

**EDUCATION ECONOMICS
L'ECONOMIE DE L'EDUCATION
EDUKESEN MO EKONOMI**

Opening Address

Odo Tevi, Governor
Reserve Bank of Vanuatu

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I Introduction

I would like to take this opportunity to thank you for inviting me to give an opening address in this workshop. Indeed this workshop is a very important one since the relationship between economics and education have not been much discussed or understood in this country. This is also timely since education issues have become an interesting development challenge for this young country over the past years. A great number of interest groups have exerted greater pressures on the Government to adjust its budget and has become a subject of public debate in the recent months. No one would argue that education is one of the key cornerstones of development in a country and it will continue to be in the future. I congratulate you all for organizing this workshop and I believe that at the end of this workshop we will be learning a lot and we will be putting these useful discussions to assist the Ministry of Education and other key stakeholders in their medium-term planning and budgetary framework.

In this type of forum I am always tempted to discuss the macroeconomic situation of the country first before I discuss the relationship between education and economics. This approach will provide us a better picture of where we stand at present and where our education sector fits into the overall picture.

II Economic Assessment and Outlook

Since independence in 1980, this country has gone through tremendous challenges. We have seen periods of political developments, changes in the global economic policies such as globalization and liberalization, experienced natural disasters such as cyclones and earthquakes and have seen social changes within the society. These challenges have greatly shaped our economy and will continue into the future.

As we all know, Vanuatu's economy is small, open, vulnerable and dualistic. Its smallness implies that it has a small population and therefore difficult to achieve economies of scale. This means that the unit cost of production is high. This is reinforced by the geographical nature of the country. Its openness implies that it is engaged in international trade and therefore subject to changes in international commodity prices.

All of these explain part of the vulnerability of the economy. The vulnerability is also reinforced by the frequency of natural disasters such as cyclones, drought and earthquake, weak institutions and high dependency on external aid.

The dualistic nature means that it has a formal and a subsistence economy. The majority of the population lives in the rural area and is actively participating in the subsistence economy. Given this high proportion of population in the rural areas it is difficult to increase tax revenue, as they cannot be subjected to conventional forms of taxation.

Since the implementation of the reforms in 1998, the economy has been stagnant and even declining in some years. Between 1998 and 2002 the economy decline by negative 0.03 %. In 2003 the economy is expected to register a better than expected performance from the previous year, which is negative 2.8%, and is expected to increase by over 1%. It is expected that in 2004 the economy will continue to improve in all sectors: agriculture, services and industry. This is expected to be aided by the growth in the world economy.

As we all know over the past years the weak economic performance has not been able to keep pace with the population growth of 2.6%. This has resulted in declining standard of living and less opportunities for the growing population. The Human Development Index, a composite measure of life expectancy, adult literacy rate, and gross enrollment ratio revealed that Vanuatu is at the lower end relative to other Pacific island countries (PIC), just above PNG and the Solomons. Similarly the Human Poverty Index ranks Vanuatu as 10th in terms of poverty among 12 PICs. Approximately 12% of the population are not expected to survive to age 40, 66% of the adults are illiterate, 23% of the children below 5 are underweight, 13% of the population do not have access to safe drinking water, and 20% of the population do not have access to health services.

The disparities in income distribution and access to basic services is widening between the rural and urban population and that within the urban areas. The lack of economic opportunities in the rural areas has resulted in the increase in the urban drift to Port Vila and Luganville at rate of 4.5% per annum, surpassing the national population growth rate. Access to infrastructure remains poor especially in the rural areas and outer islands. Approximately 7% of rural households and 61% of urban households have access to electricity for lighting.

Since the introduction of the CRP fiscal policy has been tight with the exception of 1998 where the Government recorded an overall deficit of 10.3% of GDP. In 1999 this deficit reduced significantly to 1.4% of GDP. In 2000 the deficit increased by 8.1 % of GDP this was due mainly to roll over of projects, which were not implemented in 1999. In 2001, and 2002 the deficit was 3.1 and 2.4% of GDP respectively. In 2003 the deficit was 1.6% of GDP.

Despite the reductions in the overall budget the Government continues to have tight cash management. These cash deficits is mostly financed through the overdraft facility offered at the Reserve Bank of Vanuatu (RBV) which stands at Vt400 million. To date the amount used by the Government on the overdraft facility is Vt392.8 million. The Government continues to resort to this facility and the RBV is monitoring this very

closely. This is important because continuous resorting to this facility could result in higher liquidity or money in the economy and affects monetary policy pursued by the RBV. The injection of liquidity in the economy could result in the increase in the general price level or inflation in the economy and interest rates and thereby reducing the international competitiveness of the economy. Just like any other central banks in the world, one of the main objectives of the RBV is to maintain price stability as stated in the RBV Act. So far inflation hovers around 3% and this is mostly achieved through sound monetary and exchange rate policy pursued by the RBV and the tight expenditure controls maintained by the Ministry of Finance and Economic Management (MFEM).

