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TOPIC: INTRODUCTION AND MANAGEMENT OF VARIOUS CHANGES AT MAKERERE UNIVERSITY 1988-2005

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

Makerere University was the only University in Uganda for a long time, with a mission to pursue the creation, acquisition, management and transfer of knowledge; and to fully develop the intellectual capacity of students through teaching and research; and provision of other services to the community, for accelerated economic, social and technological development (Makerere University strategic plan, 1996-97 / 98-99).

The University was set up with the following goals: teaching, research and publication, and community service (Nagimesi, 1999). It started in 1921 as a technical college and in 1922; the name was changed to Makerere College. It became an independent University in 1970 when the University of East Africa of which it was part, broke up (Makerere University prospectus, 1996/97).

It has been claimed that attempting to change a University is like trying to move a cathedral (Coombe, T. 1991). However, in only a short time Makerere University has greatly changed its system of financing, operations and management, as this thesis seeks to show.

State sponsorship:

For a very long time, since 1970 till early 1990s, all the University students were state sponsored. The government provided not only tuition fees but also all other requirements including boarding facilities, feeding, medical care, physical transport for students to the University and back to their homes for vacations. In fact, for a long time, students were also given out of pocket allowance known as "boom".

Admitting and training every body admitted to university on government sponsorship for University education was the only way known in Uganda. Students who could not be accommodated in the halls of residence were paid food allowance and living out allowance by the government. In fact, parents would not pay anything whenever their sons and daughters joined the University.

On the other hand, sponsoring students entailed so much expense especially on accommodation which included feeding, cost of utilities such as electricity, water, recreation, textbooks and stationery. This made University education too expensive. On average, the University student population during and slightly after the 1980s was 7,000 both undergraduate and postgraduate.

It is also important to highlight the fact that because all the students were state sponsored; the government could not afford to increase numbers despite the evident need. Although the norm was two students to share a room, in some cases, some students preferred to occupy single rooms because there was enough room. In 1988, there was a successful attempt to increase the numbers, which caused the University administration to decide to have three students sharing a room. This was indeed a departure from the known norm of staying in double rooms.

Gender mainstreaming:

In 1995 or there about, the question of gender mainstreaming started to gain prominence in various debates at all forums in the University. Women members of staff and those who sympathised with them expressed concern about the way women were left behind in education programmes. Suffice it to say that, by 1994, there were only two female professors and two Associate professors in the whole University.

Introduction of ICT:

Towards the end of 1990s, there was need to automate the administrative systems since the numbers of students had risen so much that they could no longer be managed purely manually. So, in the early 2000s, there was a lot of work towards introducing administrative computing. Various financial donors including NORAD, Sida/SAREC and USAID supported this endeavour. The move also received support from the government of Uganda.

1.2 Analysing the change implementation

In analysing the various changes and how they were managed, this thesis employed the ADKAR model tool (Jeffrey M. Hiatt and Timothy J. Creasey, 2003, p. 36). ADKAR is an acronym that entails five basic stages of change:

- A: Awareness of the need for change
- D: Desire to participate in and support change
- K: Knowledge about how to change
- A: Ability to implement new skills and behaviour
- R: Reinforcement to keep the change in place.

At a micro-level, ADKAR characterises the process of individual response to change. This study was based on a macro-level analysis. The effect is not an individual ADKAR change profile but an organisational ADKAR profile.

Change management in this thesis "is about helping people through change their ways of doing things. It refers to the process, tools and techniques for proactively managing the peoples' side of change in order to achieve the desired business results". (ibid p. 10-11).

Each of the changes is analysed on the ADKAR criteria.

1.3 Organisation of the thesis

In this thesis, the changes dealt with are presented as follows:

- 1. Scrapping of students' allowances and other benefits and how it was managed.
- 2. Introduction of 1.5 points bonus for the female applicants to the University, how it was managed.
- 3. Introduction of new programmes, its management.
- 4. Gender mainstreaming, its management.
- 5. Introduction of Information communication technology (ICT), its management.
- 6. Conclusions

2. CHAPTER TWO:

2.1 Scrapping students' allowances and privileges

In 1989, the government of Uganda decided to scrap the allowances that hitherto had been paid to the students for years. This was a change intended to reduce the cost of individual student's University education in order to be able to extend the opportunity to more students.

In the year 1988, government decided to introduce changes in terms of the privileges extended to students. The changes included but were not limited to scrapping of: boom, book allowance, and stationery allowance. The argument advanced by government was that most of the students at the University were

from the well to do families. In fact, it was argued that most of them came from the so-called "elite schools" in and around Kampala. These are schools, which cannot be afforded by poor parents. For that matter, these parents could afford to provide stationery and other requirements to their sons and daughters. This move caused very serious strikes at the University in 1989 climaxing in another one in 1990, in which students clashed with the police leaving two of the students dead and others injured.

Instead of students accumulating textbooks for themselves, the university resolved to establish a book bank for the future students. This was more beneficial to every body and effective than the taking of books by every one. This was in my view a good remedy for book allowance.

The government however, remained very firm in introducing change. The argument was that the University had more space to train even more people but tradition had rendered it impossible to do so.

Coupled with the above-mentioned situation, was the fact that most of the time, the lecture space was idle. This was because formal classes ended at 5.00 pm and every one went either to the library or elsewhere of one's choice. Hence, the otherwise useful space was left redundant until the next following day. On weekends, there was no formal teaching and therefore classrooms remained idle. There is also a traditional long vacation, which runs between June and October. During that period, all lecture rooms remained closed because no one used them.

It is important to note that the university also had to find another way of utilising space profitably. Through thorough investigation, it realised the need to abandon the three-term system in preference for the semester system. The semester system allowed for better utilisation of space and time. A new thinking to put facilities to use emerged and a decision was made that new and private programmes be introduced. The matter was conceived by the University leadership led by the Vice-Chancellor and passed by the University council, the highest policy making body of the University. This idea was indeed in line with government policy and therefore was immediately approved.

Analysis

In analysing the management of this change, the ADKAR tool of analysis has been employed. The first question is whether the various stakeholders were fully aware of the impending changes.

The fact of the matter is that there was very little awareness before effecting the changes because there was no effort on the part of the government to communicate to the public about the changes that were due to be introduced and the impact these changes would have on them.

Due to the fact that there was no sensitisation, students staged a strike, which disrupted academics for more than a month. According to Mushemeza (1990), the strike was prompted by the removal of the students' allowances. The argument of the government was that 'excessive' spending on higher education undermined development of education at lower levels, and it was unwise to subsidise education of higher level when the majority of the children in the countryside did not go to school. The students had not been consulted and when they protested to this undemocratic gesture, the state responded by deploying armoured personnel carries (APCs) and riot police to quell the riot, resulting into the death of one students.

It should be noted that the students ended up interpreting the intended changes as IMF inspired educational reforms prescribed for every African country, which the state was wholesomely implementing.

Secondly, because the stakeholders did not have sufficient information as to how the changes would be implemented and how they would affect them, they did not even have the desire to participate in the implementation and support the changes in question. Hence, it took a lot of pain on the part of the government to force the changes on to Makerere instead of managing them in a participatory manner.

Thirdly, it is important to understand that if the stakeholders were knowledgeable on how to effect the changes, things would have been different. The correct position is that they did not know how to, not even the government. That is why the changes were just announced by circulars and radio announcements; without any thorough investigations to establish how the students and other taxpayers would react. All this led to the introduction of the changes ending up in a bad strike.

Fourthly, it is also important to note that there was the ability to implement the new changes on the part of the government and the University administration. The contention of this thesis is that there was very little ability to implement the changes because there was no training for the people to be able to handle them. This also explains why there was need to use brutal force against the students by locking them in the halls of residence and starving them for a whole day before opening and forcing them out of the University at 4.00 pm.

