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Staff Loss and Retention at Selected African Universities:

A Synthesis Report

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TABLE OF CONTENTS

PREFACE

Believing that nearly all universities in Africa were experiencing a rapid loss of skilled staff to more attractive opportunities, either within their own countries or abroad, the Working Group on Higher Education constituted under the Donors to African Education (DAE) commissioned this study in early 1993. The goal was to secure some hard data on staffing trends and patterns, with a view to identifying possible measures to improve academic staff retention.

The investigation was undertaken through case studies of seven universities in various parts to Africa. These studies were funded by contributions from the Ford Foundation, the Swedish Agency for Research Collaboration with Developing Countries (SAREC), the International Development Research Centre, the Commonwealth Secretariat, and the DAE Secretariat.

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The views presented in this Report are those of the consultants. They should not be attributed in any manner to the Donors to African Education Working Group on Higher Education, or its constituent donor organizations; to the Commonwealth Secretariat; nor to the World Bank, to members of its Board of Executive Directors, or to the countries they represent.

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EXECUTIVE SUMMARY

This project was carried out to obtain information on academic staffing in seven African universities, and to analyze the factors influencing academic staff to leave universities in Africa. It was conducted entirely through a range of questionnaires which gathered information on academic staff statistics, salaries and conditions of service, and the views of current and former staff, of Institutional Leaders, and of Heads of Departments on secondary income earning activities.

The results show a variable picture. The generally pessimistic view of African universities is reinforced by data showing that staff are dissatisfied with remuneration packages which are very low, with deteriorating university facilities, and with what are perceived as poor relationships between the universities and their governments. Staff are engaged in a wide range of secondary income earning activities and are often absent on extended periods of leave. University leaders regard academic staff turnover as a significant problem, believe that quality is deteriorating, and report that recruitment is difficult, especially at senior levels. Several departments in each institution are very poorly staffed.

Other aspects of the data revealed a more optimistic scenario. In all the universities, except Zambia, staff numbers have been maintained or increased during the period 1988 to 1992. Staff:student ratios have also been maintained, or have increased only marginally. Staff are much better qualified and more experienced than was expected, and are strongly committed to academia, with firm academic priorities. Of the staff-in-post, 53% intend remaining in their current universities. There appears to have been a net inflow of expertise to Africa. Secondary income earnings form a significant proportion of salary and are a major factor in inducing staff to remain in post, but Heads of Department feel that, on balance, such activities have a neutral effect on Departmental activities and facilities. The collegial atmosphere and ability to determine one's own career path is valued highly, and 75% of former staff would return to their previous university if the remuneration package and conditions could be improved. Conditions of service in most of the universities are apposite, well structured, and meet staff requirements, at least in theory.

The report provides detailed analysis and comment on the data, and makes suggestions and recommendations for improvement and policy interventions. The essential factors for improved staff capacity are identified as economic growth and revival, greater autonomy for universities, and the development of diversified sources of funding so as to remove the total dependence of universities on governments for funding. A wide range of staffing policy options are suggested, with the only viable way forward possibly being a "trade-off" between high, competitive salaries, or maintaining existing conditions which provide good leave and travel benefits (in practice as well as in theory), a relaxed working environment, and a general lack of accountability. Strong leadership is essential,

and reinforced and restructured university personnel offices and programmes are crucial. The research environment is vital for viable academic staff recruitment and retention, particularly at the more senior levels, and a number of policy options for the achievement of an improved research environment are proposed. Other areas requiring attention for successful staff retention, in addition to salaries, are a means to obtain housing and vehicles, and an urgent improvement in university facilities.

Several areas warranting further investigation and research are suggested.

CHAPTER 1

INTRODUCTION

The Challenges of Staff Retention in African Universities

The past decade has witnessed remarkable changes within the African university community. Enrollments have risen sharply, many new universities have been created, and proportions of expatriate teaching staff have declined in response to the increase in national graduates. Perhaps the most notable change, however, has been a severe decrease in funding for universities resulting from extended economic stagnation on the continent. Overall, the average budget share of education dropped from 16.6 percent of government budgets in 1980 to 15.2 percent in 1990. As the education budget was shrinking, average allocations for higher education were also contracting from an average 19.1 percent of education budgets in 1980-84 to an average 17.6 percent in 1985-88. During the same period, real wages in the region fell by 30 percent.

Declining academic salaries, when coupled with more frequent university closures linked to increasing student unrest and repressive government intervention on a number of campuses, prompted numerous university staff to forsake their academic calling. In *Universities in Africa: Strategies for Stabilization and Revitalization*, the World Bank notes that some 23,000 qualified academic staff are emigrating from Africa each year in search of better working conditions. It is estimated that 10,000 Nigerians are now employed in the United States alone. More often, however, it is a neighboring country which beckons. South Africa attracts staff from Malawi, and the universities of Botswana and Swaziland attract Zimbabweans.

The staffing problem varies from university to university, and from department to department within universities. At the University of Zimbabwe, for example, the vacancy rate has worsened from 28 percent in 1988 to 34 percent in 1992. The situation is most critical in Engineering (47% vacancy) and Medicine (36% vacancy). Zambia has been continuously short of teaching staff in certain fields for some years. Wherever poor economic prospects prevail, graduates sent abroad for advanced training may return to take up posts at the university, but they then often move on to the private sector or an overseas position. Staff turnover is especially high in accounting and business administration where industry pays higher salaries (reported from Nigeria, Tanzania, and Mozambique), and staff retention is most difficult in those disciplines linked directly to a country's economic development.

Staff retention problems are further compounded by weak institutional management capacity in the area of personnel. Although most African universities enjoy substantial autonomy in the operation of their academic programs, they generally possess very little in the area of personnel management. The most extreme case is the francophone countries of West Africa where most academic staff are civil servants. In other countries, governments may intervene at crucial points in decisions on staff (e.g., the appointment of senior staff) and on the number of posts, salary levels, and conditions of service. Although some government agencies (e.g., the Nigerian National Universities Commission) provide rather comprehensive guidelines on staffing levels by discipline, compliance may be difficult when the universities are not competitive employers. In addition, few African universities plan systematically for staff development, engage in regular staff evaluation, offer incentives for good performance, or terminate those who function poorly.

The absence of job descriptions and accountability mechanisms often results in the under-utilization or mis-utilization of staff time. One study in Nigeria revealed that academic staff spent 48 percent of their time on administration, but only 29 percent on teaching. In the absence of effective monitoring and accounting for staff time, professional discipline and commitment may also weaken. The erosion of salaries and purchasing power prompts many faculty members to give minimal time to university work and seek one or more income-generating activities (e.g., private tutoring, taxi driving) to supplement their academic salaries. In effect, full-time staff function as part-time staff. The consequence for university teaching and administration is a loss of quality.

To date, however, much of the available information on the university staffing situation in Africa has been country-specific, discipline-specific, anecdotal, or outdated. The present study seeks to address these shortcomings.

The Response

Believing that nearly all universities in Africa were experiencing a rapid loss of skilled staff to more attractive opportunities, either within their own countries or abroad, the Working Group on Higher Education constituted under the Donors to African Education (DAE) commissioned this study in early 1993.[1] The goal was to secure some hard data on the trends and patterns, with a view to identifying areas which may be suitable for policy intervention to improve academic staff retention. The objectives of the study were:

- To obtain information on academic staff-in-post and on academic staff losses over the period 1987-1991;
- To quantify the extent of and identify the trends of academic staff losses (vacancy rates);
- To analyze the various categories of staff-in-post and, where possible, the staff who have departed;
- To determine the factors which shape a decision by an academic staff member to leave an institution, and to assess the relative importance of these factors; and
- To compare these factors to the internal and external conditions prevailing in the institutions participating in the study with those in places where departing staff go, in order to identify variables amenable to policy intervention for improved staff retention.

The Study

This study has been undertaken through case studies of seven universities in various parts of Africa. These were: the National University of Benin, the University of Botswana, the University of Ghana, the University of Ibadan in Nigeria, Makerere University in Uganda, the University of Zambia, and the University of Zimbabwe.[2] The study also attempted to survey African academic staff working in tertiary institutions of South Africa in the effort to determine the extent to which South Africa was drawing in academics from other African countries.

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[1] The Working Group on Higher Education is one of several Working Groups convened by the DAE in 1989 as a mechanism to further collaboration between multi- and bilateral development agencies and African governments. The Group seeks to improve the effectiveness of development assistance to African universities. Working Group members comprise 15 donor agencies supporting African higher education and a roughly equal, but rotating number of African university leaders and government officials invited to participate in the Working Group's meetings.

[2] These studies were funded by contributions from the Ford Foundation, the Swedish Agency for Research Collaboration with Developing Countries (SAREC), the International Development Research Centre, the Commonwealth Secretariat, and the DAE Secretariat.

Although there have been other studies of capacity loss and staff retention in African universities,[3] it is believed that this may be the most comprehensive study of the topic undertaken to date. In some respects, it appears that this may be a ground-breaking analysis that has produced conclusions which tend to contradict several commonly held perceptions about staffing in African universities. It is also evident from the responses that the study has provoked a considerable amount of thought within these institutions, and suggested new ways of looking at the management of academic staff in African universities. This is encouraging, as it is evident that many universities do not routinely collect and analyze data on staffing trends. It appears that much of the data requested by this survey were difficult to obtain from existing management records, and that its collation and presentation as requested by the survey was new to most institutions.

The study was undertaken through the use of various questionnaires and structured interviews administered by local institutional coordinators (ICs). It was not designed to include a literature review, as the intention was solely to portrait the current staffing situation at the selected universities. A description of the methodology employed is contained in Appendix 1.

[3] For example, see the Association of African Universities, *Staff Retention at Selected African Universities*, (Accra: 1992).

CHAPTER 2

PATTERNS OF INSTITUTIONAL STAFFING CHANGES

INTRODUCTION

The academic staffing portion of this study was designed to quantify the extent of and identify the trends of staff losses. For each case study institution[4], a discussion of the results is presented below, illustrating trends in the following five areas:

- **Establishment trends:** Establishment is defined as those posts for which funding is theoretically provided for in each institution's budget. Only two institutions budget on the basis of an establishment figure for each academic grade; some budget on the basis of establishment for professor and for the balance of the grades, allowing incumbents to occupy a post at any of the grades; whilst in Ghana, there is simply an overall establishment for a department with no specificity concerning grade.
- **Trends in the number of occupied/vacant posts.**
- **Trends by academic grade** (partly as a substitute for an analysis of changes in the age patterns of academic staff)
- **Trends in the gender composition of staff**
- **Trends in the employment of national and expatriate staff**
- **Trends in student numbers and staff:student ratios**

RESULTS

Arguably, the results of this part of the study are most unexpected. During the period 1988 - 1992, five of the six case study institutions for which data have been received did not experience the deterioration in their staffing complements that has generally been assumed (see Figure 2.1). Indeed, most have more than adequately maintained and even increased staffing levels. Apart from Zambia, the only area where the concept of staff loss/inability to recruit stands up to the statistical evidence from these six institutions is the general inability to improve vacancy rates, which have remained constant at quite high levels.

The fundamental reason for this has been the continuing increase in establishment which effectively cancels out any gains in recruitment. Most of the universities would have achieved (or almost achieved) their targeted 1988 staffing levels by 1992 if no further increases in establishment had occurred. Despite high vacancy rates, departments have apparently been able to keep functioning during the period, albeit perhaps with some deterioration in quality (which it has not been possible to measure in this study).

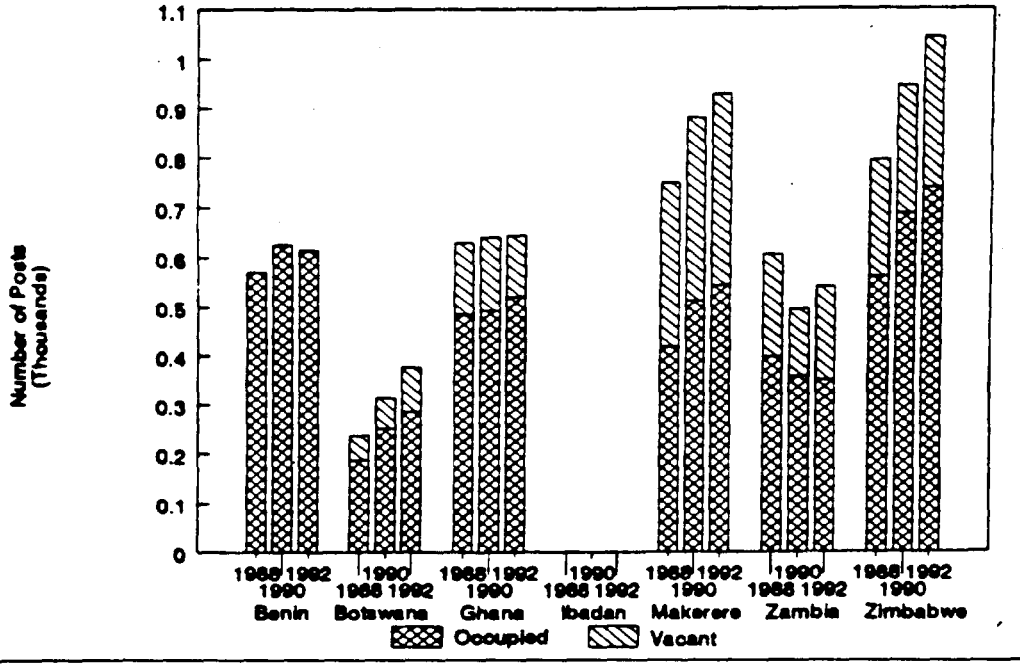
[4]Ibadan did not submit this part of the survey, and therefore is not included in this discussion.

It is necessary to examine why the widely held view that African universities are experiencing staff losses and are unable to retain or recruit staff is so pervasive, when the evidence from this section of the study appears to indicate that, at least in terms of absolute numbers, with one or two exceptions the perception is incorrect. The widespread acceptance of the capacity loss theory is evidenced by various studies. One such study, by William S. Saint, states that:

> Attracting and retaining talented staff has now become the biggest current problem for many African universities. Declining salaries, deteriorating working conditions, and increasing numbers of students, sometimes exacerbated by un-supportive political conditions, have prompted many staff to seek a better situation elsewhere. As a result, many universities are left with young, inexperienced and insufficiently trained staff who lack the necessary mentors and role models to guide them. Some universities have recently been forced to curtail enrollments and postpone graduations due to staff shortages.[5]

and refers to an "exodus of talent from the universities" and "the brain drain."[6] Similarly, several of the institutional leaders view capacity loss and an inability to recruit staff as a major problem facing their institution. Only in Benin and Botswana do the institutional leaders appear to be relatively unconcerned about capacity loss and staff retention.

Figure 2.1. Overall establishment and occupied/vacant posts in the case study universities, 1988 to 1992



There are a number of possible reasons for the apparent mismatch between the widely held view and the data emerging from this study:

1. Capacity loss in the case study institutions took place before 1988, so that the significant deterioration in staffing levels had already taken place before the first year for which this study collected data.

[5] Saint, William S. *Universities in Africa: Strategies for Stabilization and Revitalization.* Washington, D.C.: The World Bank, 1992, p. xiii.

[6] *Ibid., p. 23.*

2. The institutions surveyed are not representative of universities in Africa generally, and the picture emerging from the University of Zambia is more typical.

3. The poor performance of the economies of the countries included in this study over the study period may have resulted in a reduction in opportunities for academic staff to secure employment in other sectors of the economy. The concurrent recession in the developed world will have magnified the relative scarcity of alternative job opportunities outside of the universities. Conceivably, if the African economies improved considerably, and the slow improvement in the world economy accelerated, opportunities to secure employment outside of their universities would improve significantly, and this could lead to a renewed exodus of staff from the case study institutions.

4. Universities do not know the actual staffing patterns in their institutions, let alone the trends. It is possible that they work on comparisons between staff-in-post and establishment, with no analysis of growth in establishment or absolute growth in staff numbers. In several institutions, there is evidence from this study that not even such data are available to institutional management.

5. Universities are so inured to "bad news" that, even if they are aware of the fact that they are holding their own in terms of staff numbers, they find it difficult to accept this "good news" and to turn it to their advantage in negotiations with governments and donors.

6. Staff-in-post statistics are misleading. It is true that at any time a fair proportion of the staff-in-post are likely to be absent for a range of reasons - sabbaticals (up to one seventh of staff at any one time), extended leaves of absence, study leave. Many of the staff who are away may well be "phantom" staff with no intention of returning. Their absence certainly results in a deterioration of staff:student ratios on the ground, and would result in the occupancy rates provided by the statistics in this study being inflated. This situation is found at Zimbabwe, where additional data showed that at the end of 1992, some 59 staff members were away on different types of extended leave (the majority "unpaid"), and a further 17 were scheduled to depart on similar extended leave during 1993. The total of 76 absentees represents 10% of the Zimbabwe staff-in-post at the end of 1992, and if they are removed from the data used to calculate the Zimbabwe occupancy rate, the rate for 1992 is reduced to 63% (inclusive of the B.Tech posts). Further, current information from Zimbabwe indicates that the position deteriorated in 1993, and by 30 June 1993 a total of 91 academic staff were absent on either study or unpaid leave. If a similar situation exists in the other institutions, it is evident that the staffing position on the ground is worse than is demonstrated by the statistics, and some of the high departmental vacancy rates are even more alarming.

7. The alarm over staff loss and retention is in fact a "code" for a concern about the quality of staff currently being recruited and promoted. The institutional leaders confirm this to some extent, with various muted expressions of concern at the quality of candidates recruited, and the possibility of reduced rigor in promotion practices.

8. The position on the ground is worse than reflected by the occupancy statistics, as staff-in- post are effectively spending the bulk of their time out of the university, moonlighting in a second job or private business in order to earn sufficient income to stay abreast of living costs. The comments on the staff-in-post questionnaire do indicate that staff in many institutions are "desperate," regarding themselves as struggling to achieve what is perceived as an adequate lifestyle. The data show that a high proportion of staff are earning some form of additional income, though the amounts earned by most are relatively modest.

It is probable that the explanation is a mix of all of the above, with the first six being the major reasons. In addition, the period for which data have been gathered for this study is very brief, and it may be that trends indicated by the data cannot be extrapolated as indicating a trend likely to continue in the future. Ideally, the period of the study would have stretched over a much longer period of time, but that

would have compounded the difficulties in several of the institutions in obtaining accurate data. It is submitted, however, that the seven case study institutions are a fairly representative sample of universities in Africa (at least in respect of countries which are operating in a fairly orderly and rational manner and have not disintegrated into anarchy and chaos), and therefore it is valid to draw some general conclusions about African universities from the data presented.

The inadequate information theory is reinforced by several of the Institutional Co-ordinators (ICs) referring to the extreme difficulty they experienced in obtaining data to complete the Academic Staffing Data questionnaires. The statement by the Zambian IC: "This exercise was by far the most difficult and most time demanding of all my activities. The main difficulty arose from the fact that available records do not have information in the required form" was an extreme example of what appears to be a somewhat typical position. If obtaining data in the fashion requested by the questionnaire was so difficult, it indicates that university officials do not have adequate data with which to manage their academic staff. Therefore it is possible that they simply do not know what the true position is, particularly over an extended period of time. This view is further reinforced by evidence from the Institutional Leaders questionnaires, which indicate that very few institutional leaders have given any clear thought to university staffing plans or strategies with which to combat the capacity loss and inability to recruit staff which they believe affects their institution.

The data on student numbers and staff:student ratios indicate that, on the whole, the case study universities have more than adequately held their own in respect of staff:student ratios. Although data on student numbers were available for only five of the case study universities, they indicate that a marked deterioration in the staff:student ratio occurred only in Ghana (and here the resulting ratios are not excessive, and are in fact below the ratios in most of the other case study institutions). All the institutions experienced growth in student numbers over the study period, but this was dramatic only in Ghana (54%). Ghana and Benin were the only institutions to experience little or no growth in establishments over the study period. In the light of increases in student numbers over the study period, the growth in establishments appears to have been fully justified. The relative success of most institutions in improving the number of occupied posts has enabled them to maintain staff:student ratios at reasonable levels, while Botswana and Zimbabwe succeeded in improving staff:student ratios. Although the staff:student ratios calculated for the purposes of this study are "rough and ready," and not based on full-time student equivalents, nor any sophisticated system taking account of differences in discipline, load etc., they are sufficient to indicate that the growth in both established and occupied posts in most of the case study institutions over the study period was justified, and for assessing whether a serious decline or improvement in the proportion of staff:students occurred. The data on student numbers appears to reinforce the evidence from this and other sections of the study that most of the case study institutions have more than adequately held their own in respect of staff:student ratios over the study period.

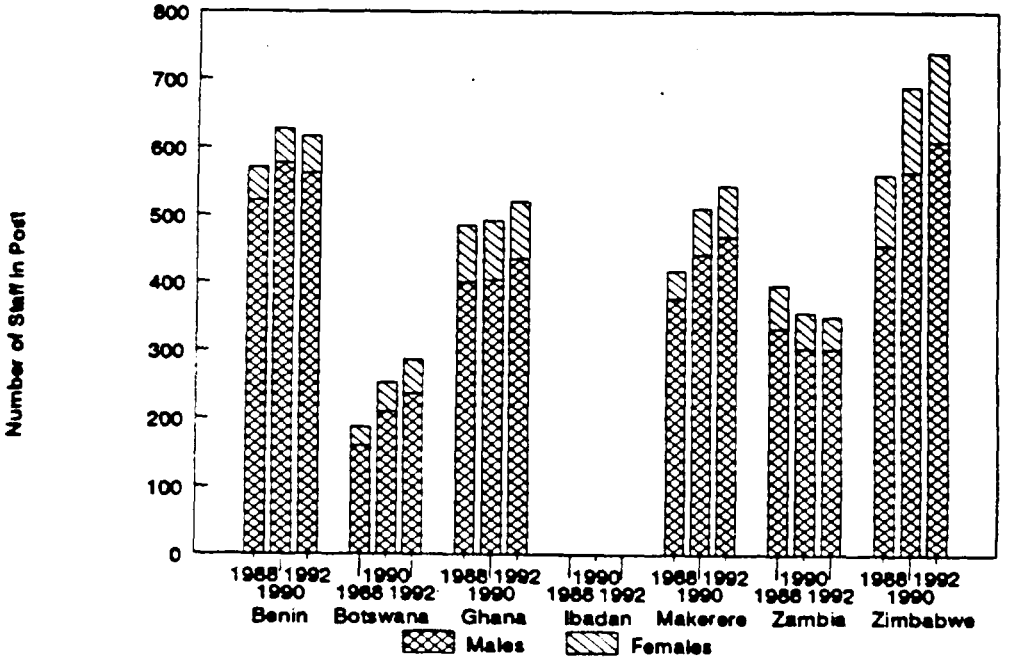
The problem presented by the data, that a significant proportion of staff are away on some form of study leave or extended absence at any one time, is a difficult one to resolve. The absence of such staff, who continue to notionally occupy a post in the university, clearly does worsen the "on-ground" teaching situation. While such staff members are away it is difficult to recruit replacements because such appointments can only be temporary, particularly if the absent "permanent incumbent" occupies a specialist "niche." However, if the university's leaders refuse requests for such leave, and force the issue - resign or stay - it is possible that a significant number will resign in order to take the short term advantages of whatever position they are proceeding to.

The alternative, which appears to have been the more generally adopted policy, is to accede to such requests for extended special leave, viewing it as a useful staff retention tool, allowing staff to gain a wider experience, enrich their qualifications, energize them and, crucially in many countries, allow them to earn hard currency. Such staff are likely to return to their home institution in a happier frame of mind, with better experience and perhaps with the resources to make their lives at home more pleasant and secure. The end result of this strategy is a long term permanent member of staff. However, a policy which allows staff to proceed on long periods of absence has to be carefully controlled, as many are in fact unlikely to

return. It is worth noting that, on evidence from Zimbabwe and the University of Eduardo Mondlane in Mozambique, donor agencies are significant employers of university staff on medium to long term leaves of absence. Donor agencies need to be aware that in attracting academic staff to leave their universities for such appointments they are, in the main, doing the university and the department a disservice, and exacerbating a university's staffing problems. Greater use by donors of able academics on a short term basis (vacations or a semester), rather than on a medium to long term full-time basis, could be less damaging to staffing in universities. However, in an open market environment, universities equally have to improve their attractiveness as an employer.

One area where capacity loss has occurred and where the trend is worsening is in the professoriate. Full professors could be an "endangered species." In all institutions the occupancy of full professorial posts seems to be static in absolute terms, but the number of professors as a proportion of total occupied posts is declining as growth takes place in other ranks. This represents serious consequences for academic leadership and guidance, particularly as in several institutions staff being recruited are inexperienced

Figure 2.2. Comparison of male/female occupied posts in the case study universities, 1988-1992



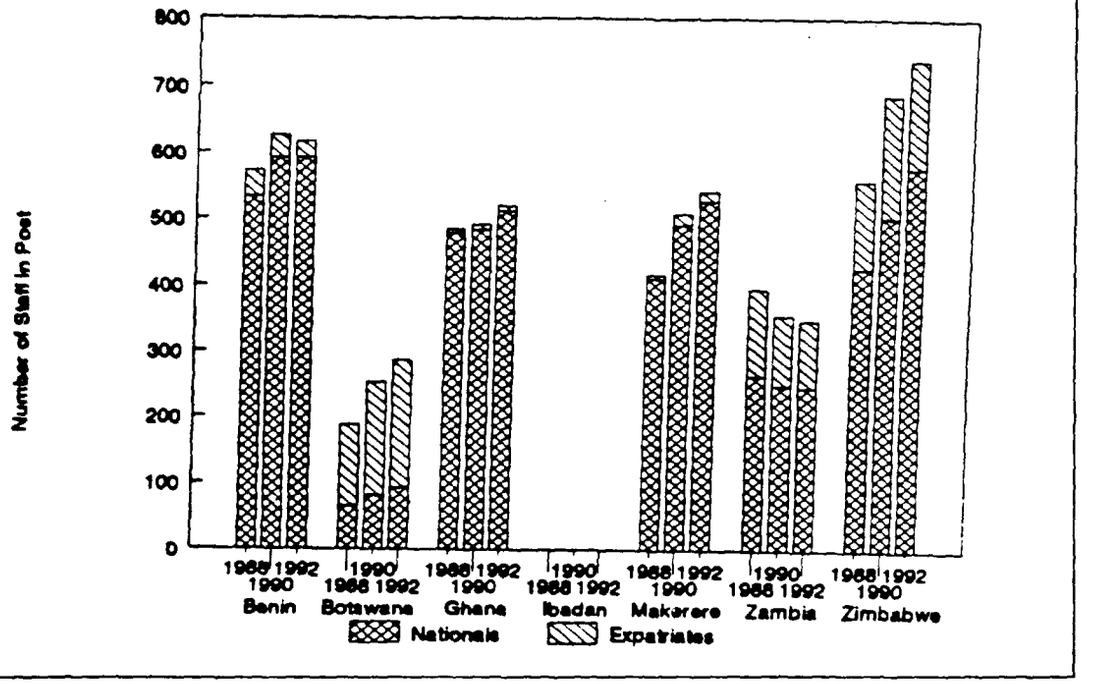
nationals. Staff who have achieved the rank of professor or are aspirant professors are obviously more marketable in the international academic market, in the national private sector, and in politics. The staff-in-post survey (see Chapter Four) has provided some evidence that a particular set of policies needs to be devised to ensure the retention of full professors. Promotion, or more rarely, the recruitment of staff at associate professor or professor level, only goes some way to addressing the issue of a serious gap in academic leadership: full professors are essential and in very short supply. Policies for professorial retention will have to consider the provision of adequate research opportunities, including the possibility of developing a team or research group, attending international conferences, securing publications and interacting with colleagues elsewhere.

The recruitment of women is not improving, reflecting very little change over the study period (see Figure 2.2). Clearly women are under-represented at the most senior levels in all universities, with female professors being an effectively non-existent rather than an endangered species. Conversely, female academics are slightly over-represented at the junior levels. But apart from Makerere, there is little

evidence to suggest that the growth in staff numbers which has taken place in most institutions has been due to the recruitment of women rather than men. Presumably as women in the lower ranks proceed through their academic careers, they should (given equal opportunity to do so) start to filter into the more senior ranks. Programmes to enhance the recruitment of women to university academic positions and to improve the proportion of female staff-in-post are obviously much needed.

Expatriate staff form a significant proportion of staff at only three universities: Botswana, Zambia and Zimbabwe (see Figure 2.3). In general their numbers are declining as national staff are developed. Several universities have achieved a position where effectively all staff are nationals, and this is presumably largely due to the active staff development programmes in operation in several of the case study institutions. The staff-in-post survey (Chapter Four) indicates some need for special programmes to support new/younger staff in order to ensure that they have adequate and enriching research/teaching opportunities, and clear, transparent promotion routes which hold out realistic prospects for advancement within an academic career. There is some evidence, to put it crudely, that once a few years into an academic career, a member of staff is less likely to leave: he/she is either committed or trapped.

Figure 2.3. Comparison of national/expatriate occupied posts in the case study universities, 1988-1992



RESULTS BY INSTITUTION

BENIN

Establishment Trends

Benin did not supply statistics concerning the academic establishments of its departments, and therefore it has not been possible to analyze trends in establishment levels at Benin. It is not clear how budgeting takes place in the absence of establishments for each department, but perhaps the fact that all staff at Benin are "civil servants" is a partial explanation.

Trends in Number of Occupied/Vacant Posts

The number of occupied posts at Benin increased over the study period, although there was a marginal drop in 1992 from a peak in 1990. The increase in the University as a whole represents an 8% gain in staff numbers (571 in 1988 to 616 in 1992). Most subject areas[7] indicate very stable staffing levels with little or insignificant change, except in SA 5, where a significant increase took place between 1988 and 1990. This increase is almost entirely attributable to the creation of a Faculty of Education at Benin in 1990, which accounted for 40 out of 45 additional staff between 1988 and 1990 in SA 5.

The stability in staffing is largely due to policy -- the Benin IC reported in his overall summary that, as part of the Benin structural adjustment programme, no recruitment of academic staff (all of whom are civil servants) is currently permitted. Indeed, it is claimed in the Institutional Leaders questionnaire that even staff retiring or dying in post are not being replaced. The IC expressed some concern at the greater tendency for academic staff in Economics, Public Administration, and the Environment to leave the University, but if this is so Benin has been able to recruit or promote staff at all levels, as the departments included in SA 4 are the most stable within the University, with no change whatsoever in total staffing levels between 1988 and 1992, and almost no change in the mix of staff at various ranks. The only other area showing any gain in staff numbers is SA 2 where most of the increase is accounted for by the Department of Environmental Protection and Management which gained three staff over the period 1988 to 1992.

