The Quest for Coordination of the Higher Education System in Namibia

2010

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PREFACE

At the moment, Namibia enjoys a small-sized Higher Education (HE) system. However, the system will in future expand as the country slowly marches along the designed path of transforming into a knowledge based economy. The inevitable expansion and diversification of higher education provision, calls for improvement in order to enhance the efficiency and productivity of the individual institutions. It is therefore critical for Namibia, as many other countries have done, to adopt the global trend of coordination as a means to make the higher education system more responsive and efficient.

Higher Education Institutions (HEIs) in Namibia, whether public or private, cannot and should not exist in isolation. This in itself demands for the development of a comprehensive yet not complex coordination system in providing higher education. Such a system should factor in the need for coordination at the institutional level, among different institutions and of course at the national level. Through this report, the National Council for Higher Education (NCHE) which has the legal mandate of coordinating higher education provision in Namibia, intends to set the stage for the ensuing process of developing what many regard as "the missing platform" for delivering a harmonized yet diversified higher education. This report advances different approaches to coordination but however places the choice of the system to coordinate higher education squarely on the shoulders of the NCHE and its principal stakeholders. However, what seems clear is that for the coordination system to be developed to have meaning, individual higher education institutions should embrace the need to adopt such a system. Certainly without a properly coordinated system of higher education, existing inefficiencies and wastage as exemplified by instances such as duplication of academic offerings will continue to persist.

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ABBREVIATIONS & ACRONYMS

ACTET	Advisory Council on Teachers' Education and Training
BETD	Basic Education Teachers' Diploma
CIET	Centre for Innovation, Entrepreneurship and Technology
CRII	Council for Research and Industrial Innovation
CRST	Commission for Research, Science and Technology
ETSIP	Education and Training Sector Improvement Programme
GDP	Gross Domestic Product
GRN	Government of the Republic of Namibia
HE	Higher Education
HEIs	Higher Education Institutions
HODs	Heads of Department
ICT	Information and Communication Technology
ICTs	Information and Communication Technologies
IUM	International University of Management
MoE	Ministry of Education
MoF	Ministry of Finance
MTI	Ministry of Trade and Industry
NACE	National Advisory Council on Education
NCTS	National Credit Transfer System
NCHE	National Council for Higher Education
NDP3	Third National Development Plan
NDPs	National Development Plans
NIED	National Institute for Educational Development
NPC	National Planning Commission
NSI	Namibia Standards Institute
NQA	Namibia Qualifications Authority
NQF	National Qualifications Framework
PDPs	Product Development Partnerships
PhD	Doctor of Philosophy
PoN	Polytechnic of Namibia
R&D	Research and Development
SGB	Standard Generating Bodies
UNAM	University of Namibia
UNESCO	United Nations Educational, Scientific and Cultural Organization

EXECUTIVE SUMMARY

One of the basic functions of higher education in any country is to satisfy varying needs of skills development and training. In so doing, it is paramount that higher education relates its programmes to regional, national and international socio-economic needs of the country in which it operates. In the effort to achieve this goal, each HEI has a specific function and role to play. The role should and necessarily needs to vary according to each institution's own mandate and character. If this total higher education system is to function effectively and develop, it is necessary for a coordinated plan to be instituted to assure the availability of quality educational opportunities to everyone and also to make sure that national development plans are achieved without unnecessary duplication, consequently wasting the country's resources.

Coordination can take many forms, and may be instituted through the establishment of instructive units, through compulsory administrative procedures and/or through conditions for financing research. This research project, commissioned by the NCHE in Namibia, examines questions related to coordination of the higher education system and between the higher education institutions in Namibia.

Higher education in Namibia consists of universities, a polytechnic and colleges of education. According to the Higher Education Act No. 26 of 2003, being a post-secondary entity does not constitute automatic qualification as higher education, although it does mean qualification as tertiary education. For example, even though vocational training centres and other institutes are formally part of post-secondary education, they are not considered HEIs. Instead, they are part of the tertiary education system. The institutions of higher education can be grouped into three groups: a) those that operate autonomously, like the University of Namibia and the Polytechnic of Namibia; b) those that operate within the operational sphere of the Ministry of Education, namely Colleges of Education; and c) those registered as private higher education institutions, such as the International University of Management.

There is a general perception amongst various stakeholders that the set up of higher education has a 'three tier' dimension, ranking universities at the top, polytechnic in the middle and colleges of education at the bottom. This perception is not accurate, since currently there are no acceptable criteria for ranking HEIs in the country. Moreover, HEIs have different mandates and missions; as such, they should not be compared in the absence of criteria. Currently, Namibian HEIs offer education at the levels of certificate, diploma, undergraduate degree, graduate and some post-graduate levels, each typically pursuing different levels of capacity in skill and knowledge inculcation for their graduates. A policy question that arises in a setting such as this, where there is not only some diversity of post-secondary institutional types, but also where there is an assortment of higher education operational frameworks, is this: Should there be some formal arrangements for coordinating groups of different and/or same types of institutions, and if so, what form should these arrangements take?

The data used in this study was collected from NIED, NCHE, PoN, NQA, MoE, UNAM, four Colleges of Education, and IUM. A mixed-method approach, namely, qualitative and quantitative methods was used. The research team reviewed relevant literature, which included national policy documents, international scientific journal articles, and other publications of higher education, particularly in Southern Africa. The review of literature informed the design of the research instruments (questionnaires, key informant interviews and field observations) and the analysis techniques. Fieldwork for this study was carried out over a period of three months at different intervals from May to July 2008. The extended fieldwork period was due to circumstances beyond the control of the research team.

Findings:

1. The results show that the current lack of coordination is perceived to be one of the drawbacks to the success of higher education in Namibia. The study found that all HEIs see the need for a coordination system to be put in place. Furthermore, the study investigated the function of several change agencies in the higher education system. While it was found that both HEIs and change agencies are doing their best, the biggest constraint to the desired functioning of HEIs is not coordination alone. As the study shows, coordination itself, in the absence of a well articulated national higher education policy that creates the enabling environment and the ownership of a shared vision and goal cannot be effective because there is no common denominator.

2. All HEIs reported that they experience problems of coordination, especially between the HEIs themselves. The reason for this is mainly due to the fact that the purpose of coordination, and its rationale as well as value in the overall function of HE as a system, is not clearly articulated. The purpose of harmonizing higher education activities is not only to avoid duplication and encourage joint material production and course offerings, but also to enable the higher education sector to proactively respond better to the needs and challenges of Namibia.

3. The study found that the system of higher education is fragmented. One of the major barriers to the coordination of the higher education system is the lack of shared vision and shared sense of common purpose at the philosophical level. The shared vision must be compelling enough for HEIs to see coordination as a natural process. According to the results, although HEIs feel strongly that coordination is imperative for HE to stay focused while diversifying its programmes, it was clear that there is no unity of purpose. The unity of purpose ideally must come from the actors themselves, namely the higher education institutions, but this is nearly impossible to achieve without a clear and persuasive national higher education policy and framework. In the absence of a unity of purpose, each institution concentrates on its plans and core mandate, which results in duplication of functions. Nevertheless, this is not surprising because of the developmental nature of higher education institutions. Their primary focus is to build capacity, institutional expansion and ensure growth in student enrolments at both graduate and postgraduate levels. As such, coordination necessarily does not come forth as a priority.

4. Several specialised, post-secondary educational and research institutions exist, but there is lack of clarity over the status of these institutions. Although they are formally part of tertiary education,

the Higher Education Act does not accord them the status of HEIs. Some of the work of the these organisations, namely, the Central Veterinary Laboratory, Namibia Institute of Mining and Technology and so on, are of high value, and if they were part of higher education, joint work with their counterparts could lead to proper harmonisation of specialised offerings. The real problem in this case is that there are no criteria upon which an institution can be evaluated to form part of the higher education system, or indeed, to be excluded from it. A national higher education policy would also shape in its thrust the nature and depth of HEI competitiveness.

5. In view of the absence of a national higher education policy, and the fact that the legal authority of the NCHE is mainly advisory and partly executive, there appears to be an overlap of functions between the NQA and the NCHE. For instance, one of the functions of the NQA is accreditation, but this is the same function that the NCHE must perform in concurrence with the NQA.

6. HEIs have major expectations regarding the functions and responsibilities of the NCHE. They expect the NCHE to solve the quandary of higher education funding, to institute a monitoring and evaluation scheme of HEIs, to establish quality assurance mechanisms, to advise HEIs, to regulate their operations (who offers what), to not only assess academic performance of both students and their lecturers, but also to manage performance, and, above all, to coordinate the higher education system so that HEIs offer what is within national priorities and demands. However, currently the NCHE does not have the capacity to do this. This is mainly due to the fact that the NCHE Secretariat is grossly understaffed. It would need to be given support and resources to recruit senior experts in order to fully realise its mandate.

7. According to the study findings, one of the major barriers to coordination is the absence of a national policy on innovation and change agencies to implement it, as well as lack of a higher education financing formula.

8. The results show that although HEIs reported that they consider coordination important, it seems that it is not significant enough to rate high on their agendas.

9. The study also found that one of the reasons why there is no coordination is because HEIs have no system, office or units directly dealing with institutional relationships. They do not communicate with one another formally in their planning. As a result, planning and implementation do not benefit from the insight of other institutions. Currently, they depend on published materials to know what is going on in other institutions within the country.

10. When issues of demand and supply are considered, the study found that inception of academic programmes is not always informed by hard evidence. The result is that many of the HEIs' graduates remain unemployed after completion of their studies. This results from the fact that there are no formal means HEIs can employ to determine whether or not they are overproducing or under-producing human capital. In addition, it was reported that there is no way or mechanism by which HEIs can determine what are the staffing needs in the regions.

11. The study also found that joint offerings do not take place, although there is willingness on the part of various individuals to explore this area.

12. It was also found that the Acts of Parliament, which in fact guide the governance of HEIs, do not require them to coordinate their activities with each other. Although it may be implied in these Acts, coordination per se, does not take place.

13. Furthermore, a number of policy concerns were reported. These include, but are not limited to, the need for autonomy of colleges, the absence of incentives to encourage expert mobility (sharing skills), a recruitment system at colleges that is allegedly not enabling colleges to recruit a high skilled labour force, lack of ICT infrastructure and services, lack of criteria for enrolment of marginalised and disadvantaged groups, absence of a national higher education policy, and so on.

14. The fact that BETD is not yet evaluated was reported as a stumbling block to college graduates who want to progress in their academic careers through either UNAM or PoN.

15. In general, the study found that the higher education system in Namibia faces the challenge of adaptation and transformation into a vibrant institutional network that can drive Namibia into a knowledge-based economy, as envisaged by Vision 2030.

