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*a part of the western world university portfolio?*

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## Capacity Building for Higher Education in Developing Countries – A Part of the Western World University Portfolio?

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### **SUMMARY**

“Higher education is the modern world’s basic education, but many countries are falling further and further behind”. This quote from a recent World Bank publication indicates that the role of the universities as a key driver for societal development is now widely recognized and included in the donor policies. However, donor projects are not easy to organize in this area, and the role of the western universities in this area is not easy to identify.

The paper presents a case study from Mozambique dealing with a World Bank project in Higher Education. The project was focused on qualitative reforms in the teaching and learning process in selected faculties at three public universities in Mozambique. The objective was to increase the use of student centered, project-oriented approaches, integrated with computer use, and to provide measurable increase in the proportion of students that pass rather than fail the course.

A pilot project was carried out by a Danish university consortium with the purpose of developing a full scale project to be agreed and implemented as a part of the total World Bank project. However, in spite of the fact that the project was very well received and agreed by all parties, the funding problem was never solved due to a lack of cooperation and mutual understanding between the key stakeholders in both donor and recipient countries.

The paper presents the lessons learnt in this regard. There is a need to develop a cross-sectoral understanding at national level in the donor countries in order to merge the interests of the universities, the Ministry of Science/Education and the national/international donor agencies.

It is argued that capacity building for higher education in developing countries should be a generally accepted part of the university strategy portfolio and be supported by the relevant stakeholders such as donor agencies, ministries and the trade and industries. It is important that such capacity building activities are seen as not only a key driver for societal development in the recipient countries, but also as a necessity for facilitating the building of relevant international capacity and institutional innovation in the donor countries. It is a process of mutual benefit for both recipient and donor countries.

## **INTRODUCTION**

Higher education is increasingly seen as a priority in the policies of aid agencies such as the World Bank. It is increasingly understood that “Higher education is the modern world’s basic education, but many countries are falling further and further behind” and it is understood that “Higher education is no longer a luxury, it is essential for survival” (World Bank, 2000).

The world’s economy is changing as knowledge supplants physical capital as a source of present and future wealth. As knowledge becomes more important, so does higher education. Therefore, the quality of knowledge generated through higher education institutions, and its availability to the wider economy, is becoming increasingly critical to national competitiveness.

This poses a serious challenge to the developing world. Since many decades, most national governments and international donors have focused on primary education as a means to attain the goal of poverty reduction, while investments in higher education were considered to be less important and less beneficial to promote development. As a result, higher education systems in developing countries are under great strain.

It is argued that urgent action to expand the quantity and improve the quality of higher education in developing countries should be a top development priority. The strengths of all players, public and private, must be used, with the international community at last emerging to provide strong and coordinated support and leadership in this critical area. (World Bank, 2000).

This paper provides an insight into the needs for implementing this new agenda. The paper presents a case study from Mozambique dealing with a World Bank project in Higher Education. A pilot project was carried out by a Danish university consortium with the purpose of developing a full scale project to be agreed and implemented as a part of the total World Bank project. The case study shows that such donor projects are not easy to organize, and the role of the western world universities within such projects is not easy to identify.

Capacity building for Higher Education in Developing Countries is a complex area. It is an on-going process that must be based on a national priority and a holistic historical analysis of the national system of higher education and its contribution to social, economic and political development. The analysis should establish clear goals and offer the ability to balance strategic direction by viewing the higher education system as a whole, determining what each part can contribute to the public good.

The role of the western universities is to facilitate this process of capacity building. This must be driven by strategic policy approaches and not solely through market driven consultancy activities. Capacity building in higher education is a two-way activity that must be seen as a necessity also in the developed countries. This calls for combined efforts of organizing the policies and priorities in both donor and recipient countries.

## CASE STUDY: MOZAMBIQUE

Mozambique gained its independency (from Portugal) in 1975. From the 80's onwards, Mozambique faced a long period of economic crises, political and military instability and a civil war that ended in 1992 followed by the country's first multiparty election in 1994.

Mozambique is located along the south-eastern coast of Africa with an area of around 800,000 sq km. It is bordered to the north by Tanzania, to the north-west by Malawi and Zambia, to the west by Zimbabwe and to the south-west and south by Swaziland and South Africa. To the east, the country is bordered by the Indian Ocean, with a coastline of almost 3,000 km.

