



Widening Access in Higher Education in Zimbabwe

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Higher education in Zimbabwe is undergoing changes mainly because of the rapid expansion that started in 1999. The current situation is that higher education is going through a series of crises due to the fact that government subventions are diminishing in real terms as a result of the decline in economic growth, yet at the same time, student enrolments are increasing very rapidly due to increasing demand for tertiary education. Universities are critical to the development of any nation. In the developing countries, they are often the only institutions with the capacity for the development of high-skilled manpower, technology transfer and generation of new knowledge. With increasing globalization, it is natural that when such institutions are in a state of decline or stagnation, research and international attention come to the forefront. This paper reviews the development of higher education in Zimbabwe with a particular focus on universities, as the country moves from an elite to a 'mass' education system. It critically analyses the factors impacting on access and the quality of higher education before drawing conclusions. As resources become scarce there is a tendency for political intervention in the resource allocation process. The paper argues for the adoption of a transparent formula for allocating resources under a supportive higher education policy framework. It postulates, as a way forward, that the ultimate goal for improving efficiency and effectiveness in African higher education lies in a transparent formula for resource allocation that rewards performance, not withstanding, adequate public funding.

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Introduction

Higher education in Zimbabwe is going through a series of crises. It is characterized by under-funding and rapidly growing student enrolments. In the past few years, student protests have been frequent. Some of the demonstrations have been violent. A lot of property has been destroyed on at least one large campus and the university had to close temporarily. Clashes with the police are common when the protests take place. Staff have been leaving for



greener pastures as a result of poor working conditions and low remuneration. The oldest and more established institution is finding it difficult to maintain its buildings and equipment let alone recruit and retain staff. Library books are old and there is not enough money and foreign exchange to order journals. The new institutions do not have sufficient funds to build the necessary infrastructure. To compound the problem, the institutions do not know how their subventions are calculated by Treasury even though they are involved in negotiations on the basis of which Treasury makes the final decisions. There are striking differences between the university allocations that cannot be explained by enrolment figures. In general, this budgeting process makes it difficult to engage in long-term or strategic planning.

This paper argues that for stability to prevail, there must be a strong supportive policy framework (Ziderman and Albretch, 1995; World Bank, 2000b). The government should introduce an objective and scientific way of allocating resources to higher education. The paper focuses on resource allocation to universities, even though higher education in Zimbabwe consists of other institutions such as Teacher Training Colleges, Polytechnics and Vocational Training Centers.

The major issues reviewed in this paper are governance, funding, access and quality. The Zimbabwean reform of higher education is consistent, with developments worldwide. Johnstone (1998) observes the following five themes in the trends of reform:

- (i) Expansion and diversification of enrolments, participation rates, and number and types of institutions
- (ii) Fiscal pressure — as measured in low and declining per student expenditures and as seen in overcrowding, low-paid faculty, lack of academic equipment or libraries and in dilapidated physical plant.
- (iii) Markets — the ascendance of market orientations and solutions and the search for non-governmental revenue.
- (iv) The demand for greater accountability on the part of institutions and faculty and on behalf of students, employees and those who pay.
- (v) The demand for greater quality and efficiency.

Higher education in Zimbabwe is going through rapid expansion and all the above trends, except markets, are discernible, although not to the same extent as larger systems found in the developed world.

By way of comparison, when the UK decided to move towards mass higher education there were radical changes that were made to the funding of higher education. Williams (1998) observes that the introduction of tuition fees was one of the major changes. Hitherto the government had borne the full cost of higher education. Maintenance grants were to be abolished and loans increased to cover maintenance. The argument used in introducing fees is that those who

go through higher education have private benefits in terms of better employment opportunities and better salaries. They were therefore to contribute to the cost of higher education provision. In introducing tuition fees, the government was cognisant of the equity issues and therefore in order not to disadvantage the poor the fee levels are based on means testing.

In developing its policies on higher education Zimbabwe lays emphasis on equity issues, although the effectiveness is not achieved mainly because the implementation lacks enforcement mechanisms. An example is the processing of loans that are supposed to be awarded on the basis of means tests. There are loopholes in the system, such that unintended beneficiaries manage to access the funds.