In view of the fact that no statistics were provided for academic establishment it is not possible to draw any conclusions as to the adequacy of current staffing levels and their relationship to the University's targets, except to draw attention to the fact that Benin seems to have a very poorly staffed SA 3 (Medicine), with several departments being one or two person departments, and a possibly overstaffed SA 4 in relation to the other universities. If the staffing is poor in relation to what is required, the deterioration occurred before 1988 and has not worsened.

Trends by Academic Grade

Given the stability in staffing levels, there are no significant changes in the proportion of staff at each academic grade. Professors and Associate Professors have consistently occupied approximately 15% of occupied posts, Senior Lecturers a very low 8%, and Lecturers at 43% and Assistant Lecturers at 34% forming the bulk of academic staff. These figures indicate that overall Benin has a large proportion of its staff in the lower ranks, very few in the middle, and a fair proportion (in comparison to other institutions) at the senior level. The relatively high proportion of posts occupied at Professor and Associate Professor grade is due primarily to the fact that these ranks are represented at a disproportionately high level in SA 3 (Medicine), showing a significant increase from 43% of occupied posts in 1988 to 69% in 1992 (a gain of 13 Professors and Associate Professors over the period). On the face of it the Faculty of Medicine is top heavy but, as indicated above, many departments in SA 3 operate on extremely small staff numbers with, in several cases, the only staff member in post being at Professor or Associate Professor level. SA 4 and SA 5 appear to have disproportionately fewer senior staff and an overwhelmingly young staff, with 94% of occupied posts in SA 4 at the level of Lecturer or Assistant Lecturer, and 80% at this level in SA 5. Again, however, these statistics reveal virtually no change over the period of this study. The position of full professors at Benin is unchanged over the study period, with only 22 full professors in post, comprising 4% of total occupied posts in 1992.

The academic rank patterns at Benin, whilst a cause for some concern, have been in place since before 1988, and are effectively unchanged.

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[7]The Subject Areas (SA) are as follows:

SA 1: Physical sciences, engineering, technology

SA 2: Environmental sciences, biological sciences, agriculture, veterinary medicine

SA 3: Medicine, dentistry

SA 4: Management, business, economics, law

SA 5: Arts, education, social sciences

Trends in Gender Composition of Staff

Benin is an overwhelmingly male institution in terms of its academic staff. In 1992, 91% of its occupied posts were held by males, and this reveals no change over the period from 1988. All subject areas are consistent with this overall proportion, although SA 1, as expected, is even higher at 96% males. Since 1988, the number of women on the academic staff of Benin has increased by a mere five (11%), which accords roughly with their proportion of the total staff. There has therefore been no change in the overall pattern during the period of the study. Female academics are under-represented at the three senior levels (Professor, Associate Professor and Senior Lecturer), although there has been some slight improvement at these levels, up from 6.4% (8) of occupied posts in 1988, to 8.5% (12) in 1992.

Trends in Employment of National and Expatriate Staff

The number of expatriate academic staff at Benin is insignificant, and the slight trend over the study period has been to further reduce the number of expatriates employed. All expatriates are effectively employed on external contracts. An insignificant number of these are African expatriates (1988, 3; 1990, 2; 1992, 1). Overall, nationals occupied 96% of posts at Benin in 1992, up from 93% in 1988. This pattern is almost unchanged through the subject areas, although nationals occupy 100% of posts in SA 4.

This trend is also reflected in the number of Professors and Associate Professors who are nationals. With 87% of such ranks occupied by nationals (up from 74% in 1988), Benin has the highest proportion of the professoriate as nationals of all the universities participating in the study. Only in SA 2 are expatriate professors significant at 32% of occupied professorial posts.

Trends in Student Numbers and Staff:Student Ratios

It has not been possible to secure data on student numbers from Benin. However, in William S. Saint's 1992 report, *Universities in Africa: Strategies for Stabilization and Revitalization*[8], Benin's student population is shown as having increased from 4 000 in 1980 to 8 883 in the period 1987-1990. Taking this student population as applicable in 1988, and using the data supplied by Benin on its academic staffing position in 1988, the resulting overall staff:student ratio for 1988 is 1:15.5. This figure compares fairly closely with the ratio of 1:14 cited elsewhere in the above publication. Unfortunately, as indicated above, no further data on student numbers were available for the period covered by this study.

BOTSWANA

Establishment Trends

Botswana has increased its academic staff establishment[9] by 60% over the period 1988 to 1992 (from 237 in 1988 to 377 in 1992). This growth has taken place in all subject areas, but especially in SA 4 (86% growth) and in the sciences (SA 1, 65%; SA 2, 67%). Very few departments have not shown an increase in establishment, and several have more than doubled in size over the study period. Botswana has obviously been in a very considerable growth phase over the study period, with its academic establishment more than matching the growth in student numbers.

Trends in Number of Occupied/Vacant Posts

Botswana has been able to keep pace with its rapid expansion of established academic posts by recruiting at an equally fast pace. The number of occupied posts increased from 180 in 1988 to 277 in 1992, an overall increase of 54%. Particularly rapid expansion in the number of occupied posts took place in SA 2 (120%) and SA 4 (105%). This ability to recruit staff as the establishment grew resulted in Botswana effectively maintaining the proportion of established posts which were occupied at 79% in 1988, 80% in 1990 and 76% in 1992. All subject areas showed an improvement in the proportion of occupied posts over the study period except SA 1 and SA 5, with SA 2 in particular approaching full occupancy (94%) in 1992. Only SA 5 showed any deterioration in the proportion of occupied posts (88% to 76%). The vacancy rate has therefore remained pretty well constant at 20% to 24% of established posts. All

[8] *Ibid.*, p. 65.

[9] Botswana fixes an establishment for each academic grade, but has no grade below Lecturer.

departments at Botswana appear to be reasonably well staffed with a critical mass of staff-in-post. Only the newly established Department of Physical Education is vulnerable, with one staff member in post.

In all subject areas Botswana would have more than adequately filled all its 1988 established posts if it had continued its recruitment without increasing the number of established posts over the study period (i.e. it could have achieved its budgeted targets for staff by 1990 if the target had not been constantly increased). The Institutional Leaders questionnaire confirms that staff loss is not a problem at Botswana. Further, it is claimed that no local academic has ever left Botswana for another country, and that staff who left for the private/public sector are returning to the University. Nevertheless, officials anticipate the need to recruit about 25% of establishment each year, and envisage increasing difficulties in attracting expatriates as South Africa emerges as a serious competitor.

Trends by Academic Grade

Botswana's rapid growth in the number of occupied posts has not significantly affected the basic rank structure of the University. Over the study period Professors and Associate Professors have consistently occupied 10% of occupied posts, while the proportion of Senior Lecturers has increased from 16% to 25%, and Lecturers have decreased from 76% to 65%. Botswana's staff have become more senior and experienced, presumably through both promotion and recruitment.

Botswana's full professors are quite resilient, reaching numbers of 18 (16 in 1988) but dropping as a proportion of total occupied posts from 9% in 1988 to 6% in 1992. Only two of the 18 full professors are nationals.

Trends in Gender Composition of Staff

Little change has occurred in the proportion of occupied posts held by men (86% in 1988, 83% in 1990, 83% in 1992). SA 1 and SA 4 are almost entirely male, whilst SA 2 is 85% male. Only in SA 5 does the proportion of females increase to 29% (71% male), and this is a significant improvement over the 21% female rate in 1988. Women are considerably under-represented in the senior ranks, though a steady, slight improvement in the proportion of women represented in the ranks of Professor, Associate Professor and Senior Lecturer has occurred, increasing from 4.5% (2) of occupied posts in these ranks in 1988, to 7.4% (4) in 1990, and to 8% (8) in 1992. In the junior ranks, women are proportionately considerably over-represented, and here the trend is deteriorating from the position where in 1988 women held 18% of occupied lectureships to the position in 1992 where they hold 23% of occupied lectureships.

Botswana appears to be more successful in recruiting Batswana women to its staff than males. The proportion of Batswana women to the total number of women employed improved from 63% in 1988 to 68% in 1992; at Lecturer level they formed 64% of the total women employed in 1988, and 74% in 1992.

Trends in Employment of National and Expatriate Staff

Botswana has succeeded in matching its rapid growth in establishment with recruitment largely through its ability to recruit expatriate academic staff. Expatriates on external contracts are insignificant at Botswana (only 5 in 1992), but expatriates on local contracts form a significant proportion of Botswana's occupied posts (64% in 1988, 67% in 1990 and 67% in 1992). In SA 1 expatriates occupy 95% of occupied posts, up from 74% in 1988. The considerable growth in the physical sciences at Botswana has been almost entirely due to its ability to recruit expatriate academics. Similarly, expatriates form 73% of occupied posts in SA 2, but only 63% in SA 4 and 50% in SA 5, with the latter two areas showing an improvement in the proportion of nationals employed.

Expatriates from elsewhere in Africa form a significant proportion of the expatriate staff at Botswana, with the trend increasing from 44% in 1988 to 57% in 1992. The most significant areas in

which African expatriates have increased as a proportion of total expatriates are SA 2 and SA 5. These figures confirm the commonly held view that Botswana is able to recruit academic staff from other universities in Africa.

Whilst nationals occupy 33% of occupied posts, they occupy only 10% of occupied Professorial posts, with no national Professors or Associate Professors in SA 1 and SA 4. However, there was a pleasing improvement in the number of national Professors as a total of all Professors in SA 2 -- up from nil in 1988 to 25% in 1992.

Clearly Botswana is very heavily dependent on expatriate staff at all levels, but particularly for academic leadership. Botswana would be vulnerable to a change in economic circumstances that reduced its attractiveness to expatriates. The University's leaders have confirmed a desire to reduce expatriate employment to 25-30% of occupied posts, and are concerned at the University's ability to continue to attract expatriates as South Africa becomes a more acceptable country in which to seek employment. However, the University has a large staff development programme underway, and at present it is able to attract and retain staff, and therefore the proportion of nationals should steadily increase. An improvement in the proportion of nationals at senior level will take longer.

Trends in Student Numbers and Staff:Student Ratios

Enrollment data show that Botswana's total student numbers increased from 2 721 in 1988 to 3 824 in 1992, an increase of 40.5%. As Botswana increased its establishment by 60% and its number of occupied posts by 54% over the same period, it adequately kept pace with growth in student numbers, and in fact reduced the overall staff:student ratio both on established posts (from 11.48 in 1988 to 10.14 in 1992), and on occupied posts (from 14.55 in 1988 to 13.37 in 1992). All subject areas showed an improvement in the staff:student ratio, except SA 5, where a small increase was recorded in the occupied posts:student ratio by 1992. Significant improvements in the staff:student ratio were achieved in SA 2 (17.53 to 8.67) and SA 4 (44.8 to 32.59). Evidently Botswana has matched its growth in student numbers with its growth in both established and occupied academic posts, and has achieved an overall improvement in staff:student ratios.

GHANA

Establishment Trends

Ghana has maintained its academic staff establishment levels[10] at close to 1988 figures. Establishment growth has been very small (2.4%), with the addition of only fifteen posts between 1988 and 1992. In SA 1 and SA 4 there was no growth at all over the study period. The only area with any significant growth (only 7.3%) was SA 3, with an increase of 10 posts between 1988 and 1992.

Trends in Number of Occupied/Vacant Posts

The academic staffing position at Ghana has been remarkably stable over the study period, but overall between 1988 and 1992 Ghana managed to increase its staff-in-post by 7%. SA'3 shows an increase of 7% in the number of staff-in-post, whilst SA 2 shows a significant increase of 17%. Several departments in SA 2 have shown significant improvements in their staffing levels over the study period.

Ghana managed to improve the proportion of its established posts which are occupied by 3% over the study period (77% of posts were occupied in 1988 compared to 80% in 1992). A major improvement occurred in SA 2. However, SA 1 is significantly different, and by 1992 only 64% of posts were occupied (a vacancy rate of 36%). Whilst the overall fairly satisfactory position (20% of posts vacant) reflects an improvement, it does disguise the fact that several departments are severely understaffed in relation to the establishment -- Computer Science and Mathematics in SA 1, Animal Science in SA 2, the Noguchi Medical Centre, Nursing, and Psychiatry in SA 3, and Classics, Linguistics, and Philosophy in SA 5. On the other hand, several departments in all Faculties improved their staffing levels significantly over the

[10]Ghana does not fix its establishment by academic grade, and merely has a total establishment figure for the whole department.

study period, with Medicine in particular having all posts occupied, and several other departments having a ratio of staff-in-post to established posts in excess of 80%.

Trends by Academic Grade

The overall stability in staffing at Ghana is reflected in the proportion of posts occupied at each academic grade. There has been very little change over the study period. Professors and Associate Professors occupy approximately 13% of occupied posts, but are over-represented in SA 1 with 23% of posts, and very under-represented in SA 4 (3% of posts). Senior Lecturers have consistently occupied approximately 25% of posts, and this is fairly uniform across all subject areas. Lecturers occupy approximately 60% of posts, and this too is uniform across all subject areas with the exception of SA 1, where they are under-represented at only 49%, and SA 4 where they are over-represented at 70%. The Assistant Lecturer grade at Ghana is insignificant, with only six members of staff at that grade. All of Ghana's full professors in 1992 were nationals, but at 5% they form a very small proportion of total occupied posts.

Consequently, the small growth in staff-in-post at Ghana has not been achieved merely by recruiting junior staff, as the rank profile of staff has remained consistent, through promotion and recruitment.

Trends in Gender Composition of Staff

Ghana showed no progress towards increasing the number of female academic staff during the study period. In fact, the overall female representation deteriorated slightly. Males occupied 82% of occupied posts in 1988; this figure increased to 84% of posts in 1992. SA 1 is almost entirely staffed by males (95% of occupied posts).

Further, women are under-represented in the senior ranks at Ghana: 10.7% of Professors, Associate Professors and Senior Lecturers in 1988, and 8.9% in 1992. At Lecturer and Assistant Lecturer grades, women comprise 21.6% of occupied posts, whilst overall they comprise 17% of occupied posts at Ghana.

Trends in Employment of National and Expatriate Staff

The employment of expatriate academic staff at Ghana is insignificant, with no change over the study period. Throughout the period, Ghana has not employed any expatriate academic staff on external contracts, and the number of expatriates employed on local contracts (all in SA 5) increased by only two, from six in 1988 to eight in 1992. National staff occupy 100% of occupied posts in all subject areas except SA 5, where they hold 96% of such posts. Overall, nationals comprise 98% of the academic staff employed by the University of Ghana. Of the eight expatriates employed in SA 5, 25% are from elsewhere in Africa. All the Professors and Associate Professors at Ghana are nationals, with the exception of two in SA 5.

Trends in Student Numbers and Staff:Student Ratios

During the study period, Ghana's student population increased by 54% from 3 538 students in 1988 to 5 447 in 1992. As Ghana's academic establishment has remained stable over the study period, and the number of occupied posts has increased by only 7%, staff:student ratios at Ghana have deteriorated. Overall, the ratio in respect of established posts has worsened from 1:5.61 in 1988 to 1:8.43 in 1992, and in respect of occupied posts from 1:7.29 in 1988 to 1:10.48 in 1992 (increases in the staff:student ratio of 50% and 44% respectively). Despite this deterioration in the staff:student ratio, resulting ratios are not dissimilar to those experienced in the other case study institutions, and would not appear to be excessive, even in SA 4 which is traditionally an area with very high staff:student ratios. Consequently, whilst Ghana has not matched its growth in student numbers with an equivalent growth in either established or occupied academic posts, the resultant staff:student ratios appear to be reasonable and reflect an improvement in "productivity" at Ghana.

MAKERERE

Establishment Trends

Makerere has increased its academic staff establishment[11] quite significantly over the study period. Overall, establishment has increased by 24% from 751 posts in 1988 to 928 in 1992. This growth has taken place in all subject areas, but is especially marked in SA 5, where 74 posts were added to establishment (an increase of 41%) and SA 2, where 47 posts were added to establishment (an increase of 30%). Several departments experienced considerable growth in their establishments during the study period: Electrical Engineering and Educational Psychology doubled in size; Veterinary Anatomy increased establishment by 83%; and Forestry, History, Accounting, and Management and Marketing all increased establishment by 67%. In addition Makerere added to its establishment by creating several new, fairly large departments since 1988: Agricultural Extension (establishment 12); Environment and Natural Resources (8); Food Science (9); Population Studies (10); Languages Education (8); Mass Communications (10); Women's Studies (13). Thirty-one of the 74 posts added to establishment in SA 5 were the result of creating new departments. In that subject area, even departments such as Music and Dance, Political Science and Public Administration, and Religious Studies, experienced fairly significant increases in establishment.

Trends in Number of Occupied/Vacant Posts

Makerere succeeded in maintaining its staffing levels during the study period, increasing the number of occupied posts overall by 30% and achieving significant increases of 55% in SA 4 and 53% in SA 5. Makerere kept pace with its establishment growth as the trend in occupied posts as a percentage of establishment over the study period reflects a slight improvement in staffing levels (from 56% of established posts occupied in 1988 to 59% in 1992). All subject areas were remarkably consistent by 1992 in the proportion of posts occupied, except that SA 5 was better staffed with 65% of posts occupied, whilst SA 2 was somewhat below the norm with only 54%.

In total therefore, Makerere was been able to recruit and retain academic staff in balance with its increase in establishment, but its staffing levels overall are disconcerting, with vacancy rates of the order of 41% being the norm, and a worst case situation of 46% in 1992 in SA 2. Even in SA 5, 35% of posts are vacant. To some extent these high vacancy rates are caused by the rapid creation of new departments, and an inability to recruit reasonable numbers of academic staff in the short time since the departments were created. In other cases the staffing situation has deteriorated significantly -- Agricultural Economics has lost all its staff and in 1992 had no one in post; the Veterinary Physiology staffing level has dropped from 71% to 11%; Anesthetics only has 2 members of staff; Microbiology in the Faculty of Medicine has only 1 staff member; the new Child Development Centre has no staff-in-post. On the other hand, a number of departments have managed to improve their staffing levels: Crop Science has 100% of posts occupied; Pharmacy, which had no staff-in-post in 1988, now has 6 staff-in-post, an occupancy rate of 75%; and Radiology has increased its occupancy rate from 50% to 83%, Law and Jurisprudence from 50% to 75%, Public and Comparative Law from 12.5% to 44%, and several departments in SA 5 have occupancy rates in the upper 70%.

It is of concern to note that, if Makerere had not increased its established posts, its occupied posts in 1992 as a percentage of 1988 establishment are still way down, despite its successful recruitment since 1988, with the overall percentage of occupied posts in relation to the 1988 establishment only 72%. Only in SA 5 would Makerere have approached full achievement of its 1988 establishment target. On the face of it, the establishment levels are reasonable for Makerere's student population, although the resultant staff:student ratios are marginally more generous than those in the other case study universities. However, the high vacancy rates do not appear to indicate capacity problems, as the ratios of occupied posts to students, although the highest of the participating universities, are very comparable to those in Botswana. The Makerere leadership foresees continuing recruitment problems, but hopes that the steady

[11] Makerere fixes an establishment for each academic grade. It introduced the grade of Assistant Lecturer in 1990.

improvement in Uganda's security situation and economy will enable it to maintain growth in staff numbers.

Trends by Academic Grade

Makerere's growth in staff-in-post over the study period has, to a significant degree, occurred at the junior levels. The rank of Assistant Lecturer was introduced between 1988 and 1990 and, since then, recruitment to this grade has been significant, with 36 posts at this level by 1992 (29% of the growth in occupied posts since 1988). The rank of Lecturer reflects very little change over the study period, with 54% of posts at this level in 1992, compared to 53% in 1988. At Lecturer level, SA 4 increased from 53% of occupied posts to 63% and SA 5 from 55% to 60% between 1988 and 1992, whilst SA 2 decreased from 48% in 1988 to 41% in 1992. The proportion of occupied posts held at Senior Lecturer level reflects a 4% drop over the study period to a level where 23% of posts overall are at Senior Lecturer level, with SA 2 being over-represented by Senior Lecturers (33% of occupied posts) and SA 4 and SA 5 being under-represented (19% and 17% of occupied posts respectively).

The ranks of the Professoriate at Makerere have increased very marginally over the study period, with only five additional Professors and Associate Professors in post. The proportion of occupied posts held by these ranks has dropped from 20% in 1988 to 16% in 1992, with the most significant drop occurring in SA 4 (21% in 1988 to 10% in 1992). Makerere's full professors have consistently been Ugandan through the study period, but have only increased in number by two, and by 1992 formed only 7% of total occupied posts.

It appears, therefore, that Makerere has achieved a significant proportion of its growth in establishment at the junior ranks, and in some departments it has lost several of its senior academic staff (possibly through retirement).

Trends in Gender Composition of Staff

Makerere is overwhelmingly male, but there has been an improvement in the proportion of occupied posts held by women over the study period (10% of posts in 1988 and 14% in 1992). Males occupy 100% of occupied posts in SA 1, and 90% in SA 4. Only in SA 5 does the proportion of males drop significantly, to 75% in 1992. Female academics are under-represented in the three most senior grades of Professor, Associate Professor, and Senior Lecturer. In 1988, females comprised 7.6% of occupied posts at those grades, and 8.9% in 1992. As a consequence, women are marginally over-represented in the Lecturer and Assistant Lecturer grades, comprising 16.3% of occupied posts at those levels in 1992.

To a significant degree, growth in Makerere's academic establishment has been achieved by the recruitment of females: between 1988 and 1992 the number of women employed by Makerere increased by 87%, whereas the total number of staff increased by only 30%.

Trends in Employment of National and Expatriate Staff

Expatriates are insignificant at Makerere, occupying only 3% of occupied posts in 1992, with the pattern having hardly changed over the study period. In 1992 only four staff were employed on local expatriate terms, and 11 on external contracts. The number of staff employed on external expatriate contracts increased from 3 in 1988 to 11 in 1992, with the majority of these personnel employed in SA 3, where they comprise 5% of occupied posts. Of the expatriate staff, 24% are from elsewhere in Africa, up from nil in 1988. Consequently, Makerere reveals very high levels of national staff in all subject areas, with an overall average of 97% of occupied posts held by Ugandans.

Although expatriate numbers are relatively insignificant at Makerere, expatriates are over-represented at the Professorial level in SA 4 (17%), and SA 1 (14%). Overall, however, Ugandans occupy 93% of all professorial level occupied posts.

Trends in Student Numbers and Staff:Student Ratios

Makerere's student population increased by 35.7% over the study period, from 5 460 in 1988 to 7 410 in 1992. Makerere was able to almost match this growth in student numbers with growth in both established and occupied academic posts, as these increased by 24% and 30% respectively over the study period. This increase in all areas resulted in the staff:student ratios deteriorating only marginally from 1:7.27 in 1988 to 1:7.98 in 1992 (an increase of 9.7%) in respect of established posts, and from 1:13.09 in 1988 to 1:13.65 in 1992 (an increase of 4.3%) in respect of occupied posts. In SA 3, SA 4, and SA 5, Makerere was actually able to improve the staff:student ratio over the study period in respect of both established and occupied posts. Consequently, Makerere's growth in establishment and in the number of occupied posts appears to be fully justified in the light of the increase in student numbers, and the resulting staff:student ratios appear to be reasonable and comparable with ratios prevailing in the other case study institutions.

ZAMBIA

Establishment Trends

Zambia is the only University to have reduced its establishment[12] overall during the study period. The establishment has fluctuated quite considerably over the three years under study, dropping from 606 in 1988 to 493 in 1990, and rising again to 539 in 1992. This drop in establishment of approximately 11% over the study period is evenly distributed throughout the subject areas, except for SA 2 where the decline in establishment is only 6%. This is an interesting trend, and perhaps represents an attempt by the University to reduce its establishment to more realistic levels in the light of funding constraints. A contraction in establishment is one way of tackling the shortage of funds for improved salaries and remuneration packages.

Trends in Number of Occupied/Vacant Posts

Unfortunately, and despite the contraction in its establishment, Zambia's occupancy rate did not improve over the study period, and in SA 4 declined quite significantly. The number of occupied posts overall declined from 396 in 1988 to 349 in 1992, representing a 12% decline over the period, compared to the 11% decline in established posts. However, in SA 1 the 1992 occupied posts were almost unchanged from 1988, whilst the other areas reflect declining numbers of staff-in-post. The overall vacancy rate remained at 35% over the study period, only improving to 28% in 1990 when the establishment was severely reduced, but in SA 4 it worsened to 42%.

The trend is reversed in certain departments, with the three key departments of Civil, Electrical and Mechanical Engineering showing increases in the occupancy rate from 53% to 83%, 33% to 53%, and 56% to 82% respectively. In SA 1, Mathematics shows a deterioration from 64% to 42% occupancy in 1992. Several departments in each subject area show fairly serious declines in their occupancy rate, with some departments in a precarious position with only two or three staff members in post. In Veterinary Medicine, overall occupancy rates show a general trend of increase from around 47% in 1988 to 54% in 1992. Although staffing levels in the departments of Clinical Studies and Disease Control are low (at 45% and 36%, respectively), the other departments show significant improvements in occupancy rates. Similarly, in SA 3 many of the departments are very poorly staffed, with only one or two people in post. The overall trend appears to be a declining occupancy rate in most departments in the Faculty of Medicine over the study period. In SA 4, Economics has lost over half its staff, and now has only four staff members in post, with a vacancy rate of 64%. The data produces some erroneous results for the occupancy and vacancy rates in 1988 and 1990, as the format cannot accommodate the way the data has been presented following the division of the Department of Education into four separate departments. The Department of Education (now Mathematics and Science Education) had an establishment of 27 posts in 1988, all of which were occupied. In 1990 its establishment was reduced to 17, with 23 posts occupied

[12]Zambia fixes its establishment at two levels: Professor and Lecturer. Established Professor posts can be occupied by Professors or Associate Professors, and established Lecturer posts can be occupied by either of the remaining 4 academic ranks: Senior Lecturer, Lecturer Grade I and Grade II (Lecturer in this study), and Lecturer Grade III (Assistant Lecturer in this study).

(occupancy rate of 135%). But, in 1992, following the creation of four departments out of the original one, the establishment for these departments had increased to 36, with 22 posts occupied (occupancy rate of 61% overall). In SA 5 the trend is an increasing number of departments with increasing vacancy rates.

In summary, Zambia's staffing position does appear to have deteriorated over the study period. Despite a reduction in its establishment, the number of staff-in-post has declined between 1988 and 1992, placing several departments in a precarious position.

Trends by Academic Grade

Zambia was able to achieve even its current staffing levels only through recruitment to the lowest grade of Assistant Lecturer, where the number of staff-in-post increased from 53 to 88 over the study period, an increase of 66%. At all other grades there was a steady loss of staff, which is particularly marked at the Lecturer grade, where the complement of staff-in-post dropped from 225 in 1988 to 155 in 1992, a decline of 31%. Whilst Professors and Associate Professors were a consistent 11% of occupied posts, their total numbers declined by 6, and only in SA 1 did they show any resilience and improvement. Senior Lecturers also declined in absolute numbers, although they continued to represent 19% of occupied posts, with the significant exception of SA 3, where they form 34% of occupied posts. Lecturers have shown the largest decline from 37% of occupied posts in 1988 to 26% in 1992, with significant reductions in SA 1 and SA 4. Assistant Lecturers grew as a proportion of occupied posts in all subject areas, but especially in SA 1, SA 4, and SA 5. It is clear, therefore, that Zambia is suffering a loss of senior staff, and is maintaining its position only through the recruitment of junior staff, with consequent ramifications for the quality of its teaching and research programmes.

Trends in Gender Composition of Staff

Zambia is strongly male, with the trend being towards an increase in the proportion of males in occupied posts. Females in occupied posts dropped 25%, declining from 63 in 1988 (16% of staff-in-post), to 47 in 1992 (13%). Typically, SA 1 is almost exclusively male, with SA 2 not much better, and only in SA 3 do females increase as a proportion of the occupied posts, where they are now 30% of staff-in-post. Females are marginally under-represented in the senior ranks of Professor, Associate Professor, and Senior Lecturer, representing 10.4% of occupied posts in those grades in 1992. Conversely, they are marginally over-represented at the junior levels of Lecturer and Assistant Lecturer, representing 15% of occupied posts at those grades in 1992. In summary, it appears that Zambia has been losing female academic staff at both senior and junior levels at a greater rate than it has lost male staff.

Trends in Employment of National and Expatriate Staff

National staff occupy 71% of posts in Zambia, a marginal increase from the level of 67% in 1988. National staff are well represented in all subject areas but SA 1 and SA 3, where they represent only 55% and 47% of staff-in-post, respectively. In the light of these figures it is evident that Zambia is heavily dependent on expatriates, with the overwhelming majority of expatriates employed on externally funded contracts. Such staff amounted to 28% of staff-in-post in 1992, rising to 42% in SA 1, and 51% in SA 3. Only in SA 4 and SA 5 were expatriate staff relatively insignificant. Expatriates employed on local contracts were non-existent in Zambia until 1992, when a total of four were recruited. This may be evidence either of highly committed individuals or of a slight improvement in the conditions that Zambia could offer.

Zambia has been relatively successful in recruiting expatriates from elsewhere in Africa, and such staff now represent 27% of expatriates in post. Consequently, whilst Zambia has clearly been losing academic staff to other universities in Africa (as is clearly indicated in the Institutional Leaders questionnaires discussed in Chapter Six), it has also succeeded to some degree in recruiting African staff from elsewhere in Africa. Expatriates are a significant proportion of the Professors and Associate Professors, representing 76% of Professors and Associate Professors in post overall, rising to 100% in SA 2, 93% in SA 1, and 77% in SA 3. Zambia has been able to maintain only a modicum of senior level staff through the recruitment of expatriate Professors and Associate Professors on externally funded contracts.

Trends in Student Numbers and Staff:Student Ratios

Student numbers at Zambia increased only marginally over the study period, from 4 176 in 1988 to 4 497 in 1992 (an increase of 7.7%). As Zambia is the only institution in the study to show a contraction in the number of both established and occupied posts, the staff:student ratios have deteriorated over the study period. In 1988 the staff:student ratio in terms of established posts was 1:6.89, and this deteriorated by 21% to 1:8.34 in 1992. Similarly, the ratio in respect of occupied posts deteriorated by 22% from 1:10.55 in 1988 to 1:12.89 in 1992. Nevertheless, the resulting staff:student ratios are not dissimilar to those in the other case study institutions, and in SA 2, SA 3, and SA 4 are in fact very low. Therefore, it is evident that Zambia was able to hold (or manage) its student growth to take account of the fact that it was experiencing staffing difficulties, with the result that staff:student ratios have not deteriorated as much as would have been expected in light of the reduction in staff numbers.

