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Investment in Higher Education in Nepal: A Need for Economic Growth

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Abstract

Investment in higher education would be justified and resources can be generated for further development if higher education becomes relevant to the society. It has been realized that owing to the problems and difficult situation of the country, failure to ensure different programs implemented with foreign assistance and investment, and the lack of sufficient budget as per the requirement of the program are the major challenges of higher education. Thus, in line with generating resources and making higher education meaningful to the emerged needs of the country we should work with concerned agencies in a collaborative manner and strive for making the delivery of higher education in consonance with the needs of the relevant sector.

Introduction

Basically, higher education is rooted in the economics of information. It creates benefits that go beyond the range of individual benefits in terms of growth, social cohesion and the transmission of values. Access to higher education implies that an intelligent person should be able to go to the best university irrespective of his or her financial circumstances. [Barr, 2005:35]. Regarding the investment in higher education, it may be unfair to ask students to pay more of the cost of higher education. Moreover, in developing countries most students cannot offer to pay more as the cost of higher education leading to the necessary of students' loans enough to cover tuition fees. It is also viewed that if loans cover fees, students will pay nothing at the time they go to the university. Part of the cost may be paid through taxation and the remaining part through the subsequent income-contingent repayments. Furthermore, scholarship should provide to the students from poor background in addition to loan, which implies that no student from a poor background would be worse off because of the reforms in tuition fees.

In this regard it is also suggested that universities fees are liberalized or kept low for long period, most universities will not run in a sustainable way. The education of existing universities has been decentralized by the creation of colleges, institutions, and higher secondary schools. The university system consists of student participation, course implementation, updating,

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encouraging students to the research and conducting the examination. It is known that higher education attracts both the students and the scholars in universities. As a society undergoes industrialization and technical modernization, higher education becomes more necessary for the economy and links closely to it as a major mediation between manpower demand and labour supply. The concept of higher education is that the more highly educated means the more aware of the impact of government policy; free to engage in political and competent to influence governmental affairs. Thus, higher education becomes a way of investing in human capital across different level of skills. The higher education system is vital for the overall development of the country. Its importance and relevance would be much greater as we enter into the new era. In developing countries like Nepal, resource constraint is a real problem for the development of higher education system. Thus, to manage existing resources and to make their efficient use, University Grant Commission (UGC) should come up bridging as a pooling institution between universities and the government. Besides, UGC should continue its efforts to cooperate for the development of higher education and monitor regularly the financing in universities to strengthen and foster quality education.

Higher education in Nepal plays a prominent role in creating productive manpower. Educated manpower is a precious assets as well as agents for advancing the nation. Thus, economic growth of the country also depends upon the policy for quality education adopted by the country (NPC, 1998: 610). Considering the role of higher education in the Nepalese economy, this paper has raised some issues as:

What is the trend of investment in higher education? How does quality education boost economic growth? Why quality matters in higher education? Does more college entering imply higher economic growth? It would analyze the investment situation in higher education

This article has been prepared by taking the required data from the annual UGC budget allocated to five universities of Nepal. In the process, this article has reviewed the Second Higher Education Project (2006) in Nepal.

Investment in Higher Education

The policy of investment in higher education appears to have been a sound financial proposition for students who are enrolled in undergraduate program. In fact, most types of public investment including investment in higher education give more benefits to the middle class than to the lower or working class (Cautres, 1997: 217). It is also argued that larger per capita income may lead to high level of investment in higher education. Furthermore, high rate of return that could be expected from investment may strengthen capable argument for public investment in higher education (Cohen *et al* 2001:549).

Investment in higher education is to focus on increasing admission, sustaining enrollment of students to reduce dropout rates and improving learning outcomes. Moreover, expenditure made on higher education would eventually pay for themselves through higher returns to human capital. Thus, in this perspective, policy makers should think about making social outlays efficient and foreign aid to be made more regular.

Over the decade of 1990s, access to higher education has increased enormously and the larger proportion of people are competing for securing job in secondary and tertiary sector, but there is no planning in human resource management even if enrolment in higher education has become more than doubled since 1990. In order to fulfill the demand for certificate level in higher education, (10+2) classes are running in higher secondary schools under the Higher Secondary Act of 1992. It is also known that women have covered more than 1/2 of the total population, but their share in economic activities is less than that of the male population. In this regard, it is better to quote Kofi Annan's statement that "when the poorest, especially women receive micro credits, they become economic actors with power to improve not only their lives of their families, but also their community and their action". Thus, it is a wise investment in human's capital.

