



# **Post-Basic Education and Poverty in Tanzania**

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## Acronyms

AIDS	Acquired Immuno-deficiency Syndrome
BEDC	Basic Education Development Committee
BERRIPA	Basic Education Renewal Research Initiative for Poverty Alleviation
Danida	Danish International Development Assistance
EFA	Education for All
ELTSP	English Language Teaching in Schools Project
ESDP	Education Sector Development Programme
FTI	Fast Track Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GOT	Government of Tanzania
GTZ	German Agency for Technical Co-operation
HIV	Human Immunodeficiency Virus
HRDS	Human Resources Development Survey
ILFS	Integrated Labour Force Survey
JICA	Japanese International Co-operation Agency
MoEC	Ministry of Education and Culture
NBST	National Bureau of Statistics Tanzania
NER	Net Enrolment Ratio
OUT	Open University of Tanzania
PEDP	Primary Education Development Programme
PLSE	Primary School Leaving Examination
PPA	Participatory Poverty Appraisal
PRS II	second Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Paper
RAWG	Research and Analysis Working Group on Poverty Monitoring
SEDP	Secondary Education Development Programme
SEIA	Secondary Education in Africa
SEMP	Secondary Education Master Plan
SIDA	Swedish International Development Agency
SUA	Sokoine University of Agriculture
TSh	Tanzanian Shillings
UDSM	University of Dar es Salaam
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
URoT	United Republic of Tanzania
US\$	United States Dollars
VET	Vocational education and training
VETA	Vocational Education and Training Authority
WCEFA	The World Conference on Education for All
WEF	World Education Forum

## **Executive Summary**

This paper reviews the research evidence of returns to education in Tanzania, both financial and non-financial. It considers whether these returns translate into poverty reduction. It reviews recent attempts to reduce poverty through expanding access to education in the light of the long term outcomes of Tanzania's attempt to achieve Universal Primary Education (UPE) in the previous century.

### **Findings:**

#### **1) Long term outcomes of UPE**

Tanzania's past experience with expansion of primary education in the interests of equity has shown that primary schooling does not necessarily lead to poverty reduction in the long run. Near universal primary schooling in the early eighties does not appear to have yielded benefits such as reduced fertility, greater agricultural productivity and overall economic growth in the Tanzanian case. It was also not sustainable and enrolment ratios fell throughout the 90s.

#### **2) Returns to education**

Whilst econometric studies imply that the greatest social rates of return are at primary level, a number of smaller scale and more qualitative studies suggest that for some potential benefits of education, including reduced fertility and improved livelihoods, the effects at the primary level are limited and it is only at the secondary levels that the benefits are fully realised.

#### **3) Employment outcomes**

Employment outcomes of the different levels of education imply that the labour market for those with good post-primary education and training is far from saturated, and that rising unemployment is more an outcome of low quality education than of the number of school leavers exceeding the labour market demands.

#### **4) The quality of primary education**

One reason why the potential benefits of primary education have not been realised in Tanzania is that the quality of education fell to critically low levels. The decision to drop school fees in 2001, threatened to reduce quality further, as thousands of extra children were enrolled into overcrowded, under-staffed schools. In 2002, the Primary Education Development Programme (PEDP) was started with extensive donor support. PEDP has enabled enrolment to rise dramatically and has improved some aspects of school quality.

#### **5) Access to secondary education**

Tanzania has one of the lowest secondary enrolment ratios in the world, and the majority of places at public secondary schools are taken by families from the richer end of society. Under the current level of provision, education provides very few of the poor with a viable pathway out of poverty. The number of places at secondary schools is set to increase dramatically under the Secondary Education Development Programme (SEDP).

#### **5) Rural-Urban disparities**

The majority of the poor in Tanzania live in rural areas. The quality of education in these areas has generally been extremely low. This has meant that few children from rural areas qualify for places in secondary schools. Rural secondary schools find it hard to retain teachers and students.

## **6) Teacher supply**

The quality of primary education has been limited by the quality and quantity of secondary graduates available to enter the teaching profession.

## **7) Higher education**

The poor have only very limited access to higher education, but universities have an important role to play in poverty reduction by training professionals and carrying out research. Low qualifications and competencies among secondary graduates have hampered the quality of higher education.

## **8) The influence of the external environment**

The realisation of the benefits of education depends on the social, political and economic environment that school leavers enter into. The environment in Tanzania has become much more supportive of enterprise and small businesses, enabling individuals to capitalise on their education. Poor roads and services in rural areas remain inhibiting factors in the relationship between education and poverty reduction.

## **Recommendations**

### **1) An integrated approach to expanding access**

The different education sub-sectors should not be treated separately. Attempts to expand access to primary schooling should take into account the quality and quantity of secondary education available.

### **2) Prioritising quality**

If expansion is too rapid it can have adverse effects on the quality of education. Poverty reduction and improved equality are more likely to be achieved if expansion takes place at a rate at which quality can be maintained. The rate of expansion should be limited by the rate at which quality teachers can be trained and employed. Crash programmes to train teachers are unlikely to be successful unless the trainees can be given extensive professional support.

### **3) Target improvements to rural areas**

The quality of education in rural areas needs to be improved in order to reduce poverty. Incentives are needed to encourage teachers to work in these areas. Teacher houses in rural schools should be a priority spending area.

### **4) Assist children from poor rural families**

The increased number of government scholarships under SEDP will help to expand access to secondary education. Many areas will remain without day schools for the foreseeable future and boarding schools are the only feasible source of a good secondary education. Allocation of places at public boarding schools should therefore privilege bright children from areas without secondary provision.

# **Post-Basic Education and Poverty in Tanzania**

## **Tanzania as a Case Study on Education and Poverty Reduction.**

Within the international donor community, primary education has gradually emerged as a priority sector and is seen as central to both poverty reduction and development. Since the end of the last millennium many donors have increasingly focused resources on primary education, withdrawing from other education and training sectors. They have put pressure on recipient countries to do likewise through mechanisms such as the Poverty Reduction Strategy Paper (PRSP) process. Tanzania has followed a similar education policy since the late 60s, and hence provides an historical model for possible longer-term outcomes of such policies. Since Tanzania nearly achieved Universal Primary Education (UPE) in the 80s, it is now possible to reflect on the benefits of this achievement. This paper considers how the realisation of these benefits has been restricted by limiting factors within the education system and in the wider society. It also looks at the potential role of post-basic education in mitigating these limitations.

Tanzania is one of the poorest countries in the world, and poverty reduction has long been central to government policies. In recent years, the government has shown a high degree of compliance with the policies of the international donor community. This has enabled Tanzania to secure a high level of funding from multilateral and bilateral agencies. External support in 2003 represented around 40% of government spending (World Bank 2003). Donors have been very involved in the recent efforts to get all children into primary school through the Primary Education Development Programme (PEDP). A case study of the outcomes of education in Tanzania is useful for considering the effectiveness of national and donor strategies for poverty reduction.

The first part of this paper describes the Tanzanian context. An overview of the history of educational development in Tanzania is given. The current extent of poverty is explored by looking at statistical data and surveys of Tanzanians' experiences and opinions. The education and training system is then described. The political context of education and poverty reduction is considered in terms of the local policy environment and the influence of donors in the education and training sector. Given the current context, post-basic education has been taken to include secondary as well as tertiary education.

The next part of the paper reviews the research findings on the returns to education in Tanzania. Research indicates that there are many potential benefits to education, but that the poverty reducing effects of primary education have been limited. Each education sub-sector is then considered in more detail. At primary level, the low quality of education is a likely reason for the limited influence that it has had on poverty reduction. Secondary education has greater potential than primary to provide individuals with a pathway out of poverty. However, access to secondary education in Tanzania is very limited, especially for the rural poor. Low quality and quantity of secondary provision has had a negative impact on the quality in primary schools. Particular attention is given to three phases of expansion within the formal education system: the UPE drive of the late 70s and early 80s, the Primary Education Development Programme and the more recent Secondary Education Development Programme (SEDP). The balance between quantity and quality is considered in each case. A problem encountered in UPE, and anticipated

in SEDP, is that the supply of teachers is limited by the quality and quantity of higher levels of education. The impact of higher education on poverty reduction is considered briefly. Links between education, training and work are explored.

The final section of the paper looks at the social, political and economic environment that school leavers have entered into. It explores how this environment can either inhibit or enable the realisation of the benefits of education. This environment has changed dramatically since the time when the first UPE pupils were graduating. During the 80s there were many barriers that prevented individuals from capitalising on their education. Since then, many of these barriers have been removed. In particular, the environment is now much more supportive of enterprise and small businesses. Some aspects of the environment, such as access to health services, have not changed as positively and barriers still exist that impede the relationship between education and poverty reduction.

### **Educational Development in Tanzania: an historical overview**

After World War One, Tanganyika was mandated to the British as a protectorate. The British government deliberately focussed educational provision for the Africans at the primary level, aiming at mass education for rural development (Cameron and Dodd 1970; Buchert 1994). Post-primary education was developed at a very late stage, with the first secondary school for Africans opening in Tabora in 1934. Expansion beyond primary became a priority in 1956, when the shortage of skilled national manpower had begun to be noted. The secondary sector was expanded at an almost exponential rate. However, with such a late start, the level of provision and the output of skilled manpower were still very limited, with only 700 form IV pupils in 1960 (Morrison 1976; Mbilinyi 1979).

In the years immediately following independence in 1961, secondary expansion continued to be prioritised and by 1967 there were over 5000 pupils sitting the Cambridge School Certificate. The new government desperately needed educated Tanzanians to take up jobs previously filled by Europeans. Education was seen as an instrument for modernisation, by providing high level manpower that would drive top-down development. With the support of the World Bank, Tanzania focussed its resources on expanding secondary and higher education, consciously eschewing the resolutions of the UNESCO conferences of Karachi (1960) and Addis Ababa (1961) which set a target for achieving UPE by 1980 (Samoff and Carrol 2003:9). In 1967 Nyerere made mass primary education a priority again through his version of socialism, as outlined in the *Arusha Declaration*.

After the Arusha declaration, Tanzania's education policy was guided by Nyerere's *Education for Self Reliance* (Nyerere 1967) which has a strong pro-poor focus, urging for primary education to be terminal for the majority. It was intended to equip Tanzanians for self reliant, rural livelihoods rather than as a preparation for further academic education. Post-primary education was intended to produce only enough graduates to supply the projected skilled manpower needs of the country. It was therefore limited to a tiny minority, acknowledging that only a small fraction of the population could be accommodated in modern sector jobs. Whilst Nyerere's ideals were never very successfully translated into the primary curriculum, the shape of the educational pyramid has reflected his thinking throughout Tanzania's history, with a broad primary base, that almost reached universality in the early eighties, and very narrow post-

primary tiers. One outcome of this is that Tanzania has one of the lowest secondary enrolment ratios in the world<sup>1</sup>. The small pool of secondary graduates is a potential barrier to poverty reduction as it means there are only limited human resources available for developing the capacity of systems such as primary education (UNDP 2001), primary healthcare and agricultural extension systems.

In the mid 1970s a decision was made by the Party to aim for UPE by 1984. Funding was concentrated on primary expansion, and secondary enrolments stagnated (United Republic of Tanzania, MoEC 2003: 38). The statistics for primary enrolment and adult literacy in the early eighties are very impressive; the gross enrolment ratio (GER) for 1980 was 98% and compared well with those of other Sub-Saharan countries. However, by the 1990s, the GER had fallen to below 80% and it continued to decline throughout that decade (URoT, MoEC 1999b) to the extent that in the 2002 Education For All (EFA) Global monitoring report (UNESCO 2002) Tanzania was grouped in the lowest quadrant of countries, those that had a net enrolment ratio (NER) of below 70% (The figure given for Tanzania is 47%) and that had moved away from the goal of EFA since 1990.

In the 70s and early 80s secondary education was not only restricted by limited public investment but also by policies which restricted the involvement of the private and voluntary sector due to concerns over maintaining quality and equity. In the mid 80s the restrictions on running non-governmental schools (both private and voluntary sector) were relaxed and the sector rapidly expanded; however, whilst this gave greater opportunities for access, it did not help to improve the quality of learning. The small pool of good teachers was even more thinly spread. Some non-governmental schools, such as the seminaries and other schools run by churches and other religious bodies, were of good quality but charged relatively high fees. The main growth area was in private schools, which were often built by local communities and staffed with unqualified teachers. Since most private schools were of lower perceived quality than the government schools, wealthier families who were financially able to pay the higher private fees still opted for the heavily subsidised government schooling and took up a disproportionate number of government school places. It also gave richer families greater to access public higher secondary and tertiary education as they could now privately educate children not selected to go to government secondary schools. The expansion of the non-governmental sector was accompanied with increased social inequality (Lassibille, Tan et al. 2001).

Higher education in Tanzania during the last century was predominantly provided by University of Dar es Salaam (UDSM). This was established as a college of the University of London in 1961 and then later it became a part of the University of East Africa. In 1970 it became an independent University. In the 1970s UDSM was seen as “a development university” with all students being required to study development studies and with field attachments in many subjects. The creation of Sokoine University of Agriculture (SUA) as the second university in Tanzania was indicative of an awareness of the importance of agriculture in Tanzania’s development. The 80s and early 90s were a period of decline for the university with enrolments stagnating and spending per student falling dramatically. In 1994 the Institutional Transformation Programme was initiated and since then there has been a considerable increase in

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<sup>1</sup> According to the 2004/5 EFA global monitoring report (UNESCO 2004a) the secondary GER for Tanzania was 5.8% compared with 27% mean for Sub-Saharan Africa and 57% mean for less developed countries.



student numbers. Several other tertiary training institutions have now become universities. More recently, a number of private universities have opened, mainly run by religious bodies (Cooksey, Levey et al. 2001).

Delivery of vocational training in Tanzania was partly through the secondary school system, which was diversified in the 70s with the intention of providing students with vocational skills alongside academic knowledge. However, since the secondary school system could only accommodate a small proportion of primary leavers, the government established post-primary training centres, offering two-year courses in skills such as metalwork, woodwork, dressmaking and masonry. There were also a number of Folk Development Colleges, set up with support from Swedish International Development Agency (SIDA), offering shorter courses and aimed at providing skills for rural development. Vocational training was also provided at National Vocational Training Centres. In 1994 these came under the newly formed Vocational Education and Training Authority (VETA) which was partly funded by a levy on businesses. VETA colleges offer a wide range of courses, many aimed at modern sector jobs (Dar 2000).

Since the start of the new millennium, there has been a dramatic expansion of the primary education system due to the dropping of primary fees in 2001 and the Primary Education Development Programme (PEDP). In 2002 alone standard I enrolments increased by 43.1 %. Between 2000 and 2002 around 1.7 million *extra* children joined primary schools (URoT MoEC 2003). In 2004 the government embarked on ambitious plans for the expansion of the secondary system through the Secondary Education Development Programme (SEDP)

## **Poverty in Tanzania**

In economic terms, Tanzania is one of the poorest countries in the world with only Sierra Leone recorded as having a lower GDP per capita (UNDP 2004a). However, due to a relatively high adult literacy rate, Tanzania has maintained a position of around 162 out of 177 countries in the human development rank, above several other countries with higher GDPs. The life expectancy, as for Sub-Saharan Africa as a whole, has shown an alarming decline over recent years as a result of the HIV/AIDS pandemic, dropping from 51 years in the early 80s to 44 years in 2000. Despite its very low GDP, Tanzania does relatively well on the Human Poverty Index, coming in at 59 out of 95 countries, above other more prosperous countries such as Namibia, Botswana and Cambodia (UNDP 2004a). While almost 60% of the population survive on under \$2 a day, less than 20% live on under \$1 a day, a lower proportion of the population than in neighbouring countries like Kenya, Rwanda, Mozambique, Malawi and Zambia. Many families live in poverty, but a lower proportion live in absolute poverty than in counties of comparable GDP, which is in part a legacy of Nyerere's socialist, pro-poor policies. The 2003 Poverty and Human Development Report (URoT 2003a), based on a household survey of 2000/2001, states that 36% of Tanzanians live below the basic needs poverty line and that 19% live below the food poverty line, meaning that their household income is insufficient to provide for the calorific needs of the family. The vast majority (87%) of the poor live in rural areas (URoT 2003a).