In as far as reinforcement was concerned, the government as the sponsor of the changes was able to keep the changes in place. To that extent, there was some level of reinforcement. However, the University administration took a bit of time trying to adjust and guarding against simmering strikes.

2.2 Introduction of 1.5 points bonus for female applicants

Makerere University was established in 1922 as a men's college. Women were first admitted in 1945. Female numbers increased slowly until Affirmative Action was instituted in 1990. Hence, the Gender Mainstreaming Programme was intended to address historical imbalances.

For a long time, the University admitted all students on merit. However, the number of female students remained very low, in fact below 30% of the total enrolment. It is for this reason that positive discrimination after some time of soul searching was decided upon. It was observed that the academic performance of females generally was discouraging females and they were marginalized in Education. Based on this reason, the government deemed it necessary to lift the female enrolment position by offering 1.5 more points to them for applicants' admission to Makerere. This gender-weighing scheme started in 1990.

The Government of Uganda, in an attempt to address the imbalance, introduced a scheme that would favour the female applicants. In doing this, they introduced a bonus of 1.5 points for all the female applicants. The effect of this was that those whose marks were slightly below the cut-off points could be boosted to qualify for admission. At the same time, those who would have otherwise only qualified for less competitive courses were able to enter the more competitive ones. This indeed boosted the number of females joining Makerere University to slightly over the traditional one third.

The first year of the scheme produced a six percent increase in the overall female intake to Makerere University, which was a commendable

improvement. This scheme won females an edge over in Arts and Social Sciences and a total of 110 female students would not have been enrolled in Makerere if the scheme were not in place that year.

To demonstrate the contribution of the scheme in improving the female intake to Makerere University, it is important to give figures of some past years. In 1954, the intake was 9 females out of a total of 148. In 1964 the intake of females was 57 out of 477. And, in 1988, 350 females were admitted out of a total of 1,530 students and in 1989, only 420 out of 1700 students were admitted.

Whatever the position some people hold, the scheme has increased on the number of women joining the University, though there may have been no follow up since its inception, to understand its impact and people's views. Please note that this particular scheme is subject to periodical revision by parliament; section 78 (2) of The Constitution of The Republic of Uganda. This is meant to continually assess relevance of the changes. The vision is to scrap the scheme after the gender imbalance in higher institutions of learning, among others, has been corrected.]

In the study I carried out in Uganda in Rukungiri District (M.A Muhwezi-Murari, forthcoming) a number of arguments were advanced. A very important one was that if the University were to select girls on the same point limit as boys, the number of girls going to University would remain as low as before. Others welcomed the affirmative action because girls in most cases wasted a lot of time cooking and doing other related home chores, which society subjects them to while boys got sufficient time to do their studies without disruption of the kind. That not until society has changed its attitude, shall the performance of girls improve without any affirmative action. A contrary view was that there is no reason for the girls to be given such favours just because they are girls since they follow the same syllabus. Proponents of this view maintained that this act leads to further subordination of women since girls will be looked at as intellectually weaker.

The 1.5 decision was hailed as a very good and positive move and indeed noble, by those who were concerned about the hitherto subsisting social imbalance.

Analysis of the 1.5 bonus.

As is known, in change management, resistance is the norm and not the exception (J. M Hiatt & T.J Creasey, 2003 p. 92). This one also attracted some resistance from the different sections of the population both within and outside the University.

Some argued that the scheme had an adverse effect on male candidates, who might score the same as girls but still be edged out and consequently fail to go to University, because of the positive discrimination. Professor Mukama for instance argued that the scheme was unfair to the boys who might be left out after sitting the same exams with the girls and scored similar marks.

Others argued that it gave the impression that mediocrity was being promoted among the females at the alter of excellency. This view was shared by Bitambeki and R. Kadaga; the Deputy speaker of the Parliament of Uganda when she argued that the scheme put women in a weaker position and should be scrapped. Kadaga asserted, "I do not subscribe to this. I am a product of a very competitive system". (*The New Vision Newspaper*, Saturday No. 2, 1991). Given that people in communities are heterogeneous, the resistance stemmed from the different perceptions that the members of the society held at the time. However, given that the state was a very committed sponsor and the

majority of the community members were in lukewarm support of the scheme, it was able to go on up to now.

Generally, there was very little resistance to this particular change. However, disagreements were voiced in the respect of the additional 1.5 points awarded to girl applicants. In some sections of the women activist movement the move was interpreted to belittle women. The argument was that the message communicated by the changes was that female applicants could not inherently compete against their male counterparts. It should be observed however that these disagreements were and remained only at debate level. It is also apparent that the changes did not find favour with male applicants who were eventually not admitted because of the increase in the female intake due to the 1.5 points addition. These however had no avenue to realistically resist the changes.

2.2.2 Analysis of the process:

As far as awareness was concerned, the population was not generally sensitised. Government in consultation with the University administration came up with an idea and wanted it enforced that same year. The only reason why the resistance was quite minimal was that every right thinking person in Uganda could see the imbalance that had hitherto existed in the University.

Secondly, it did not seem to threaten any one in the University. Hence, it did not attract very much protracted resistance from the University community. In fact, most people appreciated it and thanked the government for it as a move worth undertaking.

As far as the desire to participate is concerned, the women were very eager to participate just like the government and University administration. It is this desire that made the change not only possible but also very successful.

It is also a fact that the change was possible because the implementers had the requisite knowledge of how to effect the change. They used this knowledge so well that the resistance to it was so minimal during and after the process of introducing it.

The ability to implement the change was in place as it was not necessarily a very technical thing. It required more of thinking and doing. Every one involved contributed an idea and lent a hand towards achieving this. There was a lot of ability and willingness to handle the introduction and management of the 1.5 scheme, which has survived up to today.

The introduction and management of 1.5 points was reinforced. Therefore the reinforcement of the change was effected which explains its survival up to now.

2.3 Introduction of private sponsored programmes:

The first programmes to be introduced at the University included Bachelor of Laws evening programme (1993), Bachelor of Business Administration (1994) and programmes in the faculty of Arts. Shortly after, the following courses were also introduced: Bachelor of Commerce Evening, Bachelor of Education External, Bachelor of Tourism, Bachelor of Environmental Management, Urban Planning, Development Studies and Arts subjects such as Organisational Studies, and Social Anthropology. Others were Bachelor degrees in Nursing, bio-medical laboratory technology and a few more pursuits previously un-available and even un- contemplated.

It is worthy noting that most of the courses were demand driven responding to the employment market. External degree programmes were introduced in the Bachelor of Commerce and Education. Also new programmes reflecting the changing trends in the country were introduced. Gender Studies in the faculty of Social Sciences was one of these.

Outreach programmes to benefit Ugandans who might not qualify to join Makerere University directly and Extension programmes for the rural farmers were also introduced. At the same time, distance-learning programmes were introduced, as explained later in this paper. These Included Bachelor of Education and Bachelor of Commerce both coordinated and conducted by the Institute of Adult and Continuing Education.

There are a number of courses taught at the University that are considered privately sponsored without any government sponsored participants. These include Bachelor of Business Administration (BBA) and Organisational Management. These courses are only offered to privately sponsored students.

The introduction of privately sponsored programmes was born out of the need for people around town who required upgrading their qualifications to degree level. Hitherto, going to University was a preserve of those with very high grades from high school and a few people who could sit and pass mature entry examinations. Mature entrants constituted only 10% of the total number of entrants.

