



REPORT ON THE BENCH-MARKING VISIT BY A DELEGATION OF MAKERERE UNIVERSITY TO MALAYSIAN UNIVERSITIES FROM 6TH TO 14TH NOVEMBER 2015

1.0. INTRODUCTION

At the invitation of the University of Putra Malaysia, the University of Putra Malaysia Holdings and the University of Kuala Lumpur, a delegation of Makerere University headed by Prof. Barnabas Nawangwe visited the three institutions on a bench-marking mission. The delegation comprised of the following officers of the University:

- i. Prof. Barnabas Nawangwe, Deputy Vice Chancellor (Finance & Administration);
- ii. Assoc. Prof. David Owiny Okello, Deputy Director, Directorate of Research and Graduate Training;
- iii. Dr. Hussein Kisiki Nsamba, Lecturer, Department of Chemistry, CONAS;
- iv. Mr. Moses Nadiope, Ag. CEO, Makerere University Holdings Ltd.

The objectives of the bench-marking visit were to:

- a. Strengthen capacity of University Management in management of innovations and commercialization of research;
- b. Benchmark best practices in the area of research commercialization and innovation at universities in countries with identical socio-economic conditions to Uganda, which have recorded success in that area;
- c. Explore opportunities for collaboration between Makerere University and the leading Malaysian universities, and between Makerere University Holdings Ltd. and similar entrepreneurial ventures at the Malaysian universities.

The delegation left Uganda on 6th November, arriving in Kula Lumpur on 7th November 2015 and departed Kula Lumpur on return to Uganda on 14th November 2015. During the visit to the two top Malaysian universities, meetings were held with top officers of the two universities. The delegation also toured the facilities at the two universities. Below is a summary of the activities undertaken by the delegation in Malaysia.

2.0. VISIT TO UNIVERSITY OF PUTRA MALAYSIA HOLDINGS (UPMHOLDINGS)

The Makerere University delegation visited the University of Putra Malaysia Holdings (UPMHOLDINGS) on 9th November 2015. The delegation was received by the Managing Director of UPMHOLDINGS, Prof. Dr. Husaini Omar and the Chief Executive Officer, Dr. Mohd Kamil Yusoff and held discussions with the two officers and other staff of the company. The following are the highlights about UPMHOLDINGS:

- i. UPMHOLDINGS was established by the Board of University of Putra Malaysia in 1985, starting as a consultancy unit;
- ii. UPMHOLDINGS is a private limited liability company completely independent of UPM bureaucracy and not subjected to government regulations governing public institutions;
- iii. UPMHOLDINGS is governed by a 7-member Board of Directors, chaired by an external Director who may be from Business or Government;
- iv. UPMHOLDINGS is managed by a CEO appointed by the Board of Directors;
- v. UPMHOLDINGS has 3 subsidiaries providing services as follows:
 - a. UPM Education and Training
 - Distance Learning
 - Franchise
 - Off-shore campuses
 - b. UPM Training
 - Training for Government
 - Training for the Private Sector
 - Training for International Agencies
 - c. UPM Consultancy
 - Services
 - Consultancy
 - Consultancy for Government (70%)
 - Consultancy for Private Sector (29%)
 - Consultancy for International Agencies (1%)

The services offered include:

- | | |
|-------------------------|-----------------------|
| ▪ Catering | ▪ Space Rentals |
| ▪ Student Accommodation | ▪ Laboratory Services |
| ▪ Event Management | |
- vi. UPMHOLDINGS fully transformed from a consultancy into a holding company in 2009 with a University loan of 1 million Malaysia Ringgit (approx. UGX 1 billion) and it started giving dividends to the University in 2011, giving 1 million Ringgit in 2011, 1 million Ringgit in 2012, 2 million Ringgit in 2013 and 2 million Ringgit in 2014 as dividends.

Lesson Learned: A university holding company is a viable way of implementing university investments and its success greatly depends on initial support from the university and ensuring maximum independence of the Board in taking business decisions.



The Mak delegation poses for a photo with the Prof. Mokhtar, Managing Director, UPMHOLDINGS

3.0. VISIT TO UNIVERSITY OF PUTRA MALAYSIA (UPM)

The Makerere University delegation visited the University of Putra Malaysia on 12th November 2015. The delegation was received by and held discussions with the Deputy Vice Chancellor (Research and Innovation), Dr. Mohd Azmi Mohd Lila, who was joined by Prof. Dato Mohd Yazid Manap, Director of Halal Products Research Institute, Prof. Dr. Taufiq Yap Yun Hin, Head of Laboratory for Sustainable Bioenergy and Chemicals Catalysis Science and Technology Research Centre, Ms Shahriah Member, Head of Marketing and Branding section and others.

The discussions concentrated on UPM experience in research and innovation, technology transfer between university and industry and commercialization of research. The following are the highlights from that discussion:

- i. UPM was originally established as an agricultural institute, but has transformed into a multi-disciplinary university;
- ii. UPM is the only public university in Malaysia offering agricultural training;
- iii. UPM has a total academic staffing of 1800 of whom 80% hold PhDs and a student population of 29,000 out of which 50% are postgraduate students;
- iv. UPM is one of 5 public universities in Malaysia categorized as Research Universities;
- v. The main source of research funding is the Government Research Grant totaling to 100 million Malaysia Ringgit, which is available only to the 5 public universities categorized as research Universities;
- vi. The Government Research grant is competitive and researchers may apply individually or through their faculties;
- vii. Other research grants are provided by the Ministry of Higher Education, Ministry of Industry, Science, Technology and Innovation and Ministry of Agriculture;

- viii. Research grants are also available at Government Link Companies, which include Petronas and Sine Derby, specifically for research on product improvement and services;
- ix. Commercialization of research at UPM is mainly through sale of IP licences through UPMHOLDINGS;
- x. UPM also gets returns from commercialization of research through royalties on product sales, usually at the rate of 2.5%;
- xi. By September 2015, UPM had registered 1890 patents, of which 45 have been commercialized;
- xii. Researchers get 60-70% of proceeds from royalties or sale of licences;
- xiii. Commercialization of IP is normally done in the following steps;
 - a. Screening of the IP
 - b. Conducting Due Diligence;
 - c. Promotion of the IP;
 - d. Identification of partners; and
 - e. Negotiation and sale.