In terms of health and nutrition, the under 5 mortality rate is around 147 per 1000 and 29% of under fives are under weight. The prevalence of HIV infection among blood donors is around 10% and has shown a steady increase. Rates are higher for young women (13%) than for young men (8%). Most people reported that they were satisfied with the health services provided but

there are indications that rising costs have led to lower usage. For example, there has been a decrease in the number of births attended by trained attendants from 44% to 36% during the 90s (URoT 2003a).

During the early 90s Tanzania's economy was performing very poorly with GDP growth often less than population growth. Since the mid 90s there has been a steady increase in growth and in 2002 the target figure of 6% growth set in the PRSP was surpassed. Much of the growth has been in the manufacturing and mining sectors. It is not yet clear to what extent growth in these areas is pro-poor. Since most of the poor live in rural areas, increasing rural incomes is likely to be pro-poor. Growth in rural areas has been found to be four times as effective in reducing poverty as growth in urban areas (World Bank 1996). Growth in agriculture is essential for rural incomes to increase. The agricultural sector accounts for almost 50% of GDP although its share is falling as other sectors grow at a faster rate. Productivity in agriculture is limited by the use of the hand hoe as the major cultivating tool; this puts limitations on the size of land holding. Smallholder farmers need access to affordable technology if they are to increase their productivity (URoT 2003a).

Unemployment, by international definitions, remains low over the country as a whole, although it showed a rise from 3.5% to 5% over the last decade of the twentieth century. In rural areas the unemployment rate has remained at 2% but in urban areas it has climbed from 10% to 15% from 1990/91 to 2000/2001. It is particularly high for urban youth aged between 15 and 24 years old (28%) with higher rates for women than for men. Caution must be taken in interpreting these figures; since there is no unemployment benefit and only a small minority of the population are engaged in formal sector employment, actual figures for unemployment are very hard to obtain and cannot be compared with those of more industrialised countries. Although unemployment is largely an urban phenomenon, it is partly fuelled by problems in rural areas. Rural youth often lack access to land and hence a source of income, providing a push towards urban migration, swelling the population of the urban unemployed (URoT 2003a). Underemployment is a more concerning problem than "unemployment" as defined by international standards, especially for people whose livelihoods are based on agriculture. In rural areas agricultural "employment" in the sense of doing paid farm work for others is seen as something that the poor are forced to engage in, often having to cultivate for others before cultivating their own land and thus risking missing the rains. (Narayan 1997).

There appears to be a difference in attitude to those classified as "poor" and those classed as "very poor" in the report on the World Bank's participatory poverty appraisal (PPA) (Narayan 1997). Whilst the poor are looked on with great sympathy as hardworking folk who remain poor in spite of their labours, the very poor are looked down on as those who are poor by choice, stupid fools who rely on others and are not engaged in any productive activity themselves. There is little sympathy for those who simply rely on others for their needs, as expressed by the Kiswahili proverb: "*Mtumai cha nduguye hufa hali masikini*" (One who relies on his relatives will die poor). The very poor category also tends to include the mentally or physically disabled. In the 1997 PPA, 17% of households were classified as "very poor" and a further 34% as "poor". Poverty was more prevalent among female-headed households as female heads tended to have less land and less education. However findings also indicted that women were more likely than men to engage in income generating activities such as trading or piecework.

The Kiswahili term generally used for 'poverty' is *umaskini*. This term has a broad meaning, going well beyond financial poverty. It implies a lack of ability to utilise resources. This may be

due to lack of skills or a disability or other circumstances. It also implies a sense of being unfortunate and deserving pity. The exclamation “*maskini!*” is often used to express sympathy for any type of misfortune. The Kiswahili term *ufukara* refers more specifically to lack of income, or lack of basic needs, but is less commonly used than *umaskini*. Common use definitions of the term poverty in Tanzania depend on location and social group but poor people are generally characterized by communities as those who can only afford to eat once a day, have few or no possessions, can’t afford health services and are often sick (Narayan 1997). The *Poverty and Human Development Report* (URoT 2003a) looks at poverty in terms of income poverty, which includes limitations in agriculture food security, inflation, employment and communications; and non-income poverty, which includes limitations in human capabilities, survival and well-being. PPAs and other surveys have consistently found that people consider poverty to involve much more than simply whether a person has money or not (Research and Analysis Working Group on Poverty Monitoring 2004). When asked what one needs in order not to be poor, answers included material wellbeing, bodily wellbeing, social wellbeing, security and freedom of choice. Research into the views of children and youth about poverty (Massesa 2004) found that they associated being poor with lack of money to buy basic things, lack of food, shelter, clothes, medical care, not being able to go to school at all or getting a poor education.

A World Bank funded PPA in the late 90s found that the rural poor saw agricultural inputs, simple technology and access to credit and to markets as important in keeping them out of poverty (Narayan 1997). Major problems were seen as lack of transport and farming problems (by men), access to food and water (by women), and drunkenness (by all). Social capital at the village level was found to be closely correlated with household expenditure, more so than education levels. Education was seen as desirable but as something that only the non-poor could aspire to, with secondary education being seen as the domain of the rich. Lack of education was not seen as a major problem and provision of education was not seen as a priority need.

A more recent PPA (RAWG 2004) looks more at *vulnerability*, referring to the likelihood of an individual or a group experiencing a decline in wellbeing in the future, rather than *poverty*, which it treats as the condition of lacking wellbeing in the present. A person’s vulnerability is determined by their level of exposure to impoverishing forces and their available range of response options needed to resist the push into poverty. Impoverishing forces have been categorised as environmental, macroeconomic, governance, ill health, lifecycle linked and cultural beliefs and practices. The range and effectiveness of a person’s response options depends on their capital; human, social, political, natural, physical and financial. Human capital includes the labour available to a household, education, knowledge, skills and health. It is often considered the most important type of asset for poor people, since it can be translated into other things such as better jobs and because skills and education cannot be lost in the same way that material assets can be. A family’s ability to realise this capital is limited by economic conditions, laws, customs, ecological conditions, lifecycle-linked conditions and lack of hope. Rather than focusing on lifting the absolute poor out of poverty, this report is more concerned with creating safety mechanisms to prevent people from becoming poorer.

Interpretation of PPA results in which poor rural people give their views on what makes them poor, or what hinders them from being more productive must be read with caution. Lack of education is rarely cited by the poor themselves as a cause of their poverty, they tend to say, “I am uneducated because I am poor” rather than “I am poor because I am uneducated” (United Nations Conference on Trade and Development 2002). The causal relationship between education and poverty reduction tends to be seen in terms of poverty reduction leading to greater

access to education rather than education leading to poverty reduction. In many of the surveys discussed above, respondents have tended to focus more on tangible, material causes of poverty, such as lack of land, lack of access to credit, lack of farm inputs. However, there is a fundamental difference between knowledge as an asset and material assets. With money, seed, farm implements, good roads and other physical assets, people often know about them but do not have access to them. In the case of knowledge, if an individual knows about a knowledge area, it implies that they have had some access to that knowledge. Hence respondents are less likely to give lack of knowledge as a cause of their problems because they don't know about the knowledge that they lack. Furthermore, there is an element of preserving ones human dignity in conceptualising the causes of ones own plight. It is less damaging to ones own self esteem to respond: "I am poor because I lack the seed, fertiliser and equipment necessary for me to be a productive farmer" than to respond "I am poor because I am ignorant". These two factors lead to underreporting of lack of education as a cause of poverty in PPA type research, and the fact that people rarely give lack of education as a major constraint should not be interpreted as implying that it is not a constraint in practice.

### **The Current State of Education**

Tanzania's relatively high adult literacy rate (77 % compared with an average of 63.6 % for low income countries) contrasts markedly with its low combined GER for primary, secondary and tertiary schools (31 compared with an average of 51 for low income countries) which is indicative of the historically wide access to primary and very limited access to higher levels of education (UNDP 2004a).

The formal education system has a structure of 7 years' primary, four years' secondary (O' level), 2 years' high school (A' level) and 4 years' university. There are also an increasing number of pre-schools. Students sit national examinations at the end of primary, secondary and high school. There are further public examinations in standard IV and form II. In recent years, those who have failed form II have had to repeat the year. They are only allowed to repeat once. In 2003 the NER at primary level was 88.5%, but for secondary schools was only 6.3% and for high schools a mere 0.4%. In 2002, 27.1% of standard VII students passed the Primary School Leaving Examination (PLSE). The standard VII to form I transition rate in 2002/2003 was around 20%, with just under half going to private schools. Hence the public secondary sector is currently only able to accommodate a small proportion (about 40%) of those passing the PLSE (URoT MoEC 2003).

The primary education sector is almost entirely government run whereas around 40% of secondary students are in non-governmental schools, which include seminaries, other faith-based schools and schools run for business. Government secondary schools include those owned and run by the government and community schools which are built by communities but staffed by the state. Government-owned schools have tended to be relatively prestigious whereas community schools tend to be of much lower quality. This latter category has been the most rapidly expanding one in the last decade. Primary education is in Kiswahili and English is taught as a foreign language. The medium of instruction at secondary and higher education is English. Post-primary training institutes tend to use Kiswahili, whilst much post-secondary training, such as nursing, is in English; however, primary teacher training is in Kiswahili.

Primary education is officially compulsory and free, although the level of enforcement varies greatly between districts. Until 2004, government secondary schools charged a fee of 40,000 TSh<sup>2</sup> for day schools and 70,000 TSh for boarding schools. Places are allocated according to students' results in the PLSE. The total cost to parents, including uniforms, writing materials and other costs is over 200,000 TSh (URoT MoEC 1999a). Given that the majority of people live on less than 2,000 TSh a day, the cost of secondary education is highly prohibitive to average income Tanzanian households.

There are large geographical, economic and gender related disparities in educational provision. At primary level, access is relatively equitable but the quality of available education is highly inequitable. In 1998 the number of school age children per classroom in the poorest districts was 222:1 whilst in the richest districts it was 60:1 (Galabawa 2001). PLSE pass rate in rural areas was 17% compared with 29% in urban areas. At the secondary level, provision is very unevenly distributed. Kilimanjaro region had 118 secondary schools in 2003, compared with only 16 in Lindi (URoT MoEC 2003). In previous years a quota system was employed to ensure that a similar proportion of students from each region were allocated places at secondary schools. This meant that the cut off point for some areas was very low, whilst in other areas pupils needed a very high score at PLSE to secure a place at secondary school. According to the *Education and Training Policy*, this system was to be dropped on the grounds that it had been set up to correct for temporary problems of inequality caused by historical factors and that it has now outlived its original purpose (URoT MoEC 1995: 21). In practice, the regional quota system remains for the government boarding schools but most secondary places are now allocated locally to schools within the district. Transition rates therefore vary widely between districts with some districts close to achieving a 50% primary to secondary transition rate and others well under 20%. Allocating places at boarding school on a regional basis is still insufficient to provide equity of provision as all regions have urban populations from which most of these candidates will be drawn.

Children from families of different income levels are relatively evenly represented across the government primary school population. The richer section of society are over represented at secondary schools, although the bias is greater in non-government schools than government ones (table 1). As a consequence, benefit from public educational spending is disproportionately enjoyed by the richer sections of society (table 2).

Table 1: school populations by economic quintiles

Quintile by income	Government Primary	Government Secondary	Mission Secondary	Private Secondary
Richest	18	36	41	43
4 <sup>th</sup>	20	24	25	30
3 <sup>rd</sup>	20	17	21	17
2 <sup>nd</sup>	22	15	11	13
poorest	20	8	2	1

Source: Galabawa 2001:49, based on data from 1993/4 HDRS

<sup>2</sup> In 2004 the approximate exchange rate was 1US\$= 1000 TSh

Table 2: benefit incidence of education sector expenditure

Quintile by income	Primary	Secondary
Richest	18	37
4 <sup>th</sup>	20	24
3 <sup>rd</sup>	21	17
2 <sup>nd</sup>	22	14
poorest	19	8

Source: Galabawa 2001:49, based on data from 1993/4 HDRS

The gender ratio at primary and lower secondary is close to parity, with the percentage of females 48.7% and 46.6% respectively, and with total parity in the non-governmental secondary sector. However, females are outperformed by males in the public examinations at all levels. While there is a certain degree of positive discrimination towards girls in selection for post-primary education, only around a third of high school students and a quarter of university students are female (Cooksey, Levey et al. 2001; URoT MoEC 2003).

### What is Basic Education in Tanzania?

The World Conference on Education for All (WCEFA 1990) stressed the need for universal *basic* education for all. The rise of the term *basic* education was partly due to a rejection of the term *primary* education, which was seen to imply preparation for further education rather than for life. It was also used to stress that provision of ‘basic needs’ in education should not mean primary schooling alone but should include other aspects such as pre-primary and adult literacy classes. A decade later, at the World Education Forum in Dakar (WEF 2000), the term basic education was still in use, although had been displaced by “primary” in the target setting. In the *Regional Framework for Sub-Saharan Africa* (WEF 2000), the two terms are used almost interchangeably, often written as “primary (basic) education”.

Long before the term “basic education” gained common usage in development discourse, Nyerere had stressed the need for primary education to provide basic life skills:

...the education given in our primary schools must be a complete education in itself. It must not continue to be simply preparation for secondary school. Instead of primary school activities being geared to the competitive examination which will select the few who go on to secondary school, they must be a preparation for the life which the majority of the children will lead. (Nyerere 1967:17)

In the late 1990s the term basic education entered the education planning vocabulary in Tanzania. The Education Sector Development Programme was formulated in 1996 and in 1997 the Basic Education Master Plan was set up to cover the development of primary education and adult literacy (URoT 2000a). Secondary education was considered under the Secondary Education Master Plan and was seen as separate from basic education. In the final draft of this

document that appeared a year later, it is explained that as far as the management structure was concerned, secondary comes under basic; however, throughout the rest of the document “secondary education” and “basic education” are given as separate headings, with the sections on basic education referring almost exclusively to primary education. The term basic education was not used in either the *National Poverty Eradication Strategy* or the *Vision 2025*. However, this latter document includes an intriguing statement within a paragraph on science and technology education:

The education system must instil a science and technology culture from its lowest levels, giving a high standard of education *to all children between the age of 6 to 15*.  
(URoT 1999: section 4.2.iii. emphasis added)

Since primary education generally goes from 7 to 13, education for all from the ages of 6 to 15 implies that the author was assuming universal pre-primary as well as two years post-primary. This does not fit with the 4-year lower secondary cycle on mainland Tanzania but may have been indicative of plans to universalise the first two years.