However, with the introduction of private sponsored courses and programmes, even people whose grades were not good enough to merit government sponsorship, but had at least two principal passes were admitted. People who were working in Kampala and wanted to upgrade their qualifications to degree level and had scored two principal passes at high school were admitted on application as long as they could pay. However, with time, due to high competition, even the grades for private sponsorship had to be good enough. Very quickly, the courses became very popular among those who were able to qualify and pay for them, who otherwise would have been left out. Alongside government-sponsored students studying during the day, a number of private sponsored ones were included. Classes became even bigger and bigger.

On the other hand, classes for only privately sponsored students were introduced. These were especially conducted in the evening after 5.00 pm a period of time in which the classrooms were hitherto, redundant. At first, these evening studies were for the working class in Kampala. However, within very few years, even students who were leaving high school started applying for them.

2.3.1 Eligibility

It is common knowledge that eligibility to University entry is based on two principal passes at high school. The number of the eligible candidates was much higher than the University could accommodate on the same resources allocated to the University. As Epelu Opio shows, in 1983/84 academic year 61% of the eligible candidates were admitted under government sponsorship, while in 1990/91 only 35% of the eligible candidates were admitted. The downward trend continued in the academic year 1999/2000 when only 10.8% of the 16,674 eligible candidates were admitted and sponsored by government.

Given the well known situation that prevailed in Makerere During the Idi Amin regime and thereafter, which were characterised by very inadequate funding Makerere University was forced to cut down on research, Staff Development, postgraduate programmes, equipment, books, science laboratories, chemicals and other teaching materials. The University was not able to recruit and retain very highly competent staff.

There was high turnover of top management, as well as lack of donor confidence and assistance. Other essential services like computing, transport, and telephone were virtually non-existent. There was congestion in lecture rooms resulting in loss of time during the time of change of classes in and out. Independent study became difficult with congestion in halls of residence and Library.

All these developments had a negative impact on the quality of education offered by Makerere University and lowered its standing in the public's eye. University/State relations deteriorated as students and academics were constantly on strike for better pay and allowances. There was failure by the institution to provide timely and decisive actions on some of the problems.

The challenges above left Makerere University with no option but to reform. The World Bank and the International Monetary Fund recommended cutting down on expenditures and higher education was not a priority. Makerere University had to wake up to address the dwindling government support. There had to be changes in government University relations.

The reforms have encouraged staff to be innovative, creative and to improve on their delivery system. Resources may be shared. There is use of audiovisual Technology such as loud speakers, video recorders, distance education techniques, introduction of the Virtual University. Virtual university facilitated training of students from a distance. This was under the African Virtual University (AVU) based in a number of Universities in Uganda. The trainers would do the training on-line from the USA without the need of physical presence.

The University has moved away from the rigid term or quarter system to a semester system, which is more efficient and flexible with regard to time use.

It keeps students busy throughout. While in the quarter system students took final exams at the end of the academic year, they now take 2 major exams in each academic year and are examined on fresh material. Assessment becomes more comprehensive and vigorous.

Academic audit and quality control system was put in place to ensure that standards are maintained. In audit students assess teachers and content of courses. On the other hand, a Quality Assurance Committee is a standing Committee of Senate that is the supreme academic organ of the University. (Epelu Opio)

2.3.1.1 Private students studying along-side government sponsored ones:

The first group of privately sponsored students constitutes those who study along the normal classes (8:00AM – 5:00PM). The difference lies in the fact that their studies are paid for privately. These are admitted for day programmes and study together with the government sponsored students. These are almost in all the programmes and courses the University offers.

These self-sponsored students were introduced in the mid 1990s. It should be noted that privately sponsored students are admitted after admitting government sponsored ones. In the months of April and May, the University goes through the admission process of government-sponsored students. These belong to three categories of applicants. They include:

- i) Students who have just completed high school,
- ii) Mature entry scheme and,
- iii) Diploma holder scheme

2.3.1.2 students who have completed high school

National High school examinations called the Uganda Advanced Certificate of Education examinations are always sat in November of every year. Results of these examinations are always released either during the month of February or March. Those that excel usually qualify for government sponsored University education. However, these are usually required to score very highly depending on the general performance of the year.

Though the change in the senior six examinations timetable is not a university affair per se, it affected the admission process. The senior six examinations from 1980 were held in March and students admitted in July and August. However, in 1998 or there about, the examination timing changed to November. Nevertheless, the time for opening remained almost the same. Students still begin their first year studies around September October. Hence, this change gave ample time to the university to admit both government scholars and private.

This exercise leaves out many candidates who are eligible to join University, which is just two principal passes. In fact, most of the students have three to four principal passes of high grade, but due to stiff competition are not admitted for government sponsorship.

After the list of the students admitted on government sponsorship is displayed, private sponsorship is advertised. The common practice is that most of the students apply for day courses but make evening course the last choices since they have six choices to make. Those whose scores are in the high range are admitted for day programmes. Those whose are out of the range but have the requisite grades are admitted for evening ones. The ones admitted on day programmes study in the same classes with government sponsored students.

2.3.1.3 Mature entry scheme

Every year, the University advertises and examines candidates for the mature entry scheme. The mature entry scheme is intended for people who have been out of school for at least two years. These must have completed at least Senior Secondary four (S.4) otherwise known as form 4 or its equivalent.

The examination is prepared, conducted and marked by the University. Those who perform very well are admitted alongside the high school leavers. Usually, the University takes a maximum of 10% of these for all the courses. Usually, these ones have one opportunity. They either qualify for the course they have applied for or they are left out. They do not have second or third choice.

2.3.1.4 Diploma holder scheme

A diploma holder scheme was introduced in 1995 to give an opportunity to people who scored highly at their diploma level from institutions recognised by the University. An advert is placed in the public media asking people interested to apply on the basis of their diplomas. In most cases, the class of diploma considered is second class upper (2.1) with some experience in employment or business.

Such candidates apply for training in the same area of their original professional training. When admitted they take the same period of time on the course as the senior six leavers. They have no exemption in terms of the period of the training.

2.3.1.5 Evening courses

Most of the courses offered to the evening classes are similar to those taught during the day. These are all private and no government-sponsored students participate in these.

However, some of these courses are only offered to the evening classes. An example of these is Organisational Management. Immediate High school leavers, those who would have been admitted on the diploma scheme or any post High school results and mature entry examinations may qualify for these.

The High school leavers who have not been successful in being admitted for day courses are admitted for evening ones. Likewise, Diploma holders who are not successful for day courses may also be admitted for evening ones. This also applies to mature entry candidates who were neither fortunate enough to go for government scholarship nor for private day courses. However, they are more convenient for the employed students who thus can attend class after work.

2.3.2 Introduction of these courses

The introduction of these courses was a very great shift from the traditional Makerere system. This shift emerged in the early 1990s with the realisation that most resources were left to lie idle when there was great need to utilise them. The lecture rooms and laboratories remained idle after 5.00 pm, during weekends and vacations.

Introducing courses parallel to the traditional government sponsored ones was deemed to be the only way out. This would benefit very many stakeholders in various ways. The participants in the courses would get knowledge and skills, the University would get extra income in form of fees, the teaching space would be put to full-time utilisation, the teaching staff would generate more income by providing extra teaching. In which case, this would be a win-win situation.

It is gratifying to note that the private courses in general terms created the capacity of the University to generate more funds for the University. In turn, the staff pay rose to some significant level. It then became possible for the University staff to own some kind of property in town and elsewhere. It is also worthy noting that most of the teaching staff is able to afford a vehicle to satisfy their transport needs.

2.3.3 Why introduction of the new programmes was necessary

The general reasons for the introduction of the new private programmes have been adequately dealt with above. This thesis looks at specific reasons for the introduction of the specific programmes. The main reason for this is the demand for them. The country was yarning for them and no one was providing them. This had two dimensions. First from the perspective of the probable financers of the programmes either individuals or companies, and second, the job market and society needs.