The Context

There is rapid expansion of the higher education system in Zimbabwe, which began in 1999. This is in response to the very high demand, which has been increasing since independence in 1980. One of the major policy decisions taken at independence was to increase access in education. Prior to 1980, less than 20% of the students who completed primary education could proceed to secondary school in the academic stream. At independence, this bottle-neck was removed and the transition rate increased from 20% in 1980 to 86% in 1981. By 1996, the rate had gone down to 70%. This was a dramatic increase that impacted heavily first on the secondary school infrastructure and large amounts of resources had to be directed towards secondary school expansion. After some 6 years, the consequences of the policy on widening access started being felt at the tertiary level, in particular at the only public university in Harare and the few colleges that were involved in vocational, technical training and teacher education.

There has been only one university located in Harare since 1957. It was not until 1991 when the second state-funded university was established in Bulawayo, the second largest city in the country. The university was to have a strong bias in Science and Technology. Then from 1995 began a period of rapid expansion of the higher education system with particular emphasis on increasing university access. There are now six public universities with two more to be established soon. In addition, there are five private universities. The system is still small in terms of total enrolments (Table 2) compared to systems in the developed countries. But for a country whose population is 11.6 million, such an expansion as is going on currently is too rapid. Arguments have been made in support of higher education as an engine for economic development. However, the quality of the education is important for it to make a significant contribution.



Demographic and Socio-Economic Factors

There are several factors that have influenced the shape of higher education in Zimbabwe. One of the factors is rapid population growth, which has been a major contributor to the pressure on access. Zimbabwe has a population growth equal to the world average of 1.1%. The sub-Saharan Africa has population growth rate of 2.2%, which is double the world average (World Bank, 2000a). The growth rate for high-income countries is 0.3%, with Europe experiencing a negative growth of -1%. These statistics show that Africa has pressure from a young and growing population to consider in terms of access to education. The rapidly growing population has serious consequences on resources and this is evident in the burden that governments have in funding higher education. The rapid growth of population is likely to slow down due to the HIV/AIDS pandemic. The pandemic has had a heavy toll on the productive age range of 15–45 years. Any planning of higher education has to take into account the effects of HIV/AIDS, which is likely to reverse the gains in development to date. For instance, the literacy levels of 15–24 year olds rose from 95 to 98% between 1992 and 1999 (UNDP, 2003). There are already signs of stress in the education sector as a result of HIV/AIDS mortality and morbidity of staff students and parents. The number of vulnerable children is on the increase.

Zimbabwe like many African countries has been affected by a serious ‘brain drain’ due to poor salaries and unattractive working conditions. The universities are therefore unable to attract staff or retain those lecturers who they employ currently. Many academic staff have emigrated to the neighbouring countries of South Africa and Botswana. The World Bank (1994) notes that some 23,000 qualified academic staff are emigrating from Africa each year, in search of better working conditions. The figure is global and therefore may not give a clearer picture of national and regional variations. What is clear is that there is a nett loss from the African continent. This brain drain has already affected the oldest and most established university in Zimbabwe where some departments are threatened with closure. The new universities have a different problem and that is of finding the expertise to establish new departments and programmes to satisfy their mandates.

The Economy

The Zimbabwean economy, which is agro-based, has not been growing fast. In 1997, it grew by less than 1%. In the 1980s, on an average, the economy grew at around 3–4% tending towards stagnation, while in the period 1998–2000 there was a negative growth. This has been caused by a number of factors, such as prolonged droughts, hyperinflation and a critical shortage of foreign

exchange. The country has made a number of attempts to turn around the economy starting with the Economic Structural Adjustment (ESAP) programme in 1991, but the economy has continued to decline. Because of this decline in economic growth, the government is finding it difficult to provide all the funding required in higher education and other sectors. Yet the demand for higher education has increased tremendously in the last few years.