The delineation between basic and secondary was clear in the interim PRSP (URoT 2000b). In the first PRSP (URoT 2000c) produced later that year and in subsequent progress reports (URoT 2001b; URoT 2003b; URoT 2004c) the position of secondary education, as to whether it is within or beyond basic education is ambiguous; however the structures within the Ministry of Education, Basic and Secondary education departments are separate. During the drafting of the second PRS, “basic” education in Tanzania has come to encompass secondary education (URoT 2004a). The term “basic education” is not used at all in the first draft of the PRSII, but secondary education has a very prominent place within the targets, compared with in the first PRSP where it is only mentioned with reference to transition rates from primary (URoT 2004b). While SEDP has been prepared by the Basic Education Development Committee (BEDC) ambiguity over the inclusion of secondary education within basic education still exists within the ministry (see for e.g. Sekwao 2004)

The way in which Tanzania has expanded the meaning of the term “basic education” may be seen in part as a response to donors’ increasing focus on basic needs and poverty reduction, and as a strategic device to coerce them into extending their funding beyond the primary level. A less cynical reading of the changing terminology is that is a response to the changing skill requirements needed for individuals to operate in an increasingly technologically complex society. Although changes in technology have been slow to reach rural areas, a rapidly growing number of Tanzanians now have access to technologies that they could gain greater benefit from if they had the necessary skills.

For the purposes of this paper, all secondary is being considered as post-basic as, for the foreseeable future, it will only be available to a minority, albeit a growing one.

## **Education in Poverty Reduction and Development Policies**

Long before PRSPs, Tanzania was putting poverty reduction at the heart of its development policy. It was there in the first five year plan of 1964 (Evans and Ngalewa 2003) and was central to the policy of *Education for Self Reliance* (Nyerere 1967). Prior to the introduction of PRSPs,

Tanzania had set out its policy for combating poverty in the *National Poverty Eradication Strategy* (URoT 1998). This did not see lack of education as a major cause of poverty, nor were low education levels seen as a challenge to poverty eradication. What was seen as a challenge was the lack of extension workers in sectors such as agriculture, primary education, and health, but the document does not say whether this lack of capacity was due to a lack of skilled manpower or limitations in the government's ability to pay the wages of these workers. Despite not highlighting lack of education as a cause of poverty, it sets ambitious targets of UPE and having a secondary school in every ward by the year 2010.<sup>3</sup> It also recommends increasing the budget allocation to education and focusing on quality.

Within the national development *Vision 2025*, lack of *quality* education is seen as one of the major impediments to development:

The level and quality of education that has been attained has not been adequate to meet the growing development challenges and to enable the search for solutions to the development problems that confront the nation. In particular, education has not adequately and appropriately been geared to integrate the individual into the community. Equally, it also has not been able to innovatively engage Tanzanians in entrepreneurship and self-employment. (URoT 1999: section 2.2.1, sic)

Education is also seen as an important agent for change:

Education should be treated as a strategic agent for mindset transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges which face the nation. In this light, the education system should be restructured and transformed qualitatively with a focus on promoting creativity and problem solving. (URoT 1999; section 4.1)

This document highlighted the need to expand primary education for poverty reduction but also higher education in order to generate the growth and capacity needed for development. It aims at:

Universal primary education, the eradication of illiteracy and the attainment of a level of tertiary education and training that is commensurate with a critical mass of high quality human resources required to effectively respond and master the development challenges at all levels. (URoT 1999; section 3.1)

*Vision 2025* sees both UPE and improved and expanded tertiary education system as essential for Tanzania's long term development but when it comes to the allocation of resources there is a tension between the two sub-sectors. Whilst achieving UPE by 2015 should lead to poverty alleviation in the short term, higher level skills need to be developed to give the growth necessary for longer term poverty reduction. This tension is not as pronounced as in Rwanda, where the government aims to drive growth through information communications technologies (Tikly, Lowe et al. 2003). In Tanzania, natural resources, and agriculture in particular, are seen as providing the initial basis for future economic growth. Basic education might be sufficient for the majority of an agricultural workforce but new technologies need to be developed and adopted

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<sup>3</sup> A ward is an administrative sub-division of a district. There are around 2,500 wards in Tanzania. Less than half had secondary schools at the start of the millennium.



if productivity is to be increased. For this agricultural research and extension workers are needed. Secondary education is notable by its absence from the development vision document.

In the interim Poverty Reduction Strategy Paper (URoT 2000b) there was a call to rationalise higher education and maintain spending on primary education at 65%. It was also proposed to start implementing the Secondary Education Master Plan (SEMP) the following financial year (2000/01). In the consultations for the first PRSP, education was ranked as one of the top priorities for poverty reduction during the zonal workshops. The main concerns were with access to and quality of primary education. In the PRSP itself (URoT 2000c) the main focus of the proposed action was at primary level, with the dropping of school fees being one of the most significant policy changes. Secondary education did get mention to the extent of a modest increase in enrolment from 5 to 7%.

In the PRS II consultations (URoT 2004a), education had a much higher profile than in the PPA carried out in the previous decade (Narayan 1997). Firstly, primary education was unanimously seen as an area of positive achievement of the last three years. One of the challenges to poverty reduction was seen as poor human resource quality, implying a need for more quality education at the post-basic level. When respondents were asked what should feature in the next PRS, the most frequently mentioned issue was *quality* primary education, and secondary education also came very high on the list (above agriculture, health and employment). Respondents' expectations for the next five years included quality primary education and a secondary school in every ward. The general opinion seemed to be that although good progress had been made in accessibility of primary education, improvements in quality should now be a priority. Secondary education has a much higher profile in the drafts of the second PRS (URoT 2004b), which states that expansion of post-primary education through SEDP will increase the educational opportunities of children from poor families.

Despite the significance given to education in poverty reduction strategies since the late 90s, the education sector spending out of the total budget remained very low until the start of the new millennium. Since 2001 education sector spending has been around 20% of the total budget. Education recurrent expenditure as a whole (including tertiary) was 3.6% of GDP for 2003/04. The proportion of spending on education is still below the regional average (World Bank 2004). The proportion of educational spending going to primary education rose over the 90s and has reached 65%, which is above the benchmark given for acceptance into the Fast Track Initiative (FTI)<sup>4</sup>. This rise in the primary share has been mainly at the expense of the share to secondary sector, which currently only receives 7% of education spending (World Bank 2004). During the 90s, spending on secondary education virtually stagnated while the number of secondary school students at public schools more than doubled. Under plans for SEDP, the share to secondary education is set to rise from 7 % to over 25% in 2015. Much of this rise will be at the expense of tertiary education, especially initially, but it will also mean a decrease in the proportion going to primary education. This has been a cause for unease among some donors; however, the primary portion is set to remain at 65% until 2008, by which time it is hoped that much of the "one off" development costs of PEDP (such as construction costs and expansion of the teaching force) will have been covered.

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<sup>4</sup> To qualify for FTI countries must conform to certain benchmarks. Education spending should be at least 20% of government revenues and between 42 and 64% of total recurrent education spending should go on primary education (World Bank 2002a, 2002b)

## Donor Influences in Education

In 1963 Tanzania received a US\$ 4.6 million World Bank loan to support secondary education. Initially, both Tanzania and the World Bank were in agreement that expansion of secondary and higher education was a greater priority than UPE as there was a pressing need for national high- and middle-level manpower to replace foreigners (Samoff and Carrol 2003). Since then, the World Bank's support for secondary education in Africa, as a share of its total commitment to education, has declined slowly but steadily. The Bank's education projects in Tanzania focused mainly on vocational education during the 70s, with some support for secondary and teacher training. The limited support given in the 80s was mainly to secondary, but projects in the 90s had a greater emphasis on primary education. Secondary support was mainly through a bursary scheme aimed at enabling girls from poor families to study at secondary school. World Bank support for secondary education in Tanzania continued throughout the twentieth century, despite it becoming steadily less of a priority for the Bank as a whole. More recently, the profile of secondary education within the Bank has been raised through research programmes such as Secondary Education in Africa (SEIA)<sup>5</sup>. In 2001 the Bank gave a \$150 million loan to PEDP and in 2004 they gave a loan of the same size to support SEDP.

Counter to popular belief, the World Bank was not the initiator of school fees at primary level. Fees were introduced in 1978 in order to fund the push for UPE; hence they are sometimes referred to as UPE fees. However, the Bank was very influential in the scrapping of primary school fees in 2001 (Evans 2003; Holtom 2003) which was only included as a policy in the PRSP at the eleventh hour. Up until this stage the government had asserted that it was financially unsustainable to drop the fees and there was also concern that dropping fees could lead to schools becoming less accountable to their local communities<sup>6</sup>.

In the early 90s donor assistance to education was almost entirely through the project approach. Education was a relatively low priority for most of the donors with Ireland, Sweden and Denmark being notable exceptions. Funding from Europe was mainly in the vocational and tertiary sectors, with the exceptions of Sweden, who gave some funding at primary level, and the UK, whose entire educational assistance spending in Tanzania was devoted to improving English at secondary schools through the English Language Teaching in Schools Project (ELTSP) (Svantesson 1993). ELTSP was later deemed to have had no poverty reducing benefits (Department for International Development 1999). Investing in the quality of secondary education had the potential long-term benefit of improving the learning of future primary teachers, and hence the quality of primary schooling. However, the ELTSP strengthened the policy of using the English medium at secondary schools, a policy that has had very negative implications for overall quality of learning (see below). Figures given by the World Bank for 1994/5 show the higher and technical sub-sectors as the major recipient of donor assistance to education, followed closely by primary, with only 3% of spending going to secondary schools, and this was entirely channelled to the few technical secondary schools (World Bank 1999).

Samoff and Carrol (2003:5) have described the donor community as “a small animal with a large roar” as the influence they have on educational development tends to be disproportionate to their contribution to the overall education budget. In the mid 1990s in Tanzania the recurrent expenditure on education was around 80 billion TSh which was entirely funded by the

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<sup>5</sup> see World Bank 2001 and <http://www.worldbank.org/afr/seia/>

<sup>6</sup> Interview with professor Galabawa 11/09/04, University of Dar es Salaam

government. The donor share of educational spending was around 5 billion TSh, a mere 6% of the total government spending on education; however, when compared to the 1.4 billion TSh *development* expenditure by the government, it is clear that donors had a very high degree of leverage over educational developments (World Bank 1999). In the late 90s there were over 50 Western consultants working within the Ministry of Education and, in the absence of strong local leadership, they had a high degree of control (Holtom 2003). Donor support to education is now done largely through basket funding which goes towards both recurrent and development costs but is currently targeted at the primary sub-sector through PEDP. The support has become proportionately much more significant. For example, in the financial year of 2002/2003 foreign support to education was 219 billion TSh out of a total of around 520 billion TSh, constituting over 40% of spending on education (URoT MoF 2003).

## Returns to Education in Tanzania: What the Research says

### *Economic Returns*

A global review of rates of return data by the World Bank (Psacharopoulos and Patrinos 2002) could give no data on social rates of return in Tanzania, only private rates of return, and these were based on ten year old data. The figures given for Tanzania are 7.9% for primary and 8.8% for secondary. The World Bank social sector review for Tanzania (World Bank 1999) and Dar (2000) give lower private rates (see table 3), although based on the same 1990/91 Labour Force Survey data, with rates of 3.6, 6.9 and 9.0% respectively for primary, secondary and higher education. The private returns to training, both vocational and on-the-job (19.4% and 35.5% respectively), are significantly higher than returns to formal education. Dar also gives figures for social rates of return as 3.6% for primary, 1.5% for secondary and negligible for higher and vocational. These figures are used to support the argument that public funding should be focused on primary levels and that cost sharing should be increased at post-primary levels.

Table 3: Rates of Return to Education

		Primary	Secondary	University	Vocational training
Private rates	Male	1.9	9.0	9.9	17.8
	Female	10.8	6.6	11.4	20.2
	All	3.6	6.9	9.0	19.4
Social rates	All	3.6	1.5	0.0	0.0

Source: Dar 2000, based on 1990/91 data<sup>7</sup>

Whilst econometric measurements imply that investments in primary were the most cost effective in terms of social rates of return, it should be noted that these calculations were based on a population where primary education was very far from universal. Evidence from other countries (Mingat and Tan 1996; Appleton 2001) suggests that as primary enrolments rise and the requirements of the labour market change, the rate of return falls relative to the rate of return

<sup>7</sup> Average private rates are closer to the male rates as in all cases there were more males than females in the sample. The given average overall rate for private returns to university education appears erroneous as it is less than the weighted average of male and female rates.

for secondary education. The per-pupil primary inputs needed to reach the “last 10%” tend to be significantly higher than average per pupil costs (Colclough and Lewin 1993). In Tanzania this is typified by the difficulties encountered in getting nomadic pastoralist children into school. One effective strategy that has been implemented in a few areas is to build boarding primary schools for such populations but the costs involved are much greater than for day schools. It may be that for Tanzania within the near future, investment in secondary education will give a higher rate of return than the investment needed to get the last 10% of children into primary school.

Boissiere, Knight and Sabot (1985) explored the possible mechanisms through which secondary education can lead to higher earnings within waged employment by comparing Kenya, which had a liberalised secondary education system, with Tanzania. The authors attempted to distinguish between “cognitive achievement” (their term for knowledge and skills acquired through schooling), native ability and years of education. They found that attendance at secondary school in itself was not sufficient to guarantee success in the labour market but that the level of cognitive achievement mattered. They also found that more able primary leavers earned less than less able secondary leavers. These findings indicate that higher rates of return for secondary education are not simply credentialism or due to the education system screening out those of lower ability but is partly due to what is learned in schools. In a further exploration of how the differences in secondary access impacted on equality, it was found that not only did expanded access give higher labour productivity in Kenya, it also gave greater equality of pay than in Tanzania. The policy of strict rationing of places at a limited number of secondary schools in Tanzania was aimed at ensuring equality. It was hoped that by limiting growth of the non-governmental education sector, access to secondary education would depend on ability rather than wealth. However, according to the findings of Boissiere, Knight and Sabot, this policy led to access in Tanzania being less egalitarian than in Kenya. Expansion of secondary would have disproportionately favoured the poor. A child of an uneducated farmer in Kenya was 3.5 times more likely to go to secondary school than one in Tanzania (Knight and Sabot 1990). Tanzania’s policy of restricted access apparently did little for quality as Kenyan schools were found to give much greater cognitive “value added” than Tanzanian ones.

The validity of rates of return to education data has been contested (Bennell 1996). In countries like Tanzania, there are numerous problems with using wages to measure productivity. One problem is that employees, especially those in a large, centralised public sector, may not be as productive as their wages suggest. Another problem is that studies, such as that of Knight and Sabot, have tended to look at only those individuals employed in the formal sector with set wages. This ignores the fact that the majority of the population are self-employed and not part of the formal sector. Many of those employed in the formal sector supplement their wages with secondary activities, both waged and informal. In a sample from a recent tracer study (Mukyanuzi 2003) around 40% of graduates admitted to having part time jobs to supplement their income. Between a quarter and a third of the total income of school leavers and graduates came from part time jobs that respondents carried out in addition to their main form of employment. The actual figures could be higher as some respondents may have chosen not to disclose some of their additional sources of income.

Omari (1999) uses data on the education levels of different income groups to argue that post-primary education may be more critical than primary in terms of poverty reduction. With reference to the figures in table 4 below, he argues that since there is little difference in primary education levels between the poor and the rich, but a large difference in post-primary levels, and

since very few post-primary educated individuals are found among the poorest sections of society, primary education, whilst vital, is not enough to lift people out of poverty.

