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THE UNIVERSITY OF MAURITIUS-
AN INSTITUTIONAL ANALYSIS

By

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THE UNIVERSITY OF MAURITIUS

An Institutional Analysis - 1989

The University of Mauritius, with over 500 full-time and 700 part-time students, is the national university of Mauritius. Currently, it is composed of four degree, diploma, and certificate granting schools: School of Agriculture, School of Science, School of Engineering, and School of Law Management and Social Studies. Affiliated with the University and located on the campus is the Bureau of Standard, the Sir Seewoosagur Ramgoolam Center for Medical Studies, and the new Institute of Textile Technology. Closely associated with UM is the Institute of Education, the Mahatma Gandhi Institute and the Mauritius Sugar Industry Research Institute.

UM has a unique history. Its beginnings can be found in the College of Agriculture established in 1922, but its original role as a university was outlined in Colin Leys' report on the "Development of a University College of Mauritius" (Sessional Paper No. 4, 1964) which described the importance of a developmental institution offering higher education for a "quick return on investment." The University of Mauritius Ordinance No. 39 (1965) defined UM's main objectives but it took the University of Mauritius Act (1971) to provide the present Constitution and the Statutes that established the University in its present form. UM officially began operations on July 1, 1971. From the start, the University has had one Vice Chancellor, Professor Manrakhan, from the School of Agriculture.

The University of Mauritius has been given a broad mandate. According to "the Act," UM shall:

> (a) provide facilities for and engage in teaching and research and thereby promote the advancement of learning and knowledge;
>
> (b) in particular, provide a university education responsive to the social, administrative, scientific, agricultural and technological needs of Mauritius; and
>
> (c) hold out, on such terms as it thinks fit and within the limits of its resources, to suitably and academically qualified persons who in its opinion are able and willing to benefit from the facilities it offers, the opportunity of acquiring education befitting a university of the highest standing.

Central Administration: The Vice Chancellor

No set of statutes can, in itself, set forth the basic responsibilities that are essential to successful management. The lines of responsibility and authority described in the "Statutes of the University of Mauritius 1989" indicate primary relationships and delineate powers and functions among central administrators and the governing bodies. However, the effectiveness of the administrative structure, as a whole, depends upon the extent to which management skills can be brought together and unified in the service of the University and the degree of leadership that is demonstrated at the top. The present incumbent at the University of Mauritius, Professor Manrakhan, has held his post as Vice Chancellor since the University's inception. Although he is without a PhD, his terminal master's degree is in agriculture and he constitutes an important bridge between the University and the founding College of Agriculture. Professor Manrakhan has presided over the innumerable changes as well as the rapid growth and expansion that have occurred at the University, especially during the past ten years.

In sum, the overall administrative structure and organization of the University are in place and appear to be functioning well. The University is positioned to accommodate expansion and it has demonstrated a willingness to accept change but, more importantly, it is showing a willingness to change itself. There is no need to alter the British model, only to breath more life and excitement into it.

The Academic Program

The University of Mauritius has adopted a curriculum of specialized courses which are professional and/or vocational in character. They have been formulated in response to demands from the private and public sectors of the economy for trained manpower and are targeted to produce specialists in a wide variety of occupational fields, mainly at Certificate (1 year) and Diploma (2 years) levels and also at the Bachelor's degree (3 years) level. For example, in the largest school, the School of Law, Management and Social Studies, the following array of 27 courses are being given to a total of 890 students, both men and women, this term:

2 LLB courses
2 BED courses
4 BSC courses
12 Diploma courses
7 Certificate courses

The subject matter in these courses varies from hotel

management, occupational health and safety, and social work to international marketing, management studies, and accounting. A total of 17 full-time and part-time faculty are teaching 30 sections, with an average class size of 30 students. Unlike U.S. college curricula, there are no majors: each "course" is a course of study in itself, although options are sometimes offered. For example, in the Diploma course in hotel management a student may opt for casino management. Before being offered, each course undergoes a rigorous review process by the Department, Board of School and the Senate, and it is carefully monitored.

Monitoring takes place primarily through "external examinations" via the on-going linkages UM has established with several British universities, arranged through the good offices of the British Council. In the School of Engineering, for example, the British Council provides regular annual visits of UM faculty to the UK and visits of UK professors to Mauritius. Thus, there is continuous consultation on the external examinations for final degree courses including advice on equipment and instrumentation:

Civil Engineering - University of Dundee
Electrical/Electronic Engineering - Univ. of Lancaster
Mechanical Engineering/Textile Technology-U of Birmingham
Sugar Technology - University of Aston (Birmingham)

At the Bachelor's level, UM offers the following degree courses: BA Honors in Administration and Indian Music; BSc Honors in Agriculture, Sugar Technology, Computer Science, Biology, Chemistry, Mathematics, Physics, Environmental Studies, and Management Studies; BTech Honors in Civil, Mechanical, and Electrical/Electronics Engineering; and B.Ed with Honors in Chemistry, Mathematics, English, and French.