The expenditure per student in Zimbabwe tertiary education is over 300% of GNP per capita, yet for primary education, it is only 19% of GNP per capita (World Bank, 2000a). This phenomenon is a result of the rapid expansion of the university sector, which began in 1999. The expansion is demand led.

In Zimbabwe, the participation rates at tertiary level of 7%, remain low compared to the high-income countries where the average rate is 59%. However, the World Bank (2000a) also shows that, in Zimbabwe, 24% of all tertiary students are in Science and Technology. This compares very well with the average of 25% in the high-income countries. Table 3 shows that an overemphasis on higher education is largely a result of political decisions that may not necessarily be economically sustainable.

Role of Government

The role of government in higher education in Zimbabwe can be described as 'state supervision' (Neave and van Vught, 1991). In this model, the state plays a major role in providing funds for education. It also gives direction on policy through the Minister of Higher Education. The universities enjoy a good deal of autonomy and academic freedom compared to the European system. They determine the curricula and hire the staff who teach and conduct research without the interference of government. The government has indirect control of the institutions. It is represented on the university councils where institutional policy is discussed. The only area where government has some form of direct control is through the appointment of the senior officers such as the Vice Chancellor, Pro Vice Chancellor and Registrar. Even in this function, the government consults the University Councils before an appointment is made. When one compares the relationship between the state and universities in other parts of the world, one can conclude that the government's role in higher education in Zimbabwe is, in fact, *laissez-faire*. While the autonomy of the institutions is healthy, it is the lack of central coordination that is undermining the sector and leading to the decline of higher education.

The universities operate under an Act of Parliament. The relationship between the government and the universities is very loosely defined. The Act simply states that, 'the Minister of Higher Education shall give direction in matters of policy'. This clause has been widely interpreted by various ministers



and the universities have experienced both extremes of state control, the tight and the laissez-faire.

Funding

In the past few years, there has been a tendency to increase funding for higher education as opposed to primary and secondary education (Table 1). Higher education is wholly funded from the fiscus. The students' tuition fees cover 3% of the operational grant, but with the new fees approved by Cabinet in 2001 this percentage is set to increase.

In Zimbabwe, a significant amount of government expenditure is devoted to education and recently an increasing proportion is being invested in higher education as illustrated in Table 1.

In the case of all state-funded higher education institutions in Zimbabwe, the allocation of budgets from treasury is conducted on historical lines, adjustments being made at the margin in the light of the overall national budget. Rarely are the institutions asked to justify their requests from first principles. They do not use zero-based budgeting terms. The institutions also use historical lines for their own internal allocations.

The method of resource allocation does not provide incentives for efficiency and improved quality in the management of these institutions. In fact, in the past the method has encouraged the inflating of bids or estimates as a method of ensuring the maximum grant.

There have been discussions on the introduction of formula-based funding. These discussions were prompted by the proliferation of new state-funded universities that started in 1999. The Council for Higher Education, which would be given the responsibility for disbursing funds, is yet to be given the mandate. Currently, the Ministry of Higher Education makes representations to Treasury on behalf of institutions for funds. Once grants are approved, the ministry handles the disbursements.

Table 1 Education expenditure as a percentage of GDP

	<i>Education</i>	<i>Higher education</i>
1996	8.21	0.52
1997	8.02	0.62
1998	6.68	1.55
1999	6.10	1.20

Source: Zimbabwe National Accounts, 1985–99.



Resource Allocation at System Level

The government currently uses a negotiations-based approach with individual institutions to decide on the budget for the year. The figures arrived at are then incorporated in the Ministry of Higher Education overall budget. The method has worked well in the past because for a long time there was only one university and a few colleges. With the recent expansion of the sector, which now has over eight universities, several vocational and technical colleges and teacher training colleges, a review of the approach is now necessary. Ziderman and Albretch (1995) claim that this method of resource allocation magnifies government control over institutions. In Zimbabwe, the situation is slightly different because once the grant has been allocated, the government allows institutions to redeploy resources with the exception of the capital grant. That notwithstanding the method has little room for incentives and does not promote efficiency. The current problems, however include:

1. Reduced funding so that the funds provided are far less than the bids from the universities. Much more serious is the fact that the increases are far below inflation levels. The country is experiencing hyperinflation.
2. The negotiations are done by civil servants who are not well informed regarding the needs of the institutions, although they are competent finance personnel.
3. The university that has a Vice Chancellor who can lobby the ministry officials successfully and prepares a good case can receive a better allocation. In other words, financial decisions may not necessarily be made on hard data.
4. The budgeting is annual and therefore planning is short term. Strategic planning becomes impossible given the short horizons.
5. Absence of a database to provide a holistic picture of the university base line data essential for resource allocation.