Instances of such courses include Bachelor of Urban planning and Bachelor of Arts with Tourism. By the mid 1990s Uganda was steadily shifting away from dependence on coffee and cotton as the perennial highest foreign exchange earners. One of the new major sources of foreign exchange was now the tourism industry. Yet the University up-till then did not provide the necessary training of the manpower for the then growing industry. Having found the requirement for such training, Bachelor of Arts with tourism was introduced. The explanation largely remains the same for Urban Planning. Development and modernisation featured prominently in the Government development programmes. It was therefore out of necessity that Urban Planning was introduced to provide well-trained human resources particularly in the area of Urban Development.

Another dimension to the demand driven courses lay in the fact that whereas the slots for government sponsorship remained the same the number of students sitting for the Uganda Advanced certificate of Education continuously increased. This made the competition for the courses even stiffer. This therefore called for opening up to new programmes. And these programmes needed to vary from those already being offered by the University. The reasons for this included the desire to create diversity and avoid explosion of numbers on the already existing ones.

The other driving reason for the introduction of these programmes was the desire to introduce courses relevant to the society. This included programmes such as Bachelor of Business Administration (BBA), Bachelor degrees in Development studies, Bio-medical Technology, Nursing and Tourism. It also extended to subjects of Bachelor and Masters of Arts programmes like communication skills and especially, ethics.

The relevance of these two particular reasons in organisations cannot be overemphasised. Besides, it was also considered that the new subjects cut across all academic disciplines and were meant to eventually be taught across the whole country at all levels of education. Basically, these courses were meant to inculcate the value of ethical conduct, accountability and social responsibility among the number of the citizens especially those being prepared to take up public businesses. The influence of the trends of globalisation, privatisation and liberalisation could also not be ignored. The trend was for government to reduce government funding on enterprises and ventures in favour of private funding. By 1999, the University had moved from a situation where none of the students paid anything to one where 70% of the total student body paid for their education.

2.3.4 Skills and knowledge, which were required to effect the changes

In order to effect changes in the University a great deal of knowledge and skill were required. This included strategic planning, advocacy and lobbying, stakeholder participation and sensitisation. The University management had to devise strategic planning as an internal implementation review mechanism of the changes it had set out to achieve.

The various Stakeholders including employees, University alumni, parents and University staff had to be involved in the changes. This entailed a lot of sensitisation, lobbying and advocacy all geared towards achieving a decentralized and participatory management of change. With the risk of preempting this thesis the University also needed to think about information and communication technology since it was apparent that the handling of the increased numbers would be more difficult to do manually.

2.3.5 Process of introduction of the new programmes

Change is a process. The above changes did not occur suddenly rather they went through processes. Before the introduction of the new programmes, research and survey to establish the needs of society in order to subsequently design programmes to suit and meet these needs was carried out. It would otherwise have been futile to offer courses for which individuals, families and companies were not willing to pay.

The appropriate policy and working plans in which to carry out these changes, had to be designed. The University therefore designed a comprehensive strategic plan as a tool of internal analysis of its progress in achieving the targeted changes. In summary the plan set out an agenda for enhancing academic development, research planning and staffing, rationalising of space usage and development of physical facilities, restructuring management and diversifying and increasing financial sources.

At the faculty level there was "soul searching". This was mainly to gauge how resources, particularly the human resources would be marshalled towards achieving the new changes. Above all, this was meant to lure the support and participation of faculty Deans and Dons in the new changes. The success of this was to create the necessary critical mass for the desire for change among the academic staff.

Two major implications of the anticipated changes were: First, an instant upsurge in the numbers of students. Indeed from 1992 to 2001, student enrolment had expanded from 6,352 to 22,000. The percentage of private students expanded from a mere 5 percent to 80 percent of the total Makerere student population by the year 2000. (East Africa Standard, August 4, 2001 and interview with Ssebuwufu, July 2005).

The University was also expected to then operate during hours and periods for which it was previously closed to business. This included the period after 5:00 pm, weekends and the traditional long vacation between June and October. This called for additional recruitment and training of staff in management to match the new time and number demands. Hand in hand with this was achievement of the full potential of the human resources in terms of hours of work. This would in addition, ensure maximum use of space and financial resources.

2.3.5.1 Source of the necessary information

The major sources of the information to sustain or drive this change were the various stakeholders, ICT other institutions of Higher learning and existing documents.

2.3.5.2 efforts to carry out best practices

Deliberate efforts were made to learn from the existing best practices. According to Ssebuwufu (In an interview) four best practices visits were made to various organisations in the East African region. These included Utalii College and Kiyanda College in Kenya. It was from these best practices visits that more knowledge was picked on how to implement the required changes.

2.3.5.3 Stakeholder participation

The major stakeholders in the process were other institutions of Higher learning, University employees, the University alumni, parents and University staff. Depending on their placement with the University the various stakeholders were involved in the changes at various levels. This involved consultation and sensitisation meetings, media publicity and professional visits. Makerere in this particular respect scored a big success. Unlike externally orientated changes, the participatory approach to change that the University took, created a feel of ownership and galvanisation and eventually made the changes acceptable to all concerned.

2.3.5.4 Reactions from the various stakeholders

The reactions to these changes were varied depending on the section of the University and society in question. The students were particularly hostile to the introduction of new programmes. The changes meant an increase in numbers yet the then University students saw University education as an exclusive luxury to which only a few should be allowed. Congestion in classrooms was yet another logical argument that was raised.

In other words, there was resistance from the students and some members of staff to these changes. In fact, at the beginning the arguments they raised sounded credible because they were talking about quality, congestion of the campus and the available resources. The print and electronic media also emerged quite hostile to the changes on the basis of quality and the dignity of the University, which had "opened for every Tom, Dick and Harry".

However, the resistance emanated more from the fact that there was no knowledge of how such numbers could be handled especially because it was the first time the University was opening for such large numbers and keeping open up to as late as 11.00 pm. At one time, in one talk show, ' The Capital Gang' one panellist referred to Professor Ssebuwufu, the then Vice-Chancellor as "a fool who had no regard for quality". However, the Vice-Chancellor was indeed determined to complete his task of modernising the University and providing more services to more members of the community. Thanks to his administration, the "Harvard of Africa" was redeemed after mismanagement for the previous over 18 years of Idi Amin's regime and his aftermath.

On the part of the development partners, Makerere was again able to attract donors who had hitherto abandoned it because of mismanagement. Notable among the donors who came to Makerere's aid are: NORAD, of Norway, Sida/SAREC of Sweden, Rockefeller Foundation, Carnegie Corporation of New York, NUFU of Norway, NUFFIC of the Netherlands. For example, since 1992, a major NUFU project involving the Universities of Makerere and Bergen was used to rebuild competence and capacity in the natural sciences at Makerere. Almost 50 students by 2002 had taken their masters' degrees in science and 15 have finished their doctorates. As a matter of comparison, during the whole of the 80s, very few masters' degrees and absolutely no doctorates were completed at the Ugandan University. (*Hilde Kvalvaag*)

2.3.5.5 Role model

Makerere University, once again became a role model for the other institutions in the region such as Kenya, Tanzania, Rwanda, Zimbabwe and others. It also started attracting partners in the various areas of Academic Corporation. For example, Makerere became a member of University Science Humanities, Engineering Partnerships in Africa (USHEPiA) a consortium of eight African Universities with its base in the University of Cape Town.

The University has reversed the plant decay of the 1970s and 1980s. International donors for example NORAD, SIDA/SAREC, SWEDEN, USAID, Carnegie Corporation of New York, Rockefeller Foundation, to mention a few have started to come to the assistance of Makerere in institutional building.