It is important to note by this forum that at least 95% of tax and non-tax revenues are mostly used to finance our recurrent budget and only an insignificant portion is used for development budget. The overdraft facility offered at the RBV, as discussed earlier, is only a temporary relief to finance the operating or the recurrent budget of the Government when revenue streams are inadequate to meet the expenditures. Our development budget is mostly financed by our development partners mostly Australia, France, European Union and New Zealand.

In terms of the balance of payments the country continues to record a current account deficit. This is attributable to the persistent trade deficits we continue to face, as our imports are four times higher than the exports. This current account deficit is a feature of a developing country that depends more on other countries goods and services for consumption and development. It also gives a clear picture of a country that is saving less and consumes more. This deficit is financed by the capital account inflows such as aid and grants provided by aid donors.

In terms of macroeconomic stability the Government, despite political instability in the past years, was able to achieve it, as reflected in price stability and sustained balance of payments position. This was mostly achieved through sound fiscal, monetary and exchange rate policies. The major challenge now is for the Government to continue its commitment towards fiscal discipline. As I have discussed earlier this is ever more

becoming difficult in the face of population increase and the last few years of economic downturn. Moreover external debts taken over the last 10 years are now falling due, which places constraint on our limited resources. Our domestic debts are continued to be rolled over and these debts can only be repaid by having a surplus budget. In view of this constraint it is clear that the choices for us now is tougher than at independence and calls for more prioritization in policy and programs, good leadership, sound institutions and more coordination. These choices are complicated by the fact that they are not exclusively determined by economics alone but also by our cultural, religious and political philosophies which makes our development efforts and prospects even more challenging.

Having this simple macroeconomic picture in mind I shall now proceed to discuss the theory underlying the economics of education and the debates emerging in this area.

III Education Economics

Education economics is a relatively young field in the area of economics. It emerged early in the 1960's and grew since then. All economists would agree that the human capital of the country is the most important vehicle for development and it determines its character and pace of its economic and social development. In the recent years the neoclassical growth model has been extended to cover human capital as an important component of growth, besides the traditional ones of land, physical capital and labour. The latter, labour, in the neoclassical context usually means unskilled labour force. In the words of Professor Frederick Harbison:

“Human resources...constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organizations, and carry forward national development. Clearly, a country which is unable to develop the skills and knowledge of its people and to utilize them effectively in the national economy will be unable to develop anything else.”

All countries have devoted themselves to the development of their education sector, especially with the goals of achieving a universal primary education and this has become

a political sensitive issue but often economically costly 'sacred cow'. It is now unanimously agreed that education aided with complimentary policies is one of the key cornerstones of the growth in successful economies such as those of the South East Asia –for instance, Singapore and South Korea.

Most of literature and public discussion on economics of education focuses mainly on two central tenets: (1) the supply and demand of education – this is mainly the interaction of the economically determined demands with politically responsive supplies in the areas of the availability of school places, the type of instruction provided and who is accessible to these places; and (2) the distinction between 'social' versus 'private' benefits and costs of different levels of education in the economy and the implication of these in the education investment strategy.

Let me first explain the first tenet, which is the supply and demand of education. Since most education in less developed countries is provided by the government, the determinants of demand turn out to be more important than the factors determining the supply of education. On the demand side there are two (2) main principal factors and these are (1) the prospects of a person earning a higher income in a modern employment sector with a higher level of education and (2) the educational costs whether direct or indirect for the person and his or her family to bear. With these one can thus argue that the demand for education is in fact a derived demand for high wage employment opportunities in the modern sector. On the supply side, the number of school places at the primary, secondary and university levels is largely determined by the political processes, which are often not related to the economic criteria. In fact the supply of education is fixed by the level of government expenditure on education given that in many less developed countries most schools are provided by the government. It is important to note that it is the demand for education that largely determines the supply of education.

Now let me turn to the second tenet: the social versus private benefits and costs. The social costs of education is mainly the opportunity cost to society as a whole resulting mainly from the society financing the educational expansion at higher levels that should

instead be diverting its resources to other more productive sectors of the economy such as agriculture and the tourism sector. The private costs are mainly costs of education borne by the students such as course and tuition fees. In many developing countries the social costs of education increases more as students attains a higher level of education. Thus the gap between private and social costs increases more at a higher level of education - the post-secondary schooling. As demands for education at high level of education increases the social costs also increases and this can induce the government to spend more at higher levels of education. In many developing countries the governments have put more resources on post secondary education and this sometimes could misallocate the resources because at a higher level of education the private returns to education surpass the social benefits derived by the society. At the post-primary education the extra social costs increases due to the expensive capital and recurrent costs of higher education such as buildings and materials. It is therefore important that there be appropriate incentive and structures in the economy so that human resources are not misallocated.