ZIMBABWE

Establishment Trends

Zimbabwe has increased its academic staff establishment[13] by 31% over the study period, from 796 posts to 1 042. All subject areas have experienced growth over the period, but SA 1 experienced a phenomenal growth of 77%, with the three key departments of the Faculty of Engineering more than doubling in size -- Civil Engineering, 131%; Electrical Engineering, 153%; and Mechanical Engineering, 140%. The Department of Statistics grew by 160% (it was a relatively new department in 1988), and other departments which grew by over 50% were Chemistry (86%), Computer Science (64%), Mathematics (57%), Physics (73%). The study period also saw considerable growth in SA 4: Accountancy grew by 115%, and Business Studies by 75%. SA 1 and SA 4 inflate the overall growth rate quite significantly, as the other three subject areas experienced much more moderate growth rates: SA 2, 14%; SA 3, 12%; SA 5, 15%. In SA 5 some interesting expansion of establishment took place in departments such as African Languages and Literature (21%), History and Economic History (18%), Educational Foundations (33%), Religious Studies (44%), and Sociology (20%).

The remarkable growth rates in SA 1 and SA 4 are largely due to the full absorption of the establishments and staff of the various B.Tech programmes run at the Harare Polytechnic and Bulawayo Technical College into the Zimbabwe budget. The University was required by Government to take over responsibility for the programmes, but they are now being phased out of the University as the new National University of Science and Technology in Bulawayo comes on stream. Further analysis reveals that the B.Tech Programme significantly distorts the Zimbabwe figures, and if they are excluded from the calculations, establishment growth over the period 1988 to 1992 is reduced as follows: SA 1: 77% to 21%; SA 2: 14% to 7%; SA 3: 12% to 6%; SA 4: 51% to 6%; overall establishment growth: 31% to 12%. Consequently, if the B.Tech posts are excluded, Zimbabwe expanded its establishment very moderately over the study period, although growth in student numbers was negligible. It will be interesting to see what happens to the B.Tech posts at Zimbabwe once the programme has been completely phased out.

Trends in Number of Occupied/Vacant Posts

Despite the overall significant growth in establishment, Zimbabwe was able to keep pace with this growth, and the number of occupied posts increased by 32%, and by a significant 87% in SA 1 (B.Tech programme). Equally, the proportion of established posts which were occupied remained almost constant despite the growth in established posts -- from 70% overall in 1988 to 71% in 1992. Only in SA 4 was there a significant deterioration in the proportion of established posts which were occupied, with the rate dropping from 74% in 1988 to 58% in 1992. Consequently, the overall vacancy rate remained constant at approximately 30%. Zimbabwe's recruitment efforts were fairly successful: when 1992 occupied posts are

[13] Zimbabwe fixes its establishment at three levels: Professor, Lecturer, and Assistant Lecturer (Teaching Assistant). Established Professor posts can be supplemented in fact by staff who are promoted to the professor grade irrespective of whether there is a vacancy in an established post. Established Lecturer posts can be occupied at any of the following levels: Lecturer, Senior Lecturer, Associate Professor and Professor.

taken as a proportion of 1988 establishment, 1988 establishment would have been achieved and even exceeded in SA 1, and virtually achieved in SA 2, SA 4, and SA 5.

However, these relatively pleasing statistics disguise the fact that there are several departments at Zimbabwe which are severely below the overall norm in terms of proportion of establishment occupied, and the departments which are fully established or above 80% are relatively few. The departments in Engineering are around the 60% occupancy rate, with Mechanical Engineering only 42%. The Department of Biological Sciences in SA 2 is only 60% occupied, as is the Department of Paraclinical Veterinary Studies. Unfortunately, several departments in the Faculty of Medicine are severely below the norm in terms of occupants, with Anatomy having only 45% of its established posts occupied, Chemical Pathology 57%, Haematology 25% (only 1 person in post), Histopathology 40% (only 2 people in post), Physiology 46%, while Radiology has no-one in post. In SA 4, the two departments which experienced rapid growth in their establishment (due to the B.Tech programme) are now way below the norm in terms of the proportion of established posts occupied, with Accountancy having dropped from 69% occupancy to 43%, and Business Studies from 63% to 33%. In the case of Accountancy, if there had been no growth in establishment, it would have achieved its 1988 target by 1990. In SA 5, Educational Foundations at 56% occupancy, Psychology at 55% and CASS at 50% in 1992 are below average for occupancy rates in that subject area.

A further analysis of occupied posts to exclude the B.Tech factor mentioned above also indicates that a major cause of Zimbabwe's relatively high vacancy rates is the B.Tech programme. Without that programme, occupancy/ vacancy rates are much healthier. If the B.Tech occupied posts are excluded, the occupancy rate improves as follows: SA 1: 67% to 80%; SA 2: 79% to 84%; SA 3: 65% to 67%; SA 4: 58% to 74%; overall occupancy rate: 71% to 78%. Furthermore, without the B.Tech programme, Zimbabwe would have come close to meeting its 1988 establishment targets in all subject areas except Medicine, and overall would have achieved 87% of its 1988 target.

In summary, Zimbabwe's staffing levels have not deteriorated, and in fact have improved significantly over the study period. Whilst the apparent overall vacancy rate of 30% (the second highest of all the universities) is of concern, assuming the establishment is realistic in relation to student numbers, it has not worsened over the study period, and is shown to have been artificially inflated by the effects of the B.Tech programme which is now being phased out. The vacancy rate is only a modest 13% when the B.Tech programme is excluded.

Trends by Academic Grade

To a large degree, Zimbabwe achieved its growth in academic staff numbers through the recruitment of very junior staff at the Assistant Lecturer grade. Assistant Lecturers in 1992 represented 14% of overall occupied posts as against 8% in 1988. In SA 1, the area which experienced the most rapid growth, Assistant Lecturers represented 18% of occupied posts in 1992, as against 7% in 1988. These figures clearly illustrate the pattern whereby the number of occupied posts (87% in SA 1) was increased to a large degree through the recruitment of Assistant Lecturers. The only other subject area in which Assistant Lecturers form a significant proportion of the total of occupied posts is SA 5, where they comprise 11% of occupied posts. The growth in the Professoriate has been below the average growth in occupied posts at only 22%, and in SA 3 the number of Professors and Associate Professors in post has actually deteriorated to 69% of the 1988 figure, which is a cause for concern. However, in SA 1, the Professoriate has grown dramatically by 125% to the extent that 41% of the professoriate at Zimbabwe is in SA 1. Overall, Professors and Associate Professors comprise 9% of occupied posts in 1992, compared to 10% in 1988, and only SA 1 (11% to 14%) shows any appreciable increase, whilst, as indicated earlier, SA 3 shows a decrease (11% to 7%). The number of full professors in post at Zimbabwe has dropped from 37 in 1988 to 31 in 1992, and full professors represented only 4% of total occupied posts by 1992 (down from 7%). Clearly there has been a significant promotion to the Associate Professorship, where numbers increased from 17 in 1988 to 35 in 1992. The Senior Lectureship has increased roughly on a par with the overall increase (29%) and as a proportion of occupied posts, Senior Lecturers have remained consistently at

18%, but are 25% of occupied posts in SA 2, 24% in SA 3, and only 10% in SA 4. Similarly, the Lecturer grade has remained consistent at 64% in 1988, and 63% in 1992, with SA 4 (as would be expected) showing a significant variation from the overall pattern of 81% of occupied posts in 1992, and SA 1 being below the norm at 52%. Overall, the growth has been achieved in all grades, but particularly at the Assistant Lecturer grade and, in SA 1, at the Professorial levels.

Trends in Gender Composition of Staff

The trend in respect of the employment of females at Zimbabwe has remained remarkably consistent -- males occupied 81% of posts in 1988 and 82% in 1992, with females therefore varying from 19% to 18% of occupied posts. SA 1 is almost exclusively male, with a slight improvement from 94% occupied by men in 1988 to 91% in 1992. Women exceed the norm of 18% of occupied posts in SA 2 (20%), SA 3 (24%), and SA 5 (22%). Female academic staff are under-represented in the three most senior grades of Professor, Associate Professor and Senior Lecturer, with only the most marginal of improvements taking place over the study period -- female academics occupied 10.2% of the occupied posts at these grades in 1988, 10.4% in 1990, and 10.7% in 1992. Similarly, they occupied 21.8% of occupied posts at Lecturer/Assistant Lecturer grade in 1988, 20.5% in 1990, and 21% in 1992. At both levels, expatriate women represent approximately 20% of total females employed.

Trends in Employment of National and Expatriate Staff

Expatriate academic staff are a significant proportion of the total academic staff at Zimbabwe, occupying 24% of posts in 1988, and 22% in 1992. A change in the character of the expatriates employed at Zimbabwe has been the marked reduction in the number of expatriates on external contracts (down from 19 in 1988 to 7 in 1992), and an increase in the number of expatriates employed on local contracts (up from 114 in 1988 to 154 in 1992). Of the expatriates at Zimbabwe, 55% are employed in SA 1 (41% of 1992 occupied posts in the subject area, up from 30% in 1988), indicating that to some extent the massive growth in this area caused by the B.Tech programme take over was achieved through the recruitment of expatriates on local contracts. All other subject areas show a reduction in the proportion of expatriates in relation to occupied posts.

Expatriates are somewhat over-represented at the senior level of Professor and Associate Professor, representing 38% of overall occupied posts at those levels. In SA 1, Zimbabweans occupy only 33% of professorial posts, whilst they occupy 67% of such posts in SA 3, 100% in SA 4, and 89% in SA 5.

Trends in Student Numbers and Staff:Student Ratios

Overall (including the B.Tech programme), the Zimbabwe student population has increased from 7 385 in 1988 to 9 017 in 1990, and down to 8 385 in 1992 (an increase of 13.5%). With increases in both established posts (31%) and occupied posts (32%) over the study period, Zimbabwe was able to more than match the growth in student numbers, producing an overall improvement in staff:student ratios. In terms of established posts the ratio improved from 1:9.28 in 1988 to 1:8.05 in 1992 (an improvement of 13.25%), and from 1:13.19 in 1988 to 1:11.33 in 1992 in terms of occupied posts (an improvement of 14%). Even in 1990, when Zimbabwe's student numbers went up to 9 000, the overall staff:student ratios did not deteriorate significantly, increasing only to 1:9.54 in terms of established posts, and 1:13.09 in terms of occupied posts. A similar picture emerges if the distorting factor of the B.Tech programme is removed from the data. Overall student numbers increased from 7 385 to 7 600 between 1988 and 1992, while staff:student ratios (excluding B.Tech students and staff) also improved from 1:9.28 in 1988 to 1:8.53 in 1992 for established posts, and for occupied posts from 1:13.19 in 1988 to 1:10.97 in 1992. Improvements in the staff:student ratio were achieved in all subject areas except SA 3, where a marginal increase from 1:5.58 in 1988 to 1:6.67 in 1992 occurred. Overall, the Zimbabwe staff:student ratios, both inclusive or exclusive of the B.Tech programme, look reasonable and comparable to those in the other case study institutions.

CONCLUSION

The evidence from other parts of this survey confirms that universities do face serious problems concerning retention and recruitment which are not easy to address, and which ultimately come back to a need for national economic revival, and a need for universities to be adequately funded. However, the evidence detailed above is that despite all their problems, universities (with the exception of Zambia and possibly of Makerere) are adequately holding their own in terms of academic staff numbers and recruitment at all ranks below that of full professor. The generally positive picture emerging from this part of the study does need to be qualified in a number of respects:

- The data, as already indicated, may not be that readily applicable to other universities in Africa, and although it has been argued that the seven case study institutions are fairly representative of universities in Africa, local conditions, particularly in relation to the political and economic situation, have to be taken into account. It is highly likely that there are several universities in Africa which are in very precarious situations and to which the data from this section of the study will not be relevant.

- The data may disguise a subtle deterioration in the quality of the academic staff-in-post. The reduction in the proportion of senior staff, which is particularly marked at the full professor level, clearly indicates a loss in quality, as newly promoted staff are less experienced and less capable of providing the academic leadership which their predecessors supplied. Although the data indicate that the profile of occupancy at the various academic grades has not changed significantly over the short period of this study, it is likely that this stability is largely being achieved through internal promotions, which may disguise a qualitative loss of experienced staff who are being replaced by less experienced staff. At the lower academic grades the data from the staff-in-post questionnaire indicate that staff at these levels are relatively young, and if it is accepted that an academic needs several years to be fully useful, losses of staff from even the more senior levels of the Lecturer grade represent a qualitative decline.

- In a number of countries there is the potential for serious difficulties in the future: in Ghana and Ibadan the staff are generally much older and recruitment difficulties could arise when retiring staff have to be replaced in the next decade or so; in Botswana, the University's success in recruiting expatriates is crucially dependent on the Botswana economy performing well. Similarly, in Zambia and Zimbabwe, the staffing position would be serious without the significant inflow of expatriates, many of whom (particularly in Zambia) are on externally funded contracts, which presumably could be withdrawn at relatively short notice.

- Finally, it is evident that in many institutions, including several of those which participated in this study, the general infrastructure and facilities are in serious decline. This picture is reinforced by some of the data emerging from the staff-in-post survey. If this is true of the institutions generally, it may be that the same deterioration in quality is applicable to the academic staff, despite the fact that the institutions have been successful in maintaining the numbers of academic staff-in-post. This view is reinforced by the information that many staff are away on extended periods of leave, whilst those on the ground may often be "only physically present" and "mentally absent" whilst they pursue second or third careers outside the university in order to improve their financial position.

In addition to the policy/intervention suggestions made earlier, there appear to be a number of avenues for investigation:

- A need for universities to implement systems for the rigorous review of establishment inflation. Are the procedures for the establishment of new posts rigorous enough to ensure that the new posts are really justified?

- Within the framework of an overall compact with their governments for more rational funding schemes (hopefully based on governments assisting students to pay an economic fee), a policy of freezing establishments at their current levels (or, as in Zambia, reducing them to something approximating the number of occupied posts) in return for the conversion of part of the budgeted funds into better remuneration packages for staff-in-post may pay dividends. High inflation and deteriorating exchange rates mean that the cost of funding universities goes up even without the considerable additional burden of constantly expanding establishments. The rapid increase in establishments exacerbates the overall funding problem. The removal of posts which are highly unlikely to be filled in the short term would be a recognition of reality, and would enable universities to improve conditions for the staff they do have, and improve their ability to recruit to the few crucial vacant posts.

- Universities need to review the record of departments which are severely understaffed, comparing them with analogous departments in neighboring universities, and analyzing the peculiar difficulties experienced by such departments.

- The evidence from the questionnaire for Institutional Leaders is that they regard the whole problem of staff capacity and recruitment as related to salary. However, it is clear from other aspects of this survey that there are a host of areas requiring attention which, cumulatively, could be as important as salary: the general environment of the institution, the maintenance of facilities, promotion policies, and the lack of postgraduate programmes.

In conclusion, the evidence examined in this chapter is generally encouraging, despite the qualifications concerning the time period of the study, its general applicability, the potential for a deterioration in quality through turnover, and the somewhat different picture which emerges if the information from Zimbabwe concerning the number of staff absent on some form of leave is at all typical. With the exception of Zambia, the case study universities have generally managed to improve their staff numbers without any serious loss of experience, as represented by academic rank. Although the loss of staff, particularly staff who have been in the institution for a period of time, represents a loss of experience, and possibly, therefore, of quality, it is also conceivable that the universities are recruiting adequately qualified and experienced staff at all grades except full professor, in which case the concern about the general quality of academic staff in the case study institutions is overstated. On the basis of the data available from these institutions, serious staff loss at African universities in the period 1988 to 1992 has not occurred: they are much better staffed than is generally believed and, since 1988 at least, have more than adequately held their own. Staff:student ratios have been broadly maintained at 1988 levels, with only marginal changes (a slight deterioration in three of the five institutions for which data were available, and a slight improvement in the other two) having occurred.

CHAPTER 3

CONDITIONS OF SERVICE AND COMPARABILITY

INTRODUCTION

The objective of the conditions of service portion of the study was to enable the comparison of conditions between universities, and to allow an analysis of how they fared in relation to their national job markets. The intention was to identify the major deficient areas both within the university employment package and in relation to competitive employers in order to indicate possible areas and means of management intervention.

RESULTS

The analysis of the conditions of service information reveals quite clearly that the economic climate is the major problem facing universities. A poorly performing economy with increasing levels of absolute poverty is hardly a conducive environment in which to expect to find a really vibrant, successful university[14]. Economic deterioration has a major impact on government revenues and therefore on the ability of governments to fund universities properly. Firm evidence of the deteriorating funding is often seen in the infrastructure, the lack of maintenance, and insufficient capital expenditure (except possibly in Zimbabwe, where these have been maintained relatively well). However, in all the case study universities except Botswana, the major impact has been on salaries, and the overall remuneration packages have shown deterioration in real terms and in competitiveness, both nationally, regionally and internationally. Academic staff do not exist in a "utopian island" sheltered from the economic situation in their countries, and cannot expect to be exempt from the generally harsh economic climate currently prevailing. Only Botswana appears to have a salary package which is competitive regionally and internationally. Even in a situation of reviving and growing economies, as long as governments continue to be the major source of funding, there are some doubts that universities will ever be able to pay their academic staff competitively. Their generally large complements of highly qualified staff pose an unrealistic burden on governments. The only long-term solution appears to be for universities to:

- Diversify their sources of funding by bringing in players other than the government.
- Become more productive, by teaching more (or at least stable student numbers) with less full-time staff, and paying the more productive staff of a slimmed down establishment a more competitive salary.
- Develop internationally recognized programmes which attract full cost tuition fees and research funding.

In general, the packages which exist in theory in the case study universities are basically right in terms of both their content and policy. On the whole, conditions covering pension, medical aid or access to medical services, and leave conditions, appear to be competitive if not better, at least in terms of each national employment market. The impression is that universities are seriously non-competitive only in

[14]To grasp the scale of Africa's poverty, consider this statistic: the combined GNP of the entire continent south of the Sahara is less than that of Holland. Worse, Africa is slipping. Sub-Saharan Africa, reported the World Bank earlier this year, "is the only region in the world likely to experience an increase in absolute poverty over the next decade." Worse again, Africa has missed out entirely on the new vogue for private investment in the poor world. For the rest of the decade - and probably beyond - it will have to rely for foreign capital almost entirely on aid. (Extract from *The Economist*, September 25, 1993, p. 53.)

terms of salary, and this view is borne out by the data from the academic staffing data and survey of staff-in-post. Universities should endeavor to make their existing policies in terms of pension, medical aid, and leave operate as efficiently as possible and as originally designed and intended. The possibility of switching resources to these areas in order to make them operate effectively, even at the expense of reduced funding in other areas, may pay handsome dividends. Universities not currently offering such conditions may find it worthwhile to explore innovative ideas which appear to be working in a number of universities. In general, the universities appear to be on the right track in terms of the basic components of a successful remuneration package from the point of view of staff recruitment and retention.

If the primary purpose of a university in most African countries is teaching, and that is the major reason for which governments fund universities, it is significant that academic staff are free from teaching responsibilities for several months in each year - at least three, conservatively speaking. Taking into account university vacations and generous sabbatical, contact and vacational leave conditions, it could be argued that current university salaries are therefore paid for eight or nine months work per annum. Furthermore, although this view will be controversial, it is generally accepted that academic work is less intense than that in many other professions, with formal contact with students perhaps amounting to not much more than a maximum of 10 or 12 hours per week. This interpretation presents the seeds for a potential solution to the salary problem, as governments, universities and their academic staff may be able to negotiate a trade-off: significantly better salaries (at least to competitive rates within the national economy) in return for significantly greater productivity in terms of student teaching loads, staff:student ratios, research output, and rigor, intensity and accountability of the daily work regimen, coupled with reduced leave and travel benefits. Under such a scenario, academic staff complements would be reduced, and the remaining staff would receive competitive salaries and other conditions (pension, medical aid, insurance, etc.), but would work a more "normal" daily regimen, and access to research travel and leave would perhaps be on a reduced and competitive basis. Indeed, universities could go all the way to performance-related pay schemes based on academic productivity, success and volume of work. Whilst this proposal may be radical, it contains the basis for a potential improvement in academic salaries. It is predicated on the view that it is unrealistic for African academics to expect African governments to fund universities to a level which allows the payment of competitive salaries to large complements of staff, whilst also funding generous travel and leave benefits, and largely self-determined and controlled daily work regimens. Although the latter feature -- actual control over one's daily regimen -- is revealed by the staff-in-post and former staff surveys as a powerful psychologically positive factor in an academic career, it **and competitive salaries** are perhaps mutually exclusive in all but the most wealthy of countries, and not sustainable in Africa. Realistically it can only be one or the other. Institutional leaders are urged to encourage debate within their universities about the choices which this conclusion points to.

There are specific problem areas which universities evidently need to tackle more energetically than appears to have been the case in the past. These problems areas are the supply of housing and access to a vehicle for academic staff members. The staff-in-post and former staff surveys have demonstrated that the inability to secure a home and a vehicle are major disincentives to an academic career. The housing problem stems primarily from the failure of national housing delivery and financing schemes to perform. Zimbabwe is an excellent case in point: even individuals who are very well paid in terms of the local economy are unable to afford housing at currently prevailing capital costs and interest rates. Furthermore, given the costs involved, it is evident that university academics need to down-size their aspirations in terms of housing. For example, purchasing 300 sq.m of serviced land (water, sewerage, roads) in the high density suburbs of Zimbabwe's capital, Harare, cost US$1 700 in 1993, and building a small, three bedroom "no frills" house (floor area 65 sq.m) would cost a minimum of US$7 700. Applying the generally accepted norm that loan repayments for housing should not exceed 25% of salary, a salary of US$7 300 (Z$47 376) per annum is required to obtain a loan for the above house. The consultants have no ready solution to the problem of housing and supply and access to a vehicle, but donors could well assist by:

- Funding a study of how universities might be able to assist in the establishment of realistic home ownership schemes for academic staff, possibly through the study of successful schemes (if any exist) in other poor, developing economies.

- Establishing an endowment/housing revolving fund for the distribution of loans for the acquisition or construction of housing by academic staff members on realistic repayment terms.

- Obtaining expert advice to assist universities and their pension scheme administrators (where the scheme is not a State system) in exploring the possibilities of using a proportion of the pension fund resources to fund the construction of housing through the provision of loans which can realistically be repaid by academic staff.

- Continuing to fund major research projects which include a means and a readiness to supply vehicles for the project and **individual** use.

Governments in Botswana, Zambia, and especially Zimbabwe could make a significant improvement in the packages available at the universities by reducing their taxation rates for staff employed in the universities. At a stroke, packages would be significantly improved.

It is evident from several sections of this study that academic staff are critical of the efficiency of their university administration and the bureaucracy involved. As a result of this inefficiency and bureaucracy, the desirable involvement of academics in the administration (particularly through service on committees, a major role in examination administration, etc.) probably helps to fritter away yet more academic staff time which could be devoted to teaching and research. Improving administrative efficiency and systems would reduce "wasted" staff time involvement in administrative issues and lead to a more contented staff.

Both the staff-in-post and former staff surveys indicate a fairly strong criticism of promotion policies and procedures in most of the case study universities, and it has been recommended that university managements should review these with a view to making them as transparent and fair as possible. Of the five institutions which supplied documentation on their conditions of service contracts and promotion procedures, the material from Botswana, Makerere, Zambia, and Zimbabwe provides information on promotion policies and procedures. The Botswana, Zambia, and Zimbabwe documents provide fairly detailed descriptions of the promotion system and application procedure, and reasonably comprehensive descriptions of promotion criteria for each grade. Botswana and Zimbabwe both operate an annual performance appraisal system for academic staff, based primarily on the self-production of a dossier covering a range of performance criteria. Botswana has gone as far as attempting to weight its assessment of the usual three criteria for promotion (teaching, research and service) in favour of teaching, despite the greater evaluation difficulties in this area. Makerere's documentation briefly describes an interesting system for allocating points to the various criteria, but it is not clear whether this system applies only to initial appointments or to promotions.

The description of the process and procedure for promotion is generally poor, and of little help. The general impression from the material available is that several universities have systems which, on paper, look clear and fair and provide ample information for aspiring academics as to what is required of them. However, they all conceivably fall down on the complexity of the evaluation systems and the reluctance of academics to undertake peer reviews of their colleagues. Those institutions which do not have clear promotion policies and procedures would be well advised to review those produced by the universities of Botswana and Zimbabwe, and all universities could do well to simplify the formidable bulk of the documentation required and undertake an effective public relations campaign amongst their academic staff as to promotion policies, criteria and procedures.

SALARY COMPARISONS

Table 3.1 provides a comparison of average salaries at lecturer, senior lecturer and professorial levels, with the comparable national public and private sector salary (in US$ terms) provided by the Institutional Coordinator (IC) showing the university salary as a proportion of the public and private sector salaries. Allowing for the fact that several of the selected public and private sector salaries could be inaccurate and unfair in terms of comparability with the academic grade, and could be inaccurate in absolute terms, this analysis shows a significant differential against all universities except Botswana and Zimbabwe. Despite the caution expressed concerning the accuracy of the public and private sector data, this comparison shows quite clearly the gap which most of the universities have to make up in order to be competitive within their own countries.

The salaries are also presented in international dollar (I$) terms using the 1991 Purchasing Power Parity (PPP) exchange rate. As expected, the salaries generally improved significantly. As a further point of reference, each university's salary is shown as a proportion of the appropriate Botswana salary in both US$ and I$ (PPP) terms. The adverse differentials which are so evident between the other universities and Botswana in US$ terms, reduce considerably in all cases when examined in PPP terms, and in Zambia and Zimbabwe the resultant I$ salaries are better than those in Botswana. Whilst caution is necessary in interpreting these results, the data for Zimbabwe is credible, reflecting the considerably higher cost of living in Botswana. But to state that Zimbabwean academics are in fact "better paid" than their Botswana counterparts may be stretching the data. The considerably improved position of Zambia in relation to Botswana is less credible, and intuitively cannot be correct.

In judging their comparative position and in exerting pressure on university administrations and governments for improvement, academic staff quite naturally make comparisons between their salaries and conditions of service and those prevailing in neighboring or regional countries. A better form of comparison than the official exchange rate is therefore desperately needed. The brief analysis using PPP rates in this study demonstrates the significantly different picture which can emerge. In order to facilitate future comparisons of university packages, and improve the quality and relevance of the comparison, it is recommended that donors consider funding a study on expenditure patterns amongst academic staff at each university in order to arrive at a reasonably accurate comparable cost of a "basket of goods" (e.g. the number of days/months/years work required in order to purchase food staples, car, house, etc.) in each country - this might well be an attractive research/teaching exercise for departments of Economics in each of the universities. An alternative strategy would be for universities to request major multinationals to

Table 3.1. Comparison of average salaries

Grade		Benin	Botswana	Ghana	Ibadan	Makerere	Zambia	Zimbabwe
Lecturer	US$ p.a.	7,452	19,884	2,787	825	1,020	3,085	10,062
	Local p.a.	2,138,724	49,511	1,674,987	20,625	1,224,000	1,542,500	65,532
	Int $ p.a. (PPP$)	29,271	43,784	19,953	8,211	10,845	55,267	63,878
	% to public sector US$	100%	175%	69%		69%	43%	170%
	% to private sector US$	41%	127%			19%	51%	110%
	% to Botswana US$	37%	100%	14%	4%	5%	16%	51%
	% to Botswana Int $	67%	100%	46%	19%	25%	126%	146%
Senior Lecturer	US$ p.a.	7,452	27,846	3,277	1,125	1,236	3,768	11,431
	Local p.a.	2,138,724	69,337	1,969,477	26,125	1,483,200	1,884,000	74,304
	Int $ p.a. (PPP$)	29,271	61,316	23,461	11,197	13,141	67,503	72,428
	% to public sector US$	--	119%	72%	--	61%	51%	160%
	% to private sector US$	--	128%	--	--	19%	42%	90%
	% to Botswana US$	27%	100%	12%	4%	4%	14%	41%
	% to Botswana Int $	48%	100%	38%	18%	21%	110%	118%
Professor	US$ p.a.	9,300	36,540	4,092	1,509	1,644	5,461	13,023
	Local p.a.	2,669,100	90,985	2,459,292	37,725	1,972,800	2,730,500	84,648
	Int $ p.a. (PPP$)	36,530	80,460	29,296	15,019	17,479	97,833	82,511
	% to public sector US$	100%	96%	77%	--	44%	43%	130%
	% to private sector US$	28%	73%	--	--	20%	37%	68
	% to Botswana US$	25%	100%	11%	4%	4%	15%	36%
	% to Botswana Int $	45%	100%	36%	19%	22%	122%	103%

share with them their very sophisticated comparison of costs of living which they undertake to ensure that staff transferred from one country to another maintain their standard of living. Universities would benefit significantly from having access to such data, and it would help to remove much of the emotion and inaccurate data used in present comparisons.

RESULTS BY INSTITUTION

The following discussion of each university's position in relation to the data collected indicates areas which require their individual attention, and areas or features which may be transportable to other institutions.

BENIN

Economic Environment: From the data supplied by the IC, the economic environment in Benin does not appear to be particularly harsh, but this is somewhat doubtful. Positive economic growth rates have been experienced in virtually all the years since 1988, rising to 4.7% in 1990/91, and forecast to be approximately 4% in 1992/93. Inflation is very low by African standards, at approximately 3% for 1992/93, and the national debt as a proportion of GDP is also low at 2% for 1991/92. On the basis of these figures the Benin economy would appear to be under control and on the move.

Salaries: Academic salaries (converted to US$) are relatively good compared to those in other case study universities. The very narrow differential of only 25% between the salaries of lecturers and full professors presents a poor career structure for advancement, with little in the way of incentive to achieve promotion. As all academic staff at Benin are civil servants, academic salaries are directly comparable with those paid in the Public Service for equivalent grades. However, salaries are considerably lower than those reported for the private sector, but as these are exceptionally high by African standards, it is felt that an error may have been made in the presentation or interpretation of the salary data for the private sector.

Taxation: Rates for married staff at Benin are low -- 18% for a married professor with several children -- but are significantly higher for single persons, rising to 40% for a single professor with no child. As the staff-in-post data indicates that Benin's academic staff have relatively large numbers of dependents per staff member, it is reasonably safe to assume that the majority of staff at Benin are paying tax at or around the lower rates.

Pension Scheme: A State scheme, comparable with that provided in most other case study institutions, and comparable to that provided by other employers in the economy. Unlike the other case study institutions (apart from Makerere), Benin provides no life insurance provision of any type for staff, and as such does not provide a common benefit which is of considerable value, although not often appreciated and factored in by staff.