Table 4: distribution of education levels in different economic quintiles

Education level	Income levels		
	High	Poor	Very Poor
None	18.9	32.2	34.9
Primary	64.9	62.0	59.9
Secondary	11.3	2.2	1.3
University	0.9	0.0	0.0

Source: Omari 1999 p81, based on data from 1993/4<sup>8</sup>

Whilst this interpretation of the data does not consider differences in educational opportunity and quality accessible to the rich and poor, it is validated by qualitative data from the field. Many parents now feel that primary education, whilst valuable, is not sufficient to improve their children's standard of living. For this, secondary education was considered to be necessary (Maarifa ni Ufunguo 2002; Ewald and Narman 2004). Parents therefore tend to be more willing to pay for secondary than for primary education. However, the poor are less able to pay for secondary and access to it is limited because the quality of primary education that the children of the poor receive rarely enables them to be selected for government schools. Given that a survey commissioned by the World Bank (Narayan 1997) found that many considered secondary education out of reach of even people of average wealth, it would seem that with the currently highly restricted access to secondary, many poor perceive themselves to be trapped in poverty, with only a very slim chance of escape through secondary education.

Economic modelling shows that increased expenditure on education in Tanzania could lead to higher wages and increased GDP but for it to be effective for poverty reduction it must be more effectively targeted towards the poor, for example by building more schools in rural areas (Jung and Thorbecke 2001). A pool of secondary educated people has been shown to be important in attracting foreign direct investment (World Bank 2004). With the globalisation of the service industry through advances in telecommunications, a well-educated population can attract jobs and increase the demand at national level, as has been the case in India. Most regional centres in Tanzania have gained internet access in the last five years and mobile telephone networks are rapidly spreading, but the level of technology is still far off that of India.

An argument often used against investment in post-basic education is that it is a waste of public resources if it simply leads to an increased output of educated unemployed and subsequent qualifications inflation. Unemployment in Tanzania has increased according to statistics (URoT 2003a) but many also consider shortage of skilled labour as an impediment to poverty reduction (URoT 1999; RAWG 2004; URoT 2004a; World Bank 2004). The SEDP document claims that:

The current limited provision of secondary education is economically unwise and socially unsustainable. Economically Tanzania is being held back by the low level of human

<sup>8</sup> Columns do not sum to 100% as those with partially completed education at any level have been omitted.

capital development resulting from the restricted access to secondary education (World Bank 2004: 5)

Anecdotal evidence on human capital and employment presents a current paradox. Whilst complaints about the difficulties of finding employment and the escalation of qualification requirements for jobs are rife, there are also complaints from employers and training institutions for doctors and teachers, that there is a shortage of suitably qualified Tanzanians. Complaints of a proliferation of unemployed secondary and post-secondary graduates run along side complaints by employers that there are not enough suitably skilled personnel (Mihayo 2003). The SEDP document claims that:

Already Tanzanians are losing out to qualified citizens from other countries who seek employment in Tanzania because the education and training system is not able to meet labour market demands (World Bank 2004: 14)

Part of the reason for the apparent employment paradox may be due to poor quality of education in comparison to education elsewhere. One newspaper report told of secondary graduates applying for jobs in the army who were unable to count beyond ten in English (Mihayo 2002). In a tracer study of law graduates from the University of Dar es Salaam, employers noted that few graduates could express themselves in writing (Mkude and Ishumi 2004). Another important factor is cultural attitudes to work. Professor Galabawa described this by saying “The dispensation to work is less than the going market rate”<sup>9</sup>. In other words, there is employment available but not at the rate that those qualified to do the work are willing to do it for. This culture may have grown partly out of the manpower planning policies by which post-primary education once led to semi-automatic employment. School leavers’ and graduates’ expectations of what constitutes a “living wage” appear to be quite high, and generally much higher than the incomes that they are getting. In 2001, a sample of secondary leavers gave their “target survival income” as around 200,000 TSh a month, and graduates gave a figure of around 500,000 TSh (Mukyanuzi 2003). At that time the author was living very comfortably in Tanzania on an income of 175,000 TSh a month; although this was admittedly without having any dependents to support.

According to the 2000/2001 Integrated Labour Force Survey (National Bureau of Statistics Tanzania 2004), over half of formally employed Tanzanians had completed primary education and 30% had secondary education or more. Of those mainly employed on their own farm, only 2% had secondary education or above. Table 5 shows the average hourly wages of a sample of around 3000 wage earners by education level.

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<sup>9</sup> Interview 11/09/04, University of Dar es Salaam

Table 5: hourly wages by education level, wage earners aged 18-65 years (2001 TSh)

Education level attained	Overall	Rural	Urban
No schooling	104	64	143
Complete primary	201	175	209
Complete lower secondary	732	378	806
Complete upper secondary	743	375	805
University	1405	418*	1,414

\* this figure is based only on one wage earner, whereas all other figures given are the average of at least 70 wage earners.

Source: (World Bank 2004:49), based on data from 2000/2001 Integrated Labour Force Survey

As the table shows, primary graduates earn almost double the wages of those with no education; however, the increment between those with secondary and those with only primary is much greater, at 732 TSh per hour compared with 201 TSh. Controlling for experience, location and gender, it was found that a wage earner with complete primary earned 75% more than one with no schooling, whereas a secondary school graduate earned 163% more. The authors of the SEDP document (World Bank 2004) argue that the large earning differential between those with and those without secondary education, and also the low prevalence of post-primary educated people among paid employees, indicate scarcities in the supply of labour with secondary education and above.

A recent tracer study (Mukyanuzi 2003) found that over half of form four leavers from 1990 were in waged employment in 2001 and a further 29 % were self-employed. Of the 1995 cohort 36% were in waged employment. The figures for those unemployed and seeking work were 4% for the 1990 cohort and 14% for the 1995 group. These results could be indicative of an increasing unemployment problem but, given that many more of the later cohort were still in further training, the reduced figures for employment could be due to a long time lag between students leaving school and entering waged employment. In the university-educated group, there was no unemployment among graduates from 1980. Of the 1999 graduates, 81% were in wage employment in 2001 and the majority of those not employed were still in full time education. It should be noted that the results for secondary leavers must be treated with some caution due to a somewhat biased selection of sample schools. All but two of the ten sample schools were in the top quartile of schools ranked by examination results, and the 5 “rural” schools are all in or around Dodoma, the administrative capital city. However, even given this caveat, the findings still indicate that the majority of post-primary education graduates find employment in the long term, and that the labour market, especially for university graduates, is far from saturated.

Within the informal sector, a survey of female-operated small enterprises found that the most profitable businesses were run by the best-educated women, almost half with secondary or more. However, the more profitable enterprises were also the businesses with high capital investments. The predominance of well educated women among the most profitable group could be due to their education making them more profitable or could simply be because women coming from families that can afford to put their daughters through secondary education are also the ones with access to higher levels of capital needed to start more profitable businesses. The majority of all the female entrepreneurs interviewed felt that schooling had been useful for running their

businesses, especially those with post-secondary education. Basic literacy was seen as a prerequisite for receiving any kind of formal training (O'Riordan, Swai et al. 1997). Trulsson's study (1997), although it had a much smaller sample size found that levels of post-primary education among entrepreneurs were well above average levels. Out of 26 entrepreneurs, 19 had post-primary education and 16 were university graduates. The Integrated Labour Force Survey (ILFS) of 2000/2001 gives a far higher proportion of post-primary educated individuals among self employed individuals with employees (26%) compared with self-employed without employees (8%) (NBST 2004). These findings indicate that those running larger enterprises tend to be better educated than those running smaller enterprises. However this data is inconclusive with regards to causality.

According to the ILFS (NBST 2004), 82.1% of the employed labour force work in agriculture, forestry or fishing. Since the vast majority of the poor in Tanzania live in rural areas and are primarily dependent on agriculture, and there is great potential for increased yields on the available land (Limbu 1999), returns to education in terms of increasing agricultural productivity would imply a potential for education to have a great effect on poverty reduction. Empirical quantitative data for the impact of education on agricultural productivity is scarce for the whole of Africa. The influential meta-analysis by Jamison and Lau (1982) included very few studies from East Africa and none from Tanzania. Psacharopoulos and Patrinos (2002) found only two such studies, one in Uganda, the other in Ethiopia, and the findings were inconclusive. A review by Appleton and Balihuta (1996) gives two Tanzania based studies. The first, from 1986, found that completed primary education was correlated with a 27% increase in crop production but insignificant results for livestock rearing. A second study from 1995 carried out in the Kilimanjaro region found that four or more years of education has a positive and significant effect on farmer productivity. Staff at the faculty of Education at the University of Dar es Salaam highlighted investigations into the influence of education on agricultural productivity as a gap in the research literature that badly needed addressing. Limbu (1999) gives level of education as one of the factors influencing whether or not farmers adopt new agricultural technology in Tanzania, but concentrates more on other factors such as credit availability. Respondents in the World Bank funded PPA in the 90s (Narayan 1997) found that rural communities tended to see access to farm inputs as a much more important than education, but adds that an earlier study concluded that increasing household members' education by a year each yielded higher returns than increasing land holding by one acre per adult. When parents in Kilimanjaro were asked about the value of primary education it was found that there was a general belief that it would enable them to become better farmers and to make sensible changes to crop production (Maarifa ni Ufunguo 2002: 20).

### *Returns to education in fertility and health*

A frequently cited link between education and poverty reduction is through the apparent effect that educating girls has on their fertility rates. Whilst not raising incomes directly, reduced fertility has great potential benefits for the next generation. According to the UNDP's statistics (UNDP 2004b), the total fertility rate in Tanzania in the early 70s (1970-75) was 6.8 births per woman which has dropped to 5.1 (2000-2005). This represents rather a small change when compared with a drop from 6.9 to 4.1 in Ghana over the same period. In the early eighties GER in Tanzania nearly reached 100% whereas in Ghana it never reached 80% and yet Ghana saw a far greater drop in fertility rates (UNESCO Institute for Statistics 2001; UNDP 2004b). The extent to which education has contributed to this fall is debatable but what is clear is that UPE in



the late 70s did not lead to a dramatic drop in fertility in Tanzania. Figures for fertility by education level (see table 6) indicate that women with primary education have only slightly fewer children than those without, and that incomplete primary education makes almost no difference to fertility. Women with secondary education have considerably lower levels of fertility than those without. Interestingly the figure given here matches remarkably with the aspirations of secondary school students in Morogoro district, many of whom said they hoped for four children, two girls and two boys (Brock-Utne and Possi 1990).

Table 6 fertility rates by residence and education level

	Total fertility Women aged 15-40 years
<b>Residence</b>	
Dar es Salaam	4.0
Rural	6.6
<b>Education</b>	
No formal education	6.5
Incomplete Primary	6.4
Complete primary	6.0
Secondary/ higher	4.2

Source: Omari 1999 p84

Whilst the difference in fertility between women with and without secondary education is large, the gap between those in rural areas and those living in Dar es Salaam is even larger and may be indicative that urbanisation has a greater fertility reducing effect than schooling. This raises the possibility that the link between education and fertility in Tanzania is not a direct one but that more educated women are more likely to come from, or migrate to, urban environments and it is the urban environment rather than schooling per se that impacts on their fertility.

The relationship between education and HIV/AIDS prevalence is a complex one that appears to be changing over time. Studies carried out in the early 1990s in Tanzania and in neighbouring countries, found that the higher the level of education, the greater the infection rates (Kelly 2000; Hargreaves and Glynn 2002). This was probably due to more educated populations being more mobile and hence more likely to be exposed. In Tanzania the link was strongest among rural populations. However, more recent evidence from Zambia has shown that whilst infection rates increase among those with lower education levels they decrease for those with medium and higher levels of education (Kelly 2000). In Uganda, infection rates in the early 90s were similar across education levels but started to decrease among secondary graduates in 1995 and among primary graduates in 1998 (UNESCO 2004a). Evidence from Tanzania shows a marked increase in condom use among males with higher levels of education although so far there is little evidence of a decrease in infection rates linked to education levels. The first year biology syllabus for secondary schools in Tanzania is largely concerned with equipping students with life skills for avoiding high risk behaviour and protecting themselves from infection by HIV and other sexually transmitted diseases (URoT 1996). Education about HIV/AIDS has also been introduced into the last three years of the primary curriculum. The education-HIV prevention link is not simply through curricular content. Research in Uganda (de Walque 2004) found that

generic cognitive skills gained through schooling enabled individuals to be more responsive to public campaigns.

As pointed out by Glewwe (2002), a limitation of many of these studies is that the measures of education are based on quantity (years in school) rather than quality (cognitive gains). Studies based purely on years of schooling may give inconclusive results if the quality of the schooling delivered is highly variable.

### *Qualitative studies*

It has been suggested that many of the returns to education may for a long time have gone unnoticed as they are difficult to quantify or measure. However, they may have an impact both on the development of society and on poverty reduction. It has been found that education can contribute to increased levels of trust (Balatti and Falk 2002) and tolerance (Schuller, Brassett-Grundy et al. 2002). The education system in Tanzania, especially at post-primary level where residential institutions were the norm, has brought people together from a wide variety of backgrounds. Primary education in the medium of Kiswahili has helped to develop a common language and identity across Tanzania. When compared to the neighbouring countries (Kenya, Rwanda, Burundi, and Uganda) Tanzania is notable for the lack of ethnic unrest in recent history. Furthermore Tanzania is remarkable for the level of religious tolerance, with Muslims and Christians living side by side. School is valued for the social connections that it can lead to (Maarifa ni Ufunguo 2002). Given the important role attributed to trust and social capital in poverty alleviation in Tanzanian society (Narayan 1997), education may have more far reaching implications for poverty reduction than are captured by statistical analyses.

Within the theoretical framework of the most recent PPA (RAWG 2004), education builds human capital which broadens an individual's or a community's range of response options when exposed to shocks and stresses such as illness, damage to crops etc. It is therefore seen as an armament to protect people from impoverishment.

Research participants in the TzPPA regarded education as one of the most decisive assets determining their range of response options.... In our rapidly changing world, it is evident that people's ability to think quickly and access a wide range of information is key to their wellbeing. (RAWG 2004:148)

One example of this is the way in which education provides females with a wider range of response options to avoid unwanted pregnancies.

According to those participating in the TzPPA, one of the most significant factors affecting women's decision-making power (in this and other domestic matters) is level of formal education. Thus, they say schooling gives women new ideas, confidence and the capacity to argue their own interests – all of which are key to taking control of/responsibility for limiting and spacing births. (RAWG 2004:113)

Even though it is commonly accepted that primary education is no longer likely to lead to waged employment, many parents still value it for the behavioural values that it imparts to children. Parents in Kilimanjaro region felt that primary education helped their children to avoid bad behaviour and to distinguish between right and wrong. It was also seen as a route to improved

ability to manage family affairs (Maarifa ni Ufunguo 2002). However, the main reason that many parents give for enrolling their children into primary education is that it will enable them to access secondary education, even though in practice (currently) only a small minority will get secondary places (Ewald and Narman 2004).

The PPA (RAWG 2004) gives cultural beliefs and practices as a major class of impoverishing force. It points out that low levels of education reduce an individual's capacity to combat discriminating customs. Many of these potentially harmful practices, such as female genital mutilation, relate to women. It argues that some women are compelled to stay in abusive relationships due to lack of education which leaves them with few escape routes and poorly equipped to counter customs which force them to submit to abusive husbands. Female education can lead to gender equality, women's empowerment and increased well being. There is also evidence of a threshold effect at secondary level, with post-primary education enabling women to become change agents (World Bank 2004). Education has the potential to have a dual effect in reducing the influence of impoverishing cultural beliefs; it both equips individuals with the resources to deal with them and it mitigates these beliefs within society as a whole. There is also a virtuously reinforcing cycle with better educated mothers giving greater input into their children's education.