Higher Education and Economic Growth

Indeed, the economic position of the country largely depends on strong and steady rate of growth. Education has the potentiality of making both people and society better off. Specially, a more educated society may lead to higher rate of innovation; make every body more productive by introducing new production technologies.

It is well known fact that providing higher education for all is not possible in the developing countries. In this article, economic aspect of higher education focuses on college attainment for quality education. However, most of the developing countries are facing the policy challenges to provide education with high quality rather than quantity. Higher quality translates education into greater earnings for individuals over the lifetime. Moreover, a society with more educated labour force can also expect faster economic growth even if the returns from investment may not be justifiable for many years. (Hanushek, 2005:15).

In recent years many people have questioned whether the enrollment in higher education is a driving force behind economic growth. Some people argue that even though there might not be a causal relationship between them. (Hanushek, 2005: 16). Thus, quality in education might not be directly linked to individual earning power and productivity that may be quite observable everywhere.

Despite these, Wolf (2003:57) was not in favour of government spending on education for economic growth. Regarding the issue of education and economic growth, she did not believe that education is crucial to the success of the economy. She showed the evidence, which contradicted the view that government spending on education plays a decisive role in economic growth. There were plenty of examples of rapidly growing economies where relatively high educational expenditure has had little impact on growth. She was of the view that families in rich societies want to spend more on higher education, while complex modern economies also require educated people to perform more complex modern job. Thus, private sector investment instead of using huge amount of government spending on higher education may be beneficial to the society and achieving economic growth.

In this regard, it is also said that a developing country may gain comparatively more by

investing in higher education than a developed country, but the evidence does not indicate that simply spending more can be expected to have a generally significant effect on student outcomes without closer attention to the use of resources. But for improving college teaching, it is argued that sufficient attention has to be given to the quality of university faculties. In fact a string of good lecturer can erase the deficit associated with poor preparation for teaching in college. The problem is that hiring good manpower is not easily achieved. Furthermore, teaching ability is not closely related to training or experience only. It also depends on lecturer's clear expression, teaching technique, salary system and students attraction in higher education. Lecturers' degrees do not seem to have improved the quality of lecturers, but it is measured by looking his exposition power and students' performance. A lecturer who has sufficient insight for selecting a program that is likely to yield significant gains in teaching profession. Teaching is generally a carrier choice that requires a prior commitment that in turns depends on the career expectation of would be professor in university. Besides, the key element is measuring student performance directly.

It is realized that spending on education can boost human capital in developing countries. Thus, investment in higher education is an effective way to spur economic growth. If higher spending on education leads to ballooning fiscal deficit, the negative impact on macroeconomic stability could more that offset the beneficial effects of such spending on social indicators. The other reason may be the poor governance and poorly targeted outlays (Baldacci et al 2005: 21).

Higher Education in Nepal

University education is regarded as the education for services, production, leadership, research, development and so on. In response to emerging challenges for higher education, it can be argued that higher education needs significant change to make broad horizon in education. It is widely accepted that if a country can achieve quality education, it will have high income and better standard of living, low infant mortality rate, health care, technical advancement, etc. Thus, higher education accelerates the pace of overall development of the country.

The higher education of a country stands as a primary indicator of advancement. Observing the university's functioning, people tend to make opinion about country's stage of overall development. Through the technique of higher education, a country prepares its graduates for positions of leadership and responsibility in an increasingly complex competitive world (Khaniya, 2005: 2-3). Thus, higher education in university is accepted as a mirror of the socio-economic and cultural advancement of the country. In the Nepalese context, there is a lack of coordination between the government and the universities for utilizing national experts for professional inputs within and outside of the country. Nepal, therefore, should be prepared to explore the possibilities in collaboration with international universities, inviting international students so that it can emerge as a good place for learning higher study and research. For succeeding this endeavor, Nepal with its natural beauty and temperate climate has enormous potential.