Makerere has linkages and collaboration with many institutions of higher learning nationally, regionally, and the world.

The University also became a partner with University of Bergen in Norway, Technical University of Delft in the Netherlands, Uppsala in Sweden and many others. These new developments were summarised in an article that appeared in the East African Standard newspaper of Kenya titled "The Harvard of Africa bounces back". (East Africa Standard, Saturday 4, 2001). In the said article, the author had this to say, "... in the last ten years, Makerere University has been transformed from the brink of collapse to the point where it aspires to become once again the regional prime intellectual and capacity-building resources centre." He went on to state, "throughout the nineties, the University embarked on low keyed but focused development plans that initiated alternative financial strategies, installed new management structures and introduced demand-driven degree programmes".

2.3.5.6 Justification of the reactions

The reasons for the hostility of the students have been elucidated above.

Appreciation of the relevance of the new courses explains the reactions of support quoted above. To the applicants, the new programmes provided them with an alternative entry opportunity to University education. With strict government scholarship entry, and in the face of stiff competition only the excellent performers were admitted. Now candidates with at least two principal passes had private sponsorship as another option. Professionals in town who also wished to upgrade could now fulfil their dreams.

There was also variety. New programmes were particularly popular because of their relevance to society and the prevailing job market demand. To the applicant, these provided opportunities for employment since personnel with the specific qualifications such as Tourism were on demand and specifically designed to meet these demands.

2.3.5.7 Management's reaction to resistance of new courses introduction

Resistance was dealt with by the use of consultations and democratic procedures. The media were effectively used to explain to the public how important it was for the University to provide as much training as was required by the economy. The University also took time to talk to the stakeholders about the developments in the University.

However, overall, the resistance was more passive than anything else. It was therefore easy to explain the issues to every one involved. The government also gave courage to the Administration by praising them publicly and therefore legitimising the changes.

2.4 Gender mainstreaming

The Ugandan society over time had cultivated cultural practices and norms that were unfair and discriminative to women. This imbalance cut across all spheres of life such as politics, the economy and education. The University started in 1922 as a college admitting only male students. It was not until 1945 that the first female students were admitted. Prior to 1990 the figures of female student enrolment hovered around a paltry 20% of the total student enrolment.

The early 1990s saw the emergence of the desire to incorporate gender in all the University business. The whole idea was to address the historical imbalance.

Until 1995, there were six halls of residence for male students, one mixed and two for female students. It was in 1995 that the one mixed hall was turned into a female hall. This change, simple as it was, met with resistance from the students who seemed to be happy mixing freely with their colleagues of the opposite sex. Currently, there are three halls for undergraduate male and female students respectively. There is only one postgraduate students' hall, which is mixed.

2.4.1 The need for the introduction of gender mainstreaming

The whole idea behind the agenda of gender mainstreaming lay in the desire to address the historical imbalance in student enrolment, and generally, women participation in the entire business of the University. The historical imbalances extended to academic leadership, academic ranks at the faculties and even administrative staff. The following figures still stood by as late as 2004 and are intended to serve as an illustration of the imbalances across the gender terrain of the University life. Female student enrolment lay at about 42%. At professional level, men accounted for 93%, women 7%. (Gender mainstreaming web site)

At associate professorial level, women accounted for 9% and men 91%. Women accounted for 29% and men 71% of all the senior lecturer positions. At lecturer level, women accounted for 42%. In the realm of non-teaching staff, women accounted for 42% and men 58% of the total number of senior administrative staff. Only 3% of all technicians were women. Women were only a majority at support staff level: 63%.

It should also be noted that had it not been for Government attitude towards gender issues, perhaps little would have been done about this gender imbalance. Had the University embarked on a plan to address the imbalances without the participation of Government, it is apparent that the drive would have been much slower. The Government attitude towards gender issues can be traced way back to its earliest action plan the ten- point programme.

The 1995 Constitution of the Republic of Uganda is particularly a gender sensitive document. It among others stressed the equality of women and men in nearly all spheres of life. It provided for at least 30% women representation at all levels of government. It also enabled the creation and fortification of policies intended to address historical gender imbalances. Among them was, the 1.5 points bonus scheme that had been introduced in 1990 to increase female student enrolment in the University. Consequently, in 1997 a National gender policy was put in place. This was particularly responsive in such key areas as decentralization, governance and Education.

It ought to be mentioned here that Uganda has ratified the Beijing platform of Action; Convention for Elimination of all forms of Discrimination Against Women and other related International instrument.

2.4.2 How the need was identified and the people that identified it

The University authorities and staff identified the need for gender mainstreaming. The figures of the various categories of staff indicated above were a pointer to the conspicuous gender imbalance in the University system. The University mission earlier stated noble as its intentions were; yet women who formed the majority of the Ugandan population were being systematically left behind.

2.4.3 Introduction of gender mainstreaming in Makerere University

The Makerere University Gender Mainstreaming Programme is implemented by Gender Mainstreaming Division; a unit within the Department of the Academic Registrar. The Division established in 2002 is aimed at engendering the University function across the board.

Gender mainstreaming in Makerere University is a strategy for making women's as well as men's concerns and experiences an integral dimension of the University function so that women and men benefit equally, thus ensuring that inequality is not perpetuated. The Makerere University Strategic Plan 2002/03-2006/7 identifies gender mainstreaming as a priority area alongside Information and Communication Technology (ICT), library services, research, science based disciplines, good governance and human rights.

According to the available documents, gender mainstreaming had a number of objectives. Some of them are as follows:

1. Promoting a gender- friendly, inclusive and secure environment in the University for staff and students.

2. Ensuring that gender balance in students' enrolment and performance is improved across all disciplines.

3. Advocating for increased recruitment, promotion and retention of female staff.

4. Working for the engendering of the University curriculum.

5. Making provision for the training of a critical mass of staff across all University units in gender analytical skills.

6. Promoting and advocate for the integration of gender in University research.

7. Promoting the integration of gender perspectives in the University's outreach programmes.

8. Advocating and promote increased participation of women in decisionmaking at all levels in Makerere University.

9. Ensuring that University policy on women's access to benefits, allowances and other entitlements is streamlined, regularized and wholly implemented. 10. Promoting the use of gender sensitive language in all forms of communication at Makerere University. (Gender mainstreaming web site)

2.4.4 Rationale for gender mainstreaming at Makerere University

The current gender terrain at the University shows glaring imbalances, as mentioned above. For example, even after implementing Affirmative Action, undergraduate female enrolment is at 40%, and mostly in the Arts. The ratio of females to males at PhD Level is 1:10. Females in science disciplines average 20%. Women at top decision-making level, like Deans, Directors and top management is under 10%. Utilisation of diversity of talents and women's special contribution has not been possible.

- Campus space and facilities such as halls of residence are still inequitably distributed between males and females. There are gender blind and gender-neutral human resource policies.
- The organisational culture, norms and practices still favour men and do not take into consideration needs, concerns and responsibilities of gender.
- The gender mainstreaming strategy will achieve quicker results than hitherto existing fragmented unit based practices.
- The Gender Mainstreaming Programme is in line with the National Gender Policy, 1997 and the Constitution, 1995, which are gender responsive in key areas of governance, decentralisation and education.

Uganda ratified the Beijing Platform of Action, Convention for Elimination of all forms of Discrimination Against Women and other international instruments. The Gender Mainstreaming Programme responds to the global context where gender mainstreaming is a requirement.

The first step in this direction was the 1.5 points bonus scheme in 1990. Prior to it, the female students constituted only between 20%-35% of the total

student in take. By 2004, the figure stood at 42% (*The Monitor Newspaper, Tuesday March* 2-5, 1993) of the total student in take.