Beyond the Bachelor's level, M/Phil./PhD courses are offered in nearly all the Bachelor's degree subject areas, plus Energy, Physical Resource Planning, Economics, Business Management, Politics and Public Administration, Social Policy Administration, Botany, Zoology, and Animal Science.

What emerges from a review of the University's current curriculum is that the faculty's course offerings have grown without much design or overall planning. By acquiescing to so many outside demands, by generating such a surplus of applicants for certain of its courses, and by accepting disproportionate numbers of students, the University has become a kind of teaching factory. To meet increasing teaching requirements, more and more part-time instructors must be hired, and full-time faculty are harder to retain. In addition to their low salaries, full-timers are stretched to teach at the lowest certificate level and the highest PhD level at one and the same

time, and frequently in areas of limited competence. The "buck shot" approach in curriculum development is worrisome and steps must be taken to rectify the situation. Quality is suffering despite the control of the external examiners. Fortunately, a critical review of all certificate courses has recently been authorized. There is the possibility that the University's entire certificate teaching program might soon be scrapped.

At the same time, recognizing the need to upgrade its course offerings, the University is currently proposing the introduction of five important new courses, four of which are upper-level courses:

Diploma in International Marketing and Finance
Degree Course in Humanities
Degree Course in Social Studies
Master's Course in Economics
Master's Course in Business Administration (MBA)

The proposed MBA course in particular represents a departure from UM's usual set of course offerings. This new program is being developed by a special faculty committee with the active participation of the two Fulbright Fellows, Mark Levine and Larry Dandurand, who are currently in residence at the University. Both are business school professors. One critical outcome of the MBA program, if it is approved and funded, will be the incorporation of the computer as an indispensable teaching learning tool in a majority of the program's courses. Based on U.S. experience, MBA and other management students will soon become the Computer Center's biggest users, by far.

All these moves are in the right direction. Whether planned or unplanned, curriculum reform appears to be under way. By eliminating lower level courses in the curriculum; by weaving diploma courses into the degree programs as a means of "escape" comparable to the safety-value of M/Phil at the doctoral level (a practice which the School of Engineering has already adopted); by proposing more relevant, high level professional courses; and by introducing computer-assisted and computer-based learning into key programs, the University has taken important first steps to establish itself as a well-respected, highly visible institution of higher learning.

However, educational quality depends primarily upon the excellence of the academic staff, i.e., the faculty.

The Faculty

Assessing the quality and potential of the Mauritius University faculty requires more than a cursory examination based on impressions, and the use of second-hand information provided by Fulbrighters and others. However, there is little evidence to go on! There appear to be a number of key members of this academic community in place upon which one can base a faculty development effort. Fortunately, they are located in departments that are slated for expansion - electrical engineering/computer science and managment/accounting - and they include professors such as S.K. Ramchurn, G.C. Nuckchady, C. Bhurtun, and D. Meri.

However, such a conclusion is based on impressionistic data only. The fact is that few UM faculty members have PhD degrees, and most instructors are given diverse teaching assignments. Moreover, there are no objective measures of teaching performance. Furthermore, there is no record of research because research activity is not expected nor in most cases is it even possible to conduct, given the lack of laboratory facilities and equipment and the dearth of library resources. The same applies to the criteria of professional/ creative activities and publications.

If it is difficult to judge individual faculty members, the assessment of the "critical mass" of qualified instructors in the various schools and departments is impossible to evaluate. Suffice it to say that the British system of external examinations provides standards against which to rate the UM faculty and on that score they seem to be performing satisfactorily.

Regrettably, the business community is extremely critical of the UM faculty, perhaps for the wrong reasons, but allegations of inexperience, incompetence, being "too theoretical," living in an ivory tower, etc., must be confronted and addressed by the University Council and the Senate.

UM is a young institution, as universities go, and the Administration has not made it easy for faculty to make a career in the institution. Better salaries, improved facilities, stimulating colleagues, permission to consult for fees, additional "perks" and a few other incentives are all needed to attract and retain more distinguished Mauritians as faculty members. Based on the calibre of the present contingent, I am convinced that a selective faculty development program would be well worth the effort.

Student Enrollment

UM is in the enviable position of having large numbers of qualified applicants for many of its courses. For example, over 400 working adults applied for the 50 available seats in the most recent Certification Course in Computer Science. Similarly, approximately 300 applicants, mostly from the secondary schools, signed up for the 30 slots available in the Diploma Course in Computer Science. The popularity of such courses speaks well for the reputation of the University (despite its detractors) and is evidence that the faculty is meeting a powerful need in the economy. In such a favorable "market," the University can afford to raise its academic standards, upgrade its curricula offerings, be more selective in admissions, focus its attention on such national priorities as informatics and engineering, and perhaps organize its own outreach service programs.