Tribhuvan University (1959) as a first and large university of Nepal has produced intermediate, graduate and post-graduate students in general and technical education in a large scale in each academic year. For the management of permanent academic faculties TU Service Commission has also been working since long time, but due to delay in organizing competitive examination for teaching faculties, meritorious manpower have not achieved the opportunities of teaching in university and ultimately they have been excluded from teaching profession. Besides TU, four other universities are running in Nepal, but they are not capable of fulfilling the demand for mass students in higher education. Due to such circumstances, TU is still compelled to provide the seats to 90.5% students in higher education and other 4 universities have fulfilled the rest 9.5 % demand for higher education. It will be clear from Table 1 mentioned below:

Table 1: Student Enrolment in Different Universities

Universities	Campuses*	1998/99	1999/00	2000/01	2001/02	2003/04	2004/05	Percentage
Tribhuvan (1959)	Const.(60)	93,396	1,27,355	1,46,749	1,42,308	1,22,766	1,26,630	
	Aff.(287)	54,981	67,048	69,454	60,763	59,161	66,004	
	Total(347)	**1,48,377**	**1,94,403**	**2,16,203**	**2,03,071**	**1,81,927**	**1,92,634**	**90.49**
N. Sanskrit (1986)	Const.(12)	1,237	1,784	1,606	1,697	1,480	2,319	
	Aff.(16)	-	140	2,010	1,555	1,314	458	
	Total(28)	**1,237**	**1,924**	**3,616**	**3,252**	**2,794**	**2,777**	**1.30**
Kathmandu (1991)	Const.(6)	9,82	1,284	1,497	1,783	2,239	2,458	
	Aff.(11)	1,425	2081	2,491	3,107	3,776	2,686	
	Total(17)	**2,407**	**3,365**	**4,988**	**4,890**	**6,015**	**5,144**	**2.42**
Purbanchal (1995)	Const.(3)	40	255	214	240	306	222	
	Aff.(73)	-	384	1,117	2,395	5,227	7,444	
	Total(76)	**40**	**639**	**1,331**	**2,635**	**5,533**	**7,666**	**3.60**
Pokhara (1997)	Const.(3)	71	67	128	95	285	285	
	Aff.(24)	-	603	1,500	2,930	4,567	4,381	
	Total(27)	**71**	**670**	**1,628**	**3,025**	**4,852**	**4,666**	**2.19**
Grand Total		**1,52,132**	**2,01,001**	**2,27,766**	**2,16,873**	**2,01,121**	**2,12,887**	**100.00**

* indicates the no. of campuses within parenthesis in year 2004/05.
Source: Annual Report of UGC, Kathmandu (various issues).

Table 1 presents the increasing scenario of student enrollment in 5 universities from the fiscal year1998/99 to 2004/05. In addition to Tribhuvan University (1959), 4 other universities namely Nepal Sanskrit University (1986), Kathmandu University (1991) Purbanchal University (1995) and Pokhara University (1997) are operating in the country covering both general and technical higher education. Technical institutes include Science and Technology, Engineering, Medicine, Agriculture, Animal Science, Forestry and Environment, whereas non-technical (general) institutes incorporate Humanities and Social Sciences, Management, Education and Laws. Under the scholarship program for higher education within and outside the country students have been selected each year by the Ministry of Education and Sports. In fiscal year 2002/03, 97 students were selected for study in Medicine within the country, 9 students were selected for engineering studies outsides the country and 10 were sent to study abroad in different subjects. In FY 2003/04, 119 students for the medicine and 8 for Engineering were selected to study both inside and outside of the country. MoF (2003/04: 174).

Regarding the trend of students in both constituent and affiliated campuses of TU, the enrollment is increased by 5.89% in 2004/05 as compared to the last FY 2003/04. This shows the increasing number of graduate students in TU even if intermediate level of education has been phasing out in (10+2) education. University Grant Commission (UGC) is providing autonomy to TU in matters of generating income from tuition fees and efficient use of its institutional resources. The guiding principle of such type of autonomy would be the cost recovery based education. UGC is also passing the bill of Umbrella Act applicable to higher education. Under this program of the government, public and the private sector guidance committee and implementation committee will be formed to generate income and providing financial incentive to the teachers.