In 1991 the department of gender and women studies was introduced in the faculty of Social Sciences. Its purpose was to have academic and out reach programmes in women and gender issues. This was also followed by a female scholarship initiative, which has been largely sponsored by the Carnegie Corporation of New York.

A series of gender oriented Academic institutional capacity enhancement initiatives as well as other gender-oriented innovations were pursued. For instance, course units focussing on gender in different faculties, Institutes and Departments such as Law, mass communication, History and Sociology were embarked on. A female PhD support scheme by Carnegie Corporation of New York and SIDA/SAREC was also put in place.

In the administration section of the University, the process took the form of gender awareness at seminars and workshops for University management. In 1999, a gender mainstreaming committee was established to ensure the engendering of the University. This committee draws up policy plans for the Gender mainstreaming department.

There have also been set up administrative structures to ensure the realisation of gender mainstreaming. These include the Senate Gender mainstreaming committee, which is a standing committee responsible for University-wide immediate policy monitoring and evaluation; The Gender mainstreaming Division, which is the secretariat to the Gender mainstreaming programme, mainly responsible for implementation.

2.4.5 Effects the introduction of gender mainstreaming has on the university business

The major effect of gender mainstreaming has been strides towards the realisation of equity. Figures of increment in the areas of female student enrolment, female staff at all levels in the academics and management can ably demonstrate this especially as a comparison with the previous years. Female Student enrolment rose to about 42% by 2004 as compared to about 27% before1990. At professional level, there have been improvements in the percentage representation of women at almost all levels and spheres of the University.

With the new changes the University also obtained better human resource utilization. The official language at the University also changed to include gender connotations.

2.4.6 How the various stakeholders were informed of the gender changes that were being introduced

The stakeholders in the business of Makerere University include the University students, staff, alumni, government and the general public. They were informed of the changes depending on their placement with the University. In the case of University staff and government, they were mostly informed through consultative meetings and sensitisation workshops. The rest of the stakeholders were informed mainly through public media.

2.4.7 Various forms of resistance dealt with.

The trifle resistance was dealt with by consultation and sensitisation as to the importance and relevance of the new changes. In time the changes were understood and appreciated.

2.4.8 Challenges of gender mainstreaming to the university business

The major challenges experienced by the University in this regard were limitations in financial and human resources to effect the changes.

The other challenge was the continuous need to provide adequate sensitisation to the University community about how to infuse gender issues.

It goes without saying that some male members of staff may not have appreciated the issues that come with gender mainstreaming. This challenge had to be fought through sensitisation of both staff and students.

2.4.9 Benefits attributable to gender mainstreaming in the university

Maximum utilization of the available human resources was obtained. At the same time, there was relative levelling of the academic and employment terrain in gender terms. There is visible increase equity in the University community, which tends towards greater working environment satisfaction. This has a tendency of increasing productivity.

The level of acceptance of female senior members of staff has also go up. For example, a number of women senior staff members have ended up in high offices. The current Deputy Vice-Chancellor Academic Affairs is a woman. The current Deputy Vice-Chancellor of Gulu University is a female who was promoted from Makerere University and transferred to Gulu. The current Vice-Chancellor of Kabale University was herself the Director of the Gender Mainstreaming Division of Makerere University.

There are a good number of female administrative staff members in the University due to increased awareness about gender issues. A whole department of Women and Gender was established and is doing very well in generating students with limited gender biases. In other words, gender biases are by and by being eliminated in the University environment.

Finally, it is important to note that the department of Gender and women studies has contributed tremendously to human resource development by training very many students at Masters and PhD levels.

2.5 Incorporation of ICT in University business

Incorporation of the ICT was the last major element to be introduced into the business of the University in the 3rd millennium. It is a change that needs to be studied for its own merits.

2.5.1 Brief history of ICT in Makerere University

ICT in Makerere has a very humble historical beginning. ICT began in the early 1980s when the UNDP together with UNESCO provided the first two microcomputers (Apple 11c & 11E) to the faculty of science, which led to the creation of the institute of computer science. Before that, the University had a mainframe computer (ICL) used exclusively by the Department of Mathematics. This was purchased in the early 70s. In 1987, the government of Uganda negotiated a loan from the African Development Bank, which was later used to set up an optical fibre University-wide network (MakNet) in 2001.

With the aid of IDRC, in 1991 Makerere became one of the first universities in Sub-Saharan Africa except South Africa to use e-mail on the MUKLA network. Indeed many members of staff acquired accounts but its operation was rather exclusive. However, this initiative was donor funded and the departure of the systems operator saw the disintegration of the system. Progress afterwards was mainly at faculty level and the faculty of Law has been a leader in this aspect.

In 1998 it commissioned a consultant to write a re-engineering plan to promote effective use of ICT in teaching, research and administration. Consequently and with the aid of USAID, it set up the legal information centre. With the funding of NORAD the faculty of forestry also became networked in 1999. In 2000 the University developed an ICT policy and master plan. In 2002, the Directorate of Information and Technology Support (DICTS) was set up to provide technical support to the users of the system.

2.5.2 How the various stakeholders prepared for the introduction of ICT:

The sponsor of the project who was the vice-chancellor pioneered the process by setting up an Information Communication Technology (ICT) implementation Committee. The Committee held various workshops for the sensitisation of the stakeholders. These workshops were held outside the University in relatively comfortable hotels. Most of them were held in Hotel Triangle in Jinja, Imperial Botanical Hotel in Entebbe and others. The reason participants were taken away from the University was to avoid the disruptions by their office chores. It was also to ensure that they concentrated without thinking about comfort.

The first workshops were meant to sensitise the Management staff at the high level while the other workshops were specific to the different systems. For example, the human resource information system (HURIS) workshops were held separately from the Financial Information system (FINIS) and the Library information system (LIBIS). At these seminars and workshops, knowledgeable and good speakers were invited to prepare and present papers. The participants would then discuss these presentations at great length. At the end of every set of presentations, would be discussions after which groups would discuss separate issues at hand. Each group would then present to the plenary. At the end of the workshop, resolutions would be made.

This approach served a number of purposes, but for this study, two of them have been picked up. One was to sensitise the users to be and secondly create a sense of ownership of the programmes.

The other important element was that the sponsor of the programme was very committed. He attended most of the workshops to which he was invited. This gave every one the morale to participate fully. He was also very often asked to present papers at the workshops and to explain some issues related to the ICT and its likely implication to people's jobs.

Another way was through study visits to best practice institutions. A number of best practice tours were made to various universities and institutions in Europe, the United States of America and South Africa. These tours exposed Makerere staff to the different ways in which computers were utilised and how simple they had made the work for the institutions.

HURIS members visited mostly the University of Bergen in Norway Uppsala in Sweden for best practices. Some of them also went to South Africa especially Cape Town and. FINIS staff had tours to Bergen also. LIBIS staff also went to the same places and elsewhere too.

Consultants were also engaged to carry out the training of staff in appreciating the use of computers and the related functionality.

There was a lot of training for the various users at various levels. The End user training alluded to earlier was meant to train the users. This was especially because not every one knew how to operate computers and even those who knew were not necessarily at the same level.

2.5.3 How the needs for ICT were identified

The need for ICT was identified through the experience with the manual systems. In the wake of increase of the numbers of students, it was clear that the University had to adopt a system that was able to handle the large numbers and to provide quality work. The only feasible system was ICT. This would help them handle teaching, research and administration challenges. It also ought to be noted here that the Vice-chancellor was instrumental in identifying key needs for ICT in the University. Donors also identified the need for ICT.

