveals is the direct relationship between economic growth of developing Asia and investments on R&D.

Figure 1. Comparison of economic growth between South Korea and Tanzania



Source: Extracted from data collected by COSTECH to inform Innovation Policy in Tanzania

Zanzibar² Economy and Poverty Reduction Policy Framework MKUZA and Vision 2020 at Glance

Zanzibar has been enjoying economic growth averaged 6.2 % from 2006-2012. The GDP per capita has increased from 14.3 % to TZs 0.8 million (USD 547) in 2012 compared to TZs 0.7 million (USD 558) in 2009³. Service sectors (i.e. trade, hotels, restaurants, transport, finance and communications) dominate the GDP growth in the Zanzibar economy. Tourism industry also plays a key role in Zanzibar’s economic growth. Other sectors are agriculture and industrial sectors. Important to note is that Zanzibar still depends on agricultural activities; about 70 % of the population depends on agriculture for their living which signals the opportunity for increased R&D activities and investments in this sector.

Zanzibar development strategies are well elaborated in long term development vision – the Zanzibar Vision 2020. Overall, the goal of Vision 2020 is to eradicate the absolute poverty and to attain sustainable development of all Zanzibar people. The overall objective is the attainment of the broad based growth with high growth rate averaging between 8 to

² Zanzibar is one of the political entities constituting the United Republic of Tanzania. It consists of two large Islands, Unguja and Pemba and few sparsely populated islands. Zanzibar has considerable autonomy in her domestic affairs administered through the Revolutionary Council and the House of Representatives.

³ Zanzibar Economic Bulletin Vol. 4 (1) July – September 2011

10 % by 2020. Numerous strategies and policy documents have then been developed and implemented such as:

- The Zanzibar Poverty Reduction Plan (ZPRP)- 2002-2005;
- Zanzibar strategy for growth and reduction of poverty I (MKUZA I) – 2009-2010;
- Zanzibar strategy for growth and reduction poverty II (MKUZA II)- 2011-2015;
- Zanzibar Growth Strategy;
- Sectoral Policies.

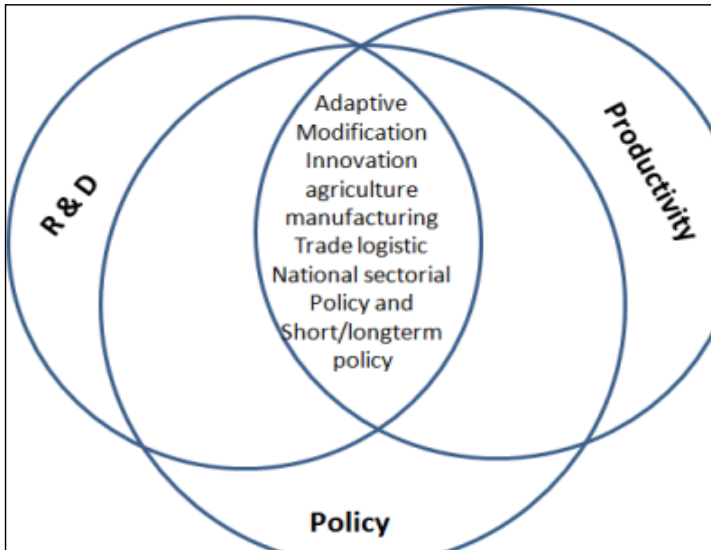
Several interventions have also been proposed for combating poverty and improving living standard of the Zanzibaris. These include:

- Creation and enabling environment for growth;
- Promotion for sustainable pro-poor and broad based;
- Reduction of income poverty and the attainment of overall food security;
- Ensure equitable access to demand driven quality education, that is gender and environmentally sensitive;
- Improvement in health status, including reproductive health, survival and well being of children, women and vulnerable group etc.

The above initiatives demonstrate the Revolutionary Government of Zanzibar (RGoZ) commitment to bringing about changes in the social, political and economic developments of Zanzibar and Tanzania at large. This commitment has been grounded in using research outputs to inform decision making at the national level, as research should reflect the needs of the community. As a result, the RGoZ has introduced the Directorate for Policy Planning and Research in each ministry of the Government. This move is propelled by the limitations in current development strategies that have not produced the intended results in reducing poverty. Therefore, there is a push to use evidence base decisions to inform poverty reduction strategies and policies.

However, the weak institutionalization and synchronization of R&D in government policy making machinery is a significant gap for a robust coordination framework. Investment on R&D is a critical step towards poverty reduction strategies which are anchored in evidence produced by research. Linkage between research, public sector and policy environments is thus seen here as a critical cornerstone in boosting economic growth and poverty reduction as depicted in **Figure 3** below.

Figure.3. Linkage between Policy, productivity and R&D



Source: Modified from MKUKUTA (*Mpango wa Kutekeleza na Kukuza Uchumi Tanzania*) II document, 2010

Based on previous identified links between R&D and economic growth, it is notably important to synchronize R&D and agriculture in Zanzibar for economic growth and poverty reduction. Various scientific models have projected future trends in agriculture growth resulting from efforts in R&D investment which implies that countries like Tanzania and by association Zanzibar, could achieve substantial growth in agriculture and poverty reduction⁴.

Current status of R&D in Zanzibar: What is the status of research?