Funding sources and mechanisms have a powerful impact on the way resources are used and also on performance of institutions as well as of individual staff. In Zimbabwe, a much more scientific method is required to increase transparency and efficiency in resource allocation at the system level. A formula-based method of resource allocation would be the first step before performance-based funding is introduced. Jongbloed and Vossensteyn (2001) state,

The major advantage of funding formulas is that because they use objective criteria they provide a clear insight into the distribution of funds among higher education institutions. Therefore they facilitate comparison (p. 130).



There are some exceptional developmental situations, such as new institutions, that may need block funding in the transitional period. The use of formulae is often the first step in developing a system of performance-based funding. There are some limitations in formula funding but they do not outweigh the benefits. Formula-based funding has been critically debated in the literature (McKeown, 1996). For instance, use of formulae may lead to a common level of mediocrity because units or institutions are funded on the same quantitative grounds rather than on the basis of qualitative assessments. Other problems include fixation or stereo-typing of parameters that perpetuate inequalities.

In the Zimbabwean context, a more flexible approach in implementing formula funding would be necessary because there are new institutions that would be disadvantaged if, for example, the formulae used solely student numbers. A combination of formula funding and earmarked or block funding is necessary in the transitional period.

In many African countries, there is normally some differences between the government perception of what the universities are about and what the university staff perceive the role of the institution should be. A 'strategic fit' between the government's goals and those of the university would result in improved performance of university staff and institutions as a whole.

Financial Diversification

As the burden of financing higher education and education in general increased, the government had no option but to consider alternative ways of funding. In 2001, the government adopted a new policy of charging tuition fees but the policy is being resisted by students who fear that the poor students will be marginalized. Bollag (2002) states that while charging fees appears to be the only option for the survival of the African university and although it is increasingly winning support from the African educators, it will make access to higher education even more dependent on wealth rather than on merit. Because of student pressure, the loan scheme in Zimbabwe has operated rather differently from the common schemes. All students even those at private universities access the government loans for tuition and those at public institutions get an additional amount for maintenance. While the government has managed to recover some of the money at nominal interest, the methods of collecting the debts have been ineffective leaving large amounts uncollected. Therefore, the loans have by default turned into 'grants' as government has had to write off the outstanding amounts.

Financial diversification goes beyond the contributions of the stakeholders to include an entrepreneurial approach by universities. There has not been much progress by Zimbabwean universities to generate their own income and



to reduce dependence on government (Blair, 1992). The main reasons for their failure include lack of capacity, human and financial, a legal framework governing university operations that inhibits entrepreneurial activities and a generally poor economic environment. In Zimbabwe, the universities have earned about 1% from other sources and the rest comes from the government. The activities such as farming and running bakeries have since been found to divert both attention and resources to non-core activities of the university. Only consultancy work remains as a relevant academic activity for income generation. Owing to the brain drain, the potential of consultancies in generating income for universities remains unexploited. Studies on income generation have shown that other than charging economic fees, sources such as conference trade, short courses and consultancies can at best yield 10% of the income of a university (Ziderman and Albretch, 1995). Blair (1997) estimated that African universities cannot generate more than 6% from such sources. Williams (1992) notes that there has been an increasing proportion of income of higher education institution, which is earned directly through the sale of specific academic services. He estimated that if fees were included in the figure, it would come to 47% of the recurrent income of the university sector. The University of Makerere is a classic example of how a university can turn around a situation of decline to stability through charging an economic fee for private students (Court, 1999). The Makerere example illustrates the point that for an institution to raise a greater percentage of its revenue outside government subventions, economic fees would have contributed substantially. Makerere raises up to 40% of its revenue from private students.