Administratively, Mozambique is divided into 10 provinces. The capital city, Maputo, has a dominant position in terms of economic and educational conditions, and for that it also has the statute of a province. Maputo has about 1 million inhabitants while the total population in Mozambique is 16,5 million of which about 50% is under 15 years. Portuguese is the official language even if it is the mother tongue of less than 2% of the population.



At the end of 1992, Mozambique was classified the poorest country in the world. In the second half of the 1990's, however, it has achieved one of the fastest rates of economic growth that has exceeded 10% per year. Still, Mozambique remains an extremely poor country with an average per capita GDP of about 220 USD, and with about 70% of the population living below the poverty line. The country is heavily reliant on external development assistance that in recent years has represented about 40% of the total annual Government budget (Republic of Mozambique, 2000).

### Higher Education in Mozambique

The higher education system reflects the country's history. At first there was only one university, established 1962 and offering courses modeled on the Portuguese system. In 1976 it was renamed into Eduardo Mondlane University (UEM) having Doctor Eduardo

Mondlane as patron in honor of his multifaceted stature of nationalist, political leader and academician. During the civil war coverage remained limited. After the peace agreement 1992 UEM remained the main provider of higher education. In 1985 the Pedagogic Higher Institute was created out of the Faculty of Education at UEM as a response to the needs of raising the entry level of the students. In 1995 it was renamed the Pedagogic University (UP). There are currently ten Higher Education Institutions (HEI's) in Mozambique as shown in the table below. The average ratio of students to full-time equivalent staff is about 10.

Name of institution Location	Year establ.	No of Courses	No of Students
<b>Public</b>			
Eduardo Mondlane University (UEM) Maputo	1962	22	6,800
Pedagogic University (UP), Maputo + branches in Sofala and Nampula	1985	12	2,000
Higher institution for International Relations (ISRI), Maputo	1986	1	230
Nautical School of Mozambique Maputo	Upgraded 1991	3	
Academy of Police Sciences Maputo	1999	2	
<b>Private</b>			
Higher Polytechnic and University Institute Maputo + branch in Quelimane	1995	8	900
Catholic University of Mozambique (UCM) Beira + branches in central and northern regions	1995	9	1,000
Higher Institute of Science and Technology in Mozambique, Maputo	1996	7	650
Mussa Bin Bik University Nampula	1995	3	130
Institute of Transport and Communication Maputo	1999	3	

Higher Education Institutions in Mozambique (updated from Republic of Mozambique, 2000)

Due to the structure of the studies, it is difficult to estimate meaningful rates of graduation. However, at the two main public universities, the rate of graduates compared to the admission five years earlier seems to be around 50%. The reasons for this low rate can be summarized in three categories:

- *Institutional*: poor linkages between secondary and tertiary education; inadequate curricula and teaching methods; poor planning; no research supporting the teaching; and poor infrastructure including libraries and ICT.
- *Individual*: teachers may not be well prepared and are too busy because of “moonlighting” activities; students in their turn may have problems of adaptation to the university life; self-exclusion; insufficient study and time management skills.
- *External*: Opportunities for jobs before graduation; and financial problems due to poverty and adverse social conditions. (Republic of Mozambique, 2000).

Furthermore, there is an urgent need to reform curricula in HEI's in Mozambique with regard to the objectives, the quality, and the relevance of the programs; the profile of the graduates; teaching and learning methods; flexibility of the study plans; measures for quality assurance; and interaction with society and the trade and industries.

### **Government strategy**

In October 1998 a Strategic Plan of Education (1999-2003) for Mozambique was approved. This plan sets out perspectives for the global development of the educational sector and covers in detail primary education and teacher training, and with less detail the secondary and technical education, and very little for the higher education system.

As a consequence, the Minister of Education established a consultancy task force with objective to analyze the present situation of Higher Education in Mozambique and to propose a 10-year strategic plan for this sub-sector in consonance with the strategic plan approved for the Education Sector, defining objectives, structure, scope, financing and governance.

Signaling the seriousness of its intent to address these issues, the government formed a new Ministry of Higher Education, Science and Technology (MESCT) January 2000. This accelerated the resulting report "Analysis of the Current Situation of Higher Education in Mozambique" (Republic of Mozambique, 2000) and the preparation of the National Strategic Plan for Higher Education 2001-2010". The strategic plan was approved by the council of Ministers in August 2000 and forms the basis for a variety of initiatives undertaken in Mozambique higher education.