16. Finally, the report makes several action recommendations to ensure that the framework for coordination is put in place alongside the preparation for a national policy. The study identifies several barriers to successful coordination, which include among others the lack of bodies or agencies that oblige HEIs to harmonise their programmes. Incentives that encourage higher education institutions to work together are non-existent. A framework that takes into account current practices, barriers and needs is proposed. The study concludes that the proposed framework will remain a 'framework' only if it is not supported by an appropriate HE policy, one that situates coordination at the centre of the complexity of interactions between the industry, public sector and the higher education system. It then outlines actions that the NCHE can take to implement the report findings.

INTRODUCTION

The establishment of a coordination system for higher education was one of the major aims of the Government of Namibia when it created the NCHE in 2003. This step elevated the importance of a harmonised approach in higher education, with the goal of positioning higher education institutions to address two challenges by the year 2030: that of transforming Namibia into a knowledge-based economy, and that of reaching a quality of life equal to the standard of living in developed countries.

The process of coordination is part of the complex system that treats knowledge as a commodity[1]. Commodification of knowledge contributes to the development of a country in many ways. Higher education is the main source of that knowledge, its production, dissemination and absorption. However, if not well coordinated, this knowledge cannot be appropriately utilised as the driving force to economic growth and an egalitarian society. It is similar to running a factory from which products cannot be sold, not because they are of poor quality, but precisely because they are too divorced from the needed compatibility of product functionality or simply that their deployment infringes on the functions of whatever they are meant to make more efficient.

One of the basic functions of higher education in any country is the satisfying of varying needs of skills development and training. In so doing, it is paramount that higher education relates its programmes to the regional, national and international socio-economic needs of the country in which it operates. In the effort to achieve this goal, each HEI has a specific function and role to play. The role of Namibian HEIs should and necessarily needs to vary from one institution to another as it is influenced by each organisation's own mandate and its own disposition in relation to its core function. If this total higher education system is to function effectively and develop, it is necessary that a coordinated plan be instituted to assure the availability of quality educational opportunities to everyone, and also to make sure that national development plans are achieved without the unnecessary duplication which consequently wastes the country's resources. Coordination can take many forms, and may be instituted through the establishment of instructive units, through compulsory administrative procedures and/or through conditions for financing research. In this regard, coordination is a key to efficiency in the higher education system. This research project, commissioned by the NCHE, examines questions related to coordination of the higher education system and between the higher education institutions in Namibia.

[1] **A commodity here refers to the phenomenon in which non-material resources such as knowledge are traded for money.**

The research focuses on a series of questions related to the issue of coordination, which are:

a) Does the Ministry of Education and related agencies attempt to coordinate policies and activities between the universities, polytechnic and colleges?

b) If so, what structural or policy instruments are employed to accomplish this coordination?

c) Do R&D and sharing of expertise, facilities and skills, take place in a coordinated manner?

d) To what extent are higher education institutions prepared to engage in joint course offerings?

These issues were addressed in this study using a mixed-methods approach, which was deployed to interpret key factors affecting coordination of the higher education system in the country.

Definitions of Key Concepts

Concepts employed in policies, management and administration of higher education systems worldwide tend to vary from country to country. For example, whereas the British use the terminology 'college of education' the Americans speak of 'teachers' college'. As in this report, these two designations are used interchangeably in Namibia. The Teachers' Education Colleges Act of 2003 refers to Teachers' Education Colleges, but the Education Act of 2001 (No. 16 of 2001) speaks of Colleges of Education. As we are aware that much of the discussion in education is bedevilled by semantics, we have noted that it is important to define key concepts used in this report. So to begin with, what is higher education?

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) at its twenty-seventh session in Paris defined higher education as *"all types of studies, training or training for research at the post-secondary level, provided by universities or other educational establishments, that are approved as institutions of higher education by the competent State authorities" (UNESCO 1996, 566).* The different types constitute a system of higher education. According to this definition, in a higher education system, there may be a variety of institutional types, as is the case in Namibia, and even clear sectoral distinctions, but the primary emphasis is on system-wide planning, catalyzing and harmonisation of the different components in order to accomplish a common goal as defined by an administrative system.

The common goal, in this case the transformation of Namibia into a knowledge-based economy, can be approached from different angles, at several levels by different institutional types. For instance, the University of Namibia, using its perspective at its level has set out to contribute to the challenge of transformation. A lot of resources have been invested, and great numerical strides recorded on the transformation process. Similarly, the Polytechnic of Namibia has established a number of programmes to surmount the barriers to transforming Namibia into a knowledge-based economy. Yet, for the reason that both UNAM and PoN operate only as components of the whole, major challenges still remain. If their activities as components were coordinated, and each was aware of what the other was planning and executing, they might jointly invest their resources for the common good, making their programmes more comprehensive, specialised and successful. Or, they may inform each other

that such an activity at that level of focus has been already addressed, thereby avoiding duplication of work and unnecessary depletion of resources.[2] This type of activity is easily achieved through coordination, but coordination itself is not easy. Thus, in this study, higher education system is defined as a set of highly advanced, interrelated education components or units involved in the challenge of joint-problem solving to accomplish a common goal in their pursuit of scientific, intellectual and moral rigor.

At the meeting mentioned above, UNESCO also defined 'qualification in higher education' as meaning *"any diploma, degree or other qualifying certificate that is awarded by an institution of higher education, or another appropriate authority, that establishes that the holder has successfully completed a course of study and qualifies him or her either to continue to a further stage of study or to practice a profession not requiring further special preparation" (ibid).* UNESCO also recommended that, it is essential for the purposes of access to and pursuance and completion of higher education and for preparation for the practice of professions that States put into practice policies of evaluating competence that take into account not only the qualifications obtained, but also courses of study taken, and skills, knowledge and experience acquired. Thus, certain agencies need to be put in place to enforce evaluations of competence. In Namibia, the NQA was established by an Act of Parliament, Act No. 29 of 1996, for this purpose. In these agencies and policies, coordination is very important.

What is coordination? Coordination is a concept that has been used so far without much clarity. Collins Cobuild English Dictionary (1999, 362) defines coordination as *"organizing the activities of two or more groups so that they work together efficiently and know what the others are doing".* Organising activities in this manner requires certain mechanisms and approaches, but these will depend on 'why'; the purposes for which such activities are undertaken in the first place. In Namibia there is a national vision, a vision in which education in general is considered not only as one of the major challenges but also as a pillar of success, a trajectory toward transformation into a knowledge-based economy. This is the major reason why coordination is important, to ensure that activities that are undertaken by HEIs address a common vision, or at least lead to a common destination.

The term 'knowledge-based economy' describes the process of producing and disseminating economically viable knowledge in practices of higher education institutions. It is characterized by economic transactions focused on knowledge itself; rapid qualitative changes in goods and services; incorporation of creativity and implementation of change itself into the mission of change agencies (e.g. NCHE). Thus, by the phrase 'knowledge-based economy' we mean the sum of innovative activities in education, research and development, media and information communication technology, technology and technology infrastructure, and information networks and services that are geared

[2] **For more details see a study by Marope in 2005, which cites a number of courses and programmes where duplication between faculties and between HEIs themselves could have been avoided, and would have resulted in courses being run cost-effectively and more competitively.**

toward economic development. These segments however, are not useful by themselves for the purposes of national economic development if they are not properly coordinated and linked to the higher education system to foster innovation and development. Innovation, here, refers to the process through which social and economic value is extracted from knowledge – through the creation, diffusion and transformation of knowledge – to produce new or significantly improved products or processes relevant to national priorities.

The Purpose of Coordination in Higher Education

There are three broad approaches to the question of higher education coordination, i.e. institutional, sectoral and systems approaches. The institutional approach presumes the existence of highly independent, self-governing or self-regulating institutions and minimal state intervention. This is the current approach when it comes to the establishment and operations of the University of Namibia and the Polytechnic of Namibia, but this form currently does not cover the Colleges of Education. The Acts of Parliament that relate to UNAM and PoN mandate that they function autonomously.

The sectored approach treats the higher education sector according to the types of institutions in existence, namely university vs. polytechnic, public vs. private universities, or technical university vs. vocational institution. Accordingly, the funding source is also determined by the institutional type (private vs. public) or by some other characteristic. In this approach, coordinating mechanisms, policies and funding approaches are sector-specific, in that government ministries would fund directly institutions that are determined by and relevant to their core mandate and vision. For instance, the Ministry of Agriculture funds the National Botanical Research Institute and the National Forestry Research Centre. As such there is no need for a central mechanism or agency responsible for coordination. Although these practices and arrangements exist, one can argue that the institutions currently funded are mostly Directorates within ministries, and they are not necessarily HEIs.

A systems approach treats all parts of the higher education system as 'components of a whole'. There may be a variety of post-high school institutional types and even clear sectoral differences, but the central emphasis is on system-wide planning and coordination. This approach argues that for a higher education system to be effective there must be a 'systems coordinating agency or board' with the capacity and authority to plan and coordinate system-wide matters. Such a body must have the competence to resolve conflicts among institutions and sectors, or to mediate sectoral interests of the institutions in the system. Based on the findings of the study, this approach is not in place in Namibia.

While each approach illustrates a different way of coordinating higher education systems, it should be noted that there are few countries in the world that operate 'pure' versions of these approaches. Also, it should be clear that what informs an approach is the rationale – the reason why and a defined purpose of higher education in a country. This research team is of the understanding that, although

higher education greatly depends on how weak or strong the foundations laid in primary education are, higher education is the engine for the transformation of Namibia into a knowledge-based economy. As such, our discussions and investigation centred on the issue of transformation into a knowledge-based economy and what role coordination might play.

Background of the Study

Since 1990 at independence, the Government of the Republic of Namibia (GRN) has made significant investments in the higher education sector. Policy changes in the higher education system have been made, and reforms and new curricula at several HEIs introduced at different levels. Noteworthy improvements in the infrastructure at HEIs have been made. Several funding schemes aimed at improving access, equity and efficiency in the higher education system were in place. The National Assembly has promulgated a number of Acts relevant to the higher education system. The number of both public and private higher education institutions has increased. To broaden access to higher education countrywide, centres of different kinds have been established. However, there are areas where further improvements still need to be made. The areas where improvements are needed include infrastructure (lecture halls, laboratory facilities), Research and Development (R&D), and coordination of higher education institutions, to name just a few. This study is focusing on the latter factor, although others are discussed in reference to the system only.

According to the Government of Namibia, the education system is *"fragmented…with few opportunities for learners to pass from one provider to another" (GRN 2004, 88).* This fragmentation is created not only by the existence of few opportunities and the absence of a higher education, system-wide credit transfer system, but also because Teacher Education Colleges (Teachers' Education Colleges Act No. 25 of 2003), the University of Namibia (University of Namibia Act No. 18 of 1992), private universities and Polytechnic of Namibia (Polytechnic of Namibia Act No. 33 of 1994) are all constituted under detached policy regimes. These different legislative mandates define the scope of operations of the institutions concerned. Moreover, although it is a matter of interpretation, by default, the judgment by HEIs is that they are under no obligation to coordinate their activities, even though coordination is implied in several government documents such as "Education for All".