Woodhall (1995) states that there are a number of conditions that need to be satisfied in order to increase the chances of successfully implementing loan schemes. These include an effective design and monitoring of programmes, capacity building to provide appropriate administrative, and institutional frameworks and consensus building to ensure widespread understanding and acceptance of schemes.

Higher Education Shape

The two main aspects of Zimbabwean higher education under examination are access and quality. They are inter-related and have been influenced by the above factors to various degrees.

Access

Up till 1989, there was only one university in Zimbabwe and that is, the University of Zimbabwe which was established in 1957 in Harare. There were



only 2,000 students enrolled. Today, there nearly 40,000 students studying at 12 universities in Zimbabwe, out of which four are private.

It is estimated that Zimbabwe has an excess of some 8,000 students annually who qualify but fail to enter university. Over 22,000 students sit for 'A' levels each year and about 14,000 qualify to enter university. The Zimbabwe Open University is a distance education university and already has the largest enrolment with some 24,000 part-time students. It is not included in the list of those institutions that offer full-time programmes.

Many students who fail to enter universities in Zimbabwe go to South Africa and overseas. These statistics indicate great demand for university education. It is increasingly difficult for the country to increase access to higher education without increasing costs. Zimbabwe is moving from an elite higher education system to a 'mass' system. The financial implications are enormous. Already the expenditure on higher education is too high compared with other countries (Table 3). The ideal is noble but the practicalities are full of challenges. The participation rates in higher education are low as shown in Table 3 but the strategies for moving to mass system are limited to public funding at present. Only recently has the government introduced fee paying, which is being resisted by students who have hitherto been supported by grants and loans. The grants have been discontinued and loans covering tuition and living expenses have been introduced. The recovery mechanisms for loans have not been effective and most amounts are simply written off. In the end, it is still the government bearing the bulk of the higher education costs.

Table 2 shows that the enrolments almost trebled in the 7-year period. However, the question arises whether there are economies of scale in the institutions given that the total enrolment could be a reasonable population of one or two universities. Why such a proliferation of institutions? Part of the explanation is that political considerations were more influential than economic factors. Table 3 illustrates the point that the system is being sustained by high public expenditure which may be at the expense of other sectors. Despite the heavy subsidy from the state the facilities at the universities remain inadequate.

Private universities

The contribution by private universities is very small, both in student enrolments (Table 2) and programme offerings, yet there is so much hope that these institutions could provide a solution to the current demand for higher education. Banya (2001) argues for the development of private universities as one way of alleviating the burden on central government. The experience in Zimbabwe is that the enrolments are quite small and the disciplines are concentrated in the humanities. While the contribution of

Table 2 University enrolments

<i>Year</i>	<i>Total enrolment at public universities</i>	<i>Total enrolment at private universities</i>	<i>Total</i>
1995	11,784	568	12,352
1996	16,166	933	17,099
1997	22,991	926	23,917
1998	17,586	1,485	19,071
1999	26,122	1,706	28,192
2000	29,390	1,534	31,339
2001	33,334	1,419	34,753

Source: Ministry of Higher Education (2003), Zimbabwe.

Table 3 Participation rates and public expenditure in higher education in selected countries

<i>Countries</i>	<i>Participation rates in higher education</i>		<i>Public expenditures as % of GNP per capita</i>	
	<i>1980</i>	<i>1997</i>	<i>1980</i>	<i>1997</i>
Canada	57	90	38	39
United Kingdom	19	52	79	40
United States	56	81	42	24
Malawi	1	1	1,839	1,593
Zambia	2	3	605	356
Zimbabwe	1	7	324	340

Source: Adapted from World Bank (2000a).

private universities is growing, at the moment it is far less than that from the state universities.