Medical Aid Scheme: A State scheme for civil servants, which is non-contributory for either the individual or the employer, and which appears to provide for 75% of the cost of most medical treatment. As such it is a relatively generous scheme on the face of it, but state provided and funded, and having no insurance base, the scheme is presumably relatively inefficient and liable to long waiting periods and relatively poor service.

Benefits and Allowances: Benin is unusual in that it provides no benefits or allowances for its staff, except for the occasional use of a university vehicle. Nevertheless, apparently this lack of provision compares favorably with the supply of benefits and allowances to professional jobs elsewhere in the Benin economy. The IC reported that it is difficult for academic staff members to acquire a vehicle, due to their price in comparison to academic salaries, but noted that other professionals in the community also experience difficulty in obtaining cars.

University Housing: Again Benin is unusual in that it provides no university housing for academic staff, nor any support for staff to obtain their own housing. The IC reported that it is very difficult for members of staff to acquire a home, due to the fact that there is no organized system of housing delivery, and the price of housing is beyond the means of university academics. The IC reported that it is "possible" for professionals employed elsewhere to obtain housing.

Leave Conditions: These are on a par with those in the more generous case study institutions: two months vacation leave per annum is the most generous allocation of all the case study institutions, but Benin's sabbatical leave allocation of only two months every five years is amongst the poorest of the sabbatical leave conditions. However, its contact visit conditions are on the generous side, allowing between 45 and 365 days absence every year. In total, reducing the entitlements for sabbatical leave and contact visits to an annual accumulation, Benin effectively allows its academic staff four months leave per annum. However, it does not appear to supply any funding for airfares or per diem allowances for the sabbatical leave and contact visits, and therefore it is possible that these provisions are somewhat theoretical, as it may be that academic staff do not have the means to utilize the generous conditions provided. This appears to be borne out by the IC's report that the travel and leave conditions compare very badly with those of professional staff of a similar level in both the public and private sectors, as the level of funding apparently available to staff in those sectors is not available at the University.

Academic and General Economic Environment: The IC reports that books, journals, computers, films etc. are only occasionally available to academic staff, but consumer goods and household durables are readily available. The IC rated the quality and availability of education at school level as either satisfactory or excellent (private schools), and as affordable, even at private school level. This does not accord well with the response of Benin staff-in-post -- only 56% rated the quality of education as being acceptable or better, and 23% rated the cost of education as acceptable or better. Similarly, the IC rated the quality of health services as ranging from acceptable (in State institutions) to generally good (in private institutions), whilst only 40% of staff-in-post rated the quality of health services as being acceptable or better. The IC's satisfactory rating of access to and availability of foreign exchange accords with that of staff-in-post. The IC's rating of public transport (very bad), police services (bad), and other infrastructural factors (such as public health, water and sanitation, electricity and power, and telecommunications) as just acceptable, concurs with the staff-in-post response.

Summary: The University's competitive position within Benin appears to be marginal. It competes adequately with the public sector in terms of salaries and other conditions, although its generous leave conditions are apparently worse than those in the public sector through the non-availability of funding. The University is seriously below the private sector in terms of the salaries cited by the IC but, as indicated above, the consultants have some doubts as to the accuracy of the private sector salaries provided. Similarly, although the University's leave conditions are rated by the IC as very bad in comparison to those in the private sector, it must be a very unusual private sector that affords its staff an effective four months leave per annum. The University's inability to provide its staff with any assistance towards housing or the acquisition of vehicles means that it is unable to address two of the major issues of concern to academic staff identified by the staff-in-post and former staff surveys. Although all academic staff are civil servants, there appear to be relatively few if any incentives for civil servants in other ministries to transfer to a life in academia, nor for young professionals to consider an academic career, apart perhaps from a greater control and direction over career development and use of personal time. However, the University has maintained staffing levels over the study period, and therefore seems able to compete reasonably well, or else job opportunities are scarce elsewhere in the economy.

BOTSWANA

Economic Environment: Botswana has the best performing economy of all the countries included in this study, the highest economic growth rates (5.8% in 1992), and moderate indebtedness, but relatively high inflation levels, peaking at 16.1% in 1991/92 and 15.2% in 1992/93. Botswana, with a per capita

income of US$2 230, is sub-Saharan Africa's fifth richest country, but in the absence of major new diamond discoveries, the boom period of the 1980s (9.3% GDP growth on average) is unlikely to be repeated.

Salaries: Academic salaries are exceptionally good by African standards and significantly better than those in any other university in the study. At the lecturer level salaries are very high, and markedly better than those available in the public and private sectors. Professorial salaries are comparable with those payable in the public sector, although not as good as those cited for equivalent levels in the private sector. At junior levels, therefore, the University must be extremely competitive within the Botswana economy.

Taxation: Tax levels are relatively high, ranging from 30% to 40%, which is comparable to Zambia and Zimbabwe.

Pension Scheme: Botswana's pension scheme is generous, but available only to citizen members of staff, with the large cohort of expatriates receiving a gratuity at the rate of 25% of basic salary on completion of a two year contract. The pension scheme is non-contributory for the employee, with the University contributing an amount of 18% of basic salary. The value of the pension on retirement is comparable to that of most of the other case study universities. It is a more generous scheme than those available from other employers in Botswana. The life insurance provisions are standard, providing cover equivalent to four times salary for death in service or by accident.

Medical Aid Scheme: The scheme is contributory, with the employee and employer each contributing 50% of the cost of contributions. The proportion of medical costs covered is relatively good at 90%, leaving a small shortfall of 10% to be met by the individual. This scheme is operated by the Botswana Medical Aid Society, and appears to be relatively efficient and effective in its operation.

Benefits and Allowances: The only cash benefits/allowances provided by Botswana is an allowance for expatriate staff towards the expenses of schooling, at the rate of US$1 524 per child per annum. In common with the other Southern African universities, Botswana provides free tuition for staff dependents, which can be a significant benefit. The University's benefits are on a par with those available elsewhere in Botswana. Vehicles are very easy to obtain for academics and other professionals in Botswana, being readily available and affordable, and therefore Botswana meets one of the major requirements identified through the staff-in-post questionnaire. The effective functioning of the country's economy makes vehicles readily available and enables the University to pay relatively good salaries, which makes vehicles affordable.

University Housing: Botswana provides extremely generous housing benefits to its academic staff. All staff are eligible to be accommodated in University housing, at rents which range from 70% to 100% of market rentals. Staff pay the full cost of utilities supplied by the municipal authorities, but maintenance is free. The provision of housing is a major benefit and also meets one of the requirements identified as crucial for a successful staff retention policy. However, the policy of providing housing for all academic staff contains potential for very heavy cost in maintenance and in the construction of new housing as the academic staff establishment grows in the future. It also presents a potential problem as academic staff become more senior and approach retirement, particularly for those who have not done anything about securing their own housing prior to retirement. The University's ability to supply housing at close to normal economic rentals is an indication of the good performance of the economy and of a rational housing delivery system, although the IC reported that there is a general shortage of housing in Gaborone. Citizen members of staff are able to acquire their own homes, with the University standing as guarantor for relatively generous housing loans from financial institutions - the current ceiling of US$24 000 is about to be increased to US$80 300.

Leave Conditions: These are not as generous as those of many of the other case study institutions. Sabbaticals are available for all staff after four to six years service, and extend over a full year, with

airfares provided for the member of staff. As there are no controls on foreign exchange in Botswana, there is no requirement for the specific provision of hard currency to make such leave visits effective. Botswana does not supply any form of short contact visit for its academic staff, and is therefore out of kilter with all the other case study institutions except Zambia. Funding for the presentation of research papers at conferences is provided. Vacation leave tends to be on the low side in comparison to the other case study institutions, with a duration of between 20 and 35 days per annum, depending on rank. Overall, factoring in the sabbatical entitlement as an annual accumulation, Botswana's academic staff have an effective three months leave per annum. The IC indicated that the leave conditions compare well with those available in the public and private sectors.

Academic and General Economic Environment: Books, journals and computers are adequately available, as are consumer goods and household durables. The IC rated the quality and availability of education at school level as being adequate, and good at university level, with costs manageable at school level and reasonable at university level. Health services are acceptable and access to foreign exchange excellent. The infrastructure ranges from good to well above average. These ratings are borne out by the very high ranking of these factors by staff-in-post.

Summary: Botswana's salary and overall package is significantly better than that offered by the public sector in the country, and is comparable to that offered in the private sector. The University is clearly highly competitive, both nationally and regionally, and arguably even internationally. Its success in attracting expatriate academic staff, and its very low turnover amongst nationals, indicates that it has relatively few difficulties in recruiting and retaining academic staff. All the other indicators from this section of the study suggest that this enviable position is due to the effective functioning of the Botswana economy, high growth rates, the effective supply of services and infrastructure. However, the cost of living is reported as very high, and the attractiveness of the very good package offered to young academic staff tends to fall away with seniority, posing the potential for later disgruntlement amongst academic staff. Indeed, the package for young professionals is so good that it must attract many individuals with diffuse career objectives who are not necessarily committed to an academic career.

GHANA

Economic Environment: Ghana's economy appears to be slowly responding to structural adjustment. Economic growth rates have been positive throughout the period of the study, and according to the latest information supplied by the IC are running at 4%. Relatively high average inflation rates have been brought under control and came down to 12.5% in 1991/92 (the most recent period for which data were available). Ghana's national debt as a proportion of GNP remains high (56.8%) but is slowly reducing. Development aid appeared to be running at approximately 15% of GDP in 1990/91. The gradual improvement in the economic environment has created the potential for an improvement in the University's condition. It is generally agreed that Ghana has moved further along the structural adjustment road than any other country, but is unfortunately still some way short of a position from which self-sustained growth can be achieved. Although the economy has grown at 5% annually since 1984 (compared with 3% for sub-Saharan Africa as a whole), Ghana still needs to broaden its export base, improve the environment for both domestic and foreign private sector investment, and slim public enterprise.

Salaries: Salaries are low when converted to US$ at the official exchange rate, both in comparison to those payable in several of the other case study institutions and in relation to those payable in the public sector. Unfortunately, the IC was not able to supply comparative salaries for the private sector. In general it is clear that Ghana's salaries are poor and cannot serve as much of an inducement in terms of staff retention or recruitment. The staff-in-post rating of the remuneration package was very low, and this bears out the generally non-competitive nature of Ghana's salaries.

Taxation: An interpretation of the data supplied by the IC suggests that taxation rates in Ghana are amongst the lowest of the case study institutions, and therefore tax should not serve as an impediment to retention or recruitment (as is the case in countries with high taxation levels).

Pension Scheme: Academic staff are members of the Ghana University Superannuation Scheme, a contributory scheme whereby employees contribute 5% to 6% of salary and the University contributes 12.5% to 18% of salary. This appears to be a relatively standard scheme and is marginally better than the pension scheme made available by Government for civil servants. However, the resulting pension on retirement (50% of final salary) is relatively poor in comparison to those in the other case study institutions. With high inflation rates, this would be a major concern for members of staff approaching retirement, and could be a factor contributing to early resignations in order to obtain more financial security upon retirement. Ghana provides a life assurance scheme for staff at three times annual salary.

Medical Aid Scheme: Ghana's medical aid scheme is non-contributory and not based on an insurance system. It appears that through a University medical service, staff and their dependents are entitled to full coverage of all medical costs. The medical aid scheme was rated as acceptable by 44% of the staff-in-post respondents, but in the experience of the consultants, such schemes are crucially dependent on the availability of medical personnel and adequate funding to the University, which is not often the case.

Benefits and Allowances: Ghana provides no cash benefits or allowances for its staff, except for an unstated professional allowance payable to medical practitioners and accountants. However, housing loans of US$16 640 and vehicle loans of US$5 990 are available to members of staff, but as the IC indicated, such loans are made only when funding is available, and thus exist in theory rather than in practice. Vehicles are very difficult for members of staff to acquire, although other professionals apparently find it possible to obtain them. Benefits and allowances are rated badly in comparison to those available for similar professional jobs in the Ghana economy. The University is therefore not meeting one of the major requirements of its academic staff in terms of a satisfactory retention policy, and this is indicated by the very low rating which the staff-in-post accorded questions concerning the possibility of acquiring a vehicle or a home.

University Housing: In theory all academic members of staff are entitled to reside in University housing, but only 33% of academic staff are in fact accommodated. The rents charged for such accommodation are low at 11.65% of salary, equating to only 30% of rentals in the open market. The cost of utilities are also low as a proportion of salary (3.8%), representing 52% of full market rates. The staff housing loan scheme available to academic staff is administered by a State insurance corporation, and is available to staff who have five years or more experience and are members of the University pension scheme. Nevertheless, it appears to be very difficult for staff to acquire a home, due to the high deposits required by building developers, and inadequate loan funds and high repayment rates. The "system" in place at Ghana for the supply of housing for staff is obviously not working in practice, and the inability of Ghana staff to obtain a home is a major deficiency in the remuneration package.

Leave Conditions: Sabbatical leave is available to all academic staff of lecturer grade and above after six years of service, and extends for one year, or, for those staff who have undergone ten years service, for two years. In addition, a budget at the rate of US$4 000 is available to meet the cost of airfares. Short contact leaves are available for all academic staff every three years for three months at a time, and a budget of US$4 000 is available for airfares. Funding is also available for the presentation of research at conferences and for collaborative research with other universities, although such funding is very limited. It is possible that the relatively generous and good sabbatical and contact visit benefits are negated by a lack of funding in practice, but if operational, these benefits go a long way to meeting the requirements of staff for research travel and international contact. Vacation leave of one month per annum is relatively modest in comparison to the other case study institutions. The IC rated the University's travel and leave conditions (a total accumulation of leave amounting to four months per annum), as being on a par with those in the public sector, but bad in relation to the private sector.

Academic and General Economic Environment: Books, journals, computers, etc. are only occasionally available to academic staff. Consumer goods and household durables are readily available. The quality of education is rated as good at both school and university level, but availability is inadequate. School level education is affordable only with difficulty, but is manageable at university level. The health services are seen as unreliable. Access and availability of foreign exchange is satisfactory. Except for telecommunications, and water and sanitation, the infrastructure is rated as acceptable or reasonably good.

Summary: Ghana's remuneration package and conditions of service are relatively standard, but in practice are probably not very competitive. Salaries are even lower than those in the public sector, and due to lack of funding, the good conditions of service are possibly not operating effectively in practice in relation to housing, leave, medical services, travel and pension benefits. However, if they were, Ghana could possibly attract people who wish to travel and maintain their international contacts in terms of research, and who are willing to accept housing, a relatively stable lifestyle and security as substitutes for a higher salary and car. The evidence from the staff-in-post survey is that this is not the case, and that academic staff are disgruntled with their remuneration package. Nevertheless, Ghana appears to have been able to maintain its staffing levels despite deteriorating staff:student ratios.

IBADAN

Economic Environment: Nigeria's economy appears to be in disarray, with economic growth rates declining over the period of the study and standing at only 2% for 1992/93, and inflation soaring to a rate of 7 100% in 1992/93 according to the IC's report. Given the present widely reported economic and political environment, it is not surprising that a University such as Ibadan appears to be struggling. However, in the absence of a response to the academic staffing data section of the study, it is not possible to work out how Ibadan's academic staffing position has held up in the adverse environment.

Salaries: The salaries in US$ converted at the official rate are extremely low - the lowest of all the case study institutions. Unfortunately, the IC has not supplied any comparative data on salaries available in either the public or private sectors, and therefore it is difficult to assess the competitive position of Ibadan within the Nigerian economy. Suffice to say that salaries are very low by any standard.

Taxation: The IC did not provide any data on the taxation rates applicable in Nigeria.

Pension Scheme: Ibadan provides, presumably as part of some Nigerian-wide universities pension scheme, a non-contributory (by the individual) scheme which produces a pension on retirement at 70% of final salary. The IC rated the pension scheme as being quite good in comparison to those available elsewhere in Nigeria, and 30% of staff-in-post respondents rated it as acceptable or better, in contrast to the extremely low ratings for other aspects of the remuneration package. Ibadan does not provide any form of life assurance for academic staff.

Medical Aid Scheme: Although the medical aid scheme is described as contributory, from the response to other questions concerning medical aid, it appears that in fact this scheme is one where academic staff have access to University or Government medical services rather than the support of an insurance scheme. It is estimated that about 50% of medical costs are borne by the scheme.

Benefits and Allowances: Ibadan provides no cash benefits or allowances, apart from an unstated professional supplement for medical staff. A loan equivalent to US$1 000 is available for refurbishing vehicles. A relatively wider range of staff (Heads of Departments, Deans and Provosts of Colleges) have access to a University vehicle than in the other case study universities. Vehicles are very difficult to acquire, but professionals employed elsewhere in the community also experience difficulty. The IC reported that the price of vehicles has escalated so much due to devaluation of the Nigerian currency that prices are now beyond the reach of any member of the University staff.

University Housing: In theory, all academic staff should be housed in University accommodation, but in practice only 50% are, as there is insufficient accommodation available. A new facility is the provision of an allowance of 56% of salary for those required to secure their own off-campus accommodation. For those fortunate staff in University accommodation, rents are low at 6% of salary (20% to 25% of market rentals), utilities average only 15% of full market rates, and whilst maintenance is charged at a rate of 10% of salary, this equates to only 15% of market rates for maintenance. Recent Government regulations enable all academic staff to draw a housing loan equivalent to US$10 000 at a low interest rate of 3%, but the IC reported that this is insufficient to build adequate housing. Consequently, academic staff at Ibadan find it difficult to secure a home in the extremely tight housing market. This situation, and the difficulty of securing vehicles, is confirmed by the very low staff-in-post ratings for these factors. Clearly, largely due to hyper-inflation and devaluation, Ibadan is unable to supply any form of serious benefit in terms of housing or vehicles, and this is a major deficiency in its remuneration and conditions of service package.

Leave Conditions: Ibadan's sabbatical leave conditions are fairly standard for the case study institutions, being available to all members of the academic staff every six years and allowing for a full year with support for airfares and special access to hard currency or remittability of income. Similarly, short contact visit entitlements are provided which are relatively generous, allowing visits of three to six months at variable frequencies, and including maintenance of salary, access to hard currency and funding for airfares. The IC reported that after almost a decade of non-existent funding, funds are now available for staff to travel to conferences for presentation of research results, and to engage in collaborative research with other universities. The vacation leave entitlement is 42 days per annum, which brings the annual leave accumulation to four and a half months - the most generous of all the case study universities. In view of the recent support for research travel, it appears that the Government of Nigeria is attempting to meet a major requirement of a successful staff retention and recruitment policy, and has addressed a deficiency in Ibadan's package. If the leave and travel benefits which exist in theory are funded so that they can be made use of in practice, then the package is good and competitive in this respect. However, the IC reported that the University's travel and leave conditions compare very badly with both the public and private sectors in terms of funding, and it is possible that the recent improvements are in fact inadequate.

Academic and General Economic Environment: Books, journals and computers had been scarce, but recent changes have resulted in steady improvements. Consumer goods and household durables are readily available, but access to foreign exchange is bad. The IC rated education at both school and university level as satisfactory in terms of quality and availability, although only 28% of staff-in-post concurred with this conclusion. Similarly, education at both school and university level is reasonably affordable. The health services were rated as acceptable, and the infrastructure generally as bad to just acceptable.

Summary: In the light of the widely reported economic and political problems in Nigeria, and the non-supply of information concerning comparative salaries, it is difficult to arrive at conclusions concerning Ibadan's competitiveness within Nigeria. Although its leave and travel conditions appear to bé very good, its other conditions are relatively moderate to poor in comparison with other sectors of the Nigerian economy and those of the other case study institutions. However, given the poor performance of the economy in recent years, and with hyper-inflation, there is little that a university can do to maintain its competitiveness.

MAKERERE

Economic Environment: According to information supplied by the IC, Uganda's economic growth rates have been positive throughout the study period. Although growth dropped from a high of 7.6% in 1988/89 to 4.1% in 1992/93, the annual average since 1987 was 5.5%. Inflation, which was very high at 196.2% in 1988/89, has been brought under control, declining to 28.1% in 1991/92, but escalating again to 49.2% in 1992/93. In considering Makerere's remuneration and conditions of service package,

Uganda's recent political and economic history, and the fact that its economy was almost totally run down and is now in the early stages of recovery, must be borne in mind. The economic climate remains harsh, with high inflation, moderate economic growth, and a very high dependence on aid.

Salaries: Salaries are extremely low in US$ terms, and amongst the lowest of the case study institutions. They compare adversely with those available in both the public and private sectors in Uganda, and are rated extremely poorly by staff-in-post (numerous comments in the questionnaires indicate that low level staff in the private sector - cleaners and messengers - earn higher salaries than university academic staff). In terms of salary, it is hard to see how Makerere can compete for staff within Uganda, and yet its 30% increase in the number of occupied posts indicates that it has been able to recruit staff.

Taxation: At 10%, tax rates in Uganda appear to be the lowest of all the countries included in this study, therefore taxation should not be a problem in terms of staff retention and recruitment, as it is in some countries.

Pension Scheme: Makerere's academic staff are members of a Uganda national social security fund which requires a contribution of 5% of salary from the employee, and apparently no contribution from the University. The IC did not provide information on the value of the pension as a proportion of final salary, nor on how it compares with pension plans for other professionals within the community, but only 7% of the staff-in-post rated the pension as acceptable. It would appear that the Makerere pension scheme is totally inadequate as a staff retention or recruitment tool. Furthermore, Makerere makes no provision for life assurance for academic staff.

Medical Aid Scheme: The medical aid scheme is non-contributory, and although inadequately described, appears to be similar to those in all non-southern African universities participating in the study. In theory, 100% of medical costs are met by the University through its own or the State's health system. As such it is probably ineffective and, significantly, only 13% of staff-in-post rated it as acceptable.

Benefits and Allowances: Makerere supplies a cash allowance of roughly US$700 per annum for housing, but this is only received by approximately 30% of staff. A US$25 "footing" allowance is available in lieu of transport. Makerere has no loan schemes available for academic staff, but does allow staff to make use of University transport. Makerere's benefits and allowances are rated as very bad in comparison to those in the open market, and whilst it is stated that other professionals find it easy to acquire a vehicle, academic staff find it very difficult due to the costs. In summary, Makerere's benefits and allowances appear to be relatively poor and non-competitive.

University Housing: In theory, all academic staff appointed to established positions are eligible for University housing, but no information was supplied on the proportion of staff actually accommodated. The IC reports that the University has very few housing units and therefore, in view of the rapid expansion in the staff complement, it is likely that a significant proportion of staff are unable to secure University housing. The housing allowance paid to those who are not housed is apparently of relatively little use, as rentals in the open market are beyond the scope of academic staff. The IC states that it is possible for an academic staff member to acquire a home, but that other professionals find it very much easier to obtain homes in the private market. If it were able to implement the policy, Makerere's theoretical position of supplying housing to all its academic staff would be an extremely attractive aspect of its conditions of service. However, as this is not the case, its housing policy is in practice totally inadequate, and only 6% of staff-in-post rated housing as acceptable. No rents or maintenance charges are levied, but the full cost of utilities is charged.

Leave Conditions: Makerere's sabbatical leave scheme appears comparable to that in other institutions, except that it is restricted to senior lecturers and above. Its duration is described as "at most 12 months," but the frequency of the entitlement is not supplied. Similarly, "all senior academic staff" are entitled to 30 days contact visit per annum, but there is no funding for participation in research conferences or

collaborative research with other universities. Vacation leave is either sub-standard in comparison to other case study institutions, or may be the most generous, as the information presented by the IC is not clear as to whether 21 or 63 days leave per annum are available. Depending on the duration of the vacation leave, the total leave accumulation entitlement per annum amounts to either four months, or five and a half months (the latter period being the most generous in the study). In any event, the University's travel and leave conditions are rated as being comparable with those in the public sector, but very bad in comparison to those in the private sector (although the consultants have some doubts as to whether private sector organizations really are able to release staff for as much as an effective four months per annum). In the absence of any budget to meet the cost of airfares, the travel and leave conditions appear to be relatively unattractive, and it is unlikely that they serve as any form of inducement to staff retention or recruitment.

Academic and General Economic Environment: Books, journals, computers, etc. are available to academic staff only occasionally, but consumer goods and household durables are readily available. The quality and availability of education at both school and university level is rated as good to satisfactory, but education costs are difficult for academic staff (a rating confirmed by the fact that only 8% of staff-in-post rated the cost of education as acceptable in relation to salary). Health services are rated as unreliable, confirming the relatively low rating supplied by staff-in-post. However, access to and availability of foreign exchange is rated as satisfactory. Public health is rated as very bad, and other aspects of the infrastructure are rated at best as just acceptable.

Summary: Overall, Makerere's salary package and general conditions of service are not particularly attractive. It must be difficult to compete for high quality professionals in the Ugandan market. The information supplied Makerere has almost no identifiable areas of competitive advantage. Its success in maintaining staffing levels and recruiting new staff over the study period can only be attributed to the fact that the Ugandan economy must still be offering relatively few alternative employment opportunities or to a strong sense of patriotism to rebuild a shattered country and university.

ZAMBIA

Economic Environment: The economic climate in Zambia continues to be tough. Growth rates have been negative for much of the study period, dropping to almost -3% in 1991, but showing a slight improvement to 0.5% positive growth in 1992. Inflation remains very high, having accelerated from 192% at the end of 1992 to 215% in mid-1993. The national debt as a proportion of GNP has soared from approximately 116% in 1988/89 to 436% in 1992/93, and Zambia remains heavily dependent on development aid (20% of GDP). Zambia's economic difficulties are well known and must be taken cognizance of in considering the University's terms and conditions of service and its competitive position in relation to staff retention.

Salaries: In July 1993, Zambia's salaries were significantly improved, and these figures have been incorporated in Table 3.1. The IC reported that the average salaries cited include additional allowances for items such as fuel and domestic workers, but exclude interesting and innovative perks, such as holiday tours, which are not possible to quantify. Nevertheless, they are low, being comparable with those in Ghana, and significantly lower than those in Zimbabwe, let alone Botswana. They are also very low in relation to both the public and private sectors in Zambia, and on the basis of its salary alone, the University must find it extremely difficult to recruit or retain academic staff. This position is confirmed by the staff-in-post data, with only 5% of staff rating the salary as acceptable.

Taxation: Zambia's tax rates are analogous to those elsewhere in Southern Africa, and tax payable on University salaries peaks at 35% on the escalating scale. The high tax rates and a sales tax of 20% must be a major disincentive to formal sector/salaried employment in Zambia.

Pension Scheme: The pension scheme is purchased from the Zambia State Insurance Corporation Limited, and requires a contribution of 5% of salary from the employee and 10% from the University. The resulting pension value on retirement of 70% of final salary is relatively standard for the better pension schemes within the case study institutions. It is rated as comparing very well with pensions schemes available elsewhere in Zambia. In addition, Zambia offers a life assurance scheme, which provides six times annual salary for death by accident, without any restrictions on the insurance. On the face of it, this is relatively generous in comparison to the other case study institutions.

Medical Aid Scheme: The scheme is provided through the University Medical Services Clinic, and theoretically meets all costs of medical treatment for academic staff. However, as only 19% of staff-in-post rated the medical aid facilities as acceptable, it is likely that there is a wide gap between the quality and extent of the service in theory and in practice, which is common with such schemes.

Benefits and Allowances: Zambia does not appear to provide any cash benefits and allowances, apart from another innovative scheme whereby members of staff may have membership subscriptions for two professional societies and one journal paid by the University each year. Although Zambia theoretically provides a housing loan of up to US$10 000, a vehicle loan of approximately US$3 000, and a special loan facility of US$300, the IC stated that these schemes are inadequately funded and therefore loans are difficult to obtain. As is the case in the other Southern African universities, Zambia provides academic staff with free tuition for the spouse and family. The IC rated the benefits and allowances as comparing very badly with those elsewhere in the open market, and indicated that it is very difficult for members of staff to acquire a vehicle, due to high prices and low salaries.

University Housing: All academic staff are entitled to reside in University housing, and it appears that Zambia successfully accommodates all such staff. Where staff cannot be accommodated in University housing, Zambia supplies a grant at a rate of US$200 per month for rental of housing on the open market. The staff accommodated in University housing are heavily subsidized, paying only 5% of their salary towards rent, which equates to 2% of open market rentals. In theory, Zambia can assist members of staff in securing a mortgage from building societies to acquire or construct their own homes. But, in practice, due to the low salaries (and therefore low amounts which can be borrowed) and high interest rates, this facility is ineffective, and it is very difficult for members of staff to acquire their own homes. However, it appears to be almost equally difficult for other professionals to secure housing on the Lusaka open market. In view of Zambia's apparent ability to house almost all its academic staff, it is clearly supplying a major component of an attractive remuneration package, providing relative housing security to younger staff, but posing the problem of housing on retirement for older staff. In addition, as the University grows and is successful in expanding its staff, the ability to house virtually all staff will deteriorate, unless it can construct or acquire additional housing, which is highly unlikely.

Leave Conditions: These appear to be the most restricted of all the case study institutions, amounting to a total annual leave accumulation of only two months. Sabbatical leave is available to all staff after six years service, but extends for only three months, and the cost of return airfares is met. No provision exists for short contact visits to maintain research contacts, although funding does exist for the presentation of research at conferences. Vacation leave of 90 days every two years is relatively generous in comparison with the other case study universities. The IC did not indicate how the travel and leave conditions compare with those in either the public or private sectors, but indicated that private companies have some very generous leave conditions, including payment of an additional daily allowance for each family member. Zambia's leave conditions appear to be deficient in relation to those applicable in other case study institutions, and could justify review in order to improve their attractiveness as a competitive recruiting and retention tool.

Academic and General Economic Environment: Unfortunately, books, journals, computers, etc. are only occasionally available to academic staff, although consumer goods and household durables are readily available. The quality and availability of education at school level is inadequate, and not

affordable by University staff (a view supported by staff-in-post). The health services are regarded as unreliable. Access to and availability of foreign currency is satisfactory, though expensive. The infrastructure is generally rated poorly, except in relation to electricity and power services.

Summary: Zambia's competitive position appears to be weak, and this is borne out the by fact that it is the only University in this study which, from the data available, has lost staff in total over the study period. The only areas in which it appears to have a competitive advantage are in housing, its pension scheme and, if it works, its medical services.