The mandates of HEIs also imply that HEIs need to be responsive to external influences only on their own intellectual and moral recognisance, and they may argue that they be treated differently from others by the State. Thus, they are not necessarily component parts (differentiated by institutional type) of a whole. Instead, they believe they have jurisdictions, specific scope within which they need to operate, and coordinating matters do not transcend their (perceived) mandate. Also bearing in mind that Namibian HEIs are very young, it can be expected that their primary focus would not be coordination. Instead, their centre of attention is on growth and student. Thus, currently there is no mechanism for coordinating substantive issues that rise above institutional mandates. So, coordination takes the form of voluntary agreements among and between academic institutions

and/or administrative units. While many policy matters are left in the hands of individual institutions (e.g. to invest in the development of joint course offerings with higher education institutions abroad, which are rightly so important for purposes such as contributing to universal knowledge and also for developing internal competence and ranking), it is nevertheless vital that a system coordination framework at a local and national level be constructed. This would help to find ways of avoiding duplication and overlapping of academic programmes, and to provide opportunities for creativity and expansion of institutional and human capacity.

Rationale of the Study

In the process of examining the individual and collective factors and processes that affect coordination of the higher education system in Namibia, it is necessary to contend with both the "what" of quality coordination – what precisely needs coordination, and the "how" of coordination – which mechanisms are appropriate for coordination to succeed. Why is this important? It is important for one complex, vital reason: in order for the higher education system to accomplish the task it has set out to do, namely *"a fully integrated, unified and flexible education and training system, that prepares Namibian learners to take advantage of a rapidly changing environment and contributes to the economic, moral, cultural and social development of the citizens throughout their lives" (GRN 2004, 89),* the meaning and understanding of 'coordination' must be a fully comprehended one in both these aspects. This entails clarifying what is possibly meant by 'quality coordination of the higher education system' and how such will be achieved; identifying and distinguishing real coordination needs from perceived ones; clarifying coordination targets; attempting to unpack the complexities involved and using outputs to set goals. In other words, a starting point could be to ask a number of crucial questions such as:

a) What is the purpose of higher education in Namibia?
b) Why do HEIs educate and/or train students the way they do it currently?
c) Is the purpose to give knowledge for the sake of accomplishing a critical mass of people with higher education qualifications?
d) Is the purpose to create international competence and specialised expertise?
e) Or, is the purpose to do both of the above, so that educational outputs trigger market-impact?
f) And if so, what role could coordination play in transforming Namibia into a knowledge-based economy?

This study only answers these questions in part, mostly because they require greater inquiry than coordination itself. Yet, even when these questions are fully answered, without coordination, an efficient and effective system cannot be achieved. Coordination is the string that holds purpose and goal together. If purpose is not defined and described, then HEIs will conduct higher education as they see fit. Thus, the above questions are raised as a critical starting point to set the context in which this study must be understood. It is realised of course, that these questions are not necessarily to be addressed by the higher education system alone, because they should be driven by other national

systems of governance and policy instruments. For instance, the absence of a national innovation policy does not promote joint R&D activities between HEIs, which then affects coordination and how they perceive their roles in comparison to one another.

From this perspective, attempting to study coordination without engaging the questions above is like attempting to restructure an organisation without confronting its underlying existence. Therefore, it is important to look beyond coordination in examining this challenge. Nevertheless, for the higher education sector to play its part in Namibia's transformation process into a knowledge-based economy, as articulated in Vision 2030 (GRN 2004), it must regularly re-examine itself against these questions, taking into account specific educational changes relevant to the demands and needs of the country.

The challenge of coordinating the higher education system, which this report attempts to address, is one of how those involved in the higher education system can come to understand what it is that must be coordinated, why it must be coordinated, and by what mechanisms and how it can best be accomplished, bearing in mind the human and financial resource limitations that Namibia faces. It is also important to realise that both the 'what' and 'how' of coordination constantly change as different institutions interact and reshape each other on the basis of educational and developmental goals.

However, HEIs need to change not with society, but ahead of it. This is only possible if an appropriate coordinating system is in place, and if such a system-coordinating agency possesses the capacity to plan, catalyse and synchronise system-wide matters, or to facilitate the realisation of arrangements that are of interest to the HEIs and relevant to Vision 2030 and other articulated national priorities. Thus, a coordinating body needs to operate as a Change Agency – setting the pace and goals and assisting HEIs by proactively responding to their needs while ensuring that HEIs are focused on the set goals and are moving at a desired pace.

Objectives of the Study

This study had the following objectives:

a) To provide an in-depth understanding of coordination and the context in which it must be practised;

b) To show how higher education institutions, more times than not, are a challenging group of institutions to coordinate, yet they need precise coordination to be effective in contributing to Namibia's quest to be a knowledge-based economy; and

c) To propose a coordination framework within which the higher education system might be organised, taking into account change agencies that need to be in place, to not only strengthen the higher education system's effectiveness, but also to identify and outline a strategy plan for coordination of the higher education system in the country.

RESEARCH APPROACH AND METHODOLOGY

Approach

The research team spent several weeks reviewing relevant Namibian documents, and consulting with relevant stakeholders (See Appendix B) in order to design an appropriate research framework. The research design that was implemented was based on two important decisions that also influenced the data collection approach. First, it was decided that for the study to be substantive, we needed to focus on coordination structures and arrangements above the institutions of higher education themselves, which is the level of authority regarding the higher education system.

At this level, the study looked at the context of education in Namibia and its policy articulations in terms of national objectives, such as those articulated in NDP3 and Vision 2030. Second, even though the study was intended to be evaluative from a national perspective (to the point of asking whether the key stakeholders themselves saw the need for coordination), the assumption the study made was that each institutional type has its own structure, priorities and mandate and that their responses will be formulated from that view point. As such, the study investigated the following:

1. Whether coordination is an issue of importance to institutions of higher education;
2. Whether or not there are policy matters that are or should be addressed through a coordinated approach to the higher education system;
3. What the perceptions of senior officials concerning the success and failures of existing arrangements are;
4. Whether there has been any attempt to formal or informal coordination and why such an attempt, if it existed, did not materialize;
5. Whether there is a need for changing the current arrangements;
6. What implementation processes, monitoring and evaluation systems need to be in place; and
7. What management processes of coordination must be instituted to ensure efficient operation.

Methods

The study is an applied research employing a mixed-method approach, in that it utilised qualitative and quantitative data collection techniques. Using questions in the research instrument (Appendix A), the researchers probed further on issues that needed clarification. The reason for this was because we view research as *"a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it" (Mouton 1996, 7).*

Qualitative Data Collection

In-depth, Open-ended Interviews

a) In-depth open-ended interviews (also known as key informant interviews) with:

1. College management and Head of Departments at Caprivi College of Education
2. College management and Head of Departments at Rundu College of Education
3. College management and Head of Departments at Ongwediva College of Education
4. College management and Head of Departments at Windhoek College of Education
5. Members of the University of Namibia senior management
6. Research and Publications Committee Secretariat at the University of Namibia
7. Senior management member at the Polytechnic of Namibia
8. Senior management member at the International University of Management
9. Namibia Qualifications Authority
10. Ministry of Education, Directorate of Planning
11. Ministry of Education, Directorate of Higher Education
12. Ministry of Education, Directorate: National Institute for Educational Development
13. Ministry of Education, Directorate of Science and Technology

b) Direct field observation on:

1. Availability of and choice of set-up of ICT infrastructure at all institutions
2. Building infrastructure layout and accessibility – relevance to people living with disabilities
3. Extent to which students utilise libraries – resources availability and usage

Unfortunately, due to time constraints and trimester holidays of some institutions, the research team was unable to meet all stakeholders of the higher education system.

Quantitative Data Collection

Short survey questionnaires – closed-ended

Short, closed-ended questionnaires were administered at all institutions of higher education. These requested information on:

1. Total number of units of ICT equipment
2. Number of certificate courses and areas of specialisation offered
3. Number of diploma courses and areas of specialisation offered
4. Number of bachelor's degree courses and areas of specialisation offered
5. Number of honours degree courses and areas of specialisation offered
6. Number of master's degree courses and areas of specialisation offered
7. Number of PhD courses and areas of specialisation offered
8. NQA levels for existing qualifications/specialisations
9. List of collaborating institutions and areas of joint offerings

10. Areas of self-perceived competence
11. Enrolment and graduation
12. Staff turnover

The use of these two methods was important because it provided for an in-depth understanding about the issue of coordination which might otherwise not have been picked up by a single method. Overall, the research team also carried out an extensive literature review of policy documents relevant to the higher education sector. Furthermore, the team reviewed recent reports and other documents emanating from the NDP3 process, ETSIP, and reports from the World Bank and other consultancies.

Data Analysis

On the one hand, qualitative data was analysed using a thematic approach. A thematic approach identifies reoccurring themes from accumulated data and groups them into categories. Secondly, the quantitative information gathered was entered into a suitable statistical office programme. From the analysis of the data gathered, figures and graphs were produced to illustrate the degree of difference between HEIs.

Expected Results

The purpose of this research study was to investigate how the system of higher education is, or is not, being coordinated, by what instruments, operating at what level and to what end, and to recommend and provide guidelines on systems coordination that will serve as a referral tool for implementation.

It was expected that the study would produce:

1. A suitable conceptual framework for the coordination of the higher education system in Namibia and the context in which it must be practiced;
2. An outline of existing and envisaged formal arrangements (operationalisation and institutional implementation of coordination mechanisms) pertaining to credit transfers; joint offerings; joint programme development; programme reviews; and issues of admission and accreditation; sharing of resources, exchange and infrastructure as a way by which the HE sector can contribute to the transformation of Namibia into a knowledge-based economy;
3. A list of issues concerning the academic interface between different institutional types, and ways or strategies of encouraging cooperation; and
4. Discussion on what the institutions themselves and the stakeholders perceive as coordination, and what strategies and policies they would like to see being put in place.

HIGHER EDUCATION SYSTEM IN NAMIBIA

In the system of higher education, two operational levels can be distinguished. One level addresses the system, and another the authority. The first unit in the system of higher education is the higher education institutions. At higher education institutions in the country, administrative structures (which are generally broken down into areas or fields of activity and into levels of management and authority) are separated from academic structures (faculties, departments, centres and institutes, laboratories and specialised units) in order to avoid unnecessary delays in making and carrying out decisions. Higher education institutions are governed by Councils or Boards as the case may be in the Act that constituted them. At present, some institutions report and receive instructions from central government, while others enjoy relative independence and autonomy. According to data collected during this research, the ways of exercising authority[3] vary between the Colleges of Education, UNAM and PoN. Nevertheless, at this level, most institutions have geared their operations towards international cooperation and exchange programmes.