Viability of the Institution

UM's viability as an effective agent of change in the economy depends upon a number of important factors. On the debit side, there are influential forces militating against the development of a first-class technological university. Private sector support, for example, appears in some cases to be non-existent; in other instances, it is hostile. The narrowness of the business view of higher education (which is not unique to Mauritius) is reflected in the criticisms leveled against UM by key representatives of the country's corporate employers. The University is simply not in good repute in the corporate community and it cannot count on the private sector for financial support, at least not in the near-term. If there is to be an early turn-around, it will undoubtedly occur first in attitudes towards the School of Engineering, especially in computer technology, computer applications, and electronics technology.

Second, there is the complete dependence of the University on the Government of Mauritius for financial support. Interestingly, the GOM has yet to understand and appreciate the potentialities of its one and only national university. This is a mixed blessing, of course, because the GOM is able to ensure UM of its base funding (even, one would hope, in the event of an economic down-turn) and there are signs that at least modest capital funds are now beginning to flow into the institution. Apparently, Rs 7 million of the recent 10 million allocated to UM by the MOE and MOF in the 1989-90 capital budget is earmarked for the School of Engineering. Nevertheless, it is the GOM that removed tuition as a major source of revenue for the University (1986) and it is the GOM that has blocked UM faculty from receiving fees for "outside" consulting, and is holding faculty and the Civil Service scales. Whatever the disadvantages may

be, however, UM must remember that it is a public institution and that its administration, faculty, and staff must work unceasingly to maintain the full support of the Government of Mauritius.

Third, the stage of development in which the University finds itself is relatively low in comparison with many other developing countries. It has been preoccupied with the critical and essential training needs of the economy and only recently has it made attempts to improve the quality of its faculty and its academic programs. However, it has a long way to go. And many people, especially those in the private sector, realize that if the economy of the country is fragile, the structure of Mauritius' national university is even more fragile.

On the positive side of the ledger, there is solid evidence that the University does in fact enjoy strong support in critical GOM ministries. The concept of "University Linkages" originated with the MEPD, for example. Moreover, the Vice Chancellor has earned sufficient respect for the University to secure the release of important capital budget monies dedicated to the enhancement of facilities and scientific equipment. Also, the rates of pay for part-time instructors have been increased from Rs 65 per class hour (1986) to the present Rs 250 and Rs 150 per class hour.

Second, prior to any attempt to upgrade its curriculum and improve its faculty, the University is assured of a pool of qualified talented students, at both undergraduate and graduate levels, from which a student body can be recruited. In addition, it has complete authority to select entering students according to its own rules and regulations. Thus, UM has the ability to establish and maintain its own standards of high quality. Furthermore, if in the future tuition fees were to be re-instated (and concommitently a student financial aid program were to be introduced), it would be possible for the University to generate revenues to underwrite at least one-third of the cost of instruction on a continuing basis.

Third, there is the reassurance of continuing technical professional and academic assistance from a variety of donor organizations, including the U.S., U.K., France, India, etc. "University linkage" programs have proven successful in the past and their impact can be substantial in the future.

Fourth, perhaps the most positive signs of the viability of UM are to be found in the efforts of the University itself to reform, upgrade and enhance its curriculum and, in addition, to improve the quality of its faculty and its teaching facilities. The priority given to designing the MBA program and developing the computer center are propitious examples. Furthermore, the motivation needed to establish high quality instructional

programs and introduce research components into the life of the institution is not only present but growing.

Adding up the pluses and minuses and coming to grips with the question of the potential impact which the University is likely to have on the changing economy of the country, it is quite clear that investing in UM at this stage of its development would be a worthwhile venture.

PERSONS MET

USAID/REDSO/ESA - Nairobi, Kenya

Satish Shah, Director
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Robert Burke
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American Embassy - Port Louis, Mauritius

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Peter Andrews, Econ/Comm Specialist
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Government of Mauritius - Port Louis, Mauritius

Mr. R. Bheenick, Director, Ministry of Economic Planning and Development
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Mr. Manraj, Director, Management Audit Bureau, Ministry of Finance
Mr. Ghoorah, Chief Technical Officer, Ministry of Education, Art and Culture

Private Sector of Mauritius - Port Louis, Triolet, Grand Bay

Danielle Wong, Manager, Economic Processing Zone Assn.
Rico du Mee, Chairman, Mauritius Employers Federation
Arif Currimjee, General Manager, Bonair Knitwear, Ltd.
D. Bundhoo, Personnel Manager, Rogers and Co., Ltd.
Peter Gordon, Manager, Hy-Q International Ltd.

University of Mauritius - Reduit, Mauritius

Professor J. Manrakhan, Vice Chancellor
Professor J. Baguant, Head, School of Industrial Techology(Eng'r)
Professor R. Lamusse, Head, School of Law, Management & Social Sc
Lawrence Dandurand, Fulbright Professor of Management (U.of Nev.)
Mark Levine, Fulbright Professor of Management (UC - Chico State)
Helen Levine, computer science instructor
G. C. Nuckchady, Lecturer, Department of Computer Science
C. Bhurtun, Senior Lecturer, Department of E/E Engineering
S.K. Ramchurn, Senior Lecturer, Dept. of Management & Accountancy
Professor A.S. Kasenally, School of Science
Numerous unidentified faculty and students on campus.

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