The idea of introducing ICT was born out of the need to perform better in handling the increasing numbers of students and the related workload. This was especially so in the administrative area including human resources, Academic records, finance and library information. Each of these units was asked to identify a way of improving their performance and came up with administrative computing as the solution. Hence, they were all asked to identify their needs and propose how the needs would be met. Then on the basis of identified needs, the Vice-Chancellor with his team lead the effort to solicit for funds.

2.5.4 Levels of success the various projects in administrative computing attained

It has been stated by some respectable analysts that it is too early to assess the performance of the various administrative computing projects. However, it is important to recognise the level at which they are now.

a) Human Resource Information System (HURIS):

HURIS started with a series of seminars to sensitise the management staff. It then went to the next stage of meetings to determine what was necessary. The meetings expressed the need to be assisted in a number of areas including: (i) in recruitment and selection, (ii) filing and tacking file movement (iii) tracking discipline cases (iv) ensuring a trusted reward system (v) handling leave administration (vi) following up the various people on study leave (vii) payroll management (viii) calculation and administration of pension and other retirement benefits.

What was critical was that the users in meetings and seminars identified all these needs. This was important because they were able to identify the need themselves given the challenges at hand. In fact, the biggest problem was the massive data handled manually in the Central Registry.

A lot of time would be spent trying to identify required information and to transfer it to the offices where it was required. It was also challenging to track file movement. Obviously, there would be records showing where the files were sent last, but some times it would be difficult to find the files where they were expected.

Challenge:

For the past five years since the process started has one of the challenges has been the issue of data migration. Data was supposed to be transferred from the existing heaps of files to electronic forms. This has been a big challenge because of a number of reasons. These include but not limited financial and human resources and little knowledge of how to handle the migration.

The other challenge has been the failure to handle Business Processes Reengineering (BPR). The management is supposed to reorient the way business is handled. However, this has been difficult because of the organisational culture that has been built in the last 83 years. However, with time, these challenges are being overcome. HURIS is now up and running despite the various challenges it may face.

b) Financial Information System (FINIS):

FINIS was yet another area that was critically required by the University. The need for the establishment of a system to enhance efficiency and effectiveness of the finance system was identified by everyone that dealt with the University. Stakeholders in this case include: students, parents, suppliers, bankers, neighbours, government, members of staff and sponsors.

When the private courses and programmes were put in place, students were asked to pay at the cash office in the administrative block. Within a very short time, this started to generate very long queues and a lot of delays in beginning lectures. At the same time the work became too much for the available members of staff. There was a lot of stress among the staff and fears of possibilities of misappropriation of funds began to emerge.

In fact, a number of forgery cases began to emerge because the students on the one hand suspected that the staff would not have sufficient time to make reference to the old records. A number of them were discovered realised and decisively dealt with by the disciplinary committee of the University Council leading some of them to lose their places at the University.

Secondly, it was feared that even the members of staff would easily misuse some money taking advantage of the situation. At one time, arson was attempted at the cash office. Indeed to someone's misfortune, there was found a lot of money in the drawers and the safe when the fire was put out before destroying the files and the money itself. The money, which had been collected over the whole week, was in the drawers and the safe contrary to the University regulation of banking all the day's collection at the end of the day.

However, the task of the chief Cashier carrying lots of money to the bank every day was putting his life to danger as he would easily be a target to the thugs.

After these situations were seen to be eminent, the University decided that all payments should be done in the various banks in town with which the University had accounts. The payers then would present pay-in-slips to the cash office, which in turn would issue receipts.

However, this one was also not very sustainable because of the inconveniences caused and the related delays. But, given the circumstances, it was the only alternative feasible at the moment.

Handling University Procurements was another tough hurdle for the Finance department. Processing tenders would take very long, handling supplies was difficult and suppliers were some times unhappy about the way they were handled.

However, when the system was put in place, it was meant to begin with three areas of the finance sections of: (i) procurement sub-module (ii) students' finance sub-system and (iii) the banking subsystem. All the three are already up and running.

With the idea of computing the whole system, every one was eager to see the change with immediate effect. However, like HURIS, FINIS also had challenges. These included: reorienting the staff to adopt the new thinking. It also included the need to train the various members of staff on how to use the new system of accounts and communication. Transferring the existing data from the manual to the electronic system also looked a tall order. However, they had to do it.

c) Makerere Library Information System (MAKLIBIS):

MAKLIBIS refers to Makerere Library Information System. This was critical for the handling of the very large numbers of library users. The library was set up with the capacity of 2,000 users at ago. However, it was now faced with massive increases of users. It was inevitable seeking more ways of performing better in dealing with them.

The University administration then devised ways of ameliorating the problem. One of the ways this could be done was by introducing computing and systems that would help the users access to information on line. Finding ways of getting material on line would then reduce tension on the strained resources of the library. At the same time, it was realised that most of the literature available in the library was out of date. There was therefore need to access the latest materials. This was possible on line.

MAKLIBIS has been very successful because of the massive support they have got from the sponsorship of the Vice-Chancellor and the massive financial support from development partners such as NORAD, and Sida/SAREC. The other important element has been the willingness of the leadership to change the mindset on the ways of handling business.

d) Academic Registry Information System (ARIS):

Handling the students and their academic life is the core business of universities. However, given the raising numbers of students, the manual system that the University had hitherto used was no longer viable.

There were a number of challenges to take care of. These included but were not limited to the following:

- (i) Congested classes: Classes were so congested that some of the participants would stand outside the classrooms to listen to the lecturers.
- (ii) Handling of admissions: The applications would be too many to be handled manually in the time limit there was.
- (iii) Examination handling had also become a big challenge because of the processes involved that were hitherto manually dealt with.
- (iv) Examination malpractices were beginning to emerge and needed to be handled decisively.
- Processing of academic transcripts and certificates was another area that challenged the University administration. The academic Registry of the University began to hit headlines in newspapers as the most disorganised section of the University.

All these challenges had to be tackled with immediate effect as they were in the first place, giving the good University bad publicity, and the drive to provide worthwhile service to the customers.

Massive support from the University management and donor communities was very crucial in the development of ARIS. The realisation for a change in mind-set was also a critical issue for the changes. It is notable that the changes have started to be noticed and felt in the business of the department. The staff willingness to adopt new ways was another asset in the effecting of the changes.

e) END USER TRAINING:

End user training project was very critical because not every one in the University was computer literate and competent. If the four projects were to succeed, there was critical need to train the users.

Hence, another project in the Institute of Computer Science was established to provide basic training to them. Courses were designed to provide that service.

EXPLANATION FOR THE SUCCESS OF THE FOUR PROJECTS:

Like in earlier cases, some pundits have expressed reservations on commenting reasoning that it is rather too early to comment. Others however attributed the success of the projects to funding, good supply of equipment, management and training.

Over all however, this project was very successful because it was greatly supported due to its significance. The support from donors coupled with the internal one was very crucial for the success.

REASONS WHY SOME OF THEM ARE NOT YET SUCCESSFUL:

The projects however are not yet fully operational. The biggest problem was that there was a lot of training required which would not be done in the time available. The other problem was that there was no complete change of the mind set. Some members used to refer to themselves as 'BBC' literally meaning 'born before computers' and took long to adjust. There was a looming feeling among staff that they would be substituted for by computers.

Hence, adoption to change was rather too slow to ensure immediate success of the projects. The other element however minor was that there were limited resources available for the projects to be immediately implemented.

CHALLENGES THESE PROJECTS POSED FOR THE IMPLEMENTERS:

ICT demands a lot of funding. Therefore, coming especially at a time in which Makerere did not have sufficient funds at its disposal, funding was a challenge. The scheme also demands skilled manpower to be pushed forward. These were generally lacking and this posed yet another challenge.