The second and last unit at the system level is the authority aspect, which is led by the Directorate of Higher Education in the Ministry of Education. In this unit, there are a number of statutory bodies with different mandates. These include the NQA and the NCHE. This level is responsible for the governance of higher education and oversees higher education frameworks and policy matters. In more recent years, it appears that another level, a level that requires systematic coordination, is appearing. Several agreements between Namibia and different countries have been signed by ministries for higher education to strengthen research, training and development. However, for some unclear reasons, the higher education institutions themselves seem unaware of these agreements. As such, they have not taken advantage of opportunities brought about by these arrangements.

Overall, higher education in Namibia currently consists of the University of Namibia, the Polytechnic of Namibia, Teacher Education Colleges and a number of private institutions such as the International University of Management. The status of other post-secondary institutions such as Police Colleges, Military Schools, Nursing Schools and other specialised colleges addressing specific areas such as Mining, Art and Fisheries, who operate under the public domain (ministries) is unclear. These organisations include the following: National Marine Information and Research Station, Sam Nujoma Marine and Coastal Research Centre, Namibia Institute of Mining and Technology, Desert Research Foundation of Namibia; Central Veterinary Laboratory, National Forestry Research Centre, National

[3] **It is probable that this variation exists due to practices in appointments (governing authority vs. appointing authority). Depending on the type of authority, collaboration with other institutions can be affected to the extent of influencing the level and nature of relationships between particular institutions.**

Forensic Laboratory, National Botanical Research Institute, and Geological Survey of Namibia. In addition, presently there are four Vocational Training Centres funded by the Government of Namibia, and several privately owned centres, which are not considered to be part of formal higher education.

Although these institutions can be considered to be part of tertiary education, there is no legislation that defines at which level in the ladder of higher education they belong. Or to put it differently, the research team did not come across set criteria upon which an institution can be evaluated to form part of the higher education sector, or indeed, to be excluded from it. Nevertheless, those institutions currently constituting higher education offer a variety of qualifications; some have been evaluated by NQA, others not. Only the Ongwediva and the Rundu Colleges reported sharing facilities with the vocational training centres in their regions. No institutions reported jointly offering a course, nor jointly producing course materials. Each institution is concentrating on its own plans, core mandate and vision. This is how the higher education 'system' currently operates.

The Transformative Role of Higher Education

"You've got to have a compelling idea… a dust particle around which to coalesce…but it has to be compelling [enough] to the coalescees" (Network leader, In Lieberman & Grolnick 2005, p.44).

When defined as *"a society that is in the process of perceptible developmental or retrogressive transition, significantly affecting aspects of the ideological, material, structural and functional characteristics of the majority of its primary [socio-economic-political] constituent elements" (van Rooyen 1996, 33),* Namibia can be described as a society in transition. It is a country whose institutions are still being built and strengthened due to the injustices of the past. One area in which massive investments have been channelled and significant efforts aimed at (re)building capacity, is the higher education sector. Councils and authorities have been established. Such bodies include the NQA, ACTET, the National Advisory Council on Education (NACE), the National Examination, Assessment and Certification Board and the NCHE. Specific functions and objectives are clearly stated in their respective statutes. Of particular interest, here, are the NACE, NQA and NCHE.

The National Advisory Council on Education

The National Advisory Council on Education was created by an Act of Parliament, the Education Act No. 16 of 2001 (GRN 2001, 7). NACE is governed by an Advisory Council. The powers and functions of the Advisory Council are grossly undefined, other than that it should advise the Minister on educational matters, upon the Advisory Council's own initiative or in response to any question referred to the Advisory Council by the Minister. In spite of being established nearly seven years ago, the body has in practice provided little guidance to higher education system coordination in Namibia. The NACE was created specifically for the then Basic Education. The merger of the two ministries of education in 2005 meant that the NACE became redundant.

The Namibia Qualifications Authority

The NQA was constituted by an Act of Parliament, the Namibia Qualifications Authority Act of 1996. The mandate of the NQA includes among others:

1. set up and administer a National Qualifications Framework (NQF);
2. be a forum for matters pertaining to qualification;
3. set the curriculum standards required for achieving the occupation standards;
4. promote the development of, and to analyse benchmarks of acceptable performance norms for any occupation, job or position ;
5. accredit persons, institutions and organisations providing education programs and courses of instruction or training for meeting stipulated national requirements;
6. enquire whether qualifications meet national standards;
7. advice on matters pertaining to qualifications; and
8. evaluate and recognise skills and competences learnt outside formal education.

In addition, the NQA is also tasked with the responsibility of, through the NQF:

a) Evaluation of qualifications;
b) Setting standards;
c) Recognition and validation of prior learning;
d) Accreditation; and
e) Quality audits.

The NQA reports to its governing NQA Council. On some aspects of higher education, the NQA is assisted by the National Standards Setting Bodies and their sub-committee, the Standard Generating Bodies (SGB). According to Marope (2005, 68), the NQA is, in terms of the number of qualified staff, only qualified to effectively carry out its mandate and responsibilities to a very limited capacity. In this study, the NQA reported that it is "overwhelmed". On the one hand, it is inundated with questions about mandates of HEIs, the status and value of qualifications, and the dichotomy of distance and full-time vs. private and public HEIs. It cannot say with certainty that all qualifications issued by HEIs in Namibia are in line with the national demands of the country.

On the other hand, the NQA's legislation does not make it compulsory for all HEIs to be assessed in all aspects. It does not prescribe what needs to be done in institutions of higher education. So, its legal authority makes its responsibility optional and without consequences for those who do not comply. As such, in its enforcement, it is limited to those HEIs who wish to have their academic programmes evaluated and accredited. It cannot monitor and evaluate performance. Moreover, the overlap of functions between the NQA and NCHE, particularly on accreditation, is obvious.

The National Council for Higher Education

The NCHE was established by an Act of Parliament, Higher Education Act No. 26 of 2003. According to the Act, the objectives of the NCHE are:

A) to promote the following:

I. The establishment of a coordinated higher education system;

II. Access for students to higher education institutions; and

III. Quality assurance in higher education.

B) to advise on the allocation of moneys to public higher education institutions.

Some of its functions include:

a) To accredit, with the concurrence of the NQA, programmes of higher education provided at HEIs;

b) To take measures to promote access of students to HEIs;

c) To undertake such research with regard to its objectives as it may think necessary or as the Minister may require; and among others; and

d) To advise the Minister, on its own accord or at the request of the Minister, on a number of issues including the structure of higher education, governance matters and the allocation of funds to HEIs.

This Act also calls on the Minister of Education to determine and table the National Policy on Higher Education in the National Assembly within 90 days of its determination, depending on whether or not the Assembly is meeting in its ordinary session. Administratively, the NCHE is managed by a Secretariat whose functions include the provision of such secretarial and administrative services and technical assistance as may be required by the NCHE or any committee of the NCHE (GRN 2003, 11). The relatively new status of the NCHE in the terrain of higher education makes its assessment difficult. However, according to the data from the field, HEIs have inflated expectations about the functions of the NCHE. They expect it to solve the quandary of higher education funding, to institute a monitoring and evaluation scheme of HEIs, to establish a quality assurance mechanism, to advise HEIs, to regulate their operations – who offers what, and to not only assess academic performance of both students and their lecturers, but also manage performance, and, above all, to coordinate the higher education system to such an extent that HEIs offer what is within national priorities and demands (also see section on joint offerings). The NCHE Secretariat currently does not have the capacity to meet these expectations. The main reason is that it is grossly understaffed and needs senior experts in all specialised fields of higher education. Moreover, a fine line will need to be drawn in order to balance the practice of academic sciences for their own sake and academic sciences targeted at achieving certain agreed national development goals.

In order to do so, the NCHE will need to create a system capable of balancing pressure on the one hand, and support on the other. Pressure will be viewed as 'interference to autonomy' and can easily lead to unnecessary confrontations between HEIs and the supreme governing agencies. Support without pressure can also lead to the waste of resources. Clearly, HEIs themselves want to have more and more autonomy and less 'interference' from the state. But they are not wholly complying with the spirit implied in various Acts related to higher education. Quality assurance for instance, has been approached from the point of view of voluntary institutional advantage.

Each HEI considers its qualifications as the best. They all have various internal and external mechanisms for quality assurance, which they feel are in line with their mandates. The Polytechnic has engaged the Higher Education Quality Committee of South Africa's Council on Higher Education in addition to joining the International Network of Quality Assurance. UNAM solicited quality assessment support from the South Africa Rectors' Conference. The Colleges of Education use UNAM's Faculty of Education and NIED to moderate their qualifications. Some reported that evaluation by the NQF is optional. This could be the result of a perceived weakness of the NQF itself. Moreover, for the reasons given earlier, the NQA is unable to ensure that compliance with the NQF is established. Even if the NCHE Secretariat would take it upon itself to ensure compliance, under the current legislation and policy, it would have to do so only after concurrence of the NQA. Coordinating and sustaining these different systems is exceedingly difficult, precisely because compliance is an option, not an obligation. Thus, overall, the current legal mandate of the NCHE, which is *advisory* rather than *executive*, defines the extent to which the NCHE can influence coordination of the higher education system.

HEIs as Pillars of National Competitiveness

National competitiveness is generally defined as the ability of a country, region or firm to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels as on a sustainable basis. The question can be asked: How competent is Namibia's education system currently? According to Marope (2005), Namibia is not faring well in this regard. The critical shortage of a skilled labour force is a formidable barrier. Marope (ibid, xx) further argues that this shortage *"limits the capacity to apply knowledge and technology in production" and that the "skills shortage also exacerbates already intolerable income inequalities".*

However, this shortage can be addressed through various systems of higher education. The 'ability' of HEIs to contribute to competitiveness is determined by a set of factors, policies, and external governance institutions such as the NQA, NCHE and so on, which determine the level of productivity, quality skill attainment and student throughput[4]. HEIs reported that their main barrier is adequate financing. Besides the financing question, the capacity of higher education institutions to act as pillars

[4] **By student throughput I mean the degree to which student success rate, completion within the prescribed period of studies as well as graduation figures are comparable to enrolment figures in academic programs.**

of national competitiveness is ultimately associated with their ability to create new knowledge with the potential of generating or attracting economic activities which are able to increase income by performing well on the market, by measurable standards. When knowledge is created, it must be commercialised. Several respondents in all institutions argued that the higher education system is currently too fragmented to transform Namibia into a knowledge-based economy. They ascribed this fragmentation to perceived limitless academic freedom and autonomy exercised without transparency and accountability. Although these claims are challengeable and could not be verified, they are probably resulting from absence of coordination and communication mechanisms that promote ownership of frameworks laid out by the GRN.