ZIMBABWE

Economic Environment: Zimbabwe has arguably the best developed and most sophisticated infrastructure of all the countries participating in this study. However, its economy has performed badly over recent years, and economic growth rates turned severely negative (approximately -8%) in 1992, largely due to the worst drought in living memory. Whilst positive growth is forecast, it appears unlikely to be more than 1% or 2% in 1993. Inflation soared to almost 50% at the end of 1992, but has now stabilized and is likely to be approximately 27% for 1993. The national debt as a proportion of GNP has been growing slowly, and in 1993 is estimated at 70%. Zimbabwe's structural adjustment programme is well in place now, and significant improvements in the economy have become evident in the past year, particularly in relation to the general liberalization of the economy and of foreign exchange controls. However, whilst many of the benefits of structural adjustment are becoming evident, access to sufficient Zimbabwe dollars is required before the individual can enjoy these benefits.

Salaries: The salaries for Zimbabwe cited in Table 3.1 were introduced in September 1993, but with retrospective effect to 1 July 1992. The increases over the previous salaries ranged from 40% at the bottom end of the lecturer scale through to 11.5% at the top of the professorial scale. The salaries shown in Table 3.1 are the mid-range salaries at each grade for staff employed in the majority of Faculties, but a professional supplement of US$625 per annum (payable to staff in the Faculties of Commerce and Engineering, and in the Department of Computer Science) raises mid-range salaries in those disciplines as follows: lecturers to US$10 707, senior lecturers to US$12 056, associate professors to US$12 989, and professors to US$13 648. Qualified medical and veterinary staff receive a generous 50% retention allowance, improving average salaries as follows: lecturers, US$15 123; senior lecturers, US$17 147; associate professors, US$18 546; and professors, US$19 535 per annum. Furthermore, certain other non-medically qualified staff in the Faculty of Medicine receive a retention allowance of 25% of salary.

Zimbabwe (like Benin) is unusual in that the differential between the bottom of the lecturer salary scale and the top of the professorial scale is very narrow at 38%. Given the long academic salary scale structure, such a small differential provides little incentive to advancement. Zimbabwe would be well advised, particularly in view of the very strong competitive edge which it has at the lecturer level, to hold further increases in salary at that level to a minimum, and to award significant increases at the senior levels in order to improve the differential and produce a more attractive career scale.

Whilst this report was being drafted, the University benefited from a further improvement in academic salary scales (of between 5% and 3%) to take effect retrospectively from 1 July 1993, which had the effect of further reducing the differential to 35%. The latest increase improved the mid-range salary for assistant lecturers by 69% to US$7 825, thereby continuing the trend of awarding large increases at the lower levels, and small increases at the top, whereas it would appear that the opposite is required. To maintain a comparable date between the data cited for Zimbabwe and for the other institutions, these new scales were not incorporated into the table.

With the recent improvements, Zimbabwe's salary structure rates compared well to those of the other case study universities, apart from Botswana. It is strongly competitive with the public sector at all levels but salaries, despite recent increases, are not fully competitive with the private sector at middle to senior

levels. Salaries at the lower ranks are at the top end of the range in Zimbabwe, and are very competitive with salaries payable in the private sector.

Taxation: Zimbabwe's taxation is the highest of the countries represented in this study, with a minimum effective tax rate of 40% for an assistant lecturer, rising to 50% for all other staff, and in recent years to 60%. Taxation is a major disincentive in Zimbabwe to salaried formal employment, and has the effect of turning relatively good salary packages into less than average packages after taxation.

Pension Scheme: This is a relatively standard contributory scheme administered by a private sector pensions company, requiring a contribution of 6.5% of salary from employees, and of 14.37% from the University - slightly more generous than average contributions within the market. The pension value on retirement of approximately 70% of final salary is also standard for the case study universities, and is comparable with that available elsewhere in the economy. Life insurance cover is relatively good at four times annual salary for married members, with no restrictions. In terms of pension and insurance, therefore, Zimbabwe is relatively competitive within the local market, although inflation has eroded the value of final pension.

Medical Aid Scheme: Zimbabwe provides membership to an effective and efficient medical scheme run by a private sector medical insurance company, with contributions paid in equal proportions by the University and the employee. Approximately 80% of medical costs are covered by the scheme, and contribution rates are relatively cheap and tax deductible. The scheme is common throughout the country and therefore the University is competitive in this respect.

Benefits and Allowances: Zimbabwe is unique among the case study institutions in that all academic staff are paid a bonus or 13th cheque (which is automatic and not performance related). This has the effect of further improving salaries by 8.3% per annum. No other cash benefits are provided, apart from a housing allowance valued at US$214 per month for staff who are entitled to but cannot be accommodated in University housing. Zimbabwe provides loans at a value of US$3 572 to assist with housing for Zimbabweans returning to the country, and provides an installation loan valued at US$1 072 to newly recruited expatriate staff. Free tuition for the member and his/her family is also provided as a non-cash benefit. The IC rated Zimbabwe's benefits and allowances as comparing very badly with those applicable to similar professional jobs in the open market, and stated that it is very difficult to acquire a vehicle (although these are now readily available) as their cost is beyond the means of academic staff. This conclusion is supported by the staff-in-post study, as only 6% of staff regard their salary as acceptable in relation to the cost of acquiring a vehicle.

University Housing: Zimbabwe restricts eligibility to its stock of housing to expatriate staff, or Zimbabweans recruited from outside Zimbabwe, and then only for the initial 12 months of appointment. Consequently, only about 19% of academic staff are accommodated in University housing, but for those who are eligible and cannot be accommodated, a housing allowance of US$214 per month is payable to assist staff to secure housing on the open market. For those staff fortunate enough to be in University housing, a highly subsidized rent of approximately 10% of salary, or 25% of open market rentals is charged, with staff paying the full cost of utilities. A guarantee scheme is operated to assist members of staff secure a loan from building societies for the acquisition or construction of a house. But, in light of prevailing market prices for housing, very high interest rates, and relatively low salaries, this scheme is non-effective, and it is very difficult for staff to acquire a home. However, the IC indicated that it is also difficult for professionals employed elsewhere in the community to acquire housing, as with rapid inflation and soaring interest rates, the housing finance system in the country is effectively non-existent. In relation to other universities in this study, Zimbabwe is therefore relatively non-competitive in terms of its housing provisions, but is not significantly different to the position of other employers in the country, except in relation to the level of salaries.

Leave Conditions: Zimbabwe has relatively standard though generous leave conditions. Sabbaticals of eight months duration are available for all academic staff after six years service, and a relatively generous budget equivalent to US$3 858 is available for airfares, and special access to hard currency and remittability of salary is available. In addition, every three years (two years for professors) all academic staff are entitled to short professional visits of a month to maintain contact with colleagues. Again, a budget of approximately US$3 000 is available for airfares, and a very generous per diem allowance is available, ranging up to US$280 per day for the duration of the visit. Furthermore, funding exists for the presentation of research at conferences and for collaborative research at other universities. To date it appears that these generous conditions have been implemented in practice rather than being merely theoretical, and clearly they are major areas of competitive advantage for the University, particularly in relation to an enabling environment for research activity. The vacation leave entitlement is 42 days per annum, with the result that the total annual leave accumulation amounts to 3.1 months per annum. The IC indicated that Zimbabwe's travel and leave conditions compare very well with both the public and private sectors in Zimbabwe, and clearly represent a strongly competitive feature of the University's remuneration and conditions of service package.

Academic and General Economic Environment: The IC rated the availability of books, journals, and computers as scarce, but the consultants, with their advantage of also living in Zimbabwe, rate the availability of these items as adequate, although they are expensive. Consumer goods and household durables are readily available and improving in range and quality. The quality and availability of education at both school and university level is good and affordable. The health services are generally good, and access to and availability of foreign exchange (rated by the IC as satisfactory) has recently become good. The infrastructure is generally rated as good, with only the police, telecommunications and public transport rated as bad or very bad.

Summary: The general environment, from the information provided, is arguably the most attractive of the countries included in this study. The University has strong competitive advantage in the local market in terms of leave and research travel facilities. Its salaries are competitive at the lower end, but are less so at the more senior levels. The package is deficient in terms of support for acquisition of housing and cars, but that is largely a factor of the economy rather than of the University itself. Zimbabwe's conditions appear likely to attract young professionals interested in developing research and having an ability to travel, but probably present some disincentives to a long-term academic career.

CONCLUSIONS

Overall, the universities require improved human resource management, and a much clearer focus on strategies and policy options. It is evident from the data supplied for this study that the information with which to manage the university's key resource (its academic staff) is often not available or is difficult to obtain. It is also evident from the questionnaires completed by university leaders that there is a tendency to see the problem of salaries, housing, etc. as totally intractable and beyond the resources of the university to address, with governments alone being seen as the source of a solution. In some respects this may be true, as a real solution depends on national economic revival, but the data indicate that most universities have held their own in terms of staff numbers despite the considerable adversities. It is recommended that university leadership use this fact in their negotiations with governments and donors, together with the demonstrated commitment, described in the next chapter, of academic staff to academia and an academic career, in order to capitalize on the positives instead of constantly bewailing the negatives.

CHAPTER 4

SATISFACTION AND PROSPECTS

INTRODUCTION

The survey of staff-in-post in each of the case study institutions was the most ambitious and time-consuming aspect of this study. Although some of the results were anticipated, there are encouraging, unexpected trends and some pointers as to where university management action or intervention may be productive.

The overall response rate of 33 percent was good and did not vary significantly across subject areas. Responses were basically in accord with the relative sizes of each subject area in the institution.

In terms of rank, the response was fairly uniform, and when analyzed between nationals and expatriates, was not significantly different in any of the institutions except for the extremely good response rates received from expatriates in Ghana and Makerere. Finally, as was expected, the response from females in each institution except Botswana was better than that from males, and in some cases was significantly better. Therefore, the overall sample has a slight skew in favour of female academic staff.

However, overall the sample is reasonably representative of the universities and does allow certain conclusions of a general character to be drawn.

PERSONAL CHARACTERISTICS OF RESPONDENTS

On the whole, the staff-in-post questionnaire provides encouraging evidence of the generally well qualified, highly experienced and relatively long serving staff in the case study institutions.

AGE

Overall the academic staff form a somewhat older and more mature body than may have been expected (overall age at lower quartile: 36), particularly in view of the assumption that all universities have been recruiting a disproportionate number of younger staff. The age profiles of the universities are remarkably similar, although there is a tendency to a generally older staff in the West African universities, which points to their longer history, and perhaps to potential staff replacement problems as staff retire. The universities showing a generally lower age profile are ones which have experienced relatively fast recent growth.

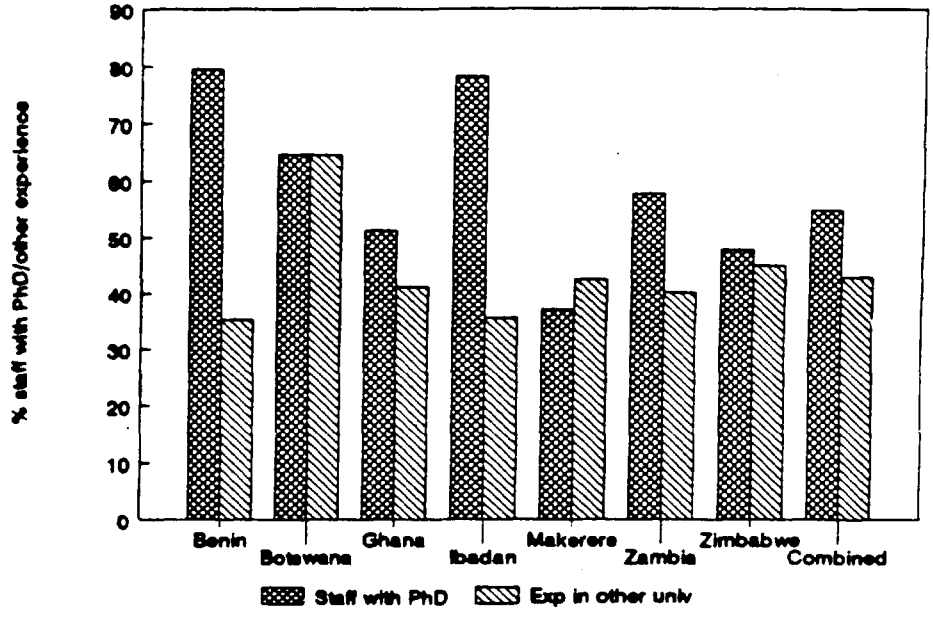
NUMBER OF DEPENDENTS

The number of dependents is higher than might be typical in western universities, but is not as high as was anticipated (overall 6 at upper quartile). The West African universities and Makerere have a generally larger number of dependents per staff member than those in Southern Africa, where families more akin to the generally accepted nuclear family (rather than to large extended families) have to be maintained by academic staff.

QUALIFICATIONS AND EXPERIENCE

The most striking aspect is that a very high proportion (overall 55%) are well qualified with doctorates (see Figure 4.1). Over 50% of the respondent staff have doctorates, with the exception of Zimbabwe, where the proportion is slightly lower at 48%, and Makerere (which has a young, relatively recently recruited staff) where it falls to 37%. The very high proportion of doctorates in Benin may be due to the different educational systems, in Ibadan to the University's long standing, and in Botswana to the very large number of expatriate staff.

Figure 4.1. Personal characteristics of respondents: proportion of staff with doctorates; and experience in other universities



LENGTH OF SERVICE IN UNIVERSITIES

Staff-in-post are much more experienced and long serving than was anticipated, with 75% of the total sample being beyond what would be regarded as a probationary period (i.e. their first two years), and 50% having been in post for more than six years, and presumably already benefited from their first sabbaticals. Overall the upper quartile staff have 13 years (two sabbaticals) service. Ibadan has an exceptionally long serving staff (upper quartile: 18 years). Benin and Ghana also have fairly long serving staff, whilst the Southern African universities tend to have generally less long serving staff, due to their shorter histories, more recent rapid growth and larger expatriate group.

Staff are also more experienced in terms of service elsewhere than might have been expected: 45% of the staff have worked in at least one other institution apart from their current one (see Figure 4.1). In Botswana, with its large expatriate cohort, this proportion rises to 65%, and in Ibadan and Benin, with their generally older staff and small expatriate groups, this proportion drops to 37% and 40%, respectively.

TYPE OF CONTRACT AND COUNTRY OF RESIDENCE

The preponderance of the sample are nationals of their countries (except in Botswana where 71% of the sample are expatriate). The overwhelming majority of respondents are permanent residents of their countries and are nationals of an African country. Botswana is once again the exception, with only 30% of respondents being permanent residents of Botswana, but the relatively high proportion of African nationals employed as expatriates in Botswana is shown by the fact that 56% of the sample specify their nationality as African.

The above results are encouraging since they show that academic staff of the case study institutions are:

- generally older and more mature than expected, particularly in view of the commonly held belief of massive capacity loss and an ability to recruit only at the most junior level. The data definitely tend to disprove this belief.

- much more experienced and longer serving than was anticipated. Commitment to an academic career is demonstrated by the large proportion of staff who have remained in post despite all the difficulties.

- well qualified, with 55% of the staff overall holding a doctorate. This provides considerable potential for development of the universities and of graduate programmes.

ACADEMIC CAREER PATH: CHARACTER OF MOVE TO CURRENT APPOINTMENT

Overall, 37% of the staff (rising to 54% in Makerere, 49% in Ghana, and 46% in Ibadan) joined their current university as their first appointment (after being a student or a staff development fellow), or moved to it on promotion from another university. A further 14% moved from another university, either at the same or better grade. Overall, 50% of the staff-in-post have either not known any other career or have been in academia for at least their current and previous appointment. The universities have been recruiting either from their own staff development programmes, or from other universities. Recruitment from other universities is particularly strong in Botswana (with its high proportion of expatriate staff) and in Zimbabwe and Zambia, where there are also significant proportions of expatriate staff-in-post.

The universities have also been successful in recruiting staff from polytechnics, teacher training colleges, vocational training institutions, and from among school teachers, with the remarkably consistent proportion of approximately 12% of staff-in-post coming from these areas. Zimbabwe and Zambia have been successful in recruiting staff from research or consulting positions outside the university field, and from management or administrative positions (Zimbabwe, 27%; Zambia, 23%). This is encouraging information which demonstrates that, despite the apparent difficulties of staff recruitment, these two institutions have been able to recruit staff from outside academia. In Zimbabwe's case, this is perhaps a reflection of its relatively well developed and diversified economy and infrastructure. In the other institutions the proportion of staff recruited from outside academia or education is relatively insignificant, but nevertheless small proportions of staff have been recruited from a multiplicity of sources other than academia.

It is evident from the response to the questionnaire for Institutional Leaders (see Chapter Six) that heads of university have insufficient knowledge about where their academic staff are recruited from. Whilst the majority of staff come from academia/education, reasonably significant numbers are recruited

from a range of non-academic areas, and it is obviously vital for university officials to be aware of the potential sources of academic staff, and of the employment practices in operation in such source organizations. Obtaining and maintaining information on potential recruitment sources and the conditions ruling in those areas is a management intervention which can be undertaken by institutional leaders, especially at the departmental level. University management should insist that departments develop clear succession plans for all their academic posts, which would ensure that they are aware of potential sources of staff and the requirements needed to recruit from those sources. The development of clear recruitment and succession plans for all academic staff is a strategy which can be introduced with institutional resources, without dependence or assistance from any other agency and without significant additional funding, and which may pay dividends in terms of an enhanced ability to recruit.

Overall, 63% of staff-in-post had not left another country in order to take up their current appointment: the implication is that they were nationals already working in-country, either in another job or as students/staff development fellows. The proportion of such staff is particularly high in Ibadan, Makerere, and Zambia. Conversely, the proportion of staff who moved country to take up their current appointment is approximately 38%, with only Botswana seriously out of kilter at 70% due to its large cohort of expatriates. Zimbabwe also has a fairly high proportion of "migrants" (50%), which is explained partly by the relatively large number of expatriates, and partly by the relatively large proportion of staff that came through the University's staff development programme who had been undergoing graduate training in another country immediately prior to joining the University.

The response to the subsequent question asking whether those who had moved country in order to take up their current appointment had come from elsewhere in Africa is also significant. Overall, 63% came from outside the African continent - Ibadan, 97%; Ghana, 75%; and Zambia, 74%. These universities have either not been successful in recruiting staff from elsewhere in Africa or have not targeted Africa for recruitment, or have large numbers of nationals who returned to the university from abroad. In Botswana and Zimbabwe, of staff who moved country to take up their appointment, 59% and 38% respectively came from elsewhere in Africa.

The message from these data appears to be that university officials should concentrate their recruitment efforts on their national employment markets, whilst not excluding attempts to recruit a proportion of their staff from other countries (one-third of the sample had been recruited from abroad). The debate concerning staff loss and retention appears to be based on an assumption that it is desirable to have nationals forming a very high proportion of academic staff, which has not been possible everywhere. However, it is also generally accepted (see the Institutional Leaders' comments in Chapter Six) that it is healthy to have a fair proportion (perhaps 20%) from elsewhere to provide new blood and different ideas. If this is to be achieved, recruitment from outside one's own country, both from abroad and from elsewhere in Africa, has to be undertaken.

ACADEMIC CAREER PATH: NEXT CAREER MOVE

Overall, 53% of staff anticipate securing promotion at their current university, or remaining at their current grade. They do not intend leaving their current university within the next five years. That in itself is a significant finding, as the common view would be that the majority of staff have intentions of leaving their current institution for "greener pastures." Furthermore, the overwhelming proportion of staff who intend to remain are planning to seek promotion, showing a clear commitment to an academic career within their current institution. The relatively high proportion of staff in Zimbabwe and Zambia (26% and 24%, respectively) planning to move (on promotion or at the same grade) to another university is largely a reflection of their high levels of expatriate staff. At Ibadan, however, the 13% of staff planning to move to another university is presumably a reflection of dissatisfaction. At Botswana, the 16% of staff planning to move to another university is surprisingly low, given that approximately 67% of Botswana's staff are expatriates.

In terms of career intentions within the next five years, the only other potential move which is of significance is the overall 12% of staff intending to move to research or consulting jobs outside the university world. The proportion of staff planning this type of career move is remarkably consistent across institutions, except at Ibadan where they rise to 20%, and at Botswana, where they drop to 2%.

It is heartening to note that 65% of respondents are planning to remain in their current country, with Makerere having a strong loyalty at 80%, and Zambia the weakest at 47%. Nevertheless, a significant proportion of staff plan to emigrate in making their next career move. As would be expected, this is fairly high in Botswana, but the high proportion planning such a move in Zambia, and to a lesser extent in Zimbabwe and Ibadan, is of concern. Of those intending to emigrate, 45% plan to remain in Africa, and 55% plan to leave. In Ghana, Botswana (as would be expected), and Benin, the intention to leave Africa is particularly high.

These results are encouraging. The majority of academic staff-in-post appear committed to an academic career, and to securing promotion within their current institutions. Whilst this majority is not overwhelming, it is nevertheless heartening, and indicates that a massive loss of existing capacity is unlikely. Another encouraging aspect of the career moves analysis is that there appears to be a net inflow into the respondent countries, and certainly into Africa. Two-thirds of staff recruited from abroad had been recruited from outside Africa, but of those intending to emigrate, only 55% intend to leave Africa. Academic staff are an above averagely mobile community and, therefore, are likely to move during their career. Given the nature of an academic career, this is not necessarily a bad thing, as it is anticipated that most staff will return to their "home institution" after gaining further experience elsewhere.

A number of management options which are entirely within the purview of the institutions become evident. As will be seen from the discussion of other aspects of the staff-in-post questionnaire, there is dissatisfaction in many institutions over promotion policies. If university management implements clear, transparent promotion policies offering realistic opportunities for promotion, they would satisfy a felt need of a significant proportion of their staff, and this would assist in retaining those staff. A further intervention would be for institutions to identify the research or consulting positions outside of academia (but largely within their own countries) that are likely to be competitors for current academic staff, and attempt to analyze conditions and attractions in those areas with a view to improving their own conditions. This may not be, however, simply a question of improved salary scales. University management should also capitalize on the very evident commitment to an academic career by improving the facilities/services within the institution, and its academic management.

In summary, this section of the questionnaire indicates that staff are committed to an academic career in their own countries, and apart from research or consulting positions outside of academia, no other employment sectors appear to be a great attraction to current academic staff.

ACADEMIC CAREER PATH: IMMEDIATE PRIORITIES

The generally hopeful outcome described above is strongly reinforced by the respondents' stated priorities, which demonstrate the overwhelming commitment of staff to an academic career. The undertaking of research and publishing is ranked among the top three priorities by 77% of staff-in-post, academic work aimed at securing promotion by 57%, and teaching and university service by 51%. The only other priorities which secured a significant response were consulting or commissioned research (37%, and particularly marked at Ibadan and Zambia), and additionally remunerated academic work such as lecturing, writing and examining (19% overall, but generally higher in most institutions except Botswana, where only 6% of staff envisage such work as a priority). The exceptional character of Botswana is reinforced by the fact that only 3% of its respondents regard encouraging their spouses to earn more money to ease financial pressures as a priority. As is evident throughout this survey, staff at the University of Botswana generally do not experience financial pressures! Also of interest is that, apart

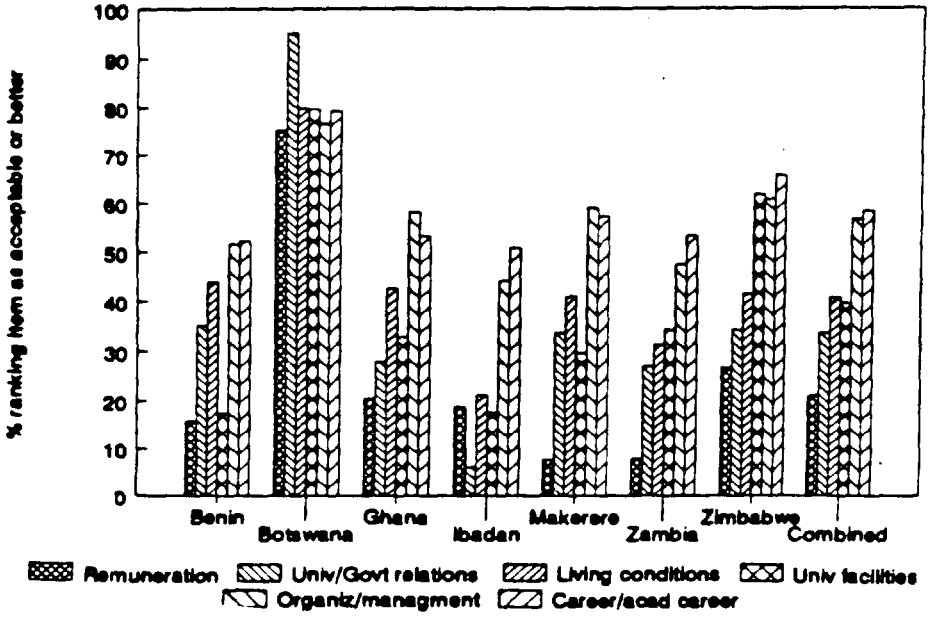
from Benin and Botswana, a proportion of staff ranging from 12% to 21% have priority intentions of developing a small business or obtaining a second job outside their discipline.

QUALITY OF THE ACADEMIC ENVIRONMENT

An overall ranking of the universities according to the satisfaction levels of staff has been carried out by considering the average percentage of staff who overall ranked 52 survey items related to the quality of the academic environment as acceptable or better. The ranking is: 1, Botswana; 2, Zimbabwe; 3, Ghana; 4, Makerere; 5, Benin; 6, Zambia; 7, Ibadan. Botswana scores extremely high, with an overall average of 81% of staff finding the issues covered in the survey as acceptable or better. This is a slightly distorted picture, as the survey has shown fairly conclusively that expatriate staff tend to be more satisfied and content than nationals, and the high proportion of expatriates at Botswana has probably improved the overall rating of the university. Nevertheless, Botswana scores very highly in comparison to the other institutions.

The response to these issues was largely predictable. The issues to do with remuneration scored very poorly, and a ranking of the issue categories places the remuneration group as the most unfavorable. It is significant that the issue relating acquisition of a home to salary was the issue ranked as "most unfavorable" by respondents (see Figure 4.2). Academic staff are concerned not simply with the quantum of salary, but with its purchasing power. Although salaries may have improved in absolute terms, they have not improved in terms of their purchasing power. Staff at Makerere and Zambia are particularly critical of their remuneration package. The gap between the most highly rated university in respect of remuneration (Botswana, where 75% of respondents find it acceptable or better) to the next "best" institution (Zimbabwe, at 27% acceptable or better[15]) is significant. The response confirms that the remuneration package is the absolutely crucial component of any staff retention policy.

Figure 4.2. Quality of the academic environment: ranking of items as acceptable or better



[15]The questionnaires were completed before the significant increases in salary awarded retrospective to 1 July 1992 were announced - see Chapter Three.

Rather surprisingly, the category ranked as the second most unfavorable overall (surpassing concern about facilities at the institution) was the relationship between the University and Government, and Government's funding of the University in particular. Academics are obviously concerned with the generally poor relationship, and understand that the major problem is the inability or unwillingness of Governments to fund universities on a more realistic basis. The Ibadan staff are especially critical of the relationship between Ibadan and the Nigerian Government, with only 6% finding the relationship acceptable or better. Apart from Botswana, only one-third (at most) of the staff in each university find the relationship acceptable or better. A number of studies, including one by the lead consultant in this project[16], have shown that universities have to work actively at improving relationships with their governments and at placing their funding by government on a more rational, long-term basis. The creation of such an environment would remove a considerable degree of academic staff dissatisfaction at a stroke.

General living conditions in their countries are ranked as being the next most unfavorable area. Unfortunately, these issues are basically to do with national policy and economic recovery, and cannot be readily addressed by the Universities. The Ibadan staff are the most dissatisfied, with only 21% of respondents finding living conditions acceptable. In Zimbabwe, the very high level of taxation is clearly evident from the extremely low proportion of staff (5%) rating the level of taxation as acceptable.

The university facilities category was rated fourth in terms of the negative aspects of the academic environment. Overall, only 40% of respondents find them acceptable, with Benin (17%) and Ibadan (18%) ranking them most poorly. Botswana is again the most highly ranked, followed by Zimbabwe (62%), while the facilities at Ghana, Makerere, and Zambia are acceptable to only one-third of their respondents.

Table 4.1. Negative and Positive Aspects of University Facilities

University	Negative Aspects	Positive Aspects
Benin	Research funding Conference travel	Nil
Botswana	Conference travel	Vacational leave Library
Ghana	Research funding Conference travel	Vacational leave
Ibadan	Research funding Conference travel Teaching facilities Computing facilities	Sabbatical leave
Makerere	Research funding Conference travel	Nil
Zambia	Conference travel Research funding	Vacational leave Sabbatical leave
Zimbabwe	Conference travel	Vacational leave Sabbatical leave

Table 4.1 indicates areas to which university officials should turn their attention. The first column alongside each institution indicates those issues which are seen in an extremely negative light by staff, and which may be capable of improvement by university management. The second column lists those which are seen in a more positive light by staff and which may present opportunities for further improvement to capitalize on an already "good thing." These avenues for intervention will, as usual, be dependent on the availability of funding, but several can be addressed without direct additional funding, or are capable of support by donors.

The fifth area of criticism is the academic management of the university. Overall, 55% of staff find the academic management of their university acceptable, although at Ibadan and Zambia fewer than 50% of staff rate it as acceptable. As this is also an area where intervention by university management is possible, an indication of the negative and positive areas for each institution is presented in Table 4.2. These results provide very good pointers as to areas for university managers to turn their attention to. Clearly, adequate time for academic work and time for the pursuit of wider interests are important aspects of an academic lifestyle, and the majority of universities appear to provide satisfactory conditions for these to be achieved. In a situation where student numbers are increasing, the negative pressures on these two attributes of an academic career will intensify. Staff seem to be well satisfied with the quality of their

[16]Blair, Robert D.D. *Financial Diversification and Income Generation at African Universities.* Washington, D.C.: The World Bank, 1992.

students and, very surprisingly, with the number of students. It would seem that the long held view that academic staff have been overwhelmed by rapidly increasing student populations is not the view of the academics themselves (this is borne out by the relatively low and not markedly deteriorating staff:student ratios presented in Chapter Two).

Some of the negative areas could be remedied fairly easily: the allocation of scarce resources amongst the competing priorities within the universities is viewed as unsatisfactory and requiring improvement. University leaders can ensure that sound planning practices are in operation, that there is transparency in all decisions concerning the allocation of resources, and that interest groups have a reasonable opportunity to express their views. Similarly, several institutions do not score too highly in terms of administrative efficiency, and there is a firm trend throughout the staff-in-post survey to criticize what are seen as overstaffed, inefficient and bureaucratic university administrations. Again, this issue could be readily addressed by university management, perhaps in the process saving resources for redistribution elsewhere. Finally, it appears that the staff of most institutions do not believe academic leaders and colleagues are able to exert much influence on their behalf with funding agencies, other universities, linkage programmes, etc. Although vice chancellors may not agree, it is the impression of the lead consultant that this is partly due to the fact that university leaders spend far to much of their time involved in the minutia of university administration, and not enough time handling the bigger issues, overall policy, and interest groups such as government, donors, and the private sector. University leaders need to implement better management structures involving delegation, control and review by aggregate measures, rather than on a decision by decision basis.