The other challenge was providing adequate training to staff other the other users. In the first place, training in itself is very costly and secondly is time consuming for those very busy senior members of staff that are ordinarily required not to keep out of office for long. At the same time, the cost of establishing the required ICT infrastructure is even a bigger challenge. It is very expensive to establish and time consuming.

The other challenge, albeit exogenous was the instability of power supply. It is worth noting that the electric power supply some times is not stable in the country. There is always the problem of "load shedding" because the supply is not sufficient for every user at the same time. Hence, the University had to provide means of addressing this by putting in place stabilisers and other gadgets. However, this in itself does not constitute a perfect solution to the big problem. There had been fear that introduction of ICT would replace the staff on the ground. This fear was about to affect the interest of the various users because they certainly were not sure of getting employment elsewhere. Especially given that some of the staff were in their mid fifties and were not ready to begin looking for other jobs. However, these fears were dispelled by the administration and every one settled down.

HOW THESE CHALLENGES WERE HANDLED:

The challenges highlighted above were dealt with variously. The University solicited for funding from outside the University to meet the fund shortage. As said earlier the faculties of Law and Forestry found funding from USAID and NORAD. The University also found in SIDA/SAREC a fund benefactor.

The University set up eight and half optic fibre optics in place all around the main campus to provide for this process. Thanks to the development partners who put immense resources in the project. The issue of addressing the bandwidth has always been tackled as and when need arises.

To address the problem of lack of the requisite knowledge and skills, ICT has continuously been incorporated in more and more courses. The institute of computer science has also been strengthened. DICTS has also been made more efficient.

The biggest solution therefore lay in continuous training and sensitisation to all staff and vivid demonstrations to all potential users. This gave immense advantages to the users of the system. The other way of ensuring success of the projects was for the University management to continue reassurance to staff that even with the introduction of ICT they would not lose their jobs.

HOW THE VARIOUS TYPES OF RESISTANCES WERE HANDLED:

As expected, there was resistance to the introduction of ICT especially among the employees. It was mainly due to the fact they were not sure of the effect the changes would have on their jobs. This resistance however was subtle. Hence, it was not possible for it to be easily detected. It was mostly based on the fear of the unknown and the possibility of losing their jobs. **CONCLUSION:**

The various changes introduced and effected in the Makerere University were not only necessary but also critical at the time they were perceived and introduced. The most critical issue was to respond to the demands of the community especially in yearning for education and training to University level. Makerere being the only University for a long time in the country with a very high reputation was an icon of first class training. *A* lot of interest was therefore invested in the University, hence the high level of attachment.

The scrapping the students' benefits constituted a challenge for the University as it generated a lot of resistance from most stakeholders, at the time it was perceived and introduced. However, it became eminent that the University had to be firm in its decisions. The money that hitherto was used to train very few people was put to more use. This is capable of generating more debate, but at least, the first step was achieved. It may be argued that very little room for democracy was given in the introduction and management of this change, but very little success would have been achieved and more time used if democracy was taken as a factor. The introduction of 1.5-point bonus for female applicants was indeed a response to the limited number of girls qualifying on a competitive basis for the limited places in the University. It was therefore important for the University to think so seriously bout uplifting the status of women through education and training. This was introduced in 1990 and helped a good number of female applicants to enter University though most of them qualified for Arts and Humanities course.

The same applied to gender mainstreaming in the University processes. The female members of staff identified the problem of very limited participation of women in University activities and talked about it constantly in various fora and meetings of the University. The most important thing was that the University management was supportive of their complaint once they got it. Hence, the administration took up the issue and facilitated it by soliciting for support from development partners and establishing an office in the University structure for it.

As far as ICT was concerned, the University was extremely overwhelmed by the number of students and therefore had to find an appropriate, efficient and effective manner of handling them. Hence, they started projects for the individual areas to handle accordingly. HURIS was set up for the Human Resource function, which was concerned for the general administrative function. FINIS was also put up to support the financial function to help administer fees collection, payment of suppliers, handling procurement, handling banking and the other functions of the divisions.

ARIS was put in place to handle academic functions of the University including examinations, admissions, processing academic transcripts and certificates. This was determined as a result of pressure both from within and without due regard to the necessary functions the Academic Registry required. It has largely succeeded and is serving its purpose to some extent. MAKILIBIS was also introduced following the eminent demand for it from the stakeholders. The readers were given very little value for their money and deserved better. The University had no other way of providing the service given the limited space capacity there was. Hence, the University administration worked hard to find funds for the purpose of setting it up. The users have been given a better service since they are able to access most current academic journals on line as the University subscribes to thousands of them.

To facilitate the success of ICT in the University, another project was put in place. This was the end-user training. This one helped the various members of staff to acquire the skills they needed to do their work easily. It was well supported by the University administration and the institute of Computer Science.

The introduction of the various new courses by the University was in response to the demand that was eminent in the market. There was very limited trained numbers in most fields of normal life in the country. The University had to respond to the needs of the population and to give the services for which some individuals and companies could pay. The various courses got some resistance, but were finally started. They have largely succeeded though a little more needs to be done.

Gender mainstreaming was also introduced on the basis of the realisation of the women senior members of staff of the fact that there was little participation of women in high positions. The structures were put in place by the University administration to facilitate the management of the process and for its success. Thanks to the Carnegie Corporation of New York for introducing a fund to avail education to girls who have qualified to join University but have no financial capacity. This facilitation has helped a number of girls so far to join University and is not about to stop.

It is worth noting that the University in its attempt to introduce the various changes took the issue of awareness seriously. It responded quite fast to the demands and requirements of the population in good time. They tried to understand the risks involved in every change and prepared to tackle it accordingly. Where more information was required, the University introduced training and sensitisation workshops. These were largely successful.

The desire to introduce the various changes was acknowledged especially for the new courses, ICT, 1.5-point and Gender mainstreaming. It was realised in good time that if these changes were not effected in good time, the University would remain an "Ivory tower" that characterised most universities in the past.

From the foregoing, it is noticeable how the University was knowledgeable about the effects of the changes would be. The administration expected to achieve a certain product and went for it. It is important to note how the government supported the various process of change. This support was critical because the University for a long time was the sole financier and secondly, in situations of uncertainty, the government would have to be called on to provide protection.

The University was also able to manage the changes because it was able to generate the capacity to effect the changes. Financially, the University got a lot of support from development partners and in terms of Human resources, was able to maintain its staff, attract back those who had run away during the turbulent time and foreign staff. Hence, most of the management staff as well as teaching staff were given the requisite knowledge to effect the required changes.

Finally, most of the changes have yielded fruits. In which case, reinforcement has been attained. The changes have not been in vain. However, more work is required and hope that the University will continue to introduce and manage the required changes. One thing it must endeavour to effect is e learning. This is a process that was started in 2002 but has not been completed up to now. It will be a helpful tool in handling the large numbers of students. It will also help in reducing the numbers of teaching staff.

Bibliography:

Brown Andrew (1998), Original Culture: 2nd Edition, London, Prentice Hall.

Coombe, T. (1991) " A consultation on Higher Education in Africa: A Report to the Ford and Rockefeller Foundations", Institute of Education, University of London.

Jeffrey M. Hiatt and Timothy J. Creasey (2003), Change Management: The people side of change. Colorado, Prosci Learning Centre.

The New Vision Newspaper, Saturday No. 2, 1991

Lugalambi George William, 'Students they call the 1.5 girls'. *The Monitor News paper*, Tuesday March 2-5, 1993

Mushemeza E. D (1990), "The University and the State in Eastern Africa: A case of Uganda; Kampala.

http/: www.Makerere.ac.ug

Hilde Kvalvaag, Rebuilding the Harvard of Africa | University of Bergen web site.

The Harvard of Africa Bounces back, in the East Africa Standard, Saturday 4, 2001).