Nevertheless, national competitiveness should be a core concern for HEIs, and it should be closely linked to their core mandates. A core function of many HEIs currently, is quality undergraduate teaching and the mass production of low to middle level workforce. There is less focus on the production of a highly skilled work force. The principal goal of national competitiveness is to produce a high and rising standard of HE, thereby contributing to desired living standards for all citizens on a sustainable basis. This is where the question of access with equity in the higher education system comes in (see separate report on access with equity). Thus, in an endeavour to achieve national competitiveness, concerted effort tackling barriers to the achievement of high levels of innovation at HEIs, as well as high levels of quality education, is needed. The proposed coordination framework is thus crucial in both maintaining competitiveness and ensuring that quality assurance standards continue to rise to the best possible international standards.

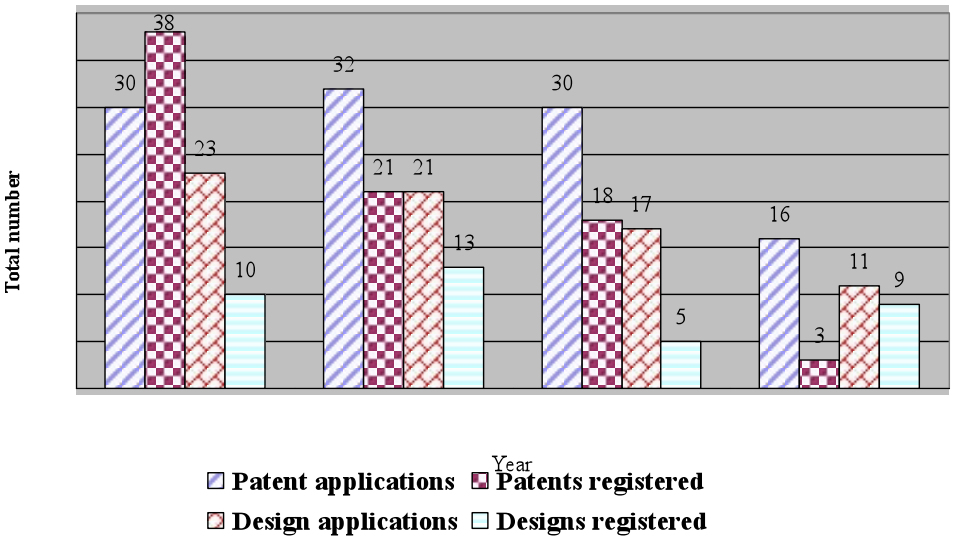
HEIs and Patenting

One way of examining the impact of HEIs in the industry sector is to look at their scores in patenting. The global competitiveness report indicates that Namibia's ranking in terms of patents currently stands at 80 points – a very low figure indeed. According to the data the research team collected at the Ministry of Trade and Industry, 95% of all the patent and design applications received by the Ministry are from South Africa, and only 5% are submitted by local Namibians. What accounts for this? It is difficult to associate this fact with anything but inadequacies in the higher education system. When probed, none of the HEIs themselves reported submitting or registering a patent or design rights. There are two arguments to this state of affairs. On the one hand, this is largely influenced by low numbers of highly skilled scientists – those that are able to harness knowledge creation, innovation and commercialisation of new knowledge and technology, at these institutions. On the other hand, the counter argument, which is supported by several publications, is that low levels of research outputs and the fact that HEIs have not registered patents is mostly influenced by heavy teaching loads imposed on the lecturers so much that they have little time and resources to allocate to scientific research.

That said, it should be noted however, that patents in themselves are of little value in indicating competitiveness especially for Namibia at this stage. They become a useful measure of development only when they are linked to successful commercialisation of the patented innovations in question. This is increasingly the trend worldwide. In order to make commercialisation efficient, many HEIs enter into product development partnerships (PDPs), thereby benefiting from the industrial expertise of practitioners on the one hand, and on the enterprises themselves on the other hand, thus benefiting from new knowledge and products as a consequence. The problem, as things stand today, is that know-how, to stitch the different parts of the higher education system together in a coordinated manner in order to achieve greater competitiveness, does not exist. In this respect, this study sets the framework for doing so.

Namibia's HEIs could increase the number of patents, but if these patents are not successfully commercialised, then their function in transformation is minimal. The figure below shows the number of patent and design applications and registrations at the Ministry of Trade and Industry for a four year period. What we do not know is in which fields of science these patents emerged, and which HEIs might have contributed to the inventions. It would be important to know this so that institutional strengths can be ascertained, as well as to understand which fields are fairing badly and which are prospering, and why, so that the necessary steps are taken to improve patent performance and its contribution to national competitiveness.

Figure 1. Intellectual property applications and registration (Source: MTI 2008)



Nevertheless, it is important for change agencies in the higher education sector to establish mechanisms that could enable HEIs to contribute effectively to the transformation of Namibia into a knowledge-based economy. The transformation into a knowledge-based economy is not entirely the function of HEIs nor is it for the private sector alone. It is in essence triggered by the nature and degree of cooperation between the public and private sector.

Higher Education and the Need for an Innovation Policy

In a knowledge-based economy, knowledge is a tradable commodity, even though it is not readily sold or acquired through the traditional market places. Trading knowledge would require Namibia to have a talent management strategy – a scheme that would identify talented individuals early and support them to realise their potential. Such a stratagem does not exist, one contributor to emigration. Although currently Namibia does not have a national innovation policy, in its National Policy on Research, Science and Technology (GRN 1999), it recognises the importance of a national innovation policy. As Vision 2030 and NDP3 documents show, the political leadership is committed, but knowledge as a commodity can be difficult to trade because of the asymmetrical distribution of information between the buyer and seller regarding the main characteristics of the product. That is why, in 2000, Cabinet approved the establishment of a Centre for Innovation, Entrepreneurship and Technology[5] (CIET), albeit slightly diverging from what was envisioned in the 1999 Policy stated above. Parts of the objectives of CIET are:

a) to forge closer links and cooperation between education institutions and industry;
b) to explore and support opportunities for applying knowledge to increase value-added production;
c) to enhance national capacity for knowledge management and technology brokerage; and
d) to support and facilitate innovation and the establishment of new enterprises.

Unfortunately, this Centre is not yet operational. Sources at the Directorate of Science and Technology reported that they were directed to put the process on hold until the National Commission for Research, Science and Technology (CRST) is in place. CRST will be in charge of research funds and will play an important role in transforming some of the HEIs into *Centres of Excellence*. Nevertheless, once it begins operating, it will form part of what we have called *change agencies*[6], and if its activities are well financed and coordinated with HEIs, it may play a pivotal role in Namibia's transformation into a knowledge-based economy. There are a number of other factors that will determine the success of CIET. Besides the impediments brought by the absence of a national innovation policy and a knowledge

[5] Formally envisioned as the Council for Research and Industrial Innovations (CRII)
[6] By change agencies, we refer to statutory bodies whose main goal is to lead HEIs' overall approach to their activities. They set research and development agendas of HEIs and assesses their relevance to national priorities.

management strategy, the quality of scientists and scientific research, as well as how HEIs will deal with questions of inventions generated by their staff members (sharing formula or incentives), will greatly influence the long-term impact of this agency. Furthermore, the question of institutional capacity[7], coordination mechanisms and an articulation of the overall purpose of higher education will determine the transformative role of HEIs in Namibia.

[7] **Capacity refers to "the ability (of an individual, institution, or society as a whole) to identify and solve a problem or problems" (Mugabe 2000, 3-5). Capacity according to Mugabe (ibid, 3), entails a) skills and expertise utilised by b) insitutions be they formal or informal, that operate in c) context of systems – economic, political, socio-cultural and the nature and breadth of communication and interaction of the institutions**

COORDINATION AND SYSTEM NEEDS

During this decade, the coordination of the higher education system in any country has continuously been on the agenda of authorities. This has largely been a result of infusion or interest to infuse market principles in the undertaking of HEIs. The pressure has not been formalised in such a way that HEIs are part of governance structures and processes that must be administered in an entrepreneurial manner. In the context of Namibia, administrative governance of HEIs is under the supreme authority of Councils or Boards. These bodies have not only the legal powers and responsibilities to manage their institutions, but also the powers to devolve responsibilities, normally to the Vice Chancellor or Rector. Members of these supreme governing bodies are often prescribed in the statutes that established a specific HEI.

Councils or Boards receive reports and recommendations from several sources: the Chief Executive of the institution concerned and senior bodies to which faculties, departments, and centres belong. They make decisions and give mandates and direction on the overall governance of HEIs. *Academic* governance is normally left to *Senate* or some other duly constituted body. Thus, while the locus of authority and responsibility for academic, financial and estate matters lie with the governing body, academic governance bodies are mainly charged with the development of academic policies, determining the content, organisation and delivery of academic programs as well as setting up a system of assessing student performance. This system is similar (in some cases) to models applied in other commonwealth countries (Meek and Wood 1998, 167).

The problem comes in when reporting, planning and undertaking academic activities outside the HEIs themselves are considered. Often there is no office or unit directly charged with system coordination to ensure that activities planned or implemented could benefit from other institutions' insight. Ways of saving resources, in the form of joint material production, joint offering and awarding do not feature on governance and management agendas of HEIs. Although one could criticize this apparent reluctance by HEIs to engage one another in a coordinated manner, there are reasons for this. This chapter will address the following questions:

a) Is there a need for coordination?
b) What are the current practices?
c) Are there any policy issues of concern?
d) Do HEIs exercise joint offerings and material development?
e) What are the barriers to institutional cooperation?
f) What framework can be proposed to support coordination of the HE system?

Most Pressing Coordination Needs

All respondents in this study reported that there is a need for putting in place a coordination system. The reason is precisely because it does not exist. The majority of the HEIs investigated spoke of the need to coordinate higher education better, but they could not point out precisely what needs coordination or what aspects of the higher education system should be harmonised. This is an important starting point, because as Fullan (1991, 69) observes, in education *"many innovations are attempted without a careful examination of whether or not they address what are perceived to be priority needs".* The reader will recall that in order to understand coordination better, one must contend with the 'what' and the 'how' of coordination practice, not only in its generic but also in its specific meaning. First we need to define '*need*' and make the difference between '*perceived*' and '*felt-need*'. Need is defined as *"the degree to which there is a formal recognition in [within] the system that unmet needs exist" (Rosenblum and Louis 1979, 12).*

According to this definition, not only should coordination be perceived to exist, but HEIs themselves must be at a stage where they recognise and admit that there is indeed a need to conduct higher education differently. In this process differences are undoubtedly likely to surface due to competing priorities, different mandates and varying levels of operation. In fact, the respondents in this study reported that the most pressing issue is inadequate financing of higher education. Thus, for coordination to be meaningful, HEIs must experience *felt need*. To clarify, on one hand, many of the respondents at Colleges of Education cited reporting structures as an issue that needs coordination, because they are frustrated by the fact that they have three lines of reporting, i.e. to NIED on curriculum matters, to the Regional Director of Education on planning matters, and to the Directorate of Higher Education on personnel issues. Lack of mechanisms for joint degree offerings was not a *felt need*, and they did not mention it as a pressing need although they expressed willingness to work *(perceived need)* with any institution. On the other hand, respondents from PoN, UNAM and IUM reported that the coordination of research activities and financing thereof is an urgent problem that needs redressing.