The category covering the academic careers of respondents showed that overall 55% of respondents are satisfied. A significant finding is that, Botswana excepted, the only issue rated acceptable or better by an overall 90% of respondents (rising to 97% at Zimbabwe) was the opportunity to teach. This confirms the commitment of academic staff to their careers and to their responsibility to teach. It is also evident that a high proportion of staff welcome the opportunity and freedom to decide on the direction and nature of their careers which, to a large degree, is the hallmark of an academic career. On the other hand, the opportunity to build a research team with a national or international reputation, and the freedom to recruit

Table 4.2. Negative and Positive Aspects of Academic Management

University	Negative Aspects	Positive Aspects
Benin	Academic leaders' influence	Time for academic work Quality of students
Botswana	Time for wider interests	Academic leaders' influence Recognition for academic achievement
Ghana	Academic leaders' influence Opportunities for further development	Quality of students Number of students Time for academic work
Ibadan	Opportunities for further development Good resources allocation Academic leaders' influence	Time for academic work Recognition for academic achievement
Makerere	Good resources allocation Administrative efficiency	Quality of students Number of students Time for academic work
Zambia	Administrative efficiency Good resources allocation Academic leaders' influence	Quality of students Number of students
Zimbabwe	Administrative efficiency	Quality of students Time for academic work

the most able and talented researchers into the team, are seen as being very poor, with an average of only 33% and 30% of respondents rating these opportunities as, respectively, acceptable or better. This indicates a further area for intervention through the development of graduate programmes and linkage activities which enable African academics to interrelate with their colleagues elsewhere and allow the development of solid research activity. Research is a clear priority of academic staff, and though much research activity will require funding, there are several ways in which research activity can be encouraged. The perceived lack of opportunity to research and to develop a research team is perhaps the crucial factor requiring attention for the retention of full professors and the professoriate in general.

The organizational climate in universities is generally acceptable, with only Ibadan having less than 50% of staff satisfied. The cordiality and supportiveness of colleagues receives a high rating, and is a significant indicator of issues of importance to academic staff which can be capitalized on by university leaders. University officials should concentrate efforts on maintaining a collegial, friendly atmosphere within their institutions, as maintaining an existing "pleasant" organizational climate will improve staff retention capabilities. However, in a number of institutions (Ibadan, Makerere, Zambia), the administration could do much better in terms of their perceived attitude towards academic staff and, in particular, the response of university leaders to requests from academic staff. In Benin and Ibadan academics are concerned about the morale of students, which indicates another area for attention.

The more amorphous aspects of an academic career -- specifically, opportunities or freedom for the individual to take part in significant cultural, political, social and economic events, or to accept public appointments, and to express wider interests and engage in a wide range of professional activities -- received high satisfaction ratings. At present, therefore, these opportunities are relatively good, and form an important component of an academic career (such opportunities are not available to the same degree in many other careers, particularly in the private sector). University leaders should capitalize on this perception and encourage staff to engage in a wide range of activities and public appointments, as such activity is evidently satisfying to a large proportion of academic staff and enhances the university's reputation and outreach to the community at very little financial cost to the institution.

In sum, the responses described above are highly illustrative and point to several areas in which university officials can intervene to develop policies which could be significant in terms of improving staff satisfaction and retention at relatively little cost. The strong commitment to teaching and research should be capitalized upon, and the general teaching environment improved. An atmosphere should be developed which encourages teachers to vary their techniques, teach as teams, teach special topics, and have an involvement in the design and revision of curricula. As the annual teaching cycle can be repetitive, university officials should devise ways to challenge teachers and provide opportunities for change and revision of courses through research and external contact. Promotion criteria should give more emphasis to excellence in teaching, provide an incentive for curriculum development, and encourage independent thought. The "routine" character of teaching is not a common characteristic of most middle management jobs in industry, for example, and therefore requires particular attention to ensure continued staff satisfaction. Research contacts, sabbaticals and attendance at conferences are also vital to retention policies, and Zimbabwe's high rating in respect of sabbatical leave perhaps indicates that its sabbatical policies would warrant investigation by other institutions. In conclusion, therefore, there is a generally acceptable level of satisfaction amongst staff-in-post, except as regards remuneration, the relationship between university and government, the general economic state of their countries and, in certain institutions, the deteriorating state of university facilities and services. Although the "hard" key factors are the major cause of dissatisfaction, and the "soft" less vital issues the areas of satisfaction, the response is relatively optimistic on the whole, indicating quite clearly where intervention strategies for staff retention and improved recruitment are required.

ACADEMIC ACHIEVEMENT

The response to the questions concerning academic achievement is less encouraging. Apart from the relatively high proportion of respondents who feel that they have achieved progress as a scholar, the relatively low proportions who have achieved promotion at certain institutions or who have achieved an above average publication record is of concern. Promotion policies which tend to encourage "turning the handle" research rather than really interesting research should be reviewed. At Botswana and Zimbabwe this is partly a reflection of the large expatriate contingent and/or the relatively younger staff. It is worrying that only 50% of respondents feel they are engaged in interesting and exciting research, with Makerere and Zambia scoring particularly badly in this respect.

These responses reinforce the frequently expressed conclusion that attention has to be paid to promotion policies and procedures and to facilitating research opportunities for academic staff. Both these issues can be addressed by university officials without recourse to additional government funding. The improvement of research opportunities is an area where donors may be capable of meaningful intervention.

INDIVIDUAL COMMENTS

The comments provided were all largely negative and predictable, with few constructive or practicable suggestions for improvement. The matters raised cover the whole range of issues of concern to academic staff, virtually all of which were covered through the questionnaire. There were no positive statements, and no reference at all to steps in the right direction which some institutions may be taking.

The following are some of the broad issues which were raised concerning all institutions:

- There is a general recognition amongst academic staff that underfunding is the fundamental problem, and all governments come in for strong criticism. There is a strong desire for more autonomy from their governments: the recurrent theme is that governments do not appreciate the universities or accord them the status and importance they require in terms of national development. A member of staff at Benin stated the problem succinctly: "Money is the heart of the problem." Allied to the question of underfunding is a strong theme of concern about an increasing over-dependence on donor support. One respondent at Zambia expressed the concern in strong terms: "If one's university can only exist on donor aid - close it down and send the students out for training on scholarships (overseas or elsewhere in Africa)." There is also a sense that donor funding could be better used. Predictably, nationals feel that donor support to supplement local salaries at a rate of say US$1 000 per month would be the most effective use of donor aid, whilst simultaneously reducing the dependence on expatriates. An expatriate, also at Zambia, suggested that donors should allocate US$5 million to supplement the salaries of Zambian staff and, in his view, that would solve the problem of staff retention in one step.

- There is a natural "jealousy" on the part of nationals for the perceived better terms of expatriate colleagues. Equally, expatriate staff, especially in Botswana, Zambia and Zimbabwe, expressed anxiety that they were made to feel unwelcome. This expression was particularly strong from expatriates from elsewhere in Africa. However, the general response by expatriate staff indicates that they tend to be more satisfied and content than their national colleagues. Another theme from the expatriates was that their contracts were too short and prevented them from becoming meaningfully involved in long term research projects.

- The overwhelming majority of comments indicate that inadequate salaries are the major disincentive to continuing an academic career. However, it is clearly not simply a question of the amount of remuneration, but its buying power in the local economy and an academic's ability to secure the basic needs of a house, car and children's education, together with an adequate retirement. The majority of

suggestions for improvement can see no alternative other than governments recognizing their universities as more valuable and providing better funding. A number of respondents suggested schemes whereby local salaries were tied to US$ and automatically increased as the exchange rate depreciated.

- Promotion policies were a common source of criticism. In many institutions they were seen as bureaucratic, unfair and too dependent on research. Many respondents drew attention to the "catch 22" situation whereby promotion is highly dependent on research results and publications, and yet in many of the institutions the infrastructure, research facilities and opportunities are so poor that it is well neigh impossible to undertake research. In all universities there seems to be a strong desire for greater recognition to teaching prowess in promotion consideration.

- A strong theme in all institutions except Zimbabwe and, to a lesser extent, Botswana, relates to the deteriorating infrastructure, inadequate facilities and equipment, and technical support and maintenance.

- University administrations come in for a fair degree of strong criticism. In several of the institutions the academics see the administration as remote, self-seeking and too conservative, with an unwillingness to enter into dialogue with academics. This view appears to be especially strong in the three West African universities, Makerere, and Zambia.

- Although 213 females responded to the questionnaire, there is no indication by them that they believe they experience any special problems over discrimination. Only one respondent, from Ghana, raised the question as follows: "particular issues and problems facing young female academics ... allocation of resources among conflicting and competing alternatives of an academic who is female, married and/or a parent ... family roles, community participation, religious interests." The respondent suggested that future studies should address such issues.

- There is quite a strong sense of a need to retain and recruit experience at the professorial level in order to provide adequate research guidance and leadership for younger, less experienced staff. There is also a general feeling, borne out by the data, that this is an area where universities have lost capacity. Several respondents drew attention to the need to have an adequately staffed professoriate in order to provide academic role models.

In addition to the general themes briefly set out above, there were a number of "local issues" which appeared to be commonly raised by respondents from particular institutions:

Benin. A concern about the status of "a lecturer." Many respondents expressed the need for "a reassertion of the value of lecturers." Internal politics seem to be a major problem. The need for considerably improved student facilities, particularly in the form of residential accommodation, was raised by several respondents as a pre-requisite for an improvement in the situation at the university generally.

Botswana. Promotion issues seem to be a major concern, related especially to the practice of having an establishment for each academic grade: several staff referred to the fact that promotion appeared to be a case of "dead mens' shoes." There was also concern from both nationals and expatriates that the University would suffer if expatriates started to go to South Africa in preference to Botswana. Some suggestions were made that expatriate staff should be given an opportunity to acquire land and fixed property in Botswana so as to make them more secure and likely to stay.

Ghana. There was strong criticism of the poor support services for academics: no offices, no secretarial support, no telephones. Promotion policies were seen as being too slow and secretive. There is a real concern about retirement and a lack of housing and pension for retired academics, together with anxiety as to how the places of the retiring cohort of staff would be filled. One respondent had what may be an

accurate if harsh view of how to retain staff: "In their first few years provide them with good research facilities and opportunities; in their next few years provide them with cash or loans to acquire a house and a car; by the time they have been there for ten years they are stuck in academia." There is some evidence from the survey that that scenario may be accurate and could be put crudely as follows: attract them in with research, keep them sweet with housing and a car, and then they are stuck. But, evidence from the survey also demonstrates that senior academics are likely to be the most mobile, and in some ways able to move more easily than others, and therefore it would seem that university leaders have to bring the research carrot back into play in the later years of an academic career.

Ibadan. Much criticism of poor municipal services was expressed. A strong sense of sorrow and frustration emerges from the comments, with many of the staff expressing the view that Ibadan had a great past which is now being destroyed. One memorably pessimistic (and misogynistic) view was: "Only the dregs and women would be university academics in the future."

Makerere. Salaries and promotion policies appear to be the major issues, together with real concern at the internal politics of the institution. Many of the respondents express a lack of confidence in the administration.

Zambia. A sense of depression and helplessness is apparent. There is a strong feeling of dependence on the government for a solution, and little thought to alternatives. There is fairly strong criticism of the administration. An expatriate lecturer proposed the following solution: "If there are no funds for the University, slim it down, close departments and only keep the important ones operating and pay the staff in them well."

Zimbabwe. Apart from the more common concerns, there is a fairly strong sense that there is insufficient recognition of teaching in promotion considerations, and a strong concern about the debilitating effects of internal politics.

CLUSTER ANALYSIS

An exhaustive analysis demonstrated two readily discernible groups, which for ease of reference are termed Cluster 1 and Cluster 2. These groups essentially represent the difference between national staff (Cluster 1) and expatriate staff (Cluster 2), but that categorization is not necessarily exclusive in respect of all items. In addition, an analysis of each institution was undertaken to see if the classification of the sample into two clusters held up in each institution. This was found to be the case, with a third element, age, occasionally coming into the picture.

There appear to be two major management issues arising out of this analysis:

- Those universities which are dependent on a significant number of expatriate staff need to pay particular attention to their requirements in relation to research and teaching, and their concern that they may be deteriorating as scholars through their short-term appointments and mobile life-style.

- Senior national staff who have gained experience could readily switch to the second cluster and become mobile and attracted to an expatriate career or appointments elsewhere -- a matter of serious concern for university management. Policies to address their needs are urgently required, as has already been indicated at several points. These policies should hinge primarily around the need to supply senior academics with adequate research opportunities, the possibility of developing and leading a research group, and the prospect of a reasonably comfortable and secure retirement (housing, pensions, etc.).

The clusters in the individual universities conform to a large degree to the basic two cluster positions identified for the sample as a whole, but there are some interesting variations:

- **Botswana:** the strong desire/intention by expatriates to remain at the University;

- **Ghana:** Three clusters emerged, which have been termed "Old Hands," "Novices," and "Single-minded Achievers." Expatriates are insignificant at Ghana, and therefore do not gel into a distinct cluster.

- **Ibadan:** Three clusters emerged, demonstrating the relative insignificance of expatriates as a group, and the more significant differences between long-serving senior staff ("Old Hands") and younger staff, which split into two clusters termed "Young" (but not necessarily young in age) and "Temporary," who tend to be young in age.

- **Makerere:** Also exhibits a three cluster grouping between a small group of "Expatriates" and "Young" and "Old" Ugandans.

- **Zambia:** The small expatriate group exhibits a strong degree of dissatisfaction with its academic achievements, a fairly strong intention to become involved in consulting, but as yet with little secondary income to show for it; but nevertheless an above average earned secondary income, presumably from salary supplementation as part of externally funded expatriate contracts.

- **Zimbabwe:** The "Nationals" and "Expatriates" clusters exhibit fewer divergent characteristics than is the case in the other institutions, except that the "Expatriates" are significantly more committed to teaching than the "Nationals."

SUMMARY & CONCLUSIONS

As pointers to management action and policies which require attention have been provided at each stage of the presentation of the staff-in-post analysis, extensive further discussion would be redundant. However, it is worth emphasizing that the results are broadly encouraging, in that academic staff:

- Are better qualified and more experienced than generally assumed.

- Are older and more mature than expected.

- Have more experience and are longer serving than anticipated.

- Are overwhelmingly nationals (except in Botswana).

- To a large degree, have been academics for most of their working lives, and intend to remain in academia, primarily in their "home" university.

- Suggest immigration and emigration patterns that indicate an overall net inflow into Africa.

- Appreciate the collegiality and ability to determine their own career path which an academic environment allows.

However, on the negative side, the results were largely anticipated, in that academic staff are:

- Overwhelmingly concerned with the weakness of university remuneration packages in relation to their buying power within the local economy.

- Strongly concerned with the apparent general deterioration in the relationship between universities and governments, particularly as regards adequate rational funding mechanisms.

- Critical of the deteriorating infrastructure and facilities in several institutions, particularly in relation to research opportunities.

- Generally critical of university management and leadership.

As indicated at several points in this Chapter, there are a host of policies and interventions available to university officials which could ameliorate the adverse factors and improve the environment in which academic staff operate. However, the first and crucial objective is to improve university/government relationships, hopefully along the lines of allowing universities more autonomy, especially in employment policies and remuneration packages, and developing a sound financial structure for universities, probably based on the university charging a full-cost economic fee, and governments assisting students to pay that fee. Overall, this section of the survey tends to confirm the generally encouraging findings of the Academic Staff Data section.

CHAPTER 5

REASONS FOR LEAVING

INTRODUCTION

This chapter reports the results of the questionnaire distributed to former staff of the case study universities, wherever they currently are, and former staff of a few other universities who are currently working in South African universities. The objective was an increased understanding of the factors which influenced the former members of staff to leave their universities, and led them to alternative employment and possibly to other countries. Despite the risks that the sample group may be unrepresentative, it was felt vital to obtain data from this crucial group. Furthermore, the response rate was not good and therefore the interpretation of the results is drawn from a relatively small sample of 100 (representing a response rate of 24%). In view of the small sample, the interpretations and conclusions reached from this section of the survey have to be qualified in terms of their general application.

RESULTS

DEMOGRAPHIC ANALYSIS OF FORMER STAFF

A comparison of the results of the staff-in-post survey with that of the former staff indicates that the demographics of the former staff respondents are almost identical to that of the staff-in-post. There are no significant differences and the only areas warranting any comment are as follows:

- The slightly higher response from former staff in Physical Sciences tends to confirm the greater tendency for staff in this area to be expatriate (i.e. including African academics working as expatriates in another African country).

- The lower (in comparison to the staff-in-post) response rate from female former staff is in line with the proportion of females employed in universities, as revealed through the academic staffing data survey (12% in the former staff survey, compared to 14.5% in the academic staffing data survey).

- The slightly higher proportion of former staff respondents with a doctorate, which perhaps indicates a greater likelihood for the better qualified staff to leave their university through enhanced opportunities for alternative employment.

- The relatively low proportion of former staff who are expatriate, which was to be expected. The original intention of this section of the study was to exclude former expatriate staff altogether, but as several universities supplied the names of former expatriate staff these were included in the study.

CAREER PATH

There are some interesting variations in comparing the career paths of the staff-in-post versus former staff:

- Whereas 51% of the staff-in-post respondents had moved from another university to their current appointment, or were still in the university in which they had begun their careers, only 40% of the former staff respondents had remained in the university sector on leaving their former university. As

regards the next career move, a total of 68% of staff-in-post respondents intended remaining in their current university or moving to another university, whilst only 37% of former staff intended remaining in or moving within the university sector.

- A total of 17% of staff-in-post respondents had moved to their current university from a research/consulting or management position outside the university sector, and 15% of the respondents anticipated leaving their current university position for positions in the research/consulting and management sectors in making their next move. However, 47% of the former staff had left their previous universities for positions in research/consulting and management, and 35% anticipated remaining in or moving within that sector.

Consequently, it appears that in the small cohort of former staff included in this study, the chances of academic staff leaving and then remaining out of the university sector are higher than is indicated by the previous moves and future intentions of the staff-in-post respondents. The overwhelming intention of the staff-in-post respondents to remain in the university sector does not appear to be borne out in practice by the nature of the employment change made by the former staff sample, and their future intentions. If this interpretation is correct, then it would appear that the university sector does have more cause for concern about staff loss than is indicated by the staff-in-post analysis. It also appears that once they have left the university sector, it is more difficult for academics either to be enticed back or to return to the university field. However, if only those staff-in-post respondents intending to leave their current university are considered (47% of the total), then the proportion of that group intending to remain in the university sector (32%) is more closely comparable to the intentions of the former staff respondents who plan to remain in the university field (37%). Similarly, the proportion of staff-in-post respondents planning to leave their current university for research/consulting or management (32%) is very similar to the proportion of former staff with the same intention (35%).

It is evident from the former staff sample that other universities, and research/consulting or management positions outside the university sector, are the only significant employment destinations for staff leaving universities. Similarly, once academics have left a university, there appear to be only four significant career options: remaining in the university environment; moving to research/consulting or management positions outside universities; remaining in their current non-university positions; or proceeding to retirement.

These data from the very small former staff sample appear to bear out much of the data obtained from the staff-in-post study. Where it differs, however, it indicates a more pessimistic scenario for staff retention within universities: staff who decide to leave a university appear to move out of the university sector in greater numbers than would be indicated by the intentions of staff-in-post, and once out are less likely to return to the university sector.

Fifty-eight percent of the former staff respondents moved from one country to another in leaving their previous university to take up their current appointment, whereas only 37% of the staff-in-post sample had done so. The proportion of former staff respondents planning to emigrate on leaving their current position (45%) is also higher than the staff-in-post respondents who indicated an intention to emigrate in making their next career move (34%). These data must be treated with caution because of the small sample of former staff respondents, and the fact that intentions may not be translated into reality in terms of next career move. But, it appears that more of those leaving universities will in fact move country in doing so than is indicated by the staff-in-post data, although the majority will probably remain in or return to Africa.

In view of the small sample, an analysis of the employment sectors to which former staff had gone was undertaken, which attempted to identify the destinations by type of employer, using the address details provided by Heads of Departments on the larger sample of approximately 350 names, and comparing this information with the former staff respondents' replies to the questionnaire. The major employment sectors to which former university staff are proceeding emerge quite clearly and are

summarized in Table 5.1. This confirms the finding from the staff-in-post questionnaire, that academic staff are fundamentally committed to an academic life.

A review of the questionnaires indicates few significant trends, except that former staff of Zambia tended to go to the Universities of Botswana and Swaziland, whilst several former medical staff of Ghana and Ibadan have gone to Saudi Arabia.

A further analysis, which cross-tabulated the employment destinations of former staff with a range of various factors, revealed the following:

Table 5.1. Employment sectors of former staff

Employment Sector	Data from Names of former Staff	Data from Completed Questionnaires
Universities	39%	45%
Private Sector	34%	24%
Government/ Parastatal	16%	14%
International Agency	8%	14%

- **Destination by rank:** Lecturers tended to move in almost equal numbers to other universities, either on promotion or on lateral transfers, and into research/consulting and management. The destinations of senior lecturers were evenly spread across all areas covered by the questionnaire. Associate professors and professors showed a fairly strong tendency to move into management positions and, surprisingly, none had moved into research or consulting positions outside of universities.

- **Destination by subject area:** Former staff in SA 5 showed a firm tendency to move to another university; staff in SA 1 and SA 2 showed a definite tendency towards research/consulting and management, with fairly strong movement to other universities; and staff in SA 4 moved overwhelmingly into management positions.

- **Destination by age:** This analysis revealed no pattern at all. There was no trend towards certain destinations by age groups.

- **Destination by having achieved promotion:** Former staff who had achieved promotion in their previous university tended to go in almost equal proportions to other universities or to research/ consulting and management positions outside universities. Beyond these sectors, the numbers moving to any other destination were insignificant.

- **Destination by publication:** Success in publication at a previous university apparently made little difference in terms of subsequent employment destination, but there was a slight trend indicating that those with a good publication record tended to remain in the university sector, whilst those with a poorer publication record tended to move into the research/consulting and management sectors.

- **Destination by interesting or exciting research:** There was no strong pattern. Equal proportions of those who had or had not undertaken interesting or exciting research moved into research/consulting and management positions outside universities. Forty-five percent of those who had not been engaged in interesting research moved to another university, and 38% of those who had enjoyed exciting research remained in the university sector.

- **Destination by progress as a scholar:** Achievement in scholarship showed a slight trend for movement into research/consulting or management. Former staff who remained in the university sector were equally split between those who had achieved progress as a scholar and those who had not.

QUALITY OF THE ACADEMIC ENVIRONMENT

The rating of former staff of the difficulties and attraction of academic life within their **former** university was almost identical to that of staff-in-post. However, former staff tend to be generally more

satisfied with the general infrastructure of their country, the availability of housing, the quality of education, the quality of medical services, the level of taxation, the government's funding of the university, medical aid, vacational leave, telecommunications and postal facilities, teaching facilities, research funding, secretarial services and copying facilities, funding for travel to conferences, sabbatical leave, student morale, the quality of students, and their ability to attend conferences. On the other hand, former staff are less satisfied than their staff-in-post colleagues with the following factors in their former university: the basic salary they were receiving, the affordability of schools, the attitude of university leaders, the attitude of the university administration towards academics, the administrative efficiency and allocation of resources, the influence academic leaders were able to exert on their behalf, the opportunities to acquire new skills or further qualifications, the recognition given for academic achievement, and the number of students.

The response indicates that their remuneration package, and their resultant inability to buy a house or car, was the major area of dissatisfaction. This conforms exactly with the response from the staff-in-post. Former staff respondents are also concerned with the relationship between their former university and government, and with the general living conditions in the country as a result of economic stagnation. The former staff are slightly less critical of the state of university facilities than their in post colleagues, but are much more critical of the organizational climate and academic management within their former universities. Former staff and staff-in-post have similarly generally favorable views of the university environment in relation to career development and collegiality. An analysis of the former staff response leads to two possible interpretations:

- Former staff have a clearer idea of the factors which influenced their decision to leave the university: in addition to inadequate remuneration, they were concerned with the academic management of their former institution; or

- The markedly more negative response to issues to do with academic management could indicate a respondent group who were disgruntled and left through dissatisfaction with their treatment by their former university.

The lessons to be drawn from this section of the study are similar to those discussed in the staff-in-post section (see Chapter Four). They reinforce the need for improvements in the organizational climate and the academic management of universities. In many respects, these are factors well within the control of universities themselves, without any funding dependence on government or other agencies. Implementation of clear staff development and promotion policies, and an improvement in both the attitude of university administrations towards academics and in administrative efficiency, would boost staff morale and satisfaction significantly, thereby tending to improve staff retention despite poor remuneration packages and other factors.

REASONS FOR LEAVING

A review of the data on the reasons why former staff had left their previous university confirms the information obtained through the staff-in-post questionnaire. The major reasons for leaving were:

- poor remuneration and an inability to live a satisfactory lifestyle on the salary received;

- disgruntlement with promotion policies and procedures;

- the offer of a better opportunity in terms of both remuneration and research facilities; and

- in Zimbabwe, a concern about what is described as Government interference in the University through the University of Zimbabwe Amendment Act.

ACADEMIC ACHIEVEMENTS

The response of the former staff to the questions concerning academic achievement in their former university was again very comparable with the response received from the staff-in-post, except in relation to the proportion who had achieved promotion in their former university (60%) as against those still in post who had achieved promotion (44%). This indicates that the former staff were either relatively more able than their in post colleagues (a larger proportion of that group also had doctorates), or displayed a tendency to inflation or exaggeration in terms of achievement at the former institution. If the former is correct, it tends to confirm the view that although academic staff complements are generally being maintained, a loss of quality is occurring.

SATISFACTION WITH CURRENT APPOINTMENT & POSSIBILITY OF RETURNING TO FORMER UNIVERSITY

The survey results indicate that the respondents were happier with the job content of their former positions, but that salary, facilities and the general environment make their current place of employment attractive. Many of the respondents who are no longer working in universities stated that they missed the interaction with students and would be keen to return to a university in order to resume teaching. A considerable majority of respondents (75%) stated that they would return to their former universities if:

- the remuneration was improved to a level sufficient to enable them to live adequately; or
- they were appointed to a rank which the respondent feels he/she deserves; or
- the general environment improved sufficiently for academic work to be meaningfully undertaken.

Only in Ghana and Ibadan did a larger proportion (55% and 45% respectively) state that they would not return to the University. Interestingly, the staff in South African universities who were formerly at Zimbabwe, or were **not** formerly in one of the case study institutions, appear to be far less likely to return to their previous universities than the rest of the sample.

CLUSTER ANALYSIS

Despite the small sample size, a cluster analysis was undertaken to ascertain whether the former staff coalesced into any groups which might point to particular management interventions. Whereas the staff-in-post respondent sample tended to differentiate into only two clusters, described as "nationals" and "expatriates," the former staff sample tended to coalesce into four groups which can best be described as relating to: SA 1; SA 2 and SA 3; SA 4; and SA 5.

A brief description of the former staff who tend to fall into each cluster is as follows:

- **SA 1, Physical Sciences:** Male, holds a doctorate and a professional qualification, has previous university experience, may be an expatriate, will move to another university at the same grade or into polytechnics or teaching and research, little involvement in secondary income earning activities.
- **SA 2 and SA 3, Biological/Environmental Sciences and Medicine:** A greater proportion of females, higher academic ranks such as professor and senior lecturer, likely to retire or move to management positions and to remain in his/her home country; likely to have a good publication record, be involved in interesting research and have achieved progress as a scholar; older and longer serving.

- **SA 4, Business/Management:** Male without a doctorate, concentrated in the lower grades and likely to leave the university for management or research/consulting; likely to remain in-country, not to have achieved promotions or publications, and to have been involved in dull research; younger, shorter serving, higher earnings in terms of secondary income earning activities, and likely to be running a small business.

- **SA 5, Humanities, Social Sciences and Education:** Female, non-professional qualification, senior lecturer, likely to move to another university, tends to be younger than average with moderate service record, relatively high extra academic earnings but low secondary income earning activity overall; the more successful and ambitious are likely to join the expatriate circuit.

Drawing interpretations from this analysis has to be done with caution as, given the size of the overall sample, the size of each cluster can be extremely small. Nevertheless, the results appear to reinforce one of the conclusions arising from the cluster analysis of the staff-in-post sample, which is that senior national staff who have gained qualifications and experience could readily become mobile and attracted to an expatriate career or appointments elsewhere. Clearly policies are required to address the needs of both the upwardly mobile young academic and the more senior academic who has already achieved a great deal, in order to provide incentives for their retention within universities.

SURVEY OF SOUTH AFRICAN INSTITUTIONS

The attempt to survey the former staff of African universities currently working in South Africa was undertaken in the belief that a very large number of African academics had relocated to South Africa. Although the response from the South African institutions was disappointing, the data indicate that they have not been recruiting academic staff from elsewhere in Africa on the scale originally imagined. Only some of the "homeland" universities have more than a handful of staff recruited from elsewhere in Africa, with the numbers employed by the major South African Universities inconsequential. Thirty of the respondents to the former staff questionnaire are employed in Southern African universities. Of these, seven are employed in the well known major South African universities, eight in "homeland" universities and 15 in other Southern African universities (Namibia, Botswana, Swaziland and Lesotho). It should be noted that the Afrikaans medium universities in South Africa were not approached for the survey as it was assumed that they would have very few staff recruited from elsewhere in Africa. On the evidence available it appears that academic staff from Africa are only moving into universities in South Africa and not into the other levels of tertiary education. The four respondents from the University of Namibia were all recruited from institutions within South Africa.

Although the fact that 15% of the former staff respondents are currently in South African universities may appear fairly significant, it has to be read in the context of the proximity of South Africa to Zimbabwe (which made postal communication relatively easier/efficient), and the fact that a special attempt was made to secure data from South African institutions. What little information is available indicates that South African institutions, at least to date, have not recruited the large numbers of African academics which it had been believed was the case. However, with the changing situation in South Africa, and the likely significant growth in university education, South Africa may become a magnet for academics from elsewhere in Africa during the next few years.