As well as providing human capital, education contributes to the social capital by forging new social networks and providing communications skills. One possible mechanism through which education increases the success of entrepreneurs may be through the social networking that secondary and higher education facilitates. Trulsson (1997) proposes that higher education enables entrepreneurs to build up high powered connections that may contribute more to the success of their businesses than their academic studies. Even where "connections" are not explicitly utilised, individuals may be inspired or learn from others that they are educated with.

Overall, the research, whilst less extensive or statistically robust than research from other countries, tends to support the argument that public investment in mass education has great potential for poverty reduction. However, for some effects primary education may not be enough to make a difference and it is only at secondary level that education provides tangible benefits both for individuals and for society.

### **Universal Primary Education in Tanzania: Lessons from History?**

There are many parallels between education policy of the 20 years following the *Arusha Declaration* of 1967 and current global EFA policies.

- Primary education was intended to provide students with the basic knowledge and skills for life, rather than being a preparation for further academic studies
- Universal Primary Education was made a goal and a target date was set.
- Adult literacy programmes were seen as important support for UPE
- Secondary and higher education were seen as something that could only be provided for a minority and should be considered less of a priority in terms of public resource allocation.

Many Tanzanian writers (e.g. URoT 1990; Leshabari and Masesa 2000; Rajabu 2000) identify the push for UPE between 1978 and 1984 as the major cause of the deterioration in quality at all levels of education in Tanzania. The restriction and neglect of the secondary education sector impacted on the perceived and actual quality of the primary sector. Expansion of primary without expansion of secondary led to reduced transition rates, which was perceived by parents as reduced quality of primary. The expansion of primary also caused a high demand for teachers, to the extent that there were not enough secondary graduates to supply the demand, and primary teachers were instead drawn from populations who had not attended secondary school. The Government is still paying for the retraining of teachers who were originally employed with limited post-primary education (grade B/C) as a temporary measure back in the 1980s (URoT 2003b). The fall in quality of primary education caused parents to lose faith in the value of sending their children to school (Malekela 1994) and made the initial progress towards achieving UPE unsustainable. By the end of the twentieth century the level of quality of the education system had reached crisis point (Kuleana 1999; Galabawa, Senkoro et al. 2000; Lwaitama, Mtalo et al. 2001). Schools lacked sufficient classrooms, toilets and classroom furniture. The actual number of toilets was less than 40% of the required number. Most parents reported that lack of textbooks was a 'big problem'. Less than half of teachers met the Ministry's minimum qualifications requirements (form IV with a two year teacher training course). Classrooms were overcrowded, teaching methodology was authoritarian and harassment of pupils, including sexual harassment, was common (Rajani 2001). The level of absenteeism among teachers was high. A UNICEF and UNESCO survey showed that in Tanzania 38% of primary school teachers were reported as absent for at least two days in the previous week (Kuleana 1999). The outcome of these conditions was that many children dropped out of primary school or were never enrolled. Of those that lasted the seven years, around three quarters failed the final examination.

Even with the exceptionally low transition rates from primary to secondary, entrants into secondary education generally have very low levels of competency in key skills (Malekela 2000). Poor levels of English greatly inhibit the quality of learning at secondary schools (Roy-Campbell and Qorro 1997; Brock-Utne and Holmarsdottir 2004). The decline in standards of students' communication skills has even been noted at university level (Cooksey, Levey et al. 2001). The limited secondary education system has led to a very limited pool from which to draw teachers for both secondary and primary levels. Many of those who do go into teaching have passed through a very impoverished education system, and so a cycle of poor teaching is perpetuated.

The quality of education could have serious repercussions in terms of equity and poverty reduction. One symptom of parents' lack of faith in public school quality has been the rise of the private tuition industry. This has been exacerbated by poorly paid teachers who feel that they need to subsidise their salaries with extra work. There are reports that some teachers deliberately under-teach in order to coerce pupils into attending their private tuition classes (Rajani 2001). For the primary school leaver examination, there is a close correlation between those who receive tuition and those who pass and get selected for secondary school (Mbelle and Katabaro 2003). At O' level the effects are not so marked. If curriculum delivery shifts into private sector tuition due to poor delivery in schools, the poor become excluded from much of the curriculum and their access to higher levels of education restricted.

There has also been a negative impact on other sectors, for instance there has been a shortage of candidates with high qualifications to enter medical training. As a result, the entrance level for medical school was lowered and most students entered with scores of either D or E in their

science subjects (Leshabari and Masesa 2000). As discussed above, many employers feel that the products of the education system do not have the skills that they require of their employees.

The social returns to primary education in Tanzania have not been as evident as might have been predicted by international statistical measures of the potential benefits of education. Economic growth has been slow and much of the population still lives in poverty. Nearing UPE in Tanzania in the early 1980s gave few apparent returns in terms of human development and was not sustainable. As Tanzania heads once again for UPE, it is necessary to consider whether the environment, both within schools and outside of them is significantly different now to how it was in the 1980s and whether these different conditions are sufficient to enable primary education to be sustainable and to lead to poverty reduction this time around.

### **The Primary Education Development Programme: Establishing a Sustainable Learning Environment?**

The Primary Education Development Programme (PEDP) runs from July 2002 to June 2007. Its main goals are expansion of enrolment, improvement of quality, building capacity and optimising resource use within the education sector. The main quantitative aim is to achieve UPE by 2005. Qualitatively, it aims at reducing teacher pupil ratios to 40:1, providing teachers with in-service training and providing a 10US\$ grant per student to be spent on teaching-learning materials, including one textbook per 3 students in each subject.

Prior to the formal implementation of PEDP, in the first PRSP (URoT 2000c) it had been decided to make primary education free. In 2001 there was a surge in standard I enrolments as a result of this decision. The largest influx of primary students was in 2002, following the start of PEDP, when standard I enrolments increased by 43.1% (Mushi 2003); approximately half a million extra children in schools in one year alone. Since then, standard I enrolments have begun to stabilise. Overall enrolments increased by over 2 million between 2000 and 2003 (URoT 2004c). It seems unlikely that the dropping of school fees alone is responsible for the dramatic increases. A survey of parental attitudes to education in the 90s indicated that faith in the quality of education had fallen so low that some parents would not send their children to school unless forced and that the fees themselves (2000 TSh per year<sup>10</sup>) were not a major impediment to enrolling children (Bergmann 1996). In practice many schools charged much more than the 2000 TSh. They made various other charges such as development fees and desk fees, so in some schools the cost was a major deterrent to enrolment. Under PEDP, schools are prevented charging these 'other charges' and students can no longer be legally be turned away from school for lack of uniform. The capitation grant has, in most cases, compensated for the loss of income to schools and has begun to bring improvements in quality. This, alongside the construction of classrooms, has convinced most parents of the need to enrol their children.

Initially in PEDP there was a deliberate focus on quantity, as the main priority was seen as getting children into schools and building physical capacity to accommodate them. It was also hoped that this would provide the momentum for changes in quality<sup>11</sup>. Quantitative progress has been impressive with the national GER exceeding 100% in 2003 and the NER exceeding 90% in

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<sup>10</sup> approx 2.5 US\$ by 2000 rates

<sup>11</sup> Jonny Baxter, former education adviser for DfID Tanzania, personal communication 2004

2004. Some regions (Kilimanjaro and Mara) have reputedly attained UPE. Others (Kigoma, Dodoma, Tabora) still have NERs below 80% and the goal of achieving UPE by 2005 has not been met. There has been an apparent leap in quality as far as the results of the PLSE go, with 40.1% passing in 2003 compared with 27.1% in 2002 and 19.9 % in 1999 (Mungai 2004). However, improving pass rates probably reflect changes in the examinations more than changes in the quality of education.<sup>12</sup>

As the programme has progressed the emphasis has remained on quantity. Sumra (2003:3) comments that “At the community level key stakeholders have seen no evidence of efforts to improve quality”. The pupil teacher ratio has worsened from 46:1 to 57:1, and is as high as 71:1 in some regions. In individual schools there are classes of up to 200 or more (Sumra 2003). Many schools have adopted double shift teaching to cope with the increased enrolment. This has led to a reduction of teaching hours from 6 to 3.5. Little in-service training has taken place and many schools are still lacking textbooks. District spending on learning resources has mainly gone on expensive science kits but few teachers have the skills to use these. There has been a great deal of construction but most of this has been classrooms. Far fewer teachers’ houses or latrines have been built (Mushi, Penny et al. 2003). Teachers’ houses are important for staff retention, especially in remote areas, whilst latrines are important for maintaining attendance, especially for girls. In some areas the quality of construction has been low.

Enrolment rates have soared but drop out rates are high, nearly 40% in some regions. Transition rates have shown a decrease since the introduction of PEDP, with more students dropping out and more repeating. Notably, in 2002/2003 over 20% repeated standard IV, the year during which pupils sit the first set of public examinations (URoT MoEC 2003). Increased repetition rates may be in part due to the removal of school fees leading to parents being more willing and able to put their children through an extra year of schooling, but is also indicative of falling quality and results in reduced efficiency. Transition rates to secondary school have been increasing but as the first cohort of PEDP students start to graduate over the next few years, without a dramatic increase in the number of secondary places available, transition rates will fall sharply. Even with the secondary expansion planned under SEDP (see below) a temporary drop off in transition rates is anticipated from 2007 to 2010. Fall in transition rates could be interpreted by parents as a fall in quality of primary education and lead to loss of trust in the system, with the danger that some parents will withdraw their children from school.

Tanzania has always struggled to get enough school leavers with good passes in the core subjects to enter teacher training (Chediak, Sekwao et al. 2000). The rush to train teachers may have led to a lowering the minimum qualification requirements of those being admitted for teacher training. The *Education and Training Policy* (URoT 1995: 48) states that minimum admission requirement for teacher education certificate course is division III at O’ level.<sup>13</sup> Taking the year 2000 O’ level candidates as a sample, there were 47,389 candidates of whom 12,226 (25.8%) scored division III and above. The following year 13,090 students joined form V. Assuming that the form V students came from the higher achieving O’ level candidates, it seems highly unlikely that many of the 6768 trainees enrolled in the first year of the certificate teacher training course in 2001 had division III or above in their O’ levels. The secondary education system simply

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<sup>12</sup> in 2003 the PLSE changed from 3 papers (Language, Sciences, Mathematics) to 4 (Kiswahili, English, Sciences, Mathematics). Thus the weighting for the mathematics paper, in which pupils tend to score least, was reduced and the weighting of marks for Kiswahili increased (Davidson 2005).

<sup>13</sup> Division III is 22-25 points where A is scored as 1, B=2 etc, scored for the best 7 examination results, so represents an average grade of C/D

wasn't producing enough students with reasonable qualifications to progress to further education and to supply quality primary teacher trainees. The pressure to reduce trainees' entrance qualifications was even greater when PEDP came into operation. In 2003 there were 15,283 first year grade A certificate trainees. The previous year there were 17,923 students graduating from secondary school with passes at division III or above; however, the vast majority of these would have gained places at A' level schools (there were 14,210 form V students in 2003), implying that most trainees entering the certificate course did not have division III<sup>14</sup>. According to the 2003 Joint annual Review of PEDP (Mushi, Penny et al. 2003), teacher training colleges are heavily over subscribed, which allows them to select higher quality candidates, although it does not mention what proportion of applicants meet the official minimum of division III. Anecdotal evidence from the field would suggest that the grade requirements for entering teacher training have increased in recent years but it is still the case that many trainees do not have division III. It should also be noted that prior to PEDP there had actually been an overproduction of teachers to the extent that a freeze had been put on teacher employment, leaving many teachers unemployed in 1998 (Chediell 2000). Many of these unemployed teachers have been taken on as part of PEDP.

Teachers trained in the "crash programme" of the previous UPE drive, who were taken on without secondary school qualifications, are required to "upgrade" to grade A by studying and sitting for O' levels. Results released in 2001 showed that over 90% of teachers sitting O' levels failed (Rajani 2001). The teacher upgrading programme has been reformed through PEDP but the first cohorts have not yet completed the new programme. Teacher Resource Centres have been built but few primary teachers have enrolled for O' level courses and many are run simply as O' and A' level tuition centres (Mushi, Penny et al. 2003).

PEDP, like the previous UPE drive, has led to teacher training being restructured and the college based component shortened. Instead of doing two years in college with periods of teaching practice, trainees stay one year in college and one year in field placements. The colleges were given no guidelines on how to compress a two-year curriculum in to one year. Support for trainees during their placement year has been inadequate both financially and professionally, leading to many trainees leaving their posts. Until recently, there was no evidence of any form of mentoring by education professionals other than assessment by the inspectorate (Mushi, Penny et al. 2003), although in late 2004 diploma teacher training centre staff were busily occupied in the assessment of trainees on school placement and in running in-service courses for established teachers. However, whilst this training was taking place, diploma level trainees were left without tutors for long periods highlighting the training capacity limitations within the education system. Despite all this there has been broad satisfaction with the trainees and they are declared to be "definitely not like the "UPE" teachers "trained" in the 1970s" (Mushi, Penny et al. 2003: 46).

It was originally proposed that there should be incentives to encourage teachers to work in remote areas. To date, there has been no incentives package and slow progress on the construction of teachers' houses has been a disincentive. Until now the strategy used to fill rural posts has been to send trainee teachers to these areas for their in-school training year, hoping that they will stay. This strategy has several disadvantages. First, the trainees are put in the schools with the fewest resources for supporting them. At the best, this leads to teachers with poor professional development; at worst it could lead to many teachers dropping out of the profession. In 2003 the President's Office approved the recruitment of 11,651 teachers but only 9,711 (83%)

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<sup>14</sup> figures from Basic Statistics in Education 1999-2003 (URoT, MoEC 2003)

new teachers reported to their workstations (URoT 2004d). In some regions 20% of trainees absconded from their placements (Mushi, Penny et al. 2003: 46). The second disadvantage is that rural schools could become largely staffed by inexperienced trainees with a high turnover, thus reducing quality of education in these schools and causing an increased quality gap between rural and urban schools, and potentially between urban and rural development. The need for greater support for teachers in some areas is noted in the draft of the second PRS which states that:

A key priority will be to make sure that well-trained and motivated teachers are equitably deployed and adequately supported to perform effectively, with a special incentive package for teachers to work in hardship areas. (URoT 2004b: 28).

Qualitative improvements may have been slower to be realised than had been hoped for but this has partly been due to the time needed for the new delivery systems to develop. The financial commitment to PEDP from donors and the government is being maintained and it is still relatively early to evaluate PEDP's impact on quality. The learning environment that is being developed is very different from that of the UPE classrooms of the 80s, at least materially. Changes in the quality of teaching are likely to be much more gradual. The joint review notes that the smart new classrooms tended to have bare walls and desks arranged in rows, indicating continued reliance on a mainly lecture based pedagogy (Mushi, Penny et al. 2003).

## Secondary Education

Despite its relative neglect in terms of funding, both from the government and from donors, and its low profile within *Vision 2025*, the secondary school system has grown considerably over the past five years (see table 7) with the majority of the growth being accounted for by new community-built government day schools.

Table 7: Number of secondary schools 1999/2004

	1999	2004
Government Schools	450	828
Non-government Schools	414	463
Total	864	1291

Source: (URoT MoEC 2003; Mungai 2004)

Expansion of the private sector has slowed considerably since the 1990s, indicating that the demand for private education from those who can afford it has mostly been met and there is limited capacity for further expansion. The construction of secondary schools by the local communities, in the face of extensive poverty and very limited government support, is indicative of the high social demand for secondary education. However, as demand for education and ability to construct schools is not evenly distributed, the growth of community schools has increased regional disparities. In 2003 Kilimanjaro region had more than twice as many schools as any other region, and three times as many as most (URoT MoEC 2003). The vast majority of these schools were built by the local communities and run either as government schools or as church schools.