This was followed by a detailed plan of operation approved by the same body in July 2001 resulting in a ten-year program aimed at nation wide strengthening of Higher Education in Mozambique. The World Bank is one of the partners supporting the implementation of the ten-year national program through a 35 million USD project. The development objectives of this Higher Education project (HEP) are to:

- Enhance internal efficiency and expand the output of the graduates
- Improve equitable efficiency (gender, location, and socio-economic), and
- Improve the quality of the teaching-learning process and the relevance of the curriculum

The key performance indicators include: An increase in the absolute number of students graduating in all HEI's (from 786 in 2000 to 1,500 in 2006); an increase in the number of students from the North and Center of the country (from 10 to 15% and 30-35% respectively in 2006); an increase in the admission to total enrolment rate from 16.3 to 18.3% (20% is ideal) by 2006; Furthermore, Curriculum changes in selected faculties should show evidence of increased use of new and updated materials and computers for information gathering and data analysis; and, finally, *qualitative reforms in the teaching-learning process, in selected faculties, that provide strong evidence of an increase in the use of student centered, project-oriented approaches, integrated with computer use, and providing a measurable increase in the proportion who pass rather than fail the course.* (World Bank, Project Appraisal Document, 2002).



Top: Eduardo Mondlane University and a wall mural from the campus.

Bottom: Rural and urban areas (Maputo).

### **The pilot project – background and objective**

A pilot project was undertaken by a Danish University Consortium in relation to the performance indicator regarding the implementation of “*qualitative reforms in the teaching-learning process by the use of student centered, project-oriented approaches*”.

The contact was established at a visit to the World Bank for promoting the Danish expertise with regard to educational consulting. The Danish University Consortium DUCED (Danish University Consortium for Environmental Development that includes 7 universities in Denmark) was represented at this visit and presented their experience in educational co-operation with universities in Botswana, South Africa, Swaziland, Malaysia and Thailand under the DANCED program funded by the Danish Government. This program also includes the use of student centered and project-organized approaches, and DUCED was therefore invited to undertake a pilot study as a basis for designing a full scale project for implementing a curriculum reform in Mozambique through the use of Problem Based Learning approaches. The pilot project was then organized through funding of 100.000 USD from the Danish trust funds at the World Bank.

The project team was established to include also a representative from the UNESCO Centre for Problem Based Learning at Aalborg University (UCPBL), and from the Danish Ministry of Science, Technology and Innovation, in total a team of four persons.

The Team visited Mozambique at three missions conducted in November 2002, August and November 2003 to establish modalities for institutional partnering between Danish and Mozambican universities under the umbrella of the government's strategic plan for higher education in Mozambique. The consultancy was commissioned by the World Bank as a preparatory investigation with regard to introducing a Problem-Based and Project-Oriented Learning Approach to higher education of Mozambique. The Terms of Reference, were specifically developed for this purpose.

The three missions undertaken in preparation of the PBL-Program dealt with the following issues:

- Fact-finding and identification of potential piloting partners (Mission 0, one week, November 2002).
- Profiling the faculties identified, preparing for a PBL-workshop and having initial negotiations between the ministries (Mission 1, one week, August 2003).
- Conducting the PBL workshop and following-up with selected faculties and MESCT (Mission 2, one week, November 2003).

In conclusion there were clear indications from the universities and MESCT that a program should be developed and supported for introducing innovative pedagogical methods as discussed during the three missions.