SUMMARY & CONCLUSIONS

In view of the small sample it is difficult to draw major conclusions from the former staff section of this study. However, the response received was very similar to that of the staff-in-post section, which lends a degree of validity to the data, and therefore some tentative conclusions have been reached. These are:

- The lack of a pattern amongst the former staff data indicates that all categories of staff at every age level are potentially likely to leave their university.

- Staff retention policies need to be designed with all staff in mind, although the evidence from both the former staff and the staff-in-post surveys is that certain groups of staff should be specifically targeted: the senior staff and professors, requiring research facilities, international exposure, security for retirement; and the younger staff, requiring a clear career path, the opportunity to acquire further qualifications, the opportunity to develop a research career, and to secure housing and a car.

- University managements need to monitor all staff and develop career progression and succession plans for each individual in an attempt to reduce the number of academic staff potentially likely to leave the university, and especially those likely to leave the country.

- Academic staff are, by definition, highly mobile. Universities should develop their plans on the assumption that a relatively high proportion of staff will either be moving on or joining the university at any one time: this should not be seen as necessarily a negative factor, as academics are able to secure a broader and stronger experience through this mobility, and hopefully will return to their "home" university in due course as a better academic. But, from Africa's point of view, it would be of merit if this traffic could be limited to within Africa, or at least kept to within universities, as the evidence is that once an academic leaves a university, it is difficult to recruit him/ her back to academia.

- The Business/Management/Law subject areas appear to be losing younger academics without doctorates, and it is arguable that Business/Management needs to receive more attention with a view to establishing it as a reputable academic discipline. The information from the Academic Staffing Data study (Chapter Two) shows that this area experiences strong demand from students, with resulting very high staff:student ratios.

- The Biological/Environmental Sciences, Veterinary Science and Medicine are relatively well-established academic areas, and attention should be focused on the creation of suitable career paths for younger academics, possibly through the assignment of mentors to guide their growth as researchers, and the development of strong research units which will attract and hold them. These areas, with their relatively strong traditions and manpower base, are excellent focuses for developing strong research units.

- The Physical Sciences need co-ordinated management attention in order to retain existing academic staff in the universities and within their countries. This area, in particular, is prone to a dependence on expatriate staff (both non-African and African).

Generally, former staff remember their previous university relatively fondly: there is a strong store of goodwill and the majority of respondents expressed regret that they had had to leave the institution. A large proportion of respondents indicated a willingness to return to their previous university if certain factors could be improved. This attitude points to the need for a better organized resignation management process. Exit interviews and counseling, possibly by Deans, are essential in order to try and secure a withdrawal of resignation or, if not successful, to obtain better information on the reasons for each individual's decision to leave. Providing staff who are potentially likely to leave with information on career opportunities, university development plans, opportunities to travel and develop research, etc., may help to reinforce an inherent desire in such staff to remain in the university. The generally critical response by former staff to the issues concerning the attitude of the administration to academics, and academic management in general, indicates that there is considerable room for improvement in this area.

It appears that the obviously more energetic and successful academics need particular attention. Their abilities and energy are desperately required by the universities. Well thought out policies are required to balance the provision of research and other academic support facilities, which enable academic staff to develop their research careers, with the opportunity for a reasonable amount of outside remunerative work. Early identification of such "go-getters" and closer attention to their needs is likely to pay dividends.

It is recommended that each university's personnel office should become much more significant and powerful. The personnel office should become pro-active and be involved in the implementation of well-developed human resource management plans. These offices should be actively involved in:

- the development of manpower and career path plans for each staff member;
- the monitoring and development of outlets for energy, both internal and external to the university;
- the encouragement of a more positive view of an academic career through the active use of role models;
- the prompt attention to grievances and sensitive handling of these; and
- the constant monitoring of the competitors for academic staff through information gathering and analysis.

This study has revealed that universities have very poor information on their former staff or their reasons for resignation. It should be a crucial role of the university's personnel office to cover all possible sources of information in order to improve the university's management of its human resources. The head of each university personnel department could be placed on a "private sector" system whereby his/her remuneration and progression is based on his/her assessed capacity to successfully develop manpower management plans, keep staff happy, and reduce the level of resignations.

The evidence from this section of the study has reinforced the conclusion reached in the staff-in-post study that the development of research capacity is a crucial area for the successful retention of staff, and has confirmed the view that academics tend to be committed to academia with strong academic priorities. Whilst the importance of an adequate and attractive remuneration package which enables academics to secure a reasonable lifestyle cannot be underestimated, and is clearly the major area requiring the attention of universities and governments, arguably the next most useful tool in any overall staff retention policy would be the development of a satisfactory research environment. Areas of strength should be identified and developed, outside competitive research institutes could be brought into the university or collaborative agreements developed, donors could support high-level research with the objective of establishing units with an international reputation in African universities, and a concentration on the small things that might work rather than grandiose schemes may well be successful. Given the consultants' close association with the University of Zimbabwe, it is perhaps not surprising that they turned to that University in an attempt to identify potentially successful models for the development of research. Zimbabwe has two models which other African universities may find worthy of consideration:

- For many years the University of Zimbabwe Research Board has administered a fund included in the University's core budget which was allocated to academics, or teams of academics, on a competitive basis for undertaking individual research projects. The Research Board also administered a separate fund from which academics could secure funding to present research results at international conferences. The system is based on academics taking the initiative to apply, with the consequence that the most energetic are better funded. Without doubt, for several years the Research Board was a major factor in the relatively successful development of research activity at the University.

- The development of very strongly focused research units which, under the direction of a leading and energetic professor, attracted young academics to the unit and thereby enabled them to develop their academic careers. The University of Zimbabwe's Centre for Applied Social Sciences, and the Geophysics Research Unit in the Department of Physics, are prime examples of this model.

Overall, the results of the former staff survey tend to confirm the conclusions reached through the staff-in-post study. Whilst there is clearly cause for concern at the potential for loss of academics from the case study institutions, this section of the study has also confirmed the strong commitment of academics to a career in academia, and has indicated a fairly wide range of policy options which are fully under the control of universities. The former staff study has also reinforced the finding of the staff-in-post study that the improvement of remuneration packages (particularly in relation to the ability of academic staff to acquire housing, a car, and adequate education for their children) is an absolute necessity. This is without doubt the major area requiring attention by universities, governments and donors, but it is also the area which, on the face of it, will be the most intractable. Whilst the energies of university managements, governments, and donors should be concentrated on the area of remuneration packages, it is recommended that university managements in particular should equally pursue vigorous policies in the areas which are within their control, and which have been revealed by this study as potentially generating considerable benefits.

CHAPTER 6

THE PERCEPTIONS OF INSTITUTIONAL LEADERS

INTRODUCTION

The analysis of the questionnaire for Institutional Leaders is reported upon in this chapter. The objective of this questionnaire was to ascertain what issues Institutional Leaders (ILs), the Vice Chancellor, Pro-Vice Chancellors, Registrar and the leader of the academic staff union (or their equivalents), believe are critical in academic staff attrition and retention, and to identify initiatives which may have been instituted to improve the position. The questionnaires were also designed to discover the extent to which the ILs' perceptions of the problems correlated with those of staff-in-post and former staff. There was also an attempt to identify the type of data available to Vice Chancellors and other ILs for institutional management, and the extent to which they considered several key issues and questions affecting university management.

QUESTIONNAIRE RESULTS

The IL's confirm the impression from the academic staffing data, staff-in-post and former staff sections of the study, that the major area of difficulty in the recruitment and retention of academic staff is at the senior level. Only Benin and Botswana regard themselves as not having a recruitment/retention problem, and in Benin's case it is because the University has not been able to recruit staff since 1986.

ACADEMIC STAFF RECRUITMENT

The appointment criteria for all the universities are very similar. Very little assistance is provided for new appointees to assist them in settling down and becoming fully productive. Although Zimbabwe's establishment of a Teaching and Learning Methods Centre is reported to have not yet achieved its potential, it would appear that such a unit should be of considerable help to newly appointed young academic staff, and may well be replicated advantageously in other institutions. Promotion periods at each rank appeared to be quite varied, with an average "fast track" period of 10 to 12 years appearing to be the norm for promotion to full professor (apart from Ghana where a much longer period was required). The other sections of the study have indicated that in most universities a significant degree of dissatisfaction with promotion policies exists. Therefore, as has been stated elsewhere, it would be worth university leaders reviewing their promotion criteria with a view to maintaining quality whilst also providing a clear career path for young academics.

None of the universities have any official policy on a staffing model, although there is a fair degree of uniformity with regard to the proportions of various grades of academic staff which are viewed as ideal. A comparison of ratios thought to exist with actual ratios at each university shows that many ILs have little idea of the position in their University. Similarly, there is no fixed policy in terms of the proportion of posts which should be occupied by recruits from outside the university. It is suggested that university leaders review this situation, as having a flexible staffing model could assist recruitment, and may serve to reduce overall costs. None of the universities have an official recruitment model, and ILs have only the most general idea as to where staff are recruited from. The staff-in-post, former staff, and conditions of

service and comparability sections of the study have demonstrated that university officials need to have much more accurate data on their academic staff if more effective management policies are to be introduced. The establishment of data and, thereafter, human resource policies for academic staff is clearly a responsibility for an enhanced personnel office within each university.

ACADEMIC STAFF TURNOVER

Turnover is seen as a problem in all universities apart from Botswana and Benin (in Benin it is anticipated that it will become a problem as more and more long serving staff reach retirement and cannot be replaced under current Government policies). The view that turnover is a significant problem tends to support the qualifications expressed in the academic staffing data analysis, that although staff numbers have been maintained or even improved in most institutions over the period of the study, the statistics may disguise changes in quality brought about through high turnover. The study was not able to track turnover rates, and none of the universities had any real data on these. Although academic staff tend to be highly mobile, high turnover rates are obviously disruptive and likely to impact adversely on overall quality.

Again, therefore, university managements need to recognize the need for accurate hard data on turnover statistics and the reasons why staff leave in order to develop appropriate policies. In general, the ILs have an accurate appreciation of the major reasons why academic staff leave, and are fully in accord with the data emerging from the staff-in-post and former staff sections of the study. However, apart from recognizing a poor research environment as a reason for resignation, ILs indicated little appreciation of additional reasons, whereas the staff-in-post and former staff studies indicated significant degrees of dissatisfaction with general university facilities and infrastructure, and administrative efficiency. ILs appear to have a reasonably accurate general idea of the destinations to which academic staff go on resignation. It is evident, however, that none of the universities had accurate statistics on these destinations, and it is suggested that this would also be an area in which a strengthened personnel office could obtain accurate data in order to assist in the development of retention policies.

STAFF RETENTION MEASURES

Unfortunately, there is little evidence that ILs have introduced, or plan to introduce, any specific measures to reduce excessive staff loss beyond constant negotiation and pressure on their governments for improved funding of their universities. Benin and Botswana do not require specific staff retention measures at present. Makerere is extending the Southern African concept of free tuition for staff children to preferential admission for staff children, and Zambia's three-pronged strategy seems to depend almost entirely on significant funding being received, presumably from Government. In view of the fairly strong understanding that the future of universities depends largely on broadening the financial base and reducing the current almost total dependence on governments for funding, it is surprising that the ILs have not been exploring staff retention measures which are not dependent on government funding or policy compliance. However, when reviewing the outstanding needs required for more effective staff retention policies, the four responding institutions have a strong theme of greater economy and reduced dependence on government, with Makerere's concept of full fee paying programmes, with students supported by government and other sponsors, being the most likely to prove effective in the long term.

SECONDARY INCOME EARNING ACTIVITIES

Benin and Botswana are again the exceptions. All the other university ILs concede that their academic staff are substantially involved in secondary income earning activities. In general, the ILs perceived such activities as having an adverse effect on university activities, but recognized the positive effect which they had on staff retention. The ILs see secondary income earning activities in a much more negative light than the Heads of Departments, who view the impact of such activities on departments as being relatively neutral. It is evident that the ILs have little hard information on the extent of secondary

income earning activities, which implies that the control mechanisms which theoretically exist in most of the institutions are effectively by-passed.

STAFF CONTENTMENT

The ILs of all the universities except Botswana report that academic staff in their institutions are not happy, and that morale is low. This finding is borne out by the results of the staff-in-post study, which showed relatively small proportions of staff reporting a range of issues as acceptable or better, indicating a significant degree of discontent. In their current environment, it is perhaps not surprising that, apart from staff development opportunities, the ILs see the universities as having little to offer aspiring young academics. As regards staff commitment, the ILs are reasonably confident that the majority of their staff are committed to academia - a finding borne out quite conclusively by the staff-in-post and former staff studies. The apparent lack of commitment observed amongst academic staff can be attributed in part to the necessity for them to become involved in secondary income earning activities, but a lack of outlets for their energies/talents in a depressed research environment and of international contact could also be to blame. The condition of the universities tends to produce an environment which does not allow academics to do what they like doing: research, seminars, guidance of postgraduate students. The result is a lack of common direction and purpose and diffuse values and views of the future.

UNIVERSITY/GOVERNMENT RELATIONSHIP

ILs are clearly significantly out of step with their academic colleagues on the question of the nature of the relationship between the university and government. The ILs reported that the relationship is good, although they desire greater autonomy and financial independence. Only at Benin is the relationship regarded as generally poor. Botswana, with a relationship described as excellent, is once again atypical. In contrast, the staff-in-post study indicated that, after their dissatisfaction with salaries and their remuneration package as a whole, the next issue which provokes the most staff dissatisfaction and concern is the relationship between the university and government (Botswana again excepted). If ILs really do believe that the relationship between their university and government is as good as they state it is, perhaps it is necessary for them to bring academic staff more into their confidence regarding the negotiations and developments that are underway, as at present this is the only serious area of divergence between the views of ILs and staff-in-post and former staff.

ACADEMIC LEADERSHIP

With the exception of Botswana, where academic leadership is reported as working reasonably well, the ILs are unanimous that academic leadership in their institutions is steadily deteriorating, primarily due to the lack of experienced academic staff to provide adequate leadership. It is pleasing to note that ILs discern this problem, as the staff-in-post and former staff studies have clearly demonstrated that senior academics (particularly full professors) are a pivotal group, and share a sense of being insufficiently utilized and even marginalised. In part this could be due to a lack of organizational leadership.

DEPARTMENTAL GOVERNMENT

The quality of departmental government is reported as being generally effective, but again adversely influenced by a shortage of senior staff and their "marginalisation" by democratic procedures for the appointment of departmental chairmen, which can lead to the election/appointment of relatively weak incumbents. Most ILs thought the university administration was relatively efficient and effective under the circumstances, but several recognized a problem in the calibre of administrative staff in several areas. This again accords with the findings of the staff-in-post and former staff studies, which indicated that academic staff are generally fairly satisfied with their administrations, although of the view that they could and should be significantly more efficient and effective. It is probable that weak administration tends to result in academic staff becoming more and more involved in administrative matters, to the

detriment of their academic duties, with a consequent further factor aggravating "academic capacity loss." Efficient and effective administrations are absolutely crucial for the proper functioning of universities, and can serve as a positive staff retention tool by relieving academics of much of the administrative burden.

UNIVERSITY FACILITIES

With the exception of Botswana and Zimbabwe, the ILs rated their university facilities as generally very poor. This finding is largely expected, being self-evident through observation by any visitor, and revealed as a major source of dissatisfaction amongst staff-in-post and former staff in the case study universities. The link between facilities and staff morals should not be ignored: the environment makes it difficult to be a "single minded" academic.

IMPROVEMENTS REQUIRED

The ILs are well on track in terms of identifying the most urgently required improvements for staff recruitment and retention at their universities. Their perceptions are fully in accord with those of the staff-in-post and former staff studies, but the measures required are overwhelmingly dependent on national economic revival.

INSTITUTIONAL CO-ORDINATOR'S SUMMARY

Brief reports by the ICs on the process of administering the questionnaire for Institutional Leaders confirm that the ILs recognize the importance of the study and were very willing to co-operate. Their summaries and comments are fully in accord with the information supplied in response to the questionnaire and summarized above.

SUMMARY & CONCLUSIONS

The major finding is that the ILs in the universities which responded to this section of the study are well briefed and cognizant of the major problem areas in respect of academic staff recruitment and retention. Apart from the ILs' relatively more sanguine view of university/government relations, their position does not appear to be seriously at variance with the views of staff-in-post or former staff. Consequently, discussing the major issues again would be redundant. However, it is evident that in most cases ILs were unable to supply the type of detailed data and information sought by the questionnaire. In the majority of cases such information was simply not available to the ILs. It is evident that several ILs had not considered access to such data necessary for planning or management purposes, and in some cases the interviewees apparently could not see the point of the data requested (particularly at Makerere). In overall terms, the majority of questions were answered in only the most general manner.

This finding points to a need for considerably strengthened personnel offices in all the institutions, with a mandate to secure and maintain hard data on recruitment and departure patterns, turnover rates, sources of recruitment, destinations of resigning staff, career path profiles, etc. These departments should be charged with developing recruitment and retention models for academic staff and developing much clearer and more precise profiles of ideal staffing patterns for each department. Leading private sector organizations of a similar size to the universities involved in this study would have significantly more data on such issues than the universities appear to have available to them. The impression gained from the questionnaire for Institutional Leaders is that full scale human resource management of academic staff is still a foreign concept in most universities. It is submitted that until such policies become an integral part of university management, academic staff loss and retention will remain as major areas of concern. Whilst it is clear that the salary and remuneration package is the most important factor in staff recruitment and retention in universities, this survey has demonstrated that a host of other policies are

available which could be implemented to mitigate the negative impact of poor salaries and other fringe benefits.

The response to the questionnaire for Institutional Leaders also indicated that exploitation of secondary income earning activities to benefit the universities was effectively non-existent. All the ILs recognized the value of such activities in staff retention, but unfortunately relatively few recognized any other benefits from such involvement, such as the spin-off benefits to research and teaching programmes, departmental and university reputations, and interaction with the wider community. Arguably the best ways to manage such activities and gain a degree of benefit from them would be through an effective and fair university consulting unit which provided academic staff with a positive service, and by rewarding those academics who are successfully engaged in income generation.

The ILs recognize that academic leadership, departmental government and administrative efficiency are not what they should be. These are all areas which are within the control of university management and should be addressed. It is significant that many of the ILs attributed the problems in these areas to the relative shortage of senior and experienced academic staff. This is clearly the situation, emphasizing once again the urgent need to develop policies which will help to retain senior staff in their universities and make use of them, whilst encouraging middle level staff aspiring to associate or full professorships to remain and secure promotion. This study has made a number of suggestions in this regard, primarily to do with improving the research environment, but it is evident from this section of the study that the marginalisation of senior academics in university and departmental government through applying greater democracy to university structures has not only had a negative effect on the quality of leadership and government, but may be a further factor encouraging senior academics to leave their universities. Perhaps some back-peddling on the policies which so marginalise senior academics would pay dividends, not only in terms of improved efficiency, but in assisting to retain such staff within the university. An alternative may be the identification and creation of leadership roles for such senior staff which cut across normal institutional structures. Finally, it is submitted that many of the ILs need to get above the normal day to day matters in order to obtain a clear overview of their universities. The questionnaire for Institutional Leaders indicates quite clearly that many ILs view their situation as managing in a crisis in respect of staff loss and retention. However, the major finding of this study is that whilst the general condition of universities may not be very healthy, they have been holding their own, at least in terms of staff numbers (Zambia excepted). ILs need to recognize this fact and capitalize on it by publicizing it and exploiting it in their negotiations with funding agencies.

CHAPTER 7

SECONDARY INCOME EARNING

INTRODUCTION

This chapter presents the results of the surveys related to secondary income earning activities of academic staff. The objectives were to ascertain the degree to which staff-in-post are committing less and less of their time to teaching, research or other worthwhile academic related activities as they "moonlight" in multiple careers in order to supplement their income, and to gauge the extent of income earned by such activities.

RESULTS

STAFF-IN-POST STUDY

The staff-in-post study of secondary income earning activities revealed that overall approximately 80% of staff are earning an additional income from another source. The major source of additional remuneration is a spouse's salary, and overall 58% of respondents receive income from this source. Although a spouse's income is not regarded as an actual secondary income earning activity of a staff member, and obviously does not result in a diminution of attention to teaching and research responsibilities, such income has been included with genuine secondary income earning activities as it can be a significant additional source of income to meet family expenditure. Reference is therefore made to the heavy "involvement" of staff in such activities at several points in the discussion which follows. As would be expected, additionally remunerated academic work such as lecturing, writing and examining is the next most popular way of earning an additional income, with an average of 40% of staff engaged in such activities, rising to 67% in Ibadan, and dropping to 23% in Botswana where perhaps the need for additional income is less pressing. Surprisingly, only 38% of respondents are engaged in consulting and commissioned research, rising to 54% in Ibadan and 45% in Ghana. But, in two institutions, Makerere and Zambia, it is possible to earn reasonably significant income from consulting and commissioned research (50% - 200% of salary at the upper quartile). Similarly, professional practice offers reasonable opportunities for earning quite useful additional income at Makerere, Zimbabwe, Ghana and Ibadan, but a relatively small proportion of staff (primarily in Medicine/Dentistry) are engaged in professional practice. In Makerere 15% of staff have a second job within their discipline or teaching, and earn significant proportions of their salary. The most lucrative source of additional income after a spouse's income is the operation of a small business or obtaining a second job outside one's discipline, and this activity is engaged in by almost 25% of staff in Ghana, Makerere and Zambia, but by almost no staff in Benin and Botswana.

An analysis of the staff-in-post respondents by subject area produced largely predictable results. For the majority of staff, irrespective of their subject area, a spouse's income is the most common source of additional income, with between 56% and 64% of staff receiving income from this source. Staff in Business/Management/Law (SA 4) are the most active in terms of consulting and commissioned research and, with their medical colleagues, in the operation of a professional practice. At the upper quartile, SA 4 staff are earning three times their university take home pay through consulting and commissioned research, and more than doubling their university take home pay through a professional practice. Interestingly, staff in SA 4 are also strongly involved in extra-paid academic work, the area in which Arts/Education/Social Sciences (SA 5) staff are most heavily engaged. In all subject areas, the operation

of a small business is the most lucrative means of earning additional income, with staff at the upper quartile in SA 3 and SA 4 earning 200% of their university take home pay. Overall, staff in SA 3 and SA 4 are heavily engaged in secondary income earning activities, and can earn substantial proportions of their university salaries through such activities.

FORMER STAFF SURVEY

The responses from the Former Staff Survey are similar to those received from the staff-in-post survey, with the major source of additional remuneration being a spouse's salary. However, the proportion of former staff who had engaged in consulting, commissioned research, or professional practice is significantly larger than that of staff-in-post. Similarly, the proportion of former staff who had engaged in a second job within their discipline or had operated a small business was higher than that of staff-in-post. Overall, 94% of former staff (as against 82% of staff-in-post) had engaged in some form of secondary income earning activity. Across all these activities, former staff claimed that they had earned a higher proportion of their university salary than that claimed by their staff-in-post colleagues. More energetic or entrepreneurial members of staff are more likely to leave universities, despite their apparent ability to make fairly considerable amounts of money from external activities. A "catch 22" situation arises: the responses to the staff-in-post questionnaire indicate that the ability of staff to engage in secondary income earning activities, and thereby significantly supplement their university salary, is a major factor in staff retention; but the response to the Former Staff questionnaire suggests that such activities, when relatively successful, are associated with members of staff leaving the university.

HEADS OF DEPARTMENTS QUESTIONNAIRE ON SECONDARY INCOME EARNING ACTIVITY

The Heads of Departments questionnaire indicates that Heads of Departments generally have an accurate view of the activities engaged in by their staff. The primary source of secondary income is identified as a spouse's income, and only at Ghana and Ibadan do Heads of Departments underestimate the number of staff earning additional income from this source. At Makerere, Heads of Departments appear to seriously underestimate the extent to which staff are engaged in extra-paid academic work, whilst overestimating the extent to which they are engaged in a second job within their discipline. Of more interest, perhaps, is that the data also indicate that Heads of Departments have overestimated the extent to which staff are able to earn additional income from consulting: whereas overall and in individual universities, Heads of Departments ranked this activity as the most lucrative source of secondary income, only in Ibadan, Makerere and Zambia does it in fact rank as even the third most lucrative source according to staff-in-post. Heads of Departments tend to under-estimate the amount of income earned through the operation of a small business: in Benin, Botswana and Makerere this is the most lucrative source of additional income. Heads of Department stated clearly that they did not have reliable sources of information on the amount of income which staff made through their various activities. However, their response as to the ranking of the earning power of such activities generally confirms the information from the in post and former staff studies.

Impact on departmental activities: overall views. Across the universities as a whole, Heads of Departments feel that academic staff secondary income earning activities have no effect upon the department's research, teaching, staff retention, reputation, and student morale. However, within that overall rather bland response, the most positive effects were felt to be on staff retention (average ranking of 3.675, with a rating of 1 signifying very disruptive, 3 no effect, and 5 very beneficial) and on the department's reputation (average ranking 3.639), whilst the impact on the morale of students (average ranking 3.099) is the closest to a negative effect. These minor differences should not be over-interpreted: the general impression is that Heads of Departments feel that the secondary income earning activities of their staff have neither disruptive nor very beneficial effects on their departments. This in itself is a fairly significant finding, as the general impression has been that such activities are extremely disruptive to the

functioning of academic departments and have an adverse effect, in particular on research, teaching and the morale of students.

Impact on departmental activities: university views. In reviewing this data more closely by university, the anticipated view that secondary income earning activities have a disruptive effect on departmental activities emerged only rarely (primarily affecting research and the morale of students). Makerere generally seems to have a more adverse view of the effects. On the other hand, the information from Zambia indicates that Heads of Departments view these activities as having had a somewhat beneficial effect on research and teaching, and Ibadan views the impact as generally favorable. The bland overall result -- of a nil effect on departmental activities -- is also the outcome when the responses are reviewed across subject areas, except that Heads of Departments in SA 4 report fairly strongly that external activities have had a beneficial effect on staff retention. More variations arise when the data is analyzed across subject areas at university level. This shows a generally very positive view of the effects of secondary income earning activities on departmental activities at Ibadan and Zambia, and a generally negative view at Makerere. Over one-third of staff were involved in consulting and commissioned research at these universities, and at Ibadan and Makerere 31% and 25% of staff respectively were engaged in professional practice. The Heads of Department at Ibadan and Zambia were either self-seeking in reporting positively on these activities, or they recognize the positive impact which such activities can have on research, teaching and staff morale. At Makerere, with its very low salaries, perhaps these activities are out of control. Also evident is the view of Heads of Departments in Botswana, Ghana, Ibadan and Makerere, that in SA 4 secondary income earning activities have generally been very positive in terms of staff retention, although tending to have a negative effect on research activities.

Overall, these local variations may be of some significance within institutions, but in general it appears that Heads of Departments are of the view that secondary income earning activities have relatively little effect, either positive or negative, on the activities of their departments, except that they do acknowledge the positive effect on staff retention. This response appears to confirm the view that if secondary income earning activities can be controlled and "channeled" in the right direction, they can have beneficial effects, not only on staff retention, but on the research and teaching activities of a department and its overall reputation. They can also be positive attributes in a department's interaction with the wider community. Such activities should therefore be encouraged, but directed towards enhancing a department's academic quality.

Impact on departmental facilities: overall views. The query whether departmental facilities were affected by secondary income earning activities also elicited a rather bland response of "no-change" from the sample as a whole. The only exceptions are a slightly deleterious effect on vehicles (presumably through their misuse by academic staff when engaged in such activities), and a slightly positive effect on departmental library material, laboratory and scientific equipment.

Impact on departmental facilities: university views. At the level of the University, however, a stronger expression of views is evident. At Benin, secondary income earning activities were seen as having negative effects on all departmental facilities apart from library material, although these effects were relatively minor ("scores" ranging between 2.615 and 2.963). Makerere's response was similar, with only library materials and other departmental personnel scoring on the positive side of "no change." Botswana indicated a slightly negative impact on departmental personnel (2.967). On the positive side, however, all universities ranked secondary income earning activities as having a slightly positive effect in terms of departmental library material, and Ghana indicated that these activities have improved departmental supplies of computer equipment quite markedly. Zambia and Zimbabwe recorded a positive effect on departmental laboratory and scientific equipment, and a generally beneficial effect on departmental funding was noted in Zimbabwe. Again, not too much should be read into this analysis, but a positive "score" (3.00+) from all universities except Benin and Makerere indicates that secondary income earning activities can have a positive effect on a range of departmental facilities. Experience in

other countries indicates that this can certainly be the case: where secondary income earning activities are efficiently managed, "spin-off" benefits of departmental growth and expansion can be achieved.

Impact on departmental facilities: subject areas. An analysis of the impact of external activities on departmental facilities by subject area[17] within each university tends to confirm the overall result; Benin was very negative about the impact of such activities on departmental facilities, with positive benefits in respect of laboratory and scientific equipment, library material and personnel indicated only in SA 1. Botswana reported an improvement in departmental facilities in SA 2. In Ghana, departments within SA 3 were generally positive about the impact of secondary income earning activities, and in several subject areas departments confirmed an improvement in the availability of computer equipment through such activities. At Ibadan, Heads of Department in SA 2 were positive about the improvement of facilities brought about by secondary income earning activities. Makerere, like Benin, was generally negative towards such activities, with an improved position in respect of equipment and vehicles reported only in SA 4. Heads of Department in Zambia were generally positive, in respect of laboratory/scientific equipment, particularly in SA 1, SA 2 and SA 3. In Zimbabwe, secondary income earning activities appear to have had little impact on departmental facilities, apart from an improvement in general departmental funding in SA 1, SA 2 and SA 4.

The Heads of Department identified the following major issues through their comments:

- **Benin:** In general, secondary income earning activities were viewed as having had little effect on departments. An interesting "side statement" from many departments was that current staff are merely biding their time in the department and would leave the University when a better opportunity arose.

- **Botswana:** It was noted that the majority of citizen members of staff are earning some income through the ownership of cattle. The University retains 10% of income from external activities (particularly consulting and extra academic work) undertaken during office hours, and therefore accrues some income from the external activities of its staff. The overwhelming view was that staff in Botswana do not need to undertake such work because of the good salary. Nevertheless, several Heads of Department recognized that such activities associated with the discipline are an integral part of academic development and maintaining relevance within the department.

- **Ghana:** In SA 1 part-time teaching at other universities was seen as the main form of secondary income earning activity as there is little opportunity for consulting. Several departments commented adversely on a University policy which retains 51% of fees earned by academics through consulting activities. Many departments reported that engagement in other income generating activities was a necessity in order to live above the "poverty line," and indicated that it is merely the lack of opportunities elsewhere in the economy which keeps staff in the University. In addition, there was a strong "old-fashioned" view of consulting as "dirty" and against the academic tradition, with little appreciation of the advantages to be gained from academic staff having practical exposure and interaction with industry and business.