The interaction between the demand and supply underlies the neo-liberal thinking in economics which focuses on the market as a main mechanism. In fact the debate on the financing of education has increasingly highlighted the role of the market and Government and is an interesting challenge. The economists who favour state intervention argued on three principal lines. First, the benefits of education of an individual's education covers the whole society at large; thus if individuals pay their own schooling there would be under-investment in the economy. Second, in less developed countries some families are poor and therefore this justify the intervention of the Government in the direct provisioning of education. Third, education is a determinant of future incomes; therefore market allocation of education will worsen the inequalities between the poor and the rich who can afford education and in turn earn higher incomes while the poor remains poor due lack of adequate education. On the hand, the advocates of market allocation and price system or the neo-liberalists argued that state intervention results in serious inefficiencies such as high cost of production, delays and misallocation of resources. They hold that the prices and markets stimulates competition that results in

greater efficiency in the production of services, wider consumer choice, and increased resources for the sector.

Since the early 1980s, the neoliberal economists mostly from the World Bank have advocated more private financing or increased cost-sharing and a greater role for the market in providing education. They argued on the grounds that the costs of meeting the expanding needs of education is increasing, however, the national budgets in less developed countries is insufficient to fully finance education. Thus more resources need to be mobilized through increased private financing, particularly at secondary and higher levels of education. One prominent strategy for mobilizing extra resources for education is the charging of fees, especially at secondary schools and higher levels, and the encouragement for private provisioning.

Whether we are conscious of it or not but Vanuatu is at the heart of these debates but before I discuss this deeper let me turn to the discussion of the education development in Vanuatu.

III Education Development in Vanuatu

Vanuatu's formal education system in 2003 consist mainly 437 primary schools, an increase of 6% compared to 2002, 56 secondary schools; and few post-secondary schools mainly a vocational technical institute, INTV, and other specialists' institutions in the areas of teacher training, marine training, nursing and in the future agriculture training. There are 279 English primary schools and 158 French schools. This also corresponds to 1151 Anglophones and 663 French teachers in the country. The education sector is heavily dominated by Government schools. In the primary schooling the Government owned almost 75% and assisted other 20% in their budget and is also providing qualified teachers. In the last few years the interest in private financing of education has increased such as the Vila City College and Tebakor Secondary school.

Access to primary schooling has increased significantly in the past years. In 2003 around 80% are enrolled in primary schools compared to only 68% in 1978. This is a

considerable increase compared to other countries in the region such as PNG and the Solomon's. Despite this there is a considerable gap between urban and rural education with around 80% enrolment rate in urban areas and 70% in rural areas. The quality of education also differs considerably in the two areas. From post-secondary the main problem lies with internal efficiency and is a reflection of low enrollment levels and insufficient quality of qualified teachers; although the latter has improved in the last few years. Given the dual nature of education system – the English and French, it is becoming very expensive to run notably at the post primary and secondary level.

In 2003 the average student/teacher ratio is 22:1 and has improved from the 2002 ratio, which was 24:1 and according to the Ministry of Education (MOE) is attributable to the 18% increase of the number of teachers. This standard ratio for 2003 differs for provinces, which is around 25-30 per teacher. The average student/teacher ratio in secondary education remains lower than the required standard ratio provided for the MOE. The Student/teacher ratio by province is also lower compared to the standard ratio.

In terms of gender there are more males than females attending primary and an even pattern can be seen in secondary schooling - around 48% attends primary school and 50% attend junior and senior secondary schools. The developments in gender equity in secondary school are a remarkable progress compared to other pacific island countries such as PNG which has a lower rate than this. However, in terms of post secondary schooling females accounted for around one-quarter of the scholarships.

The major challenge facing the education sector is the budgetary constraint facing the Government. The educational sector has received increased budgetary support in the last few years. In 1998 to 2003 the education budget as a total share of recurrent budget was around 22.4% and 29.5% respectively. Primary education consumes half of the budget while secondary schools represent over 30%. On the expenditure side wages and salaries, and allowances constitute more than 75% of budget and the rest is devoted to supplies and maintenance and repair work. Despite the lack of sufficient financing, donors have filled the budgetary gap by providing grants for capital expansion and improvements.

Given the increase in the annual rate of population of 2.6% the educational demand will be increasing in Vanuatu and this trend will continue to increase in the future. However, the supply of education will continue to be the main problem given that the bulk of the education is financed by the Government. In recent years the investment in private education has increased such as the Vila City College. This is a positive development and should be encouraged in the future. The main challenge for investments in private education is to be self-sustainable. Less dependence on the Government and aid donors will be one of the signals that investment in education has a positive rate of return. This is yet to be seen given that investments in private education are at an early stage. Moreover this will depend on the rate of economic progress and the corresponding per capita income change resulting from this progress. I believe that private initiatives in financing education should be encouraged; given the budgetary constraint facing the Government and that the Government should aim for a balance between private and Government financing in the future.