The private universities in Zimbabwe are mainly supported by church foundations and charge 'full cost' fees. The difference with other countries is that students from private universities are supported by loans from government. Therefore, the state is still making a contribution in private universities by providing soft loans to students. Private universities make a substantial contribution to the capital investment. Thus at the system level they play a major role.

The private universities, which originally started in order to provide higher education in a religious environment, have found themselves filling a gap where state universities could not satisfy demand. According to Banya, expectation of a high return on investment and the existence of restrictive access routes to publicly funded higher education, may lead to an expansion of privately funded higher education, to take up the slack in demand over supply.



Table 3 shows that advanced countries have higher participation rates than the selected countries in southern Africa. In addition, the advanced countries' public expenditures on higher education, expressed as a percentage of the GNP, are lower. The expenditures have declined significantly meaning that the contribution from tax payer has been reduced. The high expenditures by the African countries indicate great efforts to increase participation. Indeed, for Zimbabwe the policy to widen access to education was clearly enunciated in 1980, when the new democratic government decided to increase participation for the majority of the blacks who had hitherto been disadvantaged.

Quality

The monitoring of quality in higher education with particular reference to universities has largely been left to the institutions themselves. While this arrangement has worked so far, there is need to review the situation because the number of universities has increased and will continue to do so. Trends elsewhere show that it is necessary to have a central coordinating body once there is a university system. In Zimbabwe, a Council for Higher Education was established by act of Parliament in 1990. It took some time to be operational. Part of its mandate is to have an oversight over the quality of the work of universities and other institutions of higher education. The Council has managed just to deal with applications to set up new universities. It has not effectively dealt with issues of admission of students and the quality of teaching and research and the general setting of standards. Some of the constraints of the council include lack of funds and the fact that the Act does not give the Council 'teeth', since it plays an advisory role to the Minister of Higher Education. It does not have some degree of autonomy and does not have a full budget for its activities.

Quality, defined as 'fitness for purpose,' has been of major concern since the decline in funding from the state. In 1980, the mission of the university was articulated and the new mission was to transform the university into a developmental institution. The colonial institution was seen as an ivory tower where knowledge was pursued for its own sake. The new ethos focused on problems of the nation and sought solutions to a range of issues concerning economic development. The new government was satisfied with mainly the production of highly skilled manpower. The situation has since changed with advances in technology and globalization. The universities are challenged to respond to the needs of as global village, therefore quality is measured from a different perspective.

The Zimbabwean universities use peer review as the main mechanism for quality assessment and assurance. The processes are found at various levels from curriculum development through delivery to examination. The only form



of external review is through the use of external examiners. This makes the system lack transparency in particular when the institutions depend entirely on public funds. The effects of the declining funding and high inflation and a critical shortage of foreign exchange are impacting negatively on the institutions and the quality of higher education in general. There is also a serious brain drain as staff leave for greener pastures in the neighbouring countries such as South Africa and Botswana. Some emigrate far a-field to countries such as the UK, US and Australia.

The pre-independence robust structures and programmes have produced to date high-quality graduates and research. New universities have been added to this record. However, both old and new institutions are operating under very difficult conditions. There are increasing enrolments, yet the funding is declining in real terms AAU/World Bank (1997). The evidence of declining quality is seen in lack of maintenance of the physical plant. The libraries are stocked with old books. There are not enough books and journals for research. There are not enough computers, and access to the internet is very limited. Most of the time there is so much traffic one has to wait for the evenings to get access on the internet. The classes are overcrowded due to fewer staff and large intakes of students. Therefore, there is increasing concern that the quality will decline and that it will do so very rapidly, unless there is a substantial injection of funds into the university sector and higher education in general. One test of the quality of the degrees is the performance of local graduates overseas who have been accepted in post-graduate programmes and who continue to excel.

Conclusion

From the above analysis, it is evident that Zimbabwe should consider new models of financing higher education. A strong policy framework would lead to more efficient and effective ways of institutional steering and controlling. The country needs new models of resource generation and allocation and better accountability. In this context, issues that have been discussed include formula funding, the proper design of a tuition fees scheme and the promotion of private universities as a way of meeting excess demand. The current 'supervisory' role by the state needs to be informed by data on performance. The laissez-faire approach by the government is untenable (World Bank, 2000b) in a system which is expanding and requires coordination. The costs involved in providing higher education are high, therefore the role of government in ensuring standards and providing funds is important. Universities are vital institutions for the generation of knowledge and the production of highly skilled manpower. They cannot be left entirely to private and individualized initiatives.