The non-governmental sector is more varied than the public sector and tends to include both the best and the worst secondary schools in terms of examination performance. Seminaries, which educate under 5% of the secondary population, tend to have the best results, with almost 75% of candidates gaining division I to III in the 2004 form IV examinations. Most of these are well established and very selective. They are run by religious bodies. In other non-governmental schools, less than 40% of candidates scored division I to III. In government schools over 45% scored I to III. Around a third of those sitting the O' level examination in 2004 were private candidates. Many of these candidates study at private 'evening schools' or tuition centres that have not been officially registered as schools with the ministry. Only 2% of these candidates achieved division I to III.<sup>15</sup> Overall, the non-governmental sector has tended to be less efficient in providing secondary education than the public sector, although certain individual schools do offer high value for money (Lassibille & Tan 2001).

Access to secondary education is extremely biased towards the urban areas. According to data from the 2000/2001 Household Budget Survey, enrolment rates at lower secondary for urban children are seven times higher than for rural children. There is also a seven-fold difference between enrolment rates for the richest and the poorest quartiles. At upper secondary the urban-rural enrolment difference rises to well over a factor of ten. Given average incomes, secondary fees, which until recently were 40,000TSh (40US\$)<sup>16</sup>, were arguably unaffordable for most Tanzanians and the burden is proportionately much greater for poorer households (World Bank 2004: 52).

Whilst government spending per pupil at secondary school has been calculated to be around 7 times the spending per pupil at primary (Dar 2000), secondary schools face a similar crisis in quality (Malekela 2000; Mushashu 2000). There is evidence of some improvements in recent years. As with the PLSE, there has been a steady increase in the percentage of students passing the form IV examination with the percentage of those getting divisions I-III rising from 21.3% in 1999 to 39.1% in 2004 (Mungai 2004). The public spending per student in government schools has increased from a low of under 60,000 TSh in 1998/99 to around 120,000 TSh per student in 2003/04<sup>17</sup>. Of this spending, the majority is used for wages. Government spending on textbooks is only \$0.61 per student (World Bank 2004). In many areas private tuition is the norm, with 65% of those surveyed in one study reporting to have tuition (Mbelle and Katabaro 2003). The average parental contribution, including fees and other expenses such as uniforms, is estimated to be over twice the government contribution (URoT, MoEC 1999a).

Over the country as a whole, there is no absolute shortage of teachers (World Bank 2004: World Bank 1999). Pupil teacher ratios stand at 22:1 but this ratio hides rural-urban disparities and shortages in subjects such as science and mathematics. In terms of quantity, the main problem with teachers up until now has been inefficient distribution, with urban schools being over staffed and rural schools understaffed. According to the *Education and Training Policy* (URoT 1995), at least half of the teaching force in lower secondary schools should have degrees, with diploma teachers not teaching above form II. In practice only about 14% of teachers in public secondary schools are degree holders and most teaching up to form IV is done by diploma holders. Most teachers with degrees work in non-government schools (URoT MoEC 2003).

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<sup>15</sup> Calculated from National Examinations Council of Tanzania November 2004 Examinations Results Press Release issued March 02, 2005

<sup>16</sup> Fees were reduced to 20,000 TSh in Jan 2005 under SEDP

<sup>17</sup> Calculated from United Republic of Tanzania, M.o.E.C. (1999a) and World Bank (2004).

In terms of quality of teaching, there has been a prolonged vicious cycle of poor educational quality in primary and secondary schools producing school leavers with weak subject knowledge who have gone into teaching and perpetuated the same teaching methods that they were exposed to themselves. Teacher training institutions have struggled to fill their courses and as a result have taken on trainees with low grades. In the 80s UDSM lowered its entry point into the education (science) course to 3.5 points at A' level (equivalent to 3 Es and a subsidiary) in order to get enough students to enter to cater for the demand of teachers (Chonjo 1990: 8). By the late 90s supply of form VI leavers had increased so that competition for university places was increased, but even so, in 1998 the majority of BSc (education) course entrants had 7 points or less at A' level (equivalent to CDD). At diploma level most trainees enter with a mixture of Ds and Es, and many with only 2 E grades. In practice this means that many trainees lack understanding of the fundamental concepts that they are expected to teach. Even with such a low entry point, teacher training colleges cannot fill all their places (Osaki and Njabili 2003).

When considering quality of secondary education in Tanzania, the issue of the medium of instruction cannot be ignored. Whilst primary education is taught through Kiswahili medium, secondary education is officially taught through English medium. The choice of the medium of instruction in education has been hotly debated throughout Tanzania's history (see Brock-Utne and Holmarsdottir 2004). The data from numerous studies implies that the level of English of both teachers and students is a severe limitation on the quality of learning in secondary schools. Many academics argue that it is no longer feasible to achieve effective learning in the majority of secondary schools using an English medium (Roy-Campbell and Qorro 1997; Roy-Campbell 2001; Brock-Utne and Holmarsdottir 2004; Senkoro 2004). Curriculum delivery through a foreign medium encourages rote learning and reduces the chance of life skills education (e.g. HIV/AIDS prevention) leading to positive behaviour change. Since the use of English impacts negatively on the learning of secondary students, it in turn impacts on the quality of primary teachers. Much of primary teachers' content knowledge will have been taught to them through a language that they lack fluency in, often by teachers who struggle with English themselves; hence primary teachers grasp on content knowledge can be very fragile. The English medium was also acting as a barrier to UPE trained teachers trying to upgrade by sitting O' levels (Wort 2001). Teachers can now upgrade through Kiswahili medium.

The ESDP analysis of strengths and weaknesses of the education system (URoT 2001a) gave the use of English medium as a strength as it enabled Tanzanian students to study anywhere in the world. This could be considered an elitist agenda, as only a tiny minority will ever get the opportunity to study abroad. For the sake of this minority, the majority are expected to suffer the disadvantages of having to study all subjects in a foreign language. The idea of switching to Kiswahili medium at secondary schools is unpopular, as many feel that it would lead to a further deterioration of levels of English among students. However, as it has been pointed out by Roy-Campbell and Qorro, abandoning English as a medium of instruction does not mean abandoning it as a core subject. The low quality of secondary education cannot be exclusively blamed on the use of English medium, as primary education quality is also poor, despite being in Kiswahili.

The low quality of education and the financial burden of fees on parents have had negative effects on efficiency in terms of high drop out rates. Following the 2000 form I cohort, the progression rates to forms II, III and IV respectively were 98.5, 83.7 and 87.3%, meaning that less than 72% of the original cohort continued directly to form IV. The number sitting the examination at the end of form IV may have been even less (URoT MoEC 2003). The lowest

transition rates are for form II to form III, with the form II national examinations leading to a high drop out rate. Students who fail the examination are not allowed to progress to form III and many parents may be unwilling to pay the fees for them to repeat a year. Retention is much lower for girls than for boys, so whilst the gender balance is close to 50:50 in form I, girls make up around 40% of those leaving school. This is largely due to girls' poorer performance in the form II examinations. The retention rate for girls in the 2001 form I cohort in government schools was 61%. In some regions the retention rate is very low. In Lindi and Rukwa, only 50% of those students enrolled in form I in 2001 reached form IV in 2004. The number of girls in form IV in 2004 in Lindi and Mara regions was only a third of the number of form I girls in 2001, implying that two thirds of girls had dropped out or transferred to other regions.<sup>18</sup>

The problem of low retention of both teachers and students is most acute in the rural areas. This problem is typified by the case of one rural school at which the author once worked.<sup>19</sup> The school was built to accommodate two-stream entry and accepts up to 80 form I students each year. It has good rooms, smart, well-equipped laboratories with piped water, a good supply of textbooks and a small library. However, the school has been without a qualified mathematics teacher for several years and there is only one qualified science teacher. Most students rent rooms in town as the catchment area is wide but there are no boarding facilities. Many students live in poverty, working out of school hours to earn enough money for food and rent. The majority of students don't manage to last the four years at school under these conditions, with large numbers dropping out after the form II examinations. In 2003 only 4 students sat for their form IV examinations, giving a retention rate of only 5%. Two failed and the other two got division IV which leaves them with very limited prospects for employment or further training. While this is a rather extreme case, the dropout rate in many rural schools is much greater than national statistics would suggest.

Originally boarding schools were the norm at secondary level and access was based on merit. This system was assumed to give equitable access to students from all backgrounds. However, due to inequalities in primary provision as well as the strong influence that socio-economic status has been found to have on educational achievement, government secondary school populations have become highly skewed towards the richer end of the spectrum and poorer families are underrepresented. Thus, by providing boarding facilities, the government is subsidising the living costs of what is largely a middle class population. It is for this reason that government wants to phase out government boarding schools, along with strong encouragement from the World Bank who see boarding schools as an inefficient and inequitable use of resources (World Bank 1996; Rajani 2001; World Bank 2004).

Although the chances of a child from a poor rural family getting into a boarding school are currently very slim, for many families boarding schools remain the only truly viable option for secondary education. Few rural communities are served by day schools. As illustrated by the example above, students from rural areas often end up renting accommodation so that they can attend a day school but can only afford very low quality accommodation and have to raise their living costs through working. Youths, especially girls, are made vulnerable to risks of sexual abuse as they are forced to live away from home (Rajani 2001). Government boarding schools therefore have the potential both to be regressive, if the majority of students come from more

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<sup>18</sup> Calculated from Basic Statistics in Education Regional Data 2001 (URoT, MoEC 2001 & 2004b)

<sup>19</sup> The author visited the school on numerous occasions between 1999 and 2001 and met with teachers from the school in 2004.

affluent families, as is the case at present, or to be progressive, by providing education for children from rural areas without local schools. For the latter case to be realised, places at government boarding schools would have to be reserved for students from underserved areas. The quota system could be used to enable this if places were allocated at district rather than regional level.

A goal was set in the *National Poverty Eradication Strategy* (URoT 1998) to have a secondary school in every ward by 2010. However, this goal is still very far off. Tanzania has around 2,500 wards and around 1300 secondary schools, many of which are concentrated in urban or semi-urban areas. Tanzania is still in a transition phase from secondary education being provided predominantly by national boarding schools to provision by local day schools. While rural areas wait for the development of local schools, they must rely on a diminishing number of boarding places. To alleviate the situation of students living away from home to attend day schools, some communities have striven to build hostels, especially for girls. This could provide an interim measure while the diameter of school catchment areas remain larger than what is feasibly commutable for most students.

Funds exist to help support bright children from poor families to attend secondary schools. However, the allocation of such funds can be fraught with corruption. At the local level many districts had district education trust funds but the income to these funds was largely dependent of the development tax which has been scrapped in an effort to encourage small enterprise (see below), so this source of funds is being phased out. There are also funds available from the central ministry for orphans and children from poor families. Scholarships are designed to cover all of the costs of education, and not just the school fees. Ministry scholarships are currently 180,000 TSh (180 US\$), leaving over 100,000 TSh (100US\$) to cover costs for transport, uniform and other requirements. Many non-governmental and faith based organisations also sponsor secondary school students. Despite these funds, major barriers still exist that prevent intelligent children from poor rural families accessing secondary education. Low quality primary education means that few children from rural areas qualify for secondary education, and very few for places at the prestigious national boarding schools. For the few that do, their ability to access financial support depends on how well informed the local community is about available funds and whether the lines of communication are corruption free. There is also anecdotal evidence of bright students from rural areas reporting to distant secondary schools only to be turned away because their place, and even their identity, has been ‘sold’ to a child from a wealthier family.

### *The Secondary Education Development Programme*

In July 2004 the Minister for Education and Culture, Joseph Mungai, announced the launch of the Secondary Education Development Programme (Mungai 2004). The aims of SEDP were given as:

- Improvement of access
- Improvement of equity
- Improvement of quality
- Devolution of powers
- Improving education management systems

The strategies for improving access and equity are:

- build new schools and classrooms, through a system of development grants to local communities.
- reduction of day school fees from 40,000 TSh (40 US\$) to 20,000 TSh (20 US\$) per year,
- increasing the number of scholarships for children from poorer families from 6000 to 12,000
- reducing per-pupil costs by more efficient use of teaching resources (including redistribution of teachers and increasing pupil:teacher ratios)
- expanding distance learning schemes
- rehabilitation of schools for disabled students

In order to improve quality it is proposed

- to give capitation grants to cover non-salary costs and to make up for the reduction in fees (50,000 TSh total per student)
- to improve in-service training
- to enlarge the teacher training sector
- to include education for self reliance, gender, environment and HIV/AIDS prevention within the curriculum
- to reduce the number of compulsory subjects, dropping the technical/vocational subjects
- to improve libraries
- to improve the examinations

Ministry of Education and Culture gives a list of six major justifications for investment in SEDP. The first two relate to economic growth and are given as:

- a) Modern economies require the supply of educated and trainable labour force with secondary education as the minimum qualification.
- b) Secondary education is a necessary condition for economic competitiveness in the context of globalisation and liberalization.  
(URoT MoEC 2004a;v)

This emphasis on the modern labour market and the global economy implies that some major changes in the economy, in terms of modes of production, are anticipated in Tanzania. Further on in the document it anticipates that most future employment growth will be through small and medium businesses and claims that secondary graduates are more likely to establish these. It implies that the role of secondary education is conceived as providing skills for employment and for employment creation rather than for rural development. This is a major departure from Education for Self Reliance and the ideology of Nyerere. The sixth justification given is that expanded secondary will provide more applicants for tertiary and higher education. This implies that a major role of schooling is the preparation for further academic levels, even though the majority will not be selected to go to university. This also goes against the philosophy of Education for Self Reliance, which saw schooling as preparation for life rather than for further studies.

The three other justifications relate more closely to poverty reduction. The third point given is that secondary education is needed for the improvement of quality and retention in primary schools. The fourth is that secondary education is central to the PRS and the fifth is that secondary education has huge social benefits. The social benefits claimed for secondary education are:

...improvement of health standards, mitigation of fertility rates, reduction of infant mortality, containment of the spread of HIV and AIDS, and a greater social participation in democratisation and development processes.  
(URoT MoEC 2004a: v)

The World Bank is providing 150 million US\$ for SEDP, mainly as a loan but partly as a grant. It has had considerable influence in the design of the programme. One aspect in which their influence can be seen is the removal of the “biases” from the curriculum, which used to include agriculture, commerce, domestic science and technology. Based on evidence from the early years of diversified schooling in Tanzania and Columbia (Psacharopoulos and Loxley 1985), the World Bank has maintained for a long time that diversified secondary schooling is inefficient (Bennell and Segerstrom 1998). In practice, few students still follow the “biases” due to shortage of teachers and preference for the alternative academic route offered by most schools.

Poverty alleviation is built into a number of aspects of SEDP. Average Tanzanians (who are poor by any international standards) will have greater access to schools due to the increase in places and reduction of fees. The poorest will be helped with scholarships. SEDP plans to increase the scholarship scheme from 6,000 to 12,000 students per year. This represents 7% of the form I intake for 2005. As the number of secondary places is increased, the proportion of sponsored places will fall rapidly unless the number of scholarships is increased. There is no mention of plans for future increases in the number of scholarships. Building schools in rural areas through a grant system will bring money into these districts and provide some local employment as well as giving school access to the local children. Improvements in quality should reduce parents’ reliance on tuition and hence reduce parental costs as well as providing school leavers with more usable life skills. There will also be the indirect long-term benefits of a strengthened labour force leading to better development. It is hoped that reforms will improve overall efficiency in service delivery and empower local communities.