The private and social rates of return on education in Vanuatu are yet to be determined and this will be a challenge for this workshop and the Ministry of Education and Finance to arrive with estimates. This is important for policy implication and this is mainly due to three main reasons. First, if the evidence shows that education is socially and privately profitable then it should suggest that the costs of education need to be shared by society and individual (government and households). Second, if there are higher social rates of return to primary education then it indicate that top priority for public financing should be given to primary level. Third, the difference between high private returns and low social rates of return for higher education suggests that a greater part of the cost burden for the tertiary level should be borne by private individuals.

It is important to note that a remarkable achievement in access to primary education in Vanuatu is commendable. However, one should not exclusively focus on this indicator alone, because it does not indicate whether the quality of the education has improved or not. I believe that despite the improvements in the accessibility more attention should

now be diverted to improving the quality of the education in Vanuatu. Nonetheless this is a significant achievement given that studies from the World Bank have indicated that investments in primary education yield a higher social rate of return to the economy.

It is also important for the country's policymakers and planners to understand the dynamics of the labour market well so that it can plan for the level of education to meet this market. Currently in Vanuatu this matching process is not well developed and should now be more focused on developing the primary and secondary school curricular to meet the demands of the labour market. This will require a close coordination between education planning, other Government departments, NGOs and the private sector.

IV Putting education in the macroeconomic context

There is an increasing pressure on the Government to increase the education budget by the public and other interest groups. In terms of the national budget education has one of the highest shares and also contributes to the increase in the public sector salaries and wages over the past few years. This was justified on the grounds of higher population growth.

As I have discussed above, the economic growth record of this country has been poor in the face of population increase. This has resulted in undue budgetary pressures on the Government to provide for financial resources in other sectors of the Government that competes with the education sector. This has resulted in the budget deficits over the past years but has now been well controlled by the MFEM amid a lot of criticism and debate. Despite the achievement of lower deficits the Government continues to face cash flow problems, which is met by central bank borrowing. This will continue in the future given the lack of budgetary reserves over the past years.

The stark reality in our budget developments is the continued recourse in the central bank borrowing – via the overdraft, which is then translated into domestic debt at higher interest rate (currently at around 7%-8.5%). At this higher rate, resources have been

devoted away from the financing needs of development and have imposed further pressures on the budget to meet this. At maturity the domestic debt levels are continued to be rolled over, since there are not enough budgetary resources to pay for these debts. This may be a problem in the future if the financial markets do not pick up these debts. The implication will be that interest rates will increase and huge adjustments will be made which may be harmful for the economy. This is why it is important for fiscal discipline today rather than wait for worse in the future and to focus our policies to improve the rate of economic growth.

Achieving fiscal discipline will continue to be the main challenge and this could be achieved a lot better when other sectors of the economy are also disciplined in their spending especially in higher spending sectors such as education. One cannot just depend on the MFEM to control the Government expenditure but it is a duty for all sectors in the economy and I am sure a lot of developments have already occurred on this front.

VI Conclusion

From my discussions we have seen that education in Vanuatu has been developed against a backdrop of increasing globalization, stagnant economic performance that translates into declining real per capita incomes, and the continuous budgetary constraint facing the Government especially the continued recourse to central bank borrowing. These developments have posed a constraint to the development of education in Vanuatu.

However, the contribution of education to economic progress cannot be understated and is one of the cornerstones of development. Development experiences have shown that investments in education is long term and accompanied with sound policies would contribute positively to economic growth, as both are mutually reinforcing as seen in the south east Asian economies with good track record of economic performance.

There is a pressing need for quality data in the education. However, this has considerably improved in the last few years, however, there is a need for more policy analysis in terms

of determining the private and social rates of return to the economy. This remains an important challenge for the Ministry of Education and Finance.

The financing of education in Vanuatu will continue to be a major challenge given the higher population growth rate. An optimal allocation between recurrent, capital and aid resources can only be determined within a medium-term planning and budgetary framework which accounts for competing demands from other sectors. Experiences have shown that despite a well articulated macroeconomic framework for the budget, demand from other sectors in the economy is well beyond the constraints set by the framework. The result is lack of adequate financing and resorting to central bank borrowing via the overdraft facility and build up of domestic debt levels. This is a dangerous strategy that could lead to far out reaching macroeconomic implications as discussed earlier on. Private financing should be encouraged at most and the Government should be providing the enabling environment for this to grow.