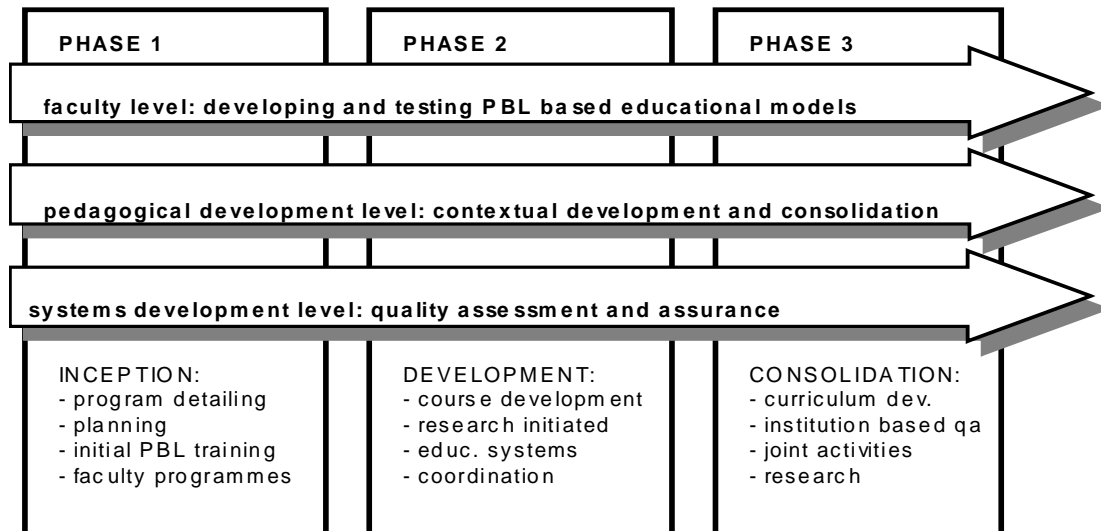


At the Ministry of Higher Education, Science and Technology (MESCT), Mozambique.  
Center: HE the Minister, Mrs. Lidia Brito; Left: WB Program coordinator, Mr. Arlindo Chilundo;  
Right: WB project coordinator, Mr. Rafique Cassamo.



## The outcome

The final report presenting the proposal for a full scale project was presented and discussed at a fourth mission June 2004. The proposal was prepared in cooperation with the Mozambique implementation group and included 10 faculties in total (seven from UEM, two from UP and one from ISRI). The project is designed for eight years with a total budget of 8 million USD. The project is designed to take place at three levels of action to be carried out in three phases as shown in the diagram below (Enemark 2004).



*The faculty level* is the operational/professional level concerning implementation of new educational and pedagogical methodologies at the pilot faculties. Student centered and project-organized approaches will be applied through course and curricula development in accordance with the demands of the specific professional areas. This level should be addressed through twinning arrangements between the pilot faculties and corresponding faculties in Denmark (and, possibly, Southern Africa).

*The pedagogical development level* is the organizational/conceptual level concerning the implementation of educational models and organizational structures in relation to student-centered and project-oriented approaches. This will aim to foster the developmental university through interaction with the outside world such as the trade and industries. This level should be addressed through cooperation between the institutions responsible for educational development at the universities involved.

*The systems development level* is the most general level of analysis concerning the role of the universities within the society, the statutory framework, and the cultural basis. This will include development of relevant measures for resource and quality management. This level should be addressed with assistance from the Danish Ministry of Science, Technology and Innovation in cooperation with the Ministry of Higher Education, Science and Technology in Mozambique.

The phasing of the project into a two year inception phase, a three year program development phase, and a three year consolidation phase will ensure that mutual

reviews are carried out prior to commencement of each phase in order to determine whether the program shall proceed.

The final project proposal was very well received by all parties: the faculties, the universities, the Ministry, and the World Bank. It was agreed that the project meets the current needs of the universities. It would enhance the quality and relevance of higher education in Mozambique, and it would fulfill the aim and objectives in the strategic plan and the WB project with regard to the implantation of qualitative reforms in the teaching-learning process. Concerns were raised about the duration of the project and the level of budget, and with regard to the proportion being allocated outside the country. With regard to the funding situation it was stated, that the new funds must be generated possibly by the Danish International Development Agency (Danida) if the project were to be implemented using Danish universities' consultancy assistance. This would follow the general procedure that country donors pay.

It was intended that a memorandum of understanding be elaborated and signed as a result of the fourth mission as a basis for implementing the full scale project. However, this was postponed due to the problems of funding the project.

### **The funding issue**

During the missions, concerns were raised several times regarding the issue of funding such a project. From the very beginning it was indicated, that the full scale program should be realized through the funding from the World Bank credit. As discussions went on, this turned out to be a matter of opinion. At a certain stage the Moz. Minister indicated, that the credit was supposed to support activities within Mozambique and was not to be used on foreign consultancies. A project like the one we were discussing was expected to be funded by national donors such as Danida and not through the WB credit. This statement is of course understandable, even if it is not in line with the understanding of which the pilot project was initiated. Furthermore, it is well known that projects in the sector of tertiary education are not included in Danida's overall development policy and strategic action planning.

At the same time, other projects were ongoing in Mozambique regarding quality assurance for higher education, concepts of Problem Based Learning, and concepts of university financial management. These projects were funded by the Dutch and Swedish national aid agencies and were not directly related to the overall World Bank project.