The point here, as Fullan (2001, 76) notes, is that while the importance of perceived or felt need for coordination might be obvious, its role when implementation comes into play is often un-clarified and is permeated with difficulties. That is because while the need for coordination is perceived as important, it might not be significant enough when compared to other priorities of HEIs. Thus, as Huberman and Miles (1984) remind us, the people involved will want to be convinced that the needs being addressed are real and significant, and that the organisations will make greater progress in meeting national needs if they engage in coordination. What we found in this research is that even though HEIs see the notable value of coordination, harmonising their activities and programmes is not a priority. Thus, it will be important that when actual coordination of the higher education system is instituted, greater specificity of objectives and contents of coordination will be made. Nevertheless, in summary, the following were cited as urgent issues that need coordination:

1. Fair, rationale and appropriate funding formula for HEIs;
2. Curriculum development and educational material sharing;
3. Establishment of quality assurance and quality management systems;
4. Support for the attainment of appropriate expertise, skills and facilities;
5. Expansion of R&D activities;
6. Research and professional development of staff; and
7. Knowledge on market-demand and supply issues.

Current Coordination Practices

If we consider coordination as defined earlier, one can argue that currently there is no coordination in the higher education system. Reporting systems appear confusing. The Colleges of Education report to different offices on different matters. They report to the Directorate of Higher Education on recruitment issues, to regional offices when capital projects are considered and to NIED on curriculum matters. It was also reported that colleges were instructed to report to the regional directors of education in the regions where they are located. However, according to the colleges, no steps have been taken to agree on which issues need to be reported on to regional offices.

In fact none of the college management has met with the regional directors. UNAM and the Polytechnic on their part only report to their Councils and consult, at will, with the Ministry of Education. They feel no obligation to harmonise their activities. Funding is normally done through a process of submission and motivation, but there is no formula for determining which institution must be allocated how much and, most importantly, on what basis. The institutions determine what courses and programmes to establish, and they determine whom to involve.

When issues of demand and supply are considered, the research team found that there is no formal way in which HEIs determine whether or not there is a need to start an academic programme, or indeed whether or not they are overproducing or under-producing human capital. UNAM and PoN use stakeholder consultative platforms to determine the needs. However, it can be argued that these platforms are not as effective as tracer studies and other methods that might inform these institutions about the demand and supply situation with regard to the existing courses or indeed those that are planned. The Colleges of education on their part reported that local regional offices sometimes consult them on the supply of teachers. However, they reported that this practice is done too late. Often they are informed of the need for teachers in schools when in fact they are needed immediately, not in a number of years, which doesn't enable them to plan. As a result, they cannot take the human capital needs of the regions into account when planning.

Moreover, at the colleges, the number of student teachers enrolled is set by the MoE. Even if the consultation with the local regional officers was being done on time, currently those regions without

colleges would be ignored. Colleges reported that there is no way/mechanism for them to know what the staffing needs in those regions are. There is no mechanism by which the Ongwediva College of Education would know about the demand situation in Omaheke or Karas, for instance. It is assumed that through the application of the quota system, the system will take care of the needs of those regions without colleges. Similarly, other HEIs are not aware of the demand and supply situations in the professions for which they were training students – a result of the absence of a mechanism. The research team is aware of the fact that there is a human capital resource forecast at the National Planning Commission (NPC); however, the reliability of the forecast at this stage is highly suspect. The fact that there is no coordination is in principle not surprising. HEIs are hard pressed to expand access to academic programmes on offer. With increased enrolments across the country, higher education becomes accessible to a greater proportion of the population. Moreover, with increased need for infrastructure for the larger student population and for complex research equipment, administrators become more and more concerned about sources of funding and subsequently more removed from discerning the need for coordination. Competition for resources takes precedence. As such, the need to coordinate with each other is not a primary agenda. Also, publicly and privately, there is a debate about commercialisation of research outputs and consequently, HEIs seek to establish themselves as a form of a 'territorialized' industry responding to short-term economic considerations.

Policy Issues of Concern

During the research, a number of respondents at the Colleges of Education, UNAM, NQA, PoN and the Ministry of Education commented on the current practices in the higher education system, which in their view raised policy concerns. These are related to the inadequacy and/or lack of:

1. A national higher education policy;
2. Autonomy for Colleges of Education;
3. Mechanisms for coordinating higher education to enable institutions to augment one another;
4. Incentives to encourage highly skilled labour mobility;
5. Recruitment systems at colleges that attract people of high academic calibre;
6. Criteria for the enrolment of people from marginalised groups ;
7. A 'common body' to which all HEIs report to ("need for the same reporting structures");
8. Lack of suitable conditions of service at HEIs, which recognise professional qualifications of individuals beside the position of recruitment; and
9. ICT infrastructure and services.

One major policy concern which emerged from this study was the lack of a coordination policy itself. Another policy concern raised relates to the subject offerings of the NQA's evaluation and accreditation levels. It was reported that whereas most of UNAM's courses have been evaluated and accredited by the NQA, the PoN has submitted all its courses for evaluation, but has not yet received a response from the NQA. On the other hand, the Basic Education Teachers' Diploma (BETD) offered by Colleges

of Education has not been evaluated. Sentiments were expressed that the BETD will not be evaluated because of the political burden that might come with the evaluation. It is feared that once the BETD is evaluated and the qualification is found to be lower than it is currently believed to be, it will affect teachers' salaries. While this argument makes some sense, it can be argued that it presents a major blockade to coordination in the system of higher education for several reasons.

First, it reinforces the widely held suspicion that qualifications from the Colleges of Education are substandard. Second, the colleges do not have the confidence to claim expertise in any area they are offering qualifications in. Third, failure to evaluate the BETD does not support collaboration with other institutions of higher education as the entry levels of BETD graduates to UNAM and PoN cannot be ranked. Lastly, the transfer of academic credits from colleges to institutions like UNAM and PoN, for the purposes of exemption is difficult, if not impossible to administer. Moreover, stakeholders spoke of double standards, citing political protection for the BETD and exclusion of Vocational Education from higher education.

Another policy issue raised by the Colleges of Education concerns the formal requirements and procedures for appointing academic staff members which keep student teachers at a disadvantage. Respondents reported that at the colleges, one still finds academic staff members with qualifications below a four year junior degree. A report by Crebbin et al. (2008, 19) and statistics from the Ministry of Education (2007) indicate that a total of 4 (four) academic staff members with only the BETD qualification can still be found at the colleges. Statistics provided by the colleges (which are similar to those indicated in the Crebbin Report) show a high proportion of lecturers at the colleges who have only the prescribed minimum qualifications. Overall, not more than half of all the teacher educators have a degree or higher qualification. They also cited several cases where it took over six months after interviews were conducted and recommendations made before people filled the vacant positions. It was suggested that the solution is to introduce new legislation governing colleges that would give them a semi-autonomous status, which would then give them powers to recruit. The view that *"If colleges continue to operate under the Ministry of Education….there will be no room for innovation" was echoed at all colleges.*

Access to ICTs and location of these facilities was also a matter of concern. Heads of Departments at colleges reported that many teacher educators do not have personal access to computers and Internet in their departments. Most lecturers share one PC with two or three other staff members. Yet, in terms of the ICT Policy for Education 2005, they are expected to integrate ICTs in their teaching, research and planning. College staff also showed members of the research team ICTs deployed in laboratories and libraries. The issue of locating PCs in labs for student use is a debatable one, particularly when it comes to whether or not they 'best contribute' to learning and research when placed in labs. HODs at the Caprivi and Rundu Colleges reported that at the beginning of the year, they received consignments of computers to be used by students – yet the instructors themselves do not have access. At the time of

this research study, those computers (up to 25 units) were just locked up in storerooms. Overall, they had few ICT facilities, and in most cases the computers were not set up in a network.

The provision of ICT overall is critical to higher education coordination, because it can support sharing of expertise and skills as well as be used for tracking demand and supply, if well instituted. Academic programme materials can easily be jointly produced without the producers themselves physically meeting. Although the ICT matters are currently the responsibility of the Ministry of Education, coordination of their deployment is a matter of importance to HEIs.

Joint Offerings and Material Development

One irony in the higher education system in Namibia is that HEIs do not communicate effectively with one another. There is no policy or directive that compels institutional cooperation. A high number of academic programme overlaps have been observed (see Marope 2005) and reported to exist. Nearly all HEIs to varying degrees (except the Colleges of Education) offer bachelor's degrees in Human Resources, Business Administration, Financial Management, Travel and Tourism Management, and so on. Although disputed by the institutions, these courses were found to cover the same content. However, none of the HEIs cited cooperation with a local counterpart on any of these academic programmes.

Interestingly, when asked whether they were willing to consider jointly offering qualifications in areas of their institutional expertise, only the colleges replied in the affirmative. IUM said their courses are unique and therefore there is no need for joint offerings. UNAM and Polytechnic told the researchers that joint offerings depended on the modalities, but they were unclear about what those modalities would be. As can be expected of HEIs, UNAM and Polytechnic individually have entered into cooperation agreements involving joint offerings with a large number of universities and institutions abroad.

Yet locally, HEIs are seemingly reluctant to collaborate. Within institutions, course overlaps are apparent. At UNAM for instance, terminology semantics aside, each department across faculties teaches courses on the research process. Although there is the element of disciplinary relevance, the question and the challenge is – Can't these courses be run in a more cost-effective manner? There is a strong argument that local joint offerings should be encouraged through a variety of incentives. The inducements may include funding specific academic programmes relevant to national priorities, but on the basis that they are offered jointly.

However, one must remember that for any new inducement instruments to be successful, HEIs must not only see the need but also experience felt need. This is only possible if a mandatory system that determines the necessity of courses and their relevance to Vision 2030 to harmonize existing courses, is put in place. Information gathered in this research show that left alone HEIs will not communicate and harmonise their efforts. Joint material production is left to individuals within institutions. Only at the

colleges, driven by need, are materials jointly developed with PoN, the Centre for External Studies and the Faculty of Education at UNAM. It is necessary, according to the respondents in this study, that HEIs be directed. Doing so would add value (no need for recruitment of extra staff, broad specialisation) to some of the academic programmes in that enrolments could be increased and expertise from different institutions utilised. Other respondents also reported that HEIs should make their needs clear and only then would NCHE give direction. The question then is: Who should take the lead?