Nepal Sanskrit University (1986) is the second university established by the government in 1986. It has 12 constituent campuses and 16 affiliated Vidyapeeths. In this university the number of students is found to be declined by 0.61% in the FY 2004/05 compared with the last FY 2003/04.

Kathmandu University (1991) has also been carrying out educational program on various subjects ranging from Science and Technology, Health, Management, Arts and Education to 81 faculties. Among such programs, KU has been operating MD/MS/MDS programs in 36 subjects of Clinical and Dental Science under postgraduate program. In 1998/99 the number of student was 2407 and that no of students increased to 5144 in FY 2004/05. Right now it has 6 constituent and 11 affiliated campuses. This shows that the numbers of students for higher education are attracted to KU for obtaining quality education.

Under Purbanchal University (1995), there are 3 constituent and 73 affiliated campuses. The total number students enrolled in its constituent and affiliated campuses were 7666 in the FY 2004/05.It has covered 3.6% of student share in higher education

Pokhara University (1997) has entered in the 9th year of its establishment with the objective to foster conductive environment for the employment oriented quality education, to promote education on cost recovery basis and to emphasize on IT education. Number of students enrolled in its constituent (3) and affiliated (24) campuses in FY 2004/05 was 4666. In

accordance with the policy of expanding educational programs since 2004/05, it has launched BMLT under its school of Pharmaceutical and Biomedical Science.

Higher Secondary Education

In order to fulfill the demand for certificate level in higher education, (10+2) classes are running in the secondary school under the (10+2) Act of 1992. In the beginning, altogether 10+2 schools were 38 and that number became 911 at 2005, and at present the number of higher secondary school reached 1056. According to the record of Higher Secondary Education Council, the number of student enrolled in class 11 was found to be 112 thousands in 2004. [Regmi 2005:3]. Under the (10+2) education system, higher secondary schools are producing the best results especially in Science and Management. The improvement in Science stream resulted by 10% and other streams by 7% in FY 2004/05 as compared to the previous result of FY 2003/04 (MoF, 2004/05:248). For the purpose of higher secondary education the distribution of schools affiliated to Higher Secondary Education Council (HSEC) by the region is shown below:

Table 2: HSEC Affiliated Schools by Geographical Region (2005)

Development Region	Mountain	Hill	Terai	Total	Student No. (%)
Eastern	17	57	119	**193**	18.96
Central	21	294	108	**423**	41.55
Western	4	195	62	**261**	25.64
Mid Western	6	28	27	**61**	5.99
Far Western	15	29	36	**80**	7.86
Total	**63**	**603**	**352**	**1018**	**100.00**

Source: Economic Survey, FY 2005/06, p. 177.

By geographical location and development region, the total number of affiliated public, private 10+2 schools at the end of Academic year 2005 has been mentioned in Table: 2. The total number of schools consisting in Mountain, Hill and Terai region was found higher (423) in Central Development Region and the lowest schools were found (61) in Mid-Western Development Region. Altogether 1018 established schools, 603 (59.23%) schools were established only in hill areas of all development regions.

The number of students attending in class11 exam in 2005 was 156.33 thousand and passed students in that year were 71.34 thousand. It shows that the passing rate in class 11 was 45.64%. However, in class 12 for that year exam, the attended number was 100.94 thousand and the passed students were 53.06 thousand (52.57%) in 2005. (Economic Survey, FY 2005/06: 180). Thus, the passing rate of students in class 12 was more than in class 11 under higher secondary education.

Challenges for Higher Education

Nepal has been experiencing a major conflict situation since February 1996 due to launch of 'Peoples War' in the country. Security expenditure increased drastically, while investment had declined. The rate of private investment declined from 15.4% in 1996 to 12.6% in 2004 as private investors have resisted from making investments and foreign investors have stayed away. (Pyakural *et al.* 2006: 169]) Thus, investment pattern showed an unsustainable development path because of absence of substantial reforms in higher education.