Lessons Learned:

- There are institutionalized research grants from Government;
- Recognition of Research Productivity is a major incentive to researchers;
- Commercialization is a difficult process and requires a lot of effort;
- A dedicated IP and research commercialization office is key to success.

At the end of the meetings at UPM, it was agreed to sign a Memorandum of Understanding to enhance further collaboration between the two universities and this process has started.

4.0. VISIT TO UNIVERSITY OF KUALA LUMPUR (UniKL)

The Makerere University delegation visited the main campus/chancellory and the Malaysian Institute of Chemical and Bioengineering Technology (MICET) of the University of Kuala Lumpur on 9th and 11th November respectively. At the main campus located in central Kuala Lumpur, the Mak delegation held discussions with the UniKL delegation led by Prof. Prof. Dato. HJ. Ahmad Zahir HJ. Mokhtar, Deputy President (International, Industrial and Institutional Partnership). The meeting was also attended by Dr. Rita Zaharah Wan Chik, Deputy Director of the Centre for Research & Innovation, Ms. Nor Zunaini Abd Kadir, Director (UniKL International Office), and Ms Chiara Marcheschi, Executive for Initiative & Development (UniKL International Office). At MICET, the UniKL delegation was led by Muzafar Zulkifli, Deputy Dean (Academic & Technology) and it included Bahtiar HJ. Kasbi, General Manager (Teknoputra Division), Norazmi Omar, Head (International, Industrial & Institutional Partnership) and others.

The following are the highlights of the discussions at UniKL Main Campus and at MICET:

- i. UniKL was established in 2002 as a private university owned by MARA, an agency of the Ministry of Agriculture established to balance educational levels among the Country's states;
- ii. The University was established to promote rural development;
- iii. The University has 12 campuses across the Malaysian Peninsular, each with a specialized area of knowledge, six of them in Kuala Lumpur;
- iv. 70% of the students at UniKL are from rural disadvantaged families;



Above: Map of Malaysia showing campuses of UniKL



Mak and UniKL delegations in group photo



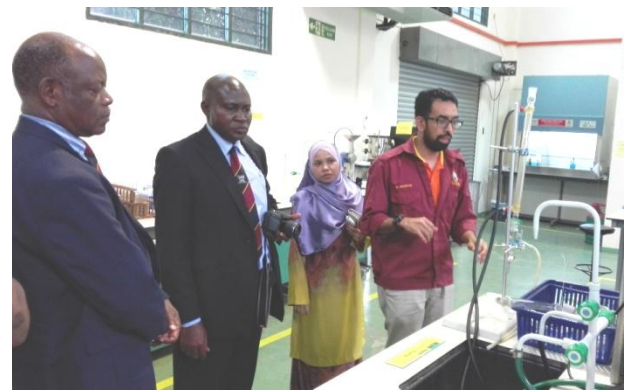
Prof. Nawangwe presenting souvenir to Prof. Mokhtar

- v. The current enrolment is 29,000 and this is projected to grow to 50,000 by the year 2020;
- vi. The education sector in Malaysia takes 30% of the national budget;
- vii. The vision of the University is *To Create Entrepreneurs*;
- viii. It is mandatory for every student at UniKL to take at least to courses on entrepreneurship;
- ix. Currently 8 % of graduates from UniKL are entrepreneurs and the plan is to ensure that this grows to at least 20% by 2020;

- x. Students with good innovations may incubate those innovations at the University's Centre for Entrepreneurship Development;
- xi. The University provides 10,000 RM as loan to every student who wishes to incubate their innovation and this is converted to a grant if the idea is accepted for further development;
- xii. Commercialization of innovations is done through a University-owned company called UniKL Resources;
- xiii. UniKL is responding to the Country's agenda, which is to focus on techno-preneurship;
- xiv. All the University's infrastructure is provided by Government.



The Mak delegation in a group photo at the experimental set-up of former PhD student Hussein Kisiki, member of Mak delegation



The Mak delegation on a tour of the Oil Laboratory at MICET

At the end of the discussions the Mak and UniKL delegations agreed to sign an MoU to take collaboration between the two institutions to the next level.

Lessons Learned:

- i. Malaysia's heavy investment in the education sector since independence is paying dividends;
- ii. Government support to universities enables them sustain entrepreneurial programmes;
- iii. Collaboration between Government, private sector and universities is key to industrialization and development of the service industry.

5.0. CONCLUSION

The bench-marking trip to Malaysian universities provided useful lessons for Makerere's current programme of diversification of revenue sources, especially the way in which commercialization is handled in conditions of a developing economy. The team wishes to thank the Management of the Centre for Transportation Technologies for sponsoring the trip.

Signed: _____ Prof. Barnabas Nawangwe
 _____ Assoc. Prof. David Okello Owiny
 _____ Dr. Hussein Kisiki Nsamba
 _____ Mr. Moses Nadiope