Challenges to Higher Education Coordination

Generally speaking, higher education in the world faces a number of challenges (Amono-Neizer 1998; Meek & Wood 1998; Fisher 1998). While some challenges relate to the historical inequities, others are purely related to governance, policy and management issues. In concrete terms, coordinating higher education without a national higher education policy poses extremely difficult questions of institutional authority and power, financial resource allocation, consensus on HE research agendas, monitoring and evaluation, and indeed, on the basis of anecdotal evidence, the tension between the 'policy on Namibianisation', the development of mobility programme to enable highly skilled labour force to support the needs of the country in different localities and institutions.

The higher education system faces the challenge of adaptation and transformation into a vibrant network of national institutions capable of producing a highly skilled labour force – one that can drive Namibia into a knowledge-based economy. Questions about the relevance of HEIs' programmes to national priorities are constant. Colleges are apparently overproducing teachers. Certain departments both at the Polytechnic and UNAM are struggling to enrol students. It is difficult to find an area of development where one can say the HE system is competent and performing beyond expectation. The HE system only haphazardly and defectively addresses national priority needs. For instance, while important questions regarding high failure rates in schools (foundational problems) persist, economic growth and poverty reduction particularly in rural areas remain unsolved.

In addition, there is widespread consensus amongst key stakeholders that the Namibian HE system is characterised by imbalances, inequalities and fragmentations. For example, the various colleges, universities and the Polytechnic vary widely in status, resources, degree of autonomy, operational focus reporting and governance systems. Despite policies and laws that encourage access with equity, or indeed, discourage inequalities, the number of staff and students from marginalised groups in HEIs remains low. Although the number of women, the San, the ovaHimba and people living with disabilities is increasing, of critical importance their share in areas critical to national development such as R&D is poor.

A conflict of values exists. Interestingly, many respondents at both HEIs and in governing agencies raised the issue of the anomaly of defining marginalisation along the lines of ethnicity outside poverty. They question the approach of differentiated admission (so-called positive discrimination) and wonder why

certain ethnic groups are categorised as marginalised while there are also people within 'main' ethnic groups who are poor but are not considered marginalised. HEIs also reported that in their opinion, individuals from marginalised communities should apply in the same manner that ordinary individuals do. They asked why these groups were selected on some other platforms and HEIs just 'ordered' to enrol them. Questions such as these arise because of a lack of articulated policies. Coordinating such a system constitutes a major challenge for policy and governance, something that requires comprehensive policies – policies that radically define the purpose and role of higher education in development, along with quality and access with equity, (inclusiveness) as well as financing. The argument we make here about comprehensive policies should not be taken to imply that institutional differences, mandates and functions should be collapsed into a homogenous menu. Instead, what it articulates is the need to ensure an effective and efficient system of governing institutional diversity, academic programmes delivered according to discipline, at different levels and interdisciplinary fields that are nationally planned, funded, regulated under one policy instrument, including coordination mechanisms and an elaboration of a single qualifications framework, and quality assurance provisions. Moreover, comprehensive policies need to be articulated in the context of Namibia's transformation into a knowledge-based economy.

Funding is another challenge. It is well known, to the credit of Namibia, that the GRN spends a substantial amount of the GDP on education. However, in the absence of agreed, formula-based budgeting and funding, which stakeholders consider as 'rational, fair and transparent', many HEIs reported lack of sufficient financing as a barrier to coordination. In reality financing higher education institutions is not the problem; the trouble is that the system of higher education has no criteria for how funds are allocated to various bodies and institutions. This creates great uncertainties and does in fact promote unhealthy competition. At the time of writing the NCHE through the services of international experts was investigating the possibility of a national funding formula. If it is true that, as one respondent put it, *"The Ministry of Education does not spend all the monies allocated to it",* then the HE system is under-funded because it has not managed to make itself a preoccupation of the political leadership.

Ironically, anecdotal evidence shows that this failure results from a lack of coordination mechanisms – but coordination mechanisms are difficult to come up with when there is no national policy on higher education. Doing so could mean certain aspects of higher education system coordination may be under-informed, while others could be misinformed. For example, articulating a mechanism of coordinating high-level innovation research without certainty of a funding formula can be grossly misleading, and more importantly, eventually leave scientific researchers frustrated and let down. So what can be done?

Integrated Strategic Coordination Framework

To address the complex needs of the HE system in Namibia, an integrated, collaborative planning vehicle that combines governance and implementation[8] should be considered necessary. By governance we mean the process through which high-level decisions are made above the line of HEIs. It is used here to refer to the approval and oversight of strategic institutional planning, implementation of a higher education policy, monitoring and evaluation, and control of activities for which operational baselines have been established and accepted by HEIs. Currently, different institutions use dissimilar frameworks for planning and implementation. Once again, this should not be mistaken as meaning that there should be a single planning system. Instead, what we are proposing is that at a governance level, there should be a planning framework from which HEIs can draw upon a philosophy to be developed and contextualised to their specific institutional-mandates. In the absence of such a framework (see figure 2 below) coordination is difficult to achieve. Thus, governance plays a crucial role in the integration of coordination in HEIs' strategic plans. Integration, a process of examining synergies, redundancies and the effectiveness of resource utilisation, allows for organisational consolidation, reporting and analysis, for rapid decision-making to take place. The management of coordination requires the participation of all stakeholders (HEIs, MoE, Councils and Authorities, and others). We have discussed briefly the functions of councils and authorised bodies and the Acts governing HEIs. An effective HE coordination system requires not only close and effective consultation, but also clear roles and responsibilities of the stakeholders with an accountability arm. The accountability arm would have a policy, content and implementation sections as follows:

A. Policy

1. National higher education strategic goals/national objectives
2. National higher education assessment
3. Coordination/linkages to national development plans and planning documents
4. Quality management and quality assurance
5. Annual consultation

B. Content

6. Country performance goals
7. Equitable funding system
8. Monitoring and control
9. Reporting

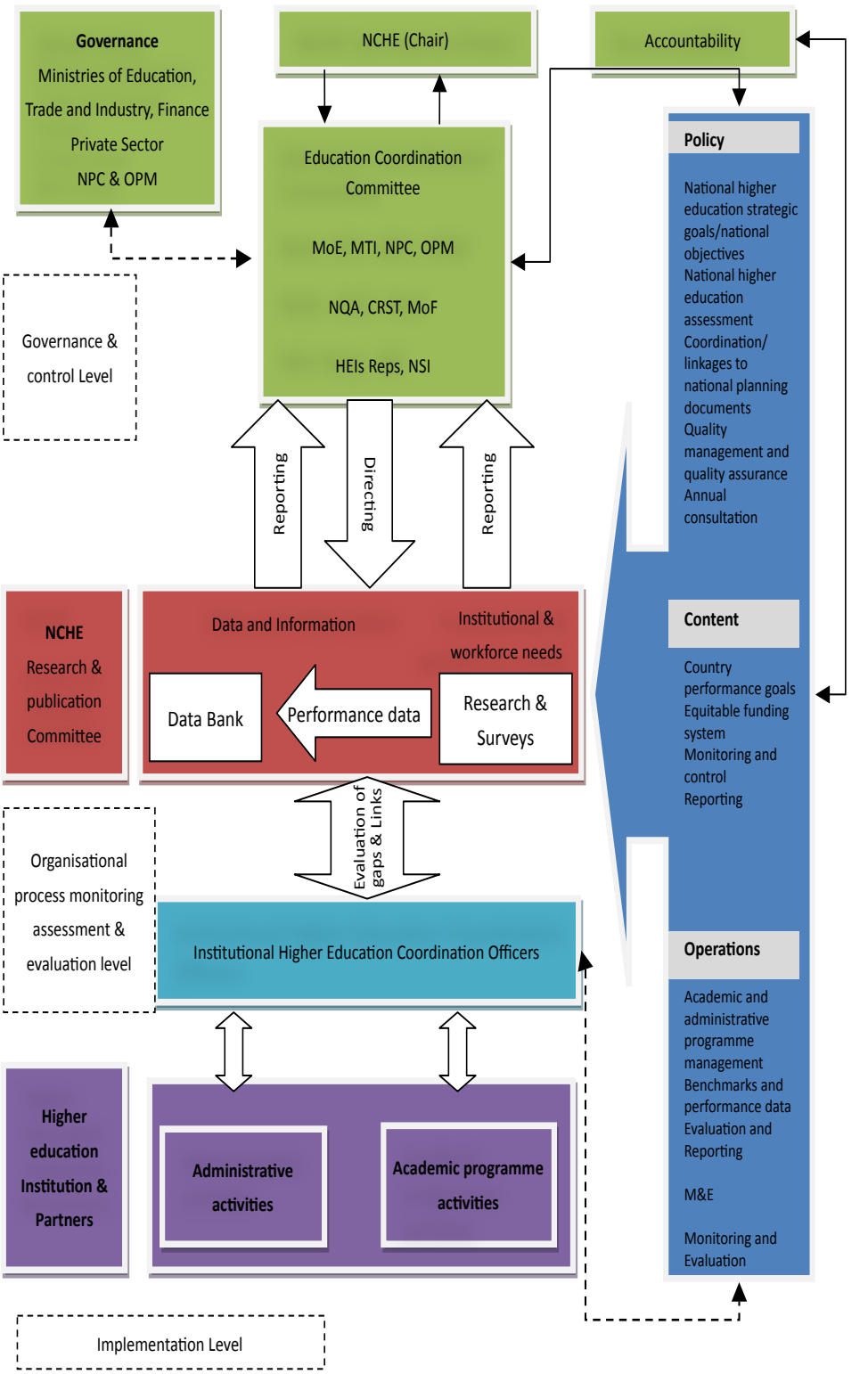
[8] **Implementation here refers to a process of putting in place the necessary resources and taking action to perform activities/projects or programmes leading to the achievement of a plan. The plans must be developed with clear requirements traceable to institutional strategic plans in order to verify compliance to those plans, to define the baseline from which monitoring and evaluation occur, and to permit the development of a national performance reporting system.**

C. Operations/implementation

10. Academic and administrative programme management
11. Benchmarks and performance data
12. Evaluation and Reporting
13. Monitoring and Evaluation

Proposed Operational Framework

Having discussed at length the issue of coordination of higher education – admittedly not exhaustively, at this point, we begin to ask these questions: How is a policy to be made? What should be the substance and driving force of it? When there are many aspects such as financing, coordination, R&D, governance, management, access to developmental resources, what coordination framework is most appropriate? And what purpose should it seek to articulate? Moreover, bearing in mind the context of Namibia, and the current 'three tier' set up – universities, polytechnic, and colleges, what kind of HE system reform should the policy articulate? Whatever the approach, it is important to recall the questions that were raised under the section 'Rationale of the Study'. It is important for the larger society to state what it thinks about its higher education system, which means that, not only the Ministry of Education, the National Planning Commission, Office of the Prime Minister (OPM), and the Ministry of Finance will want to, and indeed must have a voice, but also the private sector and members of the public. That is what should inform the conceptualisation of a coordination system. The framework encompasses the governance and control level, the organisational process monitoring, assessment and evaluation level and an implementation level. These levels should work in harmony with policy, content and implementation context of the country and specific institutional setup, capacity and mandates.