The culture of guides and guess papers in higher education has crippled the knowledge base of the students, thus, killing their creativity. The first reason may be that the teachers in Tribhuvan University do not give much time to teaching. The second reason is that the students in general colleges of TU and NSU do not attend classes regularly, so they need support at the time of examination. In this regard, some teachers without mentioning their name become the writers of such guides and guess papers and encouraging students to buy them instead of purchasing textbooks. In this way reading habit of course books and reference materials among students has been deteriorating every year. (Wagley, 2006:6). Moreover, in our context, students are oriented towards getting through the examination and not towards gaining good knowledge. Thus, the habit of consulting reference books, reading textbooks among students should be promoted in higher education.

Teaching technique, examination system and timely curriculum updating in higher education are considered as the major challenges, which can measure the quality education in universities. The examination system of new universities compared to TU and student activities related to learning education have attracted parents and guardians to the new universities. The government of Nepal has also been giving due attention to TU, NSU and other 2 universities except Kathmandu University, but there has not been found monitoring in education discipline and quality education in TU and NSU even if 90% state funding is made available over there. Thus, inconsistencies and anomalies of higher education in TU and NSU should be corrected to ensure quality education by maintaining cooperation among political parties, civil societies, stakeholders and the government. New thinking should come in TU and NSU exam system, so that the letter grading instead of numbering may make easy to compare and transfer credit from one university to other universities.

In foreign universities, emphasis has been given in the practical subjects rather than in theoretical one. However, in the Nepalese context, particularly in TU and NSU, there is more theoretical course and less is practical. As a result, the number of students going abroad for further studies becoming large from other new universities rather than from TU and NSU. (Paudel, 2006).

Economic progress of the country depends upon the education policy adopted by the country. In higher education, almost financial burden of TU and NSU has been borne by the government, but any new steps are not found to have undertaken towards cost recovery. In order to get new knowledge, there is no research-oriented education for the students and there exists a lack of harmonization in the production of higher level of manpower in accordance with the pace of development. (NPC, 1998:610). Thus, in this context special emphasis

should be given towards availability of equal opportunity to higher education, improvement in quality standard, enhancement in student capacity and making higher education financially sustainable and development oriented.

Every institution of higher education complains that there is a scarcity of financial resources for activities it wants to perform. The challenge is how to make substantial efficiency gains through improved management and innovation. Thus, resource constraint in universities has reduced incentive for efficiency. The small proportion of government educational budget (9.3%) has been allocated in higher education. In such a situation, raising student tuition fee only in universities may not become major sources of financing higher education. So, it is widely recognized that additional alternative sources of private funding and other means of income generation must be persuaded.

Strategies for Quality Education and Financial Sustainability

The Tenth National Five Year Plan (2002-07) and TU (Twenty Year) strategic vision plan have focused on poverty reduction in Nepal by developing quality of professional work force, their knowledge and technical base capable of supporting economic growth and to promote their equitable access to higher education. (Bhattarai, 2006). In this regard, these plans have made some strategies to increase cost sharing, to offer scholarships and loans for meritorious and needy students, to provide autonomy to TU constituent campuses and other universities in relation to resource generation and to establish assessment and accreditation council for ensuring quality in higher education.

Setting an Accreditation Board with sufficient power to coordinate national and international higher education institutions and human & physical resources is necessary. The universities should invite the board to visit their sites, review the qualification of faculties, examine structure and physical qualities of facilities including library and laboratory, checking student evaluation procedures, internet services, linkage with international activities, research publication, etc. (Khainya, 2005:14). Moreover, the board may monitor the course content of different universities, teaching methodology, interaction between teaching faculties and assessment of academic achievement obtained by the students. Thus, the process of making Quality Assurance and Accreditation Board has been a very important aspect of the higher education. The Second Higher Education Project is an undertaking of the Government of Nepal for bringing comprehensive reforms in higher education area in view of the need for quality improvement in the context of world development. (Bajracharya, 2006:1).

Nepalese universities are financed from the mix of state funding and tuition fees. Among 5 universities of Nepal, TU and NSU are running from almost (90.0%) government funding. However, the other universities except KU are operating by more than 50% of the government funding. Each university sets its fees. The amount of Fees has given more resources to improve quality and efficiency to KU, Purbanchal University and Pokhara University in comparison to TU and NSU. However, in the case of TU, the argument against raising fees is that most students are coming from poor backgrounds. The main problem of TU is to promote

quality and avoid crowding out certificate level of education. Furthermore, in universities to promote access of poor background students, grant and scholarships schemes may be provided