A number of questions remain to be answered in this whole debate of funding higher education in Zimbabwe. For instance, what is the potential of private universities in providing a solution to the current demand for higher education? Can the contribution by government ever be reduced to the extent of some developed countries given the poor economic performance in most sub Saharan countries? What is compounding the problem is that the trained graduates leave for greener pastures soon after completing their degrees. The impact on the economy is quite negative. Should the country continue to make such huge investment when the benefits accrue to the individual and other economies?

The trends elsewhere show that higher education has been cutting down on bureaucracy, decentralizing decision making and trying to reduce costs. The role of higher education administrators has been transformed to that of creating strategies rather than managing the work of academics.

References

- AAU/World Bank. (1997) 'Revitalizing universities in Africa — strategy and guidelines', Association of African Universities and the World Bank, Washington DC.
- Banya, K. (2001) 'Are private universities the solution to the higher education crisis in sub Saharan Africa?', *Higher Education Policy*, 14: 161–174.
- Blair, R.D.D. (1992) Financial diversification and income generation at African universities AFTEd, Technical note, No 2, The World Bank, Washington, DC.
- Blair, R.D.D. (1997) 'Financing higher education in Africa', UNESCO Eastern and Southern Africa Consultation of Higher Education in the 21st Century, Nairobi, Conference Paper, 12 February 1997.
- Blair, R.D.D. and Jordan, J. (1994) 'Staff loss and retention at selected African universities: a synthesis report'. AFTHR. Technical Note No.18, Human Resources and Poverty Division, World Bank, Washington DC.
- Bollag, B. (2002) 'Chaos on African campuses: strikes, protest and arson are common but poverty is the real plague', *The Chronicle of Higher Education* 48(44): A39.
- Court, D. (1999) Financing Higher Education in Africa: Makerere, The Quiet Revolution World Bank and the Rockefeller Foundation. Education Group, World Bank, Washington DC.
- Government of Zimbabwe National Accounts 1996–99, Harare: Government Printer, Central Statistics Office.
- Johnstone, D.B. (1998) *The Financing of Higher Education: A Status Report on Worldwide Reforms*, Washington: World Bank.
- Jongbloed, B. and Vossensteyn, H. (2001) 'Keeping up the performances: an international survey of performance based funding in higher education', *Journal of Higher Education Policy Management* 23(2): 127.
- McKeown, M.P. (1996) *State Funding Formula for Public Four Year Institutions*, Denver, CO: State Higher Education Executive Officers.
- Ministry of Higher Education. (2003) Government of Zimbabwe, Harare.
- Neave, G. and van Vught, F.A. (1991) *Prometheus Bound: The Changing Relationships between Government and Higher Education in Western Europe*, Oxford: Pergamon Press.

- Poverty reduction Forum and Institute of Development Studies. (2003) 'Redirecting our Responses to HIV/AIDS towards Reducing Vulnerability: the ultimate war for survival'. Zimbabwe Human Development report. Harare: UNDP.
- Williams, G. (1992) *Changing Patterns of Finance in Higher Education*, Buckingham: Open University Press.
- Williams, G. (1998) 'Current debates on funding mass higher education', *European Journal of Education* 33(1): 77-87.
- Woodhall, M. (1995) 'Financial diversification in higher education: a review of international experience and implications for African Universities', *Higher Education Policy* 8(1): 16-23.
- World Bank. (2000a) World Development Indicators, Washington, DC : World Bank.
- World Bank. (2000b) *Higher Education in Developing Countries: Peril and Promise*, Washington, DC: Task Force on Higher Education.
- Ziderman, A. and Albretch, D. (1995) *Financing Universities in Developing Countries*, Washington, DC: Falmer Press.