Governance
Ministries of Education, Trade and Industry, Finance
Private Sector
NPC & OPM
NCHE (Chair)
Accountability
Education Coordination Committee
MoE, MTI, NPC, OPM
NQA, CRST, MoF
HEIs Reps, NSI
Governance & control Level
Reporting
Directing
Reporting
Policy
National higher education strategic goals/national objectives
National higher education assessment
Coordination/ linkages to national planning documents
Quality management and quality assurance
Annual consultation
NCHE
Research & publication Committee
Data and Information
Institutional & workforce needs
Data Bank
Performance data
Research & Surveys
Content
Country performance goals
Equitable funding system
Monitoring and control
Reporting
Evaluation of gaps & Links
Organisational process monitoring assessment & evaluation level
Institutional Higher Education Coordination Officers
Operations
Academic and administrative programme management
Benchmarks and performance data
Evaluation and Reporting
M&E
Monitoring and Evaluation
Higher education Institution & Partners
Administrative activities
Academic programme activities
Implementation Level

In principle, what can be proposed here is a system that harmonises diverse institutional mandates into a national planning, funding and regulatory, assessment and accreditation, implementation, monitoring and evaluative system. The implementation of activities within the different aspects of the system according to set indicators and timelines on the offering of diverse-but-focused academic programmes would be linked to an integrated information management system. This conceptualisation presupposes a rational planning process – on the basis of high expertise and skills, in which diverse needs, potential and real tradeoffs are taken into account. Such a system can be linked to a human resources forecasting system and to a mechanism that monitors and evaluates national development plans (NDPs). HEIs should have user access, but not administrative access to such a system. The system should be able to show different phases of and content of plans, who is involved as a leader and/or as a contributor. A mechanism for dealing with conflicts can be established. Duplication can be avoided and joint offerings can be promoted, resulting in a far more cost-effective system of HE governance. Where applicable, a decision can be taken to 'force' collaboration or even to disallow offering a programme or undertaking defined activities. Internal system at the HEIs themselves should be put in place to assure quality and efficient coordination.

This way, the NCHE can examine areas where exceptional performance is taking place and determine the ways of sustaining or improving such. In the same way, where weaknesses are spotted, for instance, the need to promote access with equity or the need to jointly and speedily produce a skilled work force in a national priority area, the NCHE could then encourage, or if necessary, oversee the planning process, administer the programme approval process, and accordingly earmark and release funds for building capacity. The challenge is to run the system in such a way that there is a competitive system of balance between HEIs and not rivalry on the one hand, and academic freedom on the other. What is not clear, but must be clarified by the Higher Education Policy is how, by whom and on what basis, inventions and patents resulting from HEIs will be administered and coordinated. The NCHE will further need above-average capacity to plan, govern and manage this coordination system. All this will remain a 'framework' only if it is not supported by an appropriate HE policy – one that situates coordination at the centre of the complexity of interactions between the industry, public sector and the higher education system.

RECOMMENDATIONS

In addition to the framework outlined above, specific actions can be taken to deal with the issues raised in this report. The following recommendations-by-actor are suggested:

1. A national stakeholders' consultative workshop on this report should be initiated. **(Action: NCHE)**

2. Coordination, although a very complex process, can be done on two levels. At the first level, for the HE system to be harmonised, clarity at a philosophical level should be established, in a manner that helps HEIs to have a common and shared goal of higher education. When that is achieved, HEIs will more naturally coordinate their affairs in a harmonised and effective way. For such an enabling environment to be established, the NCHE must have executive powers, not advisory. At the second level, coordination is an 'instrumentation' and instructional issue. Instrumentation in that a mechanism of coordination must be put in place, and instructional in the sense that where harmonisation does not or seems not to occur, an authoritative body can instruct HEIs to do make it happens. Mechanisms such as national discussion forums should be instituted, and debate should be encouraged to achieve a shared goal **(Action: NCHE to engage HEIs and other stakeholders).**

3. A National Higher Education Policy which defines the purpose of higher education in Namibia should be formulated. Such a policy will influence to a great degree the role of HEIs in addressing in a coordinated manner the pressing national challenges such as poverty and unemployment as well as the chronic problem of school failure and learner repetition **(Action: NCHE to advise the Minister of Education for a decision).**

4. For a system-wide higher education coordination system to be effective there is a need for a Higher Education Integrated Management Information System (HEIMIS). Funded and managed by a coordinating agency, all HEIs, NQA, NCHE, NPC, MoF and authoritative bodies within the domain of higher education must be networked to this system, clearly indicating their plans, programmes and activities. This system can be automated to take care of communication and information circulation needs **(Action: NCHE to institute a committee to look into the modalities of such a system).**

5. A funding formula agreed to by HEIs should be established. Joint programme offerings, where relevant, can be linked to that funding. A funding formula can be based on specific desired outputs. The outputs may be a targeted funding per graduate per year, or funding per scientific publication **(Action: Directorate of Higher Education & NCHE).**

6. To facilitate ease of access and progression of students from one higher education system or institution to another, a national credit transfer system (NCTS) needs to be established and made compulsory for all HEIs **(Action: MoE & NCHE).**

7. To encourage ownership of coordination, HEIs should be assisted to appoint highly qualified individuals who will primarily be responsible for coordination. These positions can then be phased out after a period of time depending on the need **(Action: Directorate of Higher Education and NCHE).**

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APPENDIX A

Coordination of the Higher Education System in Namibia

Research instrument

Designation of Respondent ----------

Region ---------- Institution----------

Date Interview Administered---------- Name of Interviewer----------

Section A: institutional degree/diploma programs and areas of joint offering and material development

1. Number of degree/diplomas and areas of specialization offered
2. List all these specializations
3. At what level of NQA are they offered?
4. Are these courses offered elsewhere?
5. If yes, name the institution
6. If yes, are you in any way sharing…with that institution:

    Expertise

    Technical Skills

    Facilities
7. If no, how do you know they are not being offered elsewhere?
8. Have you considered jointly offering a specialization with other institutions?
9. If yes, which institutions and in what areas? Name institution and area sought
10. If no, what is the reason for this?
11. What mechanisms do you use to know what other institutions are offering?
12. Are you satisfied with these mechanisms?
13. What would you say is your institution's area of specialization, where you can claim to be the leaders in the field?

14. Are you willing to jointly produce materials on this/these specializations with other institutions?
15. If no, what are the reasons?
16. If yes, which institutions? List the institutions
17. And do you have any suggestions on how that process should be done? How might cooperation with other HEIs be encouraged?

Section B: Research and Development

18. What is/are your institution's overall mission and objective(s) on research and development?
19. In which category of priority areas for national HR development such as: …is your research on?
    - Agriculture;
    - Medicine;
    - Engineering;
    - Information technology and computing;
    - Planning and design;
    - Marine biology;
    - Geosciences;
    - Economics and management;
    - Education (HR as professional teaching personnel in priority subjects)
    - Basic (natural) science (maths, physics, chemistry, biology, statistics, etc.);
    - Social sciences research focusing on transforming Namibia into a knowledge-based society.

20. In these areas, how many people from the marginalized groups are engaged in R&D?

Women	
People living with disability	
San	
Himba	

21. Does your institution have sufficient capacity to conduct high-level research in order to deliver on national priority areas effectively?
22. If no, what do you suggest to be done?

23. Does your institution have knowledge of the market demand and supply situation of the professionals you train?

24. If so indicate what you know is:

    Deficit

    Surplus

25. Rate (0%-100% the performances of your institution against its mandate as per its founding objectives (e.g. in the Act or statues of the institution). (Fill-in below, as may be applicable.

    - Provision of quality higher education _____
    - Output of Academic research _____
    - Provision of extension services _____
    - Continuing education _____
    - Production of HR relevant to national economy _____
    - Collaboration with local and international institutions _____

Sections C: Institutional Coordination and System Needs Analysis

26. What are your institution's most pressing needs currently? List at least five in order of priority

27. From your institution's perspective, how might these needs be met?

28. Are there policy matters that should be addressed through a coordinated approach to the higher education system? List those issues/matters

29. What policy measures should be taken to deal with this problem?

30. Being the type of institution that you are what type of support and coordination system do you require in order to effectively and efficiently fulfil your mandate?

31. Has any attempt (formal or ad hoc) been made to create this support and coordination system?

32. If so, which office tried this and how did it work?

33. And in your view, why did it not function as expected?

34. Do you have any views about coordination of the HEIs in Namibia?

35. Are the current coordination arrangements of the higher education system an issue of concern to you?

36. What exactly concerns you about coordination?

Section D: Stakeholders

37. Who do you consider as important stakeholders for your institution? List all local and national or international stakeholders (may be individuals, institutions or organizations) that might make coordination of the higher education system (sector) effective and efficient to lead Namibia into a knowledge-based economy

    - Decision-makers: people/institution who make the final choices among alternatives usually political or administrative levels
    - Gate-keepers: people/institution with the authority to permit something to happen or to disallow it
    - Influential/opinion leaders: people/institution who can influence the behaviour or opinion of large numbers of people
    - Policy-makers: people/institutions in charge of making official policy

38. Overall, what is your institution's position on the coordination of the higher education system? How might it be done? Who should be involved and which institution should not be involved?

We thank you sincerely for your valuable input into this important study!

APPENDIX B

Alphabetical listing of people consulted, and those who kindly provided the research team with the information needed to compile this report,

Amakali, A
Auala, R
Chata, B
Claassen, P
Corneels, J
Fledersbacher, A
Gertze, F.E
Gunawardana, M
Haikali, S
Hailombe, O
Hausiku, D
Hidengwa, M
Iipinge, S
Izaks, R
Kabajani, C
Kamati, D
Kamwi, J
Kangumu, B
Katewa, E
Kirchner, E
Masule, B
Mbondo, L
Mbuye, E
Muituti, F
Musambani, E
Musialike, H
Mwandemele, O
Nicol-Wilson, E
Nzwala, K
Pomuti, H
Shihako, M
Shipena, A
Sibuku, C
Sichombe, G
Sifani, J
Sikabongo, R
Stanley, S
Uahengo, F.B
Van Kent, A