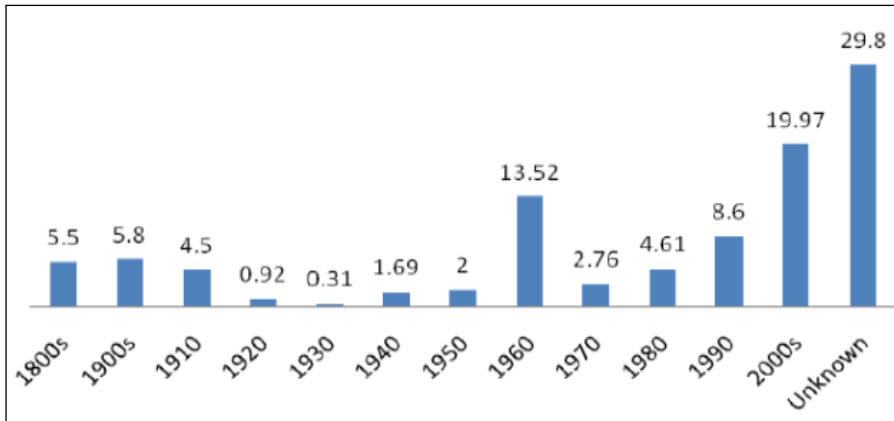
A recent study shows that there has been a myriad of R&D activities been conducted for past two centuries (from the 1800s). This study for research information for the whole of Zanzibar has been the first, attempting to bring research and evidence from research for decision making. The RGoZ has committed itself to bringing about changes in the social, political and economic developments of Zanzibar and Tanzania at large using research outputs. To accomplish this, the government introduced research components in all planning and policy departments in all public

⁴ Alejandro Nin- Pratt (2011). *Agricultural R&D Investment, Poverty, and Economic Growth in Sub-Saharan Africa; Prospects and Needs To 2050*. Conference work paper 9. ASTI/ IFRI- FARA conference.

sector ministries.

Findings from the study which are graphically illustrated in **Figure 2** reveal that research trend activities in Zanzibar have fluctuated dipping in the 1920s to 1940s and again in 1970s and 1980s. However, from the 1990s, there seems to be an upward trend depicting growth in research activities on the island. Interestingly, results show that 5.5 % of all researches activities in Zanzibar have been carried out in the late 1800s. Most of studies have been carried out by R&D Institutions (45.6%) followed by Universities (9.5 %) and Governmental ministries (8.3 %). In terms of specific topic areas, the research field was dominated by biological, environment and natural resources studies. In assessing the diversity of research conducted in Zanzibar, the present study found that research on environment were more predominant (38.03 %) followed by biological science (23.94 %), natural resource management (23.94 %), and the least one is socio-economic research (2.82%).

Figure.2. Trends of research activities in Zanzibar



Source: Report on research collection and auditing in Zanzibar” compiled by State University of Zanzibar in collaboration with the second Vice President’s Office– 2012

This may be reflective of the fact that Zanzibar is an island, so it may be indicative of the surroundings. The results also show that early researches were on natural sciences predominantly agriculture and fisheries dating back from 1830’s. There have been a wealth of research undertaken by

institutions in Zanzibar but their records are not well documented. Also, the limited research in the social sciences may mean neglect to important sectors such as education, health and others.

However, despite this, the study revealed weaknesses in coordination and dissemination of research findings, meaning that the evidence collected is not adequately used in informing decisions and policies regarding poverty reduction in Zanzibar. What this means is that the impact of research on the national economy is almost negligible. In addition, critical financial and technical capacity challenges identified in the study which further serves to weaken the ability of good evidence to come out of research.

What should be done? Policy Implications

Zanzibar has made some significant progress in promoting R&D investments and activities notably introducing research components in all planning and policy departments in all public sector ministries. However, the institutionalization of research in government offices calls for a sound coordination framework, despite presence of these structures. Findings from the study indicate presence of research interests, but this is coupled with weak capacities, signaling the need for robust coordination mechanism to be established at the national level. Based on the above analysis, Zanzibar R&D efforts could benefit from pursuing the following policy recommendations:

1. Establishment of Research Platform based on national research agenda where research results can be shared and discussed widely. Policy briefs to be developed in Kiswahili and English, printed and distributed to people to read useful results originating from researches;
2. Effectively utilise the Directorate for Planning and Research and ensure that work plans and long term strategic plans of the Ministries, Departments and Agencies (MDAs) have a strong R&D element;
3. Endorse a national capacity building plan on research as well as sensitisation campaign to orient planners and managers to use research data and evidence for planning and decision-making;
4. Inclusive R&D agenda: private sectors and NGOs to be taken on board to undertake research as well as provide funds and capacity buildings programs;
5. Promoted and encourage universities to play the key role on providing

training on research for staff from public and private sectors. Furthermore, the Institutions should start to think on commercialization of technology even in small scale;

6. The Zanzibar government should follow up on the commitment to allocate a percentage of GDP in every national budget for R&D activities in Zanzibar.

This brief is based on the report entitled “A report on research collection and auditing in Zanzibar” compiled by the State University of Zanzibar (SUZA), in collaboration with the second Vice President’s Office – Research Coordination Office, for the Commission for Science and Technology (COSTECH) by Dr. Mohammed Sheikh & Dr. Hassan Mshinda. Dr. Sheikh is from the SUZA and Dr. Hassan Mshinda is the Director General of the COSTECH.



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