- **Ibadan:** Heads of Departments indicated a fairly good appreciation of the beneficial effects of private practice and consulting, particularly in medical areas, as a means of keeping in touch and interacting with the community. However, in many departments such activities were seen merely as a means to survive, with an adverse impact on the contribution an individual makes to the department. Apparently many staff at Ibadan have extended their sabbaticals in order to earn secondary income but, by and large, have returned to the University after two or three years. Several departments felt

[17] The Subject Areas (SA) are as follows:
SA 1: Physical sciences, engineering, technology
SA 2: Environmental sciences, biological sciences, agriculture, veterinary medicine
SA 3: Medicine, dentistry
SA 4: Management, business, economics, law
SA 5: Arts, education, social sciences

that the high incomes earned from consulting and professional practice might encourage staff to leave the University to pursue these careers full-time, but on the whole such activities were seen as having a positive effect in terms of staff retention.

- **Makerere:** Generally, Heads of Departments held a negative view of the impact of secondary income earning activities on teaching and research -- perhaps because activities with little relevance to an academic's career are fairly prevalent at Makerere. Many Heads of Department recognized that such activities are an absolute necessity in order to survive, but noted negative possibilities, such as staff becoming so successful outside the University that they leave, teaching becoming a part-time activity, and lack of research leading to lack of promotion and academic development. Apparently the official position at Makerere is that secondary income earning activities are not permitted, and therefore several Heads of Department were reluctant to discuss the topic, whilst others pointed to the need for the University to develop a coherent policy concerning such activities. The negative effect such activities have on the willingness of senior academics to undertake leadership positions was also commented on.

- **Zambia:** Heads of Departments were very positive about the beneficial effects of secondary income earning activities, pointing to the potential of consulting and professional practice to enrich lecturers and research programmes. The view was expressed that the University needed to control and co-ordinate consulting activity within a proper institutional framework in order to generate more consulting opportunities, rather than "forcing" staff to operate small businesses. The benefits of donor funded linkage programmes were graphically illustrated by a statement from the department of Mining that the most lucrative form of secondary income earning activity was to serve as a guest lecturer at the University of Zimbabwe on a GTZ sponsored programme!!

- **Zimbabwe:** As with the Department of Mining in Zambia, many Heads of Department view donor funded link agreements and projects as being in fact a means to earn secondary income. A strong view emerged on the benefits which consulting and professional practice bring to research and teaching programmes, and the consequent need to encourage such activities within an academic's discipline. Several Heads of Department commented that with good organisation, teaching programmes need not be adversely affected by the involvement of staff in outside activities. Interestingly, many Heads of Department confirmed a general impression from other sections of the study: that older staff were stable and unlikely to leave the department as they had managed to acquire housing and a vehicle when it was easier to do so, but that despite the relatively high entry level salaries for lecturers in Zimbabwe, younger staff were likely to leave in an effort to secure housing and a car. Many departments reported that without the ability to earn secondary income they would have suffered a greater academic staff turnover.

SUMMARY & CONCLUSIONS

The ability of academic staff to supplement their university salaries through income earning activities appears to be a crucial aspect of staff retention. Whilst many other careers allow an employee freedom and flexibility to engage in entrepreneurial activity, an academic life style presents some particular advantages, especially in relation to time flexibility. Managed and supported (e.g. through an efficient consulting company), academic staff entrepreneurial activity should be a positive tool to be exploited by universities to their own advantage in an overall staff retention policy (e.g. contributions to the department could be rewarded by improved promotion opportunities). However, university leaders tend to view secondary income earning activities adversely.

In many institutions such undirected activities may have usurped the primary role of staff, as the pressures to earn additional income in order to survive are overwhelming. Despite the general view from

Heads of Departments that external income earning activities have relatively little effect on departmental activities or facilities, it is suspected that the time commitment required by many academic staff to earn the relatively sizable amounts of money (which the staff-in-post survey indicates are being earned), must have a negative effect on their contribution to the department. Consequently, the conundrum is that without an ability to engage in secondary income earning activities many members of staff would clearly leave the university if they could, but that whilst they are engaged in such activities their contribution to the department may be reduced. Nevertheless, the overwhelming impression is that such activities are a positive feature in staff retention, and the trade-off of reduced commitment to a department is necessary in order to retain a member of staff's services. Staff involvement in activities related to an individual's discipline, which serve as the major means of earning necessary (or desired) additional income, should be encouraged and supported so as to minimize the negative effects on institutions.

Those universities without a clear policy on secondary income earning activities obviously need to develop one fairly rapidly. The next step may be to follow the example of Ghana in the establishment of an official university consulting vehicle. However, if it is correct that Ghana's consultancy centre retains 51% of an academic's secondary earnings, it is likely to result in relatively few academics channeling their external work through the centre. In most institutions academics are so busily engaged in external income generating activities that it is unlikely that anything but the most sympathetic and efficiently run university consultancy centre will have anything other than a minimal impact on existing activities, but useful interventions would include providing time management and other relevant courses for academics engaged in consultancy, and publicizing the successful activities of entrepreneurs who remain in the university.

Overall, this section of the study demonstrates a very large involvement by academic staff in secondary income earning activities, with fairly substantial earnings being generated. All staff see their ability to engage in these activities as a vital feature of staff retention, and even of staff recruitment. Heads of Department reported that the effect of such second career/moonlighting on Departmental activities and facilities is relatively neutral, having neither strongly negative nor positive effects. Unless negative effects have been deliberately downplayed by Heads of Department so as to justify their own possible involvement in external activities, this finding is significant, and contrary to the generally assumed position. Secondary income earning activities emerge in a favorable light, having a strongly beneficial effect on staff retention, whilst not impacting severely on the ability of university departments to undertake their mission. Consequently, such activities should be encouraged and supported, and used to build a vibrant working atmosphere which actively promotes the discipline and commitment to the institution.

CHAPTER 8

OVERALL CONCLUSIONS AND SYNTHESIS

INTRODUCTION

This project was commissioned to obtain information on academic staffing in a number of African universities, and to analyze the factors influencing academic staff to leave universities in Africa. The project was designed on the assumption that universities were losing staff rapidly and therefore their ability to carry out their mission was impaired. Thus, there was an implicit pre-supposition that the universities were in a crisis, with dire views of a "brain drain" reinforcing the simple visual image of decline and loss of quality which immediately strikes any visitor to most African universities. In this context, the results of the study are generally surprising, with some of the information tending to support the pessimistic "doomsday" scenario, but much tending to show a more optimistic picture of universities in relation to academic staffing. As the data for this study was gathered from seven selected, relatively well known, prestigious universities, generalizing for Africa as a whole from the sample may not be possible. But, it is felt that they are sufficiently representative for the findings of the study, which challenge several long held views concerning academic staffing in African universities, to carry weight.

As each chapter includes a summary of the conclusions drawn from the relevant section of the study, it would be redundant to reiterate all the points made previously. However, the evidence for the contrasting views of the selected African universities needs to be briefly brought together.

OVERALL CONCLUSIONS

FINDINGS WHICH SUPPORT THE CURRENT, PESSIMISTIC VIEW

Several findings of the study tend to reinforce generally pessimistic, widely held views about African universities:

- Staff-in-post are dissatisfied because their remuneration package does not enable them to reach or maintain a desired standard of lifestyle and, in particular, to acquire suitable housing and a vehicle.
- Salaries, in all the universities except one, are very low in US$ terms, and improve relatively marginally when converted using purchasing power parity exchange rates.
- Staff are concerned about deteriorating university facilities and declining standards of academic management.
- A significant proportion of staff (47%) indicated that, despite a very strong commitment to academia and academic priorities (such as promotion, research and publishing, and teaching), they would leave the university if a suitable alternative opportunity arose.
- Staff are involved in a range of secondary income earning activities which may impinge on their academic responsibilities.

- Staff are extremely concerned about the current poor state of the relationship between their university and government.

- Former staff of the selected universities tend to confirm the views of their colleagues in post, indicating that morale is low and that many left their university for a better salary and a more conducive environment.

- Institutional leaders state that their universities are finding it increasingly difficult to recruit new academic staff, particularly at the more senior levels, and are struggling to retain the staff which they have. They feel that the quality of teaching and research in their institutions and the general academic environment are rapidly deteriorating, and that they are managing in a crisis.

- Leaders feel that their academic staff are engaged in secondary income earning activities as a "necessary evil," but that such involvement is having a negative impact on university teaching and research functions.

- Data supplied by staff-in-post indicate that sizable proportions of staff in each university are engaged in activities such as running small businesses or a second job.

- Full professors are steadily diminishing as a proportion of staff-in-post as a result of rapid expansion in staff complements at other grades, with adverse consequences for academic leadership and research guidance, and the loss of even one professor exacerbates the ratio significantly.

- Some departments in several of the institutions are close to collapse in terms of the staff numbers in post.

- In most of the selected universities there has been no success in improving the proportion of female academics.

FINDINGS WHICH PRESENT A MORE POSITIVE/OPTIMISTIC VIEW

On the other hand, and perhaps surprisingly in the context of African universities, other information emerging from the study presents a different picture:

- Staff numbers are being maintained, and even improved (sometimes significantly) in most cases, except at the University of Zambia.

- The proportion of academic staff at each of the academic grades is generally being maintained: recruitment is not only at the lower level.

- Staff:student ratios are being maintained or have increased only marginally over the period of the study, and generally speaking are low, except in Business/Management/Law.

- Staff-in-post are well qualified and much more experienced than might have been expected.

- Staff-in-post are overwhelmingly national, with a significant proportion of expatriate academic staff only in Botswana, Zambia, and Zimbabwe.

- Academic staff are strongly committed to academia: their priorities are overwhelmingly to carry out academic work with a view to seeking promotion, to undertake research leading to

publications, and to engage in teaching; rather than to get involved in secondary income earning activities.

- Of the staff-in-post sample, 53% intend to remain in their current universities, and of the remaining 47% who intend to leave, 15% intend remaining within academia by moving to another university.

- An analysis of the career moves made and anticipated by staff-in-post indicates a net inflow of expertise to Africa.

- The secondary income which a very high proportion of the staff-in-post earn is good when weighed as a proportion of their university salary.

- A comprehensive survey of the Heads of Department in each of the selected universities indicates that, on balance, these secondary income earning activities are not seen as having a detrimental effect on departmental activities or facilities.

- The external activities most commonly engaged in are extra academic work (40% of staff), and consulting and commissioned research (38% of staff), both of which have the potential to benefit departments and universities.

- The collegial atmosphere of universities and the ability to determine one's own career and lifestyle are valued very highly by staff-in-post.

- A large proportion (75%) of the former staff of the selected universities indicated an intention to return to their "home" university if the financial package could be improved.

- The survey of conditions of service in operation in the selected universities indicated that the packages are, to a very high degree, apposite and well structured: the universities are on the right track.

- Conditions of service in most institutions offer good leave and travel benefits which, with staff development opportunities, are factors rated highly by academic staff.

The disparate views of universities which emerged from the study are apparently contradictory. The first view clearly accords with the generally accepted impression of African universities. The second is surprising, and tends to undercut many of the accepted assumptions which have become embedded in university management, policies governing university/state relationships, and the environment in which universities and donors interact. The overall conclusion of this study is that both views are largely correct, but that much greater emphasis and attention needs to be paid henceforth to the positive image which this study has demonstrated.

University staffing levels are much better than is generally accepted: all the universities except Zambia have increased their staffing levels in absolute terms over the study period, and although vacancy rates remain relatively high in several of the institutions, this is largely due to continuing increases in the establishment. The 1988 establishment targets would have been achieved in most institutions if the "goal posts" had not been constantly moved. This in itself is no mean achievement considering the generally adverse economic environment in which most of the case study institutions have been operating since 1988. Furthermore, staff:student ratios are not crippling (and certainly not onerous), and only reach high levels (1:20-30) in Business/ Management/Law (SA 4).

Aggregate staff loss appears to have been largely halted in the selected universities, and any severe losses which occurred must have taken place prior to 1988. Although this study was not designed and had no means of measuring the qualitative impact of changes in staffing patterns, it is probable that staff

turnover, which all universities apart from Benin and Botswana report to be high, does have a negative effect on quality. Conceivably, less well qualified or experienced staff are being recruited, and less experienced staff promoted. The quality loss implicit in high turnover rates is exacerbated by the prevalence of large numbers of staff on long leave, which adversely affects staff:student ratios and the ability of departments to function effectively.

Academic staff in the selected universities are fully committed to an academic life and academic pursuits. Although the need to "moonlight" (so as to augment very low salaries in inflationary economies with depreciating local currencies) may distract staff from meaningful research and teaching, their objectives remain strongly academic and orientated to progress within an academic career. Academic staff-in-post are clearly committed to the attractions of an academic lifestyle, which are largely identified as a discretion over time which is not available in many other careers; the opportunity to develop one's own career; interaction with students; excellent leave conditions; very good travel conditions in several institutions; and, in some institutions, privileged access to housing.

In general, therefore, although staff retention may be assisted by a lack of alternative employment opportunities in depressed African economies, and the developed world's slow recovery from recession, most of the universities in this survey deserve recognition for having maintained committed staff complements of a size adequate to service the basic needs of the universities despite the adverse conditions. University leaders should capitalize on their success in maintaining staffing levels.

AREAS REQUIRING CHANGE

ECONOMIC REVIVAL

The fundamental prerequisite for the revival of universities in most countries in Africa is economic development. As has been stated previously, unless national economies are growing, generating wealth and improving the standard of living, universities cannot expect significant improvement. Universities are not some form of privileged island, and academic staff cannot expect to be protected and sheltered from the vicissitudes of poorly performing national economies. It is submitted that if economic development in real terms is achieved, the condition of universities will also improve.

UNIVERSITY GOVERNANCE/FINANCING

University leaders need to actively engage their governments and interest groups in a debate and educational process to explore and advocate different ways of governing and financing universities. Universities have to find alternative funding mechanisms so that academic progress and quality is not entirely dependent on the largesse of governments or donor agencies.

The following elements of a new system of university governance have emerged over the past few years, and are generally supported by the data from this study:

- Complete university autonomy from government control.

- Removal of the university's direct dependence on government for funding through full cost student fees, with government entering the financial arrangement only as the provider (in conjunction with other national organizations and donors) of grants, loans and bursaries to students.

Given these reforms and the resilient track records of the universities, market forces will reshape them into more efficient, effective, productive and accountable organizations.

ACADEMIC STAFF: OPTIONS FOR CHANGE

Such a scenario provokes consideration of several queries/options with regard to academic staff:

- Do universities require as many staff or as many tenured staff? Could they operate with higher staff:student ratios, make more use of lower level support staff for routine teaching duties, and of part-time expertise, particularly in areas without active research programmes?

- Is there merit in facilitating the development of a "teaching only" academic career track, with higher teaching loads for non-productive researchers?

- What leave and travel benefits enhance the economic viability of an academic post? Can these benefits be maintained at current levels?

- How will the economic viability and success of teaching programmes be assessed? Which will be accepted, and on what criteria will others be discontinued?

- Would a reduced ability to personally determine work regimens and accountability be acceptable?

The root consideration is whether or not it is realistic for academic staff to expect high, fully competitive salaries, **together** with a relaxed work regimen, generous leave conditions, and a general lack of accountability. In the African context it may have to be a "trade-off" -- one or the other. Institutional leaders need to open a debate on the value of all parts of the academic staff remuneration package, allowing academic staff to balance salaries against leave, travel, free time, and self-control over work regimens.

UNIVERSITY LEADERSHIP

In order to achieve reform, fairly strong and assiduous leadership is required from university leaders and senior university management. This study has demonstrated a number of areas where a change in the attitude and style of university leadership is required and, equally important, in the range of information available to them to assist in managing their institutions. University leaders must become much more pro-active, and perhaps even aggressive, in dealing with their academic staff, students, and governments, with a view to moving the status quo along to a more rational system. In the current economic and political climate it will be very difficult for institutional leaders to embark on this type of reform programme -- the experience will be stressful. Therefore, it is suggested that a range of support systems and facilities could be developed for institutional leaders. These could take a number of forms, such as:

- Regular meetings with other Vice Chancellors, Registrars and Bursars in the region which would provide moral support and be a forum for exchanging ideas on moving universities from a state of total dependence on governments to a greater degree of independence, and for reviewing methods of regional co-operation.

- Participation in a structured way in the "informal" leadership network within their countries, through membership of business and service clubs; regular contact with leaders of the private and public sectors; and the running of vigorous, systematic and targeted public relations campaigns to explain to all sectors of the public the mission and current constraints of the university, and to highlight the benefits they can reap from the university.

In addition, within universities, institutional leaders require much better information. As has been suggested at several points in this report, the personnel office within each institution should be

considerably strengthened and given specific professional goals. For example, such offices may be required to make annual reports to the Senate (or equivalent academic body) and Council on:

- Turnover, recruitment and staffing figures for the past year and past ten years, by Faculty and Department.
- Number of vacant posts, requests for and success rate of recruitment.
- Vacant posts, with the date of establishment, number of previous incumbents, and a review of reasons for continuation of the post.
- The organizational climate broken down by Faculty and Department.
- The summarized career path plans prepared for individual members of staff.
- Exit interviews and the analysis of factors which encourage staff to leave and factors which, when highlighted, encourage staff to retract resignations.
- The employment destinations of former staff.
- The costs associated with recruitment, appointment, termination of contract, etc.
- Extended staff leave statistics for the past year and during the past ten years.

RESEARCH ENVIRONMENT

It is absolutely imperative for the success of any staff retention policy that a conducive research environment be provided, even where high salaries and otherwise excellent conditions of service exist. Arguably, research is the single identifying feature of universities, and has been shown to be the major priority of in-post and former staff. Donors can play a major role in assisting with the improvement of the research environment, but the following are a number of recommendations which may warrant attention:

- Support for the research board concept, perhaps based on the Zimbabwe model, whereby individual academics or groups are able to compete for grants, large or small, to undertake meaningful research, with the initiative coming from the academics themselves.
- Based on a belief that professors need to be retained in order for universities to improve their capacity to undertake research, it is evident that all universities in the study need to build up reservoirs of professors across a fairly wide age range as soon as possible. Features more appropriate to their seniority and status need to be developed:
- Active, successful research units (rated by international reputation and measured by secondments of scholars from elsewhere in Africa, the demand by younger scholars to join the team, publications by younger members, PhDs achieved, etc.), led by high profile professors, will prove a major point of attraction for academic staff, even if salaries are low.
- Universities might consider special ranks for professors who lead these units between the current professorial ceiling and the level of Pro-Vice Chancellor.
- Research institutes within a country which are currently attracting professors away from universities should be approached and, where possible, brought within the ambit of the university.

- Donors may be particularly interested in assisting with the establishment of regional centres of excellence, with clear goals of international eminence in a specified line of research, led by established professors, and staffed on a part-time basis by lecturers from the home and regional universities.

- Support for attendance at conferences at which papers have been accepted.

OTHER AREAS REQUIRING ATTENTION

Housing: The views of in-post and former staff indicate that the strong preference would be for some form of home ownership, but with the systems for assisting employees to acquire their own homes ineffective, except in Botswana, a solution to this problem will require imagination, innovation and funding. It is evident that merely paying a higher salary is not necessarily the solution to the housing problem -- what is essential is an effective national housing supply and financing system.

Vehicles: Some means of supplying academic staff with access to vehicles is clearly a priority. Botswana has demonstrated that with an effective open market for the supply of motor vehicles, good salaries can produce the necessary result, but in other countries it appears that some form of innovative vehicle loan scheme is called for.

University facilities: The very strong commitment of academic staff to academic pursuits is a key resource and must be capitalized upon by improving university facilities such as the library, computers, support services (secretarial, photocopying, printing), and the effectiveness of the administration. Whilst many of these will depend on adequate funding, the effective management of current facilities is equally important.

AREAS FOR FUTURE INVESTIGATION

This study did not attempt and was not able to measure whether staff turnover affected quality -- whether newly appointed or promoted staff are of the same quality as those who leave. Undoubtedly, experienced staff are missed when they leave, and Institutional Leaders may be correct when they imply that staff are being recruited and promoted with lower qualifications and experience than previously. However, there does not appear to be any hard data on the question of academic staff quality. A research programme which explores aspects of quality and which poses the following questions appears to be necessary. What methods are being used to assess the quality of staff and the performance of their duties? Are duties being performed less effectively than before? If so, why is this so, from the viewpoint of both lecturers and academic leaders? What facilities and support do new staff need to perform as effectively as past generations? Are experienced staff supporting newer staff? Are universities taking adequate measures to arrange the understudying of experienced staff?

An audit of research and teaching strengths at all levels may produce a more optimistic picture of the quality of newer staff. Such an audit might be instituted as a joint venture of African professors charged with highlighting the strengths of their subject areas, and perhaps rating each area in a manner similar to the British practice -- national competence, regional competence, international competence. This exercise might be a useful forerunner to the development of regional centres.

As suggested in Chapter Three, research is needed on comparative costs of living and purchasing power parity exchange rates as applied to university remuneration packages in order to allow fairer and more accurate comparisons to be made between African university packages and between African universities and other universities/employers.

A programme to develop African university statistical records is required, measuring in particular staff:student ratios on a full time equivalent basis in the same manner in each institution. In addition,

based on experience elsewhere, it should be possible to develop norms and formulae for determining staff establishments, work load, contact hours, etc.

The development of accurate but not overly elaborate or cumbersome systems to establish unit costs, and the consequent full cost economic fee in African universities and their departments, is an urgent requirement which could be a useful project for a team approach bringing African and British, North American or Australian expertise together to advise African universities wishing to make progress in this area.

This study did not explore the impact of the AIDS epidemic on academic staffing in African universities. With studies reporting over seven million African adults infected with the HIV virus, AIDS will have a significant impact on population growth rates and economic development, and much greater proportions of each country's resources will need to be diverted to health care and social welfare. These factors alone will adversely influence university development, and management needs to take cognizance of the problem and plan for the probable negative impact of AIDS on university staffing patterns.

FINAL REMARKS

In conclusion, this study confirms a number of the negative perceptions of universities in Africa. It has demonstrated that remuneration packages are generally poor and non-competitive, and their lack of purchasing power is the major source of academic staff dissatisfaction. However, much of the information is positive, showing the case study universities to be survivors under very difficult circumstances. The ability of most of the universities to maintain or increase their staff complements over the study period, and to hold increases in staff:student ratios to reasonable levels, is nothing short of remarkable. The commitment of academic staff in an adverse environment is a major positive feature of the African university world, and a credit to the staff and university leaders. This strength should be used to advance the case of the universities: they are robust institutions with academic staff committed to a relatively selfless cause. The fact that they have survived, and done as well as they have in terms of academic staff recruitment and retention, indicates that they are sound institutions to support. Governments in particular might be pleasantly surprised by these results, and may be persuaded to negotiate a compact which places the funding of the universities on a rational basis and which encourages the participation of multiple sources of support and funding for the revitalization of universities without replacing the Government by some other controlling paymaster. The universities are hardy, vibrant institutions, and given the opportunity to operate without constraints in a market related environment, and with full responsibility and accountability for their service and development, they could come to serve national development requirements far more effectively than is possible in the current circumstances.

APPENDIX 1

METHODOLOGY

The study was composed of case studies of seven African universities, selected by the DAE Working Group on Higher Education (WGHE) and the Commonwealth Secretariat. The universities selected and funded by the WGHE were: the National University of Benin (Benin), the University of Botswana (Botswana), the University of Ibadan (Ibadan) in Nigeria, Makerere University (Makerere) in Uganda, the University of Zambia (Zambia), and the University of Zimbabwe (Zimbabwe); with the Commonwealth Secretariat funding the study at the University of Ghana (Ghana). In addition, the study attempted a survey of African academic staff working in various institutions in South Africa, in an attempt to establish to what extent South Africa was proving a magnet for academics from elsewhere in Africa, and the reasons for their choosing to go to South Africa.

The study was undertaken entirely through the use of questionnaires, followed by analysis of the data supplied through the completed questionnaires. The project was not designed to include a literature review, as the intention was to focus entirely on the data generated through the questionnaires.

The Co-ordinator of the DAE WGHE and the Director of the Education Programme within the Commonwealth Secretariat, with the assistance of the appropriate Vice Chancellors, identified a member of staff in each of the seven institutions to serve as the Institutional Co-ordinator (IC). The major role of the IC was to co-ordinate the study within his/her institution and liaise with IRT/Speciss Consulting Services (ISCS) in Harare. The ICs appointed by their Vice Chancellors were:

University of Benin
M. Ambroise Medegan
Chef Service Des Relations Internationales et Publiques

University of Botswana
Dr. S. Ndzinge
Head, School of Accounting and Management Studies

University of Ghana
Mr. S.N. Woode (deputed to Ms Alice Lamptey)
Director, Consultancy Centre

University of Ibadan
Prof. M.O. Filani
Department of Geography

Makerere University
Mr. Mohammed Mayanja
Acting Director of Planning

University of Zambia
Dr. Davison Theo
Dean, School of Natural Sciences

University of Zimbabwe
Mr. Wilfred Mukondiwa
Director, Appointments and Personnel

During February 1993 the questionnaires detailed below were developed:

- **Academic Staffing Data Questionnaire** - to obtain statistical information on the establishment, vacancy rates and details of occupied posts in each department in each of the seven institutions for each of the three years of the study, 1988, 1990 and 1992.

- **Staff-in-Post Questionnaire** - for completion by academic staff currently in post in each of the seven institutions. [Translated into French for Benin.]

- **Former Staff Questionnaire** - for completion by academic staff who had left the seven case-study institutions and by African academics from other institutions identified as working in institutions in South Africa. [Translated into French for Benin.]

- **Conditions of Service and Comparability Questionnaire** - for completion by the IC at each of the seven case-study institutions.

- **Institutional Leaders Questionnaire** - for administration by the IC to the senior academic and administrative leaders in each of the seven institutions.

- **Secondary Income-Earning Questionnaire** - for administration by the IC to Heads of Departments in each of the seven institutions. [Translated into French for Benin.]

- **Overall Summary** to be prepared by the IC at each institution.

In order to track patterns and trends by subject, the concept of "subject areas" was used for this Study. Departments were assigned to subject areas irrespective of how they might be assigned to Faculties or Schools within each institution. The subject areas (SA) were as follows:

SA 1:	Physical sciences, engineering, technology.
SA 2:	Environmental sciences, biological sciences, agriculture, veterinary medicine.
SA 3:	Medicine, dentistry.
SA 4:	Management, business, economics, law.
SA 5:	Arts, education, social sciences.

The staff-in-post questionnaire was pre-tested on a number of academic staff at the University of Zimbabwe (UZ) during February, and the Academic Staffing Data and Conditions of Service and Comparability questionnaires were reviewed by the UZ IC.

All the questionnaires were accompanied by explanatory notes for use by the IC, and where necessary by a letter to the person asked to complete the questionnaire. All the material was submitted to the DAE WGHE Co-ordinator at the end of February 1993 for review and approval. Approval was forthcoming in early March, and all the documentation was finally prepared and printed for dispatch to six of the universities on Friday 26 March 1993. The translation into French of some of the material for Benin delayed the dispatch of material to that institution until 2 April 1993. All the material was dispatched to the universities in large DHL packages, and was therefore received by each Institution by the end of the first week of April.

The ICs were requested to adhere to a number of deadlines for ensuring the distribution, completion and return of the completed questionnaires to ISCS in Harare as follows:

Names and addresses of former staff from each department	16 April 1993 (Benin: 30 April 1993)
Staff-in-post Questionnaire	30 April 1993
Academic Staffing Data Questionnaire	30 June 1993
Conditions of Service and Comparability Questionnaire	30 June 1993
Institutional Leaders Questionnaire	30 June 1993
IC's Overall Summary	30 June 1993
Secondary Income Earning Questionnaire	31 July 1993

Unfortunately, in several instances these deadlines were not met. Only the staff-in-post questionnaires and forms with the names and addresses of former staff were received from Ibadan. Apparently the disruptions in Nigeria during the year and the slow receipt of funding for the project - especially advanced to Ibadan ahead of completion of the tasks - resulted in the majority of questionnaires not being completed.

On 22 March 1993, a letter was dispatched to 25 institutions in South Africa seeking names and addresses of academic staff recruited by them during the previous five years from universities elsewhere in Africa.

The lists providing the names and addresses of former staff from the seven institutions and from South African institutions were unfortunately also submitted long after the stipulated deadlines by several institutions, thus further delaying the project schedule. In any event, the usable names and addresses received from all sources were entered into a database and on 4 June 1993 approximately 400 questionnaires were mailed to former staff of African universities, with a request that the questionnaire be returned by 23 July 1993.

On receipt of completed questionnaires, data were, in the majority of cases, entered into a computer and analyzed either simply through a spreadsheet or, in the case of the staff-in-post and Former Staff questionnaires, using the Statistical Package for the Social Sciences (SPSS) program. Further details concerning the response rates and details of methodology are provided in each of the chapters.

APPENDIX 2

PRELIMINARY REPORT: DAE WGHE MEETING, SEPTEMBER 1993

A Preliminary Report on the study was presented to the DAE WGHE meetingheld in Dar es Salaam on 21 and 22 September 1993. As the Preliminary Report was presented whilst the study was still underway, only Chapters Two and Three were close to completion. Due to the delays in the submission of several of the questionnaires, the other chapters could not be reported upon at the time of the Dar es Salaam meeting. The comments and views of the delegates at the Dar es Salaam meeting have been taken cognizance of in the preparation of this Final Report. Several of the delegates were concerned at the generally optimistic tone of the report on the basis of the data presented in Chapters Two and Three. Where appropriate, the amended discussion in those chapters now qualifies some of the interpretation of the data and indicates where the generally fairly positive statistical data may be misleading in terms of qualitative factors within each institution.

A number of Vice Chancellors present at the Dar es Salaam meeting raised questions concerning the accuracy of some of the statistical data presented in the Preliminary Report. Those who did so were asked to supply corrected data as quickly as possible after the meeting. It is pleasing to note that those universities which raised queries have all reported back, confirming that the statistical data incorporated in the Preliminary Report, and now incorporated in this Final Report, were accurate.

Although the Terms of Reference for the study deliberately excluded any examination of student numbers and staff:student ratios, the Dar es Salaam meeting agreed that the consultants should attempt - however cursorily - to obtain student numbers from the case study institutions in order to track the trend in student numbers in relation to the trends in establishment growth and staff recruitment. It was not possible, in the limited time available, to obtain accurate student numbers from all institutions, but the data obtained have been presented at the appropriate sections in Chapter Two.