The vision of SEDP is to provide rural communities with day schools. There is no provision for building hostels as it is assumed that students will live at home; however, in the medium term this could lead to underutilisation of some schools. The SEDP document recognises the risk that the ability for parents to send their children to secondary school may mean that enrolments are limited by demand rather than supply:

Facilities to be constructed under the program in rural areas and areas with relatively lower incomes may be underutilized if parents still cannot afford the direct and indirect costs. (World Bank 2004: 17)

In schools like the one mentioned above, this is already the case. In other areas, parents do not even get as far as enrolling their children. For example, it was reported that 383 students out of the 1,996 allocated with secondary places (19%) in Lindi region in 2004 did not report to the secondary schools. The Regional Education Officer suggested that this was due to parents having little awareness of the value of education (Simba 2004). To avoid this underutilisation, SEDP proposes to base allocation of grants on “careful analysis of demand” but reduced direct costs through scholarship and the capitation grant are also expected to increase the ability of rural families to educate their children (World Bank 2004;17).

The political commitment to improving education in rural areas is yet to be demonstrated through implementation. During the first year of SEDP it is proposed to build 1,456 classrooms in existing schools (i.e. in areas that already have schools) and only 458 classrooms in new schools in underserved areas (Mungai 2004); so while some areas will get new schools, the increase of supply in “served” areas is three times as high. The need for an incentive package to keep teachers in poor rural areas is highlighted in the World Bank document and given as a conditionality on the second tranche. It is also mentioned in the draft of the second PRS. However, it was not mentioned in the budget speech introducing SEDP, and there are no plans so far for providing financial incentives. None of those spoken to among donors or Ministry seemed to think this likely or feasible. The experience from PEDP would indicate that support for rural teachers has not been a priority. With the expansion of the teaching force, there will be more teachers from rural areas. It is hoped that these teachers will be willing to serve in their home areas but the attractions of “home” have to compete with the attractions of urban life and potentially lucrative second salaries through tuition. In rural areas local produce is cheaper but very limited. Also there are few parents who are willing or able to pay tuition fees.

To some extent there are greater parallels between the 70s UPE expansion and SEDP than with PEDP. Even though the expansion of the primary education system through PEDP has been dramatic, in proportional terms it has still been lower than the rate of expansion under the previous UPE drive. UPE led to almost a tripling of primary enrolments between 1974 and 1980. PEDP will nearly double the number of primary pupils over a similar length of time (2000-2006). SEDP; however, even if it follows the medium growth trajectory, will lead to almost a tripling of the number of form I-IV students from 2004 to 2010. If the high growth trajectory, as favoured by the government, is followed, the number of lower secondary students will increase by a factor of five over the same period.<sup>20</sup>

A limiting factor to the rate of school expansion is the rate at which teachers can be produced. In recognition of this it is planned to accelerate the rate of expansion of upper secondary in order to produce a large enough cadre from which to draw teachers. However, this expansion is limited itself by the number of graduate teachers. In order to increase the output of teachers, a high school (Mkwawa in Iringa) and two teacher training colleges (in Dar es Salaam and Mtwara) will become education colleges under the University of Dar es Salaam. It is proposed that the degree course will be reduced to three years. In the World Bank document (World Bank 2004) it is proposed that the diploma course is changed from two years to one year in colleges and one year in schools (as for primary teachers under PEDP). The Ministry of Education document (URoT MoEC 2004a) makes no mention of this. Diploma holders will be able to gain direct entry into the second year of the degree programme. At the planned rate of expansion it is questionable whether enough secondary leavers can be attracted into teaching. For example, the number of new teachers to be employed in 2008 represents over 40% of the form six leavers in 2006.<sup>21</sup> All these changes could have serious implications for quality.

Another element of SEDP that is reminiscent of UPE policies is the “crash programme” for training “licensed teachers”. These are form VI leavers who have been given a few weeks training and sent to teach in schools. 615 teachers are already in schools (Osaki 2004). Given that

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<sup>20</sup> Under UPE enrolments rose from 1,228,886 in 1974 to 3,361,198 in 1980. Under PEDP they are projected to increase from 4,875,764 students in 2000 to 8,166,608 in 2006. Enrolment at secondary (I-IV) for 2004 is 379,534, the projected enrolment for 2010 is 1,028,88 (medium growth) or 1,912,425 (high growth). All figures from URoT, MoEC 2003 and World Bank 2004.

<sup>21</sup> calculated from figures in Mungai 2004

the majority of form VI leavers getting division II and above will have found places at universities, these “licensed teachers” are likely to have fairly low A’ level grades. A promise that after two years of teaching they will get a place at university has made it more attractive than the alternative path of entering teacher training college and so entry to the programme has been relatively competitive for the first year. In the Ministry of Education’s plan for SEDP (URoT MoEC 2004a) it is proposed that the training of licensee teachers will become the main source of new teachers, with over 30,000 licensee teachers entering into schools by 2010. This represents almost half the proposed total teaching force. It seems unlikely that these licensee teachers will receive much professional support if they constitute such a large proportion of the total number of teachers.

An aspect in which SEDP currently differs from PEDP is the level of donor support. Whilst the programme has received strong support from the World Bank, many of the bilaterals have shown a marked reticence in their approach to it. Partly this is due to a feeling that it is still too soon, that PEDP should first be given time to be consolidated and for the qualitative aspects to be strengthened, and that primary education should remain a priority for funding. Many donors agree that there is a great need for secondary expansion, but feel that quality UPE should be attained first. There is a fear that SEDP could result in a withdrawal of funds from the primary sector when much input is still needed, especially in terms of quality. According to the medium growth projections, the SEDP document proposes a drop in budget share to primary to below 60% by 2010, and by 2008 in the high growth scenario. No development spending has been budgeted for primary from 2008 to 2013. There is also a sense that the programme has been rushed into and pushed through by the World Bank with almost no consultation of other donors. Whilst the background research for SEDP was fairly extensive, it is felt by some donors and some of the academics involved in the research that the final document does not sufficiently reflect the findings and recommendations given. The consultation process was rather hasty and although there were two design workshops, bringing together the different background research and various stakeholders, several of those present felt that the outcomes of discussions were not taken on board.

Whilst the World Bank version of the SEDP document claims that “*the main purpose of the adjustment operation is not quantitative*” (World Bank 2004:16), the first objective is one of increasing access and the proposed rate of expansion is so ambitious that it is difficult to imagine that many resources will be left for qualitative improvements. The emphasis of quantity over quality in PEDP has been a growing point of contention between the government and the donor community. In SEDP, which is only just starting, the conflict is already evident. In the World Bank’s version of the document, a high growth and a medium growth scenario are given. The differing preferences for which scenario to follow are made quite clear:

GOT’s preference is to pursue a high growth scenario...to meet the labor market needs as well as to absorb the bulge of students from primary education in the next few years...However, because of the uncertainties about how the resource and institutional requirements for the high growth scenario would be met, it was thought prudent to start with the medium growth scenario which is considered more feasible.  
(World Bank 2004:7)

The Minister for Education and Culture’s budget speech, which followed the signing of the agreement, gave projected growth figures that exceeded even those of the high growth scenario (Mungai 2004). Many teachers have shown a somewhat cynical reaction to the news of SEDP,



commenting that 2005 is an election year. The political pressure to invest in quantity rather than quality is considerable, especially with the first PEDP cohorts set to leave primary in 2008 and with long established targets of achieving 50% transition rates from primary to secondary and lower secondary to upper secondary by 2010 to attain. Even in the high growth model, transition rates are due to fall slightly in 2007 due to a bulge in primary leavers which could lead to public disaffection. Whilst the benefits of expanded access are quickly appreciated by the electorate, benefits of investments in quality may only be appreciated well after the completion of the next electoral term.

## Higher Education

Enrolment in tertiary education during the 90s was very limited indeed, with only around 6,500 undergraduate students in 1998/9 (Cooksey, Levey et al. 2001). Since the end of the 90s enrolment in higher education has expanded rapidly, although much of the expansion has been through privately sponsored candidates, both at the state universities and at private institutions which have been granted university status. Current total enrolment in higher education in Tanzania is around 20,000 (Mshana and Mshalla 2004). About half of these are at the University of Dar es Salaam (UDSM). Ishengoma (2004) claims that expansion at UDSM has been only modest and has not kept pace with the output of A' level candidates. However, according to the figures that he gives, while the number of sixth form leavers doubled between 1991 and 2001, the number of undergraduates admitted to UDSM trebled. By these figures it would appear that university entrance had become less competitive rather than more. The figures given for recent years (see table 8) suggest that new enrolments at UDSM have roughly matched the number of A' level students getting three Ds and above (divisions I and II). The figures indicate that admission has become more competitive recently.

Table 8: Admissions to UDSM and good grade A' level passes 1997-2002

Year	No. students with div. I or II	New admissions to UDSM	New admissions as a % of those with div I&II from previous year
1997	1944	1607	95
1998	2261	1805	93
1999	2435	2457	109
2000	3028	3000	123
2001	4018	2950	97
2002	5093	3531	88

Source: Ishengoma 2004.

Note: a considerable proportion of UDSM new entrants are mature students or coming from colleges, so the situation for sixth-form leavers is more competitive than the figures imply.

Admissions increased throughout the 90s but since the 2002/3 academic year, the government has put a limit on the number of students that it will sponsor. Until then, the number of privately sponsored students had been almost negligible, but since 2003 most of the expansion in enrolment has been through privately sponsored candidates (Ishengoma 2004). These candidates study alongside the government sponsored students and the increase in numbers has led to

overcrowding of lecture halls. It is not uncommon to see students sat outside the lecture hall while lectures are being delivered.

There is limited data on the recruitment of disadvantaged students although there is evidence of regional bias within enrolments (Cooksey, Levey et al. 2001). In the 1993/4 Human Resources Development Survey (HDRS), from out of the 5000 households surveyed, there were only 5 students in higher education. All of these came from the richest quintile of society (Penrose 1998). A recent tracer study (Mukyanuzi 2003) found that 66% of the fathers of graduates sampled had not completed secondary education, and 61% were in semi or unskilled labour. For the 1980 graduate cohort, 82% of fathers had not completed secondary and 75% were working as semi or unskilled labourers. For the 1999 cohort, the figures of for the fathers were 53% and 49% respectively. Whilst this rise can partly be accounted for by the rise in education levels of the population as a whole, it also indicates that access to university education has become more elitist.

The increase in the number of privately sponsored students, both at UDSM and at private universities, has further skewed tertiary enrolments towards the richer end of society as the tuition fees (approximately 1000 US\$ for state universities and 1500 US\$ for private universities) represent at least twice the average annual income of most Tanzanians. However, income from privately sponsored students can be used to fund expansion, which increases access for all sections of society. For government sponsored students, the limited cost sharing that has been introduced still amount to lower costs for households than are borne by parents supporting children through government secondary schools. It is argued that since the families of undergraduates have been able to afford to put their children through secondary education, they should be able to give at least an equivalent contribution at tertiary level. The high costs to the government per student, high private and low social returns all support the World Bank's argument that cost sharing could increase equity but so far progress towards cost sharing has been very limited (Ishengoma 2004).

One of the key issues of quality at tertiary level is the skills, or lack thereof, of entrants. There have been concerns raised that expansion has led to a dilution of quality and many of the older staff consider that the academic standards of students have fallen steadily as a consequence of the overall decline in educational standards. Communication skills in English are of particular concern (Cooksey, Levey et al. 2001). In terms of entrants' A' level grades, in the past, cut off points for some subjects had to be lowered to ensure that places were filled (Chonjo 1990; Leshabari and Masesa 2000). The minimum grade requirements were 4 and 5 points for females and males respectively.<sup>22</sup> This represents grades of D and E. Cut off points were raised in 2002, depending on the programme (Ishengoma 2004). In 2004 they were between 5.5 and 7.5 for most programmes but 8 for medicine, 9 for law and 12.5 for a BSc in computer engineering and IT, due to popularity. Of those selected as private candidates for the 2004/2005 intake, the majority of candidates had grade C average or less.

Whilst secondary education has suffered relative neglect from both government and donor funding, higher education had maintained its considerable slice of the education budget. Its situation within a separate ministry (Ministry of Science, Technology and Higher Education) sets it apart from the rest of the education system and associates it closer to its research and

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<sup>22</sup> At A' level 5 points are allocated for an A grade, 4 for a B, 3 for a C, 2 for a D, 1 for an E and 0.5 for a 'subsidiary'. Most candidates sit 3 A' levels so 4 points is equivalent to DEE.

development role rather than its education role. However, despite its relative position of prominence within national and donor agendas, only 0.04% of the population are enrolled in public universities and there was a stagnation in development of teaching facilities at the university of Dar es Salaam until the late 1990s (Ishengoma 2004).

In 1998/99 just under 50% of the total funds for UDSM came from overseas donors (Mshana and Mashalla 2004). In the areas of capital investment, post-graduate training and research, most of the funding comes from external sources (Cooksey, Levey et al. 2001). Over the last decade, bilateral donors have steadily withdrawn funding from higher education, in favour of primary education. The Netherlands, for example, which in 2002/2003 was the second highest contributor (Mshana and Mashalla 2004) is withdrawing funding from 2005 although some funding will continue under new mechanisms.<sup>23</sup> In cases where northern governments continue to give large amounts of support to universities it is often due to historical links or long term commitments rather than strictly following a poverty reduction rationale.<sup>24</sup> A considerable proportion of the external funding comes from foundations such as the Carnegie Corporation and direct links with universities in the North. An increasing amount of donor funding is now being channelled through main government budgets so it is becoming less straightforward to quantify the extent of donor support in any one sector.

Some donors have become more insistent that funding to research has a clear link to poverty reduction (Mshana 2004). This poverty focus has given rise to the funding of research projects such as Basic Education Renewal Research Initiative for Poverty Alleviation (BERRIPA). Others have been based on less direct links, such as funding for ethics research in the department of philosophy, on the grounds that it could be applied to combating corruption. This conditionality on research being poverty focused could be objected to on the grounds that it restricts academic freedom. It might also be considered to be focused only on short term goals, inhibiting other research with unforeseeable future benefits.

Higher education institutions have had an important role to play in recent poverty reduction programmes. They have provided a local research resource, which has been tapped into for preparing the background documents for programmes such as PEDP and SEDP. However, partly do to lack of confidence in the local research capacity, there is a tendency for foreign researchers to dominate in consultancy work. University staff can also be used in training and capacity building. UDSM has run in-service training courses for teachers. The Open University of Tanzania (OUT) runs training for pre-school teachers and for primary teachers of special programmes, as well as running a certificate in entrepreneurship and small business management (Mmari 2003). Mzumbe University has been used extensively in the training for the Local Government Reform process.