In this perspective, it looks strange that a high quality strategic plan for higher education like the one in Mozambique is not linked into an internationally agreed policy of funding that accounts for the various activities. The World Bank indicated that efforts would be made to establish the necessary funding from various donors (including Danida) but so far without any positive results. The Danish project team, this way, ended up to be responsible for acquisition of funding the project. This is, however, not considered a part of the general portfolio of the Danish universities.

In conclusion, the proposal prepared by the Danish team was not initiated due to the lack of (Danish) donor funding for implementation.

## LESSONS LEARNT

Capacity building support is urgently needed for higher education in developing countries. However, such projects are always a two-way activity. Capacity building projects, therefore, must be rooted in an organizational framework in the donor country. To develop such a framework in Denmark should be considered for several reasons:

- To support developing countries through capacity building in their home country and thereby underpin the concept of developmental universities that base their priorities, curricula and research on the structural needs of society and actively address those needs.
- To enable and support active cooperation with universities in the developing countries and thereby compensate for the new policy of introducing tuition fee for students from the third world to study in DK
- To support and further develop the efforts of internationalization at the Danish universities and thereby better understand the role of and the basic conditions for higher education and research in the modern global world.
- To enable Danish universities to take part and compete on equal conditions on the global market of consulting services within tertiary education and thereby support the wider aims of the Danish foreign policies.

Such a framework should include the key stakeholders such as the Universities, the Ministry of Science, and Danida. This is obviously a political issue, and not only an organizational task. It will include a cross-sectoral dialogue to agree on policies and financial arrangements that to some extent also include cooperation with the international donors such as the EU and the World Bank.

The universities – in both donor and recipient countries – are learning institutions, they are not teaching institutions. This means that, in a university, everyone learns continuously: the students, the technical staff, and the lecturers. University education is essentially the acquiring of self-learning capacity based on and supported by a high quality scientific foundation. University graduates need to be able to learn, and to unlearn in order to learn again, continuously (Brito, 2002). Building the capacity to develop such learning institutions and developmental universities in the developing countries is a huge challenge.

Higher education cannot be developed to the exclusion of other policy initiatives such as physical infrastructures, better governance, public health improvements, trade and financial market development – these are needed as well. There may be shortcuts to establishing educational infrastructure, but influencing people to understand and convey higher education values and best practice will take decades. Therefore, policy makers and donors should waste no time (World Bank, 2000). As H.G. Wells said in *The Outline of History*, “Human history becomes more and more a race between education and catastrophe”.

## CONCLUSIONS AND RECOMMENDATIONS

There is a need to commence the discussion of the role of the Danish Universities with regard to capacity building for higher education in developing countries. This is a political issue and the relevant stakeholders (the universities, the Ministry of Science, Danida, and also the trade and industries) will have to look at this from a modern and holistic view based on a more corporate responsibility.

The universities in the donor countries are not generally entrepreneurs in the sense of acting on a global market of consulting. Market oriented consultancies may be interesting for individual academics in certain professional areas with the aim of developing professional understanding and new knowledge through participating as professional experts in donor projects undertaken by the international development banks and individual country development assistance agencies. But basically, the universities are focusing on education and research as their prime activities, and this does not include market oriented consultancies.

The capacity building activities therefore must be organized as a corporate effort of all relevant stakeholders. Such capacity building activities for higher education in developing countries are at the heart of the objectives of the western world universities. This kind of consultancy or reciprocity cooperation is the direct way to voice the need for internationalization and globalization at the Western universities. And at the same time it is the direct way to support and increase innovation in the developing countries. It is, as such, a win-win situation.



Beautiful Mozambique

## REFERENCES

- Brito, L. (2002): Speech at the UNESCO Conference on Higher Education, Oslo.
- Enemark, S., Jorgensen, H.L., Muller, J., and Meinert, M. (2004): *The PBL Program – Developing Innovative Higher Education in Mozambique*. Final Report from a Danish University Consultancy.
- Kjersdam, F. and Enemark, S.: *The Aalborg Experiment – Project innovation in University Education*. Aalborg University Press, 1994.
- Republic of Mozambique (2000): *Analysis of the Current Situation of Higher Education in Mozambique*.
- World Bank (2000): *Higher Education in Developing Countries – Peril and Promises*. Published for The Task Force on Higher Education and Society by the World Bank. Washington.
- World Bank (2002): *Project Appraisal Document, Higher Education Project Mozambique*.

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