## **Education and Training for Work**

A long-term criticism of African education systems is that they have been poorly matched to labour market demands, and that the curriculum does not provide youth with the necessary skills

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<sup>23</sup> Leo Van Der Zwan, first secretary for Education, Royal Netherlands Embassy, Dar es Salaam. Personal communication

<sup>24</sup> evidence from interviews with bilateral donors 2004

for productive livelihoods. In the first few decades of Tanzania's independence, the government made several bold attempts to link formal education with work (Omari 1994). Firstly with *Education for Self Reliance* in 1967, attempts were made to integrate income generating work (agriculture or other forms of production) into the curriculum and places in post-primary education were limited according to calculated manpower needs. Then in 1972 the secondary curriculum was diversified and schools took on either an agricultural, technical, commercial or home economics bias. In 1974, the Musoma resolution abolished direct entry from schools to universities, to ensure that all students worked for two years before starting university. The lifetime of these policies on paper far exceeded their lifetime in practice, and it is debatable to what extent they were ever fully implemented. It has been pointed out that *Education for Self Reliance* was never fully implemented as intended (King 1984; Mbilinyi 2003) and that many secondary schools were not able to diversify due to lack of teachers and teaching resources (Vulliamy, Lewin et al. 1990). Also the academic streams have tended to be far more popular than the vocational ones. Direct entry for science undergraduates soon had to be reintroduced to make up for shortages of trained scientists. Direct entry for women was also allowed. Direct entry for other candidates then followed. At all levels of education, the demand from society was for an academic curriculum. Parents wanted primary schools to educate their children for selection into secondary education. Secondary education was judged by its ability to get students into higher and university education rather than its ability to impart vocational skills. Despite the policies listed above, the government was essentially unable to resist this pressure in practice.

Recently the primary curriculum has been made more vocational by the introduction of *Stadi za Kazi* (work skills); however this is still seen as irrelevant to the lives that most children will be leading after school and the delivery has been impaired due to lack of equipment and poor teacher training (Maarifa 2002). At secondary level the curriculum is becoming less vocationalised, with the technical/vocational subjects being phased out. Just as the audience of the secondary curriculum is set to be broadened through SEDP, the curriculum is set to be narrowed down, to 8 core subjects. It is the intention that some aspects of the former vocational subjects will be incorporated into the core subjects (URoT MoEC 2004a).

Tanzania's attempts to provide vocational skills within the formal education system proved to be expensive and ineffective (Psacharopoulos and Loxley 1985). It did not significantly change the employment outcomes of secondary graduates and the highest social rates of return were found to be from academic secondary schools. It is difficult for the slow machinery of curriculum development and teacher training to keep up with advances in production methods. Hardware and consumables needed for teaching vocational skills practically are expensive and skilled teachers hard to attract, as income earned from using their skills directly may be higher than teachers' wages. It is also impossible for schools to provide any more than a very narrow range of the spectrum of skills that students may need once they graduate. Industrial employers in Tanzania said that, although it was easier and faster to give job orientation to technical secondary graduates, it might be better for schools to concentrate on a general academic curriculum as schools could not provide youth with the specific needs of all employers (Chonjo 1985). The technical school graduates increased speed at picking up new skills may have been due to a screening effect for natural ability as the highest achieving primary leavers were selected to go to technical schools. Abstract generic skills developed through maths, science and language may be more transferable and valuable in the workplace than specific technical skills that can rapidly become outdated through advances in technology.

UNESCO has increasingly pushed for curriculum models that teach a set of generic competencies applicable to a wide range of circumstances (UNESCO 2004b). They argue that life skills as included in goal 3 of the Dakar Conference (WEF 2000) include skills for work. These competencies include problem solving, communication skills and entrepreneurship. The Tanzanian government has also called for curriculum change to develop generic, transferable skills, as described in *Vision 2025*:

Education should be treated as a strategic agent for mindset transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges, which face the nation. In this light, the education system should be restructured and transformed qualitatively with a focus on promoting creativity and problem solving. (URoT 1999; section 4.1, vii)

However, there is nothing particularly new about the promotion of problem solving and learning to learn in education rather than content-heavy curricula. In *Education for Self Reliance*, Nyerere (1967) also called for education to be refocused towards developing an enquiring mind, ability to learn from what others do and to adapt modern knowledge to solve local problems. The International Labour Office has compiled a directory of entrepreneurship training (Haftendorn, and Salzano 2004) but there are very few examples of mainstream training that has worked in African contexts.

Aside from schools, where vocational training is set to diminish, there is a wide range of institutions involved in vocational education and training (VET). Public sector provision is complex, and includes post-primary training centres, vocational training centres under VETA, Folk Development Colleges, technical training centres, and ministry training centres; each of which comes under a different ministry. There are also parastatal training centres, mission trade schools and a growing private sector provision (Kent and Mushi 1995; Bennell, Benders et al. 1999; Dar 2000). The cost per student at the various public colleges and centres tends to be far greater than at secondary schools. Places at private and semi-private training institutions tend to be in high demand and lead to a high level of job placement when compared to public institutions. State-run training appears to be expensive, inefficient and less demand-sensitive. Access to state vocational education is often skewed to the richer sector of society. Dar (2000) concludes that there is little justification for public investment in VET as a means of poverty reduction as most of the beneficiaries of vocational education and training come from the better-off segments of society and, although the private rates of return are high, the social rates of return are low.

A review of VETA commissioned by Danida (Bennell, Bonde et al 2002) concluded that it had limited impact in terms of poverty reduction. During the 90s, access to VETA for the poor appears to have become more restricted. This is partly due to increased competition which has meant that primary leavers are losing out to secondary graduates in the competition for places. There have been recent suggestions to change the medium of instruction on VETA certified courses to English. This would further disadvantage those from poorer backgrounds without secondary education. The courses are highly subsidised by the VETA levy income and, in previous years, by foreign aid. Even with this level of subsidy, the annual combined tuition and boarding fee is 90,000 TSh (90US\$). This represents a barrier to access for the poor. The recurrent unit training costs in 2000 was estimated at above 1.5 million TSh (1,500 US\$). This represents well over 10 times the cost of educating a secondary school student, and over 50 times the cost of educating a primary school student. The ratio of students to instructors is very low

compared to the ratio of pupils to school teachers. The average ratio in the VETA centres surveyed was 12:1, but as low as 5:1 in some trades. The salaries for VETA instructors, as given in the Danida review, are considerably higher than the salaries of teachers in Government schools, with the lowest grade of instructor being paid more than twice the salary of a graduate secondary teacher in 2000.

A tracer study conducted as part of the Danida review found, of those graduating in the mid 90s, 30% were in waged employment, around 50% were in self employment and 12% unemployed in 2002 (Bennell, Bonde et al 2002). The figures for waged employment and unemployment are very comparable to those given for secondary graduates from the mid 90s, which are 36% and 14% respectively (Mukyanuzi 2003). The average wage earned by VETA graduates in the Danida tracer study was less than the average wage of the secondary leavers in Mukyanuzi's sample. Employed VETA graduates from the mid 90s were earning around 40-65,000 TSh a month compared with form four leavers from 1995 who, on average, earned over 90,000 TSh. The proportion of those going into self employment after graduating from VETA is considerably higher than that of the secondary graduates, but many more secondary graduates were still in further training and hence excluded from the employment figures. Well under half of the graduates were in training related employment. For some courses such as secretarial and computing, very few graduates found work in training-related jobs. Less than 10% of graduates were located in rural areas, implying that VETA has little impact on improved service provision in the areas where most of the poor live. The review recommends that the training should be more directed towards informal sector activities. In order to have greater poverty reduction there should be targeted, subsidised short courses that would be accessible to poorer sections of society.

VETA centres account for less than 10% of the VET provision in Tanzania. Most VET training is delivered by church trade schools or private training centres (Bennell, Bendera et al 1999). Many church based centres are located in rural areas. They tend to deliver two-year courses in manual trades such as tailoring, masonry and carpentry. Most courses lead to trade tests administered by VETA. They have relatively low fees and train mainly primary leavers. Private centres run for profit are mostly located in urban areas and offer shorter, more expensive courses in commercial skills. These centres are obliged to register with VETA but receive minimum support beyond infrequent inspections and the trade-test. The VETA levy is used entirely by the VETA centres. It would appear that non-state providers, in particular the centres run by faith based organisations, have greater potential for directly impacting on poverty reduction than the state sector. These centres have been heavily reliant on external donor support which has waned in recent years and as a result the sector has not grown.

According to Dar (2000), the majority of donor educational aid in 1993 went to vocational training. Since then many donors have phased out support in this sector. SIDA, which was one of the main actors in the sector, has reduced the overall share of its educational spending on the vocational training sector from 13% in 1990 to 2% in 2000 (McNab 2003). It phased out its funding of VETA in 1998 (Bennell, Bonde et al 2002). Other donors like GTZ, Irish Aid and JICA have phased out support for VETA. The World Bank's support to Africa for vocational education and training has shown a marked decline since the mid 1990s (Samoff and Carrol 2003).

## **The External Environment: Can the benefits of education be realised?**

The failure of the early 80s UPE successes to translate into lasting poverty reduction was not simply due to the delivery context of poor and declining school quality. The external environment, or transformative context, was not conducive to enabling primary graduates to use their education (e.g. literacy skills) to lift them out of poverty. Obstacles to realising the benefits of education were physical, economic, political and cultural. Liberalisation since the 1980s has removed some of these obstacles; so the current UPE generation may profit more from their education than those who graduated in the mid 80s. However, increased costs of services may mean that the benefits of liberalisation have not been passed on to the poor.

Ability to read and write is unlikely to confer much advantage in a context where there is no access to written material in the surrounding environment. Learning the importance of safe drinking water is of little help when the only water source is a muddy puddle. Numeracy skills will not help farmers and traders in selling their goods if there is no way of transporting the goods to market. In the World Bank commissioned PPA (Narayan 1997), participants reported that access to hospitals, markets and farm inputs had worsened between 1985 and 1995 due to deteriorating roads, reduction in local services and increasing prices. Low road quality leads to increased transport costs which can become prohibitive for the poor. In 2002 well over half of all of the roads were classed as being in poor condition and less than 6% were paved (URoT 2003a). Benefits to improvements to roads have been found to be greater for those with more education and so investments for improving education are more effective when they are co-ordinated with investments in infrastructure (World Bank 1996). The fall in the number of births at health facilities (URoT 2003a) is indicative of reduced access to health facilities, through deteriorating physical access and cost sharing practices, and is an example where an adverse environment has negated any possible gains from education.

Access to farm inputs has also been inhibited by the limited access to micro-credit for farmers. Farmers' access to credit actually fell during 1995 to 1999 and agriculture is less favoured by investors compared to other sectors (URoT 2003a). Growth of small enterprise can also be inhibited by lack of access to credit. Liberalisation of the financial sector and privatisation of national lending bodies has led to raised interest rates and closure of rural facilities, thus reducing the access for the poor. Some local co-operatives have collapsed due to poor repayment of loans and recent government interventions have had mixed results (RAWG 2004). Poorly managed supply of credit and poor personal budgeting skills have been mutually reinforcing. If the education system can provide improved numeracy and organisational skills this would benefit both the supply of credit and the efficient use of it. Credit opportunities for small holder farmers have been opened up since 2003 (Mramba 2004).

In the past in Tanzania many crops were heavily taxed or could only be sold to state marketing boards for low fixed rates. As a result, there were few incentives for striving to increase farm output and to engage in sales through formal markets. Small businesses faced heavy taxation and licensing fees, payment of which often needed to be facilitated through bribery (Tripp 1997; URoT 2003a). By the early 90s most cash crops had been deconfined and could be sold directly to the buyers without going through state marketing boards (Trulsson 1997). More recently "nuisance" taxes which used to include a tax on items such as cows, fishing nets and bicycles have been scrapped and a cap was put on agricultural produce cesses levied by local councils of

5% of the farm gate price. In 2004 business licence fees were abolished for businesses with annual turnover of less than 20 million TSh. In 2003 the Small and Medium Enterprises Credit Guarantee Scheme was established allocated an additional sum of 1,500 million TSh in the 2004 budget (Mramba 2004; URoT 2004c).

Historically, the government banned private small-scale industries in ujamaa villages and in many cases there was open harassment of small businesses. In 1983 there was a crackdown on “economic saboteurs” and those that could not account for how their wealth was gained were put into jail (Tripp 1997; Trulsson 1997). The government’s attitude to entrepreneurs was taken up by society so that entrepreneurs were often looked on with suspicion and ill will by those around them. *Mlanguzi* (profiteer) became a term of contempt. By the mid 90s, attitudes to entrepreneurs had begun to change, both in government and society. Entrepreneurs are seen as key to national development of the country in government documents such as *Vision 2025* (URoT 1999) and the SEDP document (URoT MoEC 2004a). Several streets in Dar es Salaam are now closed off at weekends to allow for petty trade. In rural areas attitudes have been more resistant to change. Antipathy to successful individuals may go back far further than the socialist era. In many rural areas of Tanzania, such as Shinyanga, people are wary of ostentatious success for fear of how the local community will look on it. Successful people are sometimes looked on with suspicion, and accused of using witchcraft to enrich themselves. They sometimes live in fear of avenging actions taken by other members of the community made jealous by their success.<sup>25</sup>

Until the 1990s, Education for Self Reliance deposited graduates into an context where the central state was the main provider of employment, goods and services and where there were few means for setting up business or investing in farm improvements. This encouraged a culture more of state reliance than of self-reliance. When the state was no longer able to provide, donors stepped in as providers of services and both the state and the population began to adopt a culture of dependency. In Tanzania’s *Vision 2025* the culture of dependency is seen as one of the main barriers to development.

The mindset of the people of Tanzania and their leader has succumbed to donor dependency and has resulted in an erosion of initiative and lack of ownership of the development agenda. (URoT 1999: section 2.2.1, sic)

The man-power planning approach to post-primary education in the 1970s may also have helped to contribute to a culture in which education is assumed to lead to formal employment by the state in positions that did not necessarily involve much work. The limited secondary education became highly extractive, removing the more academically able members of rural communities by directing them into urban based jobs. The extent to which expanded and improved post-primary education can contribute to the creation of an enabling environment is debatable but expanding the skilled labour force could saturate employment opportunities within the urban areas, encouraging enterprising individuals to look for opportunities in the rural areas. A small population of more enterprising individuals in a rural community could be catalytic for change, for example, by introducing farming technology and inspiring others to imitate them. Improving the quality and quantity of professional level workers will increase the competition for rural based jobs and increase the quality of rural professional service providers such as teachers, health workers and agricultural extension workers.

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<sup>25</sup> anecdotal evidence from informal discussions 1999 - 2004



## Conclusions

Tanzania provides a clear example that getting children in to school on its own is not enough for poverty alleviation. The quality of education has been so poor that many of the potential benefits of education have not been realised. A major limiting factor on the quality has been the narrow post-primary education system. The low number of secondary leavers with good grades has meant that those entering teaching have a very low level of competence in their subject areas. Those entering the labour force beyond the education system have often lacked the skills required by employers and tend to lose out to those from abroad. In attempting to aim for equality, the quality has fallen so low that there is little hope for individuals from poor households to improve their circumstances through education in the public system. As the richer members of society have had access to other sources of education at the early stages, such as tuition, they have benefited disproportionately from public spending on higher levels of education.

Increasing public expenditure post-primary education, especially secondary, is necessary for greater equality and poverty alleviation in Tanzania. Investment in secondary education can be used to expand access to poorer sections of society and to strengthen and support quality at primary level. Simply increasing the number of secondary school places will not help to reduce poverty unless the quality of the education is significantly improved. In order to increase equity of provision, mechanisms are needed to ensure that the quality of education in rural areas is comparable with that of urban areas. Schemes are needed to support bright children from poor families to attend secondary schools, especially those living in areas without secondary schools. A possible disadvantage of expanding secondary education will be greater unemployment but if secondary graduates can be encouraged to work in rural areas, either through the push of urban unemployment or the pull of improved rural services and opportunities, then the poverty alleviating affects of education are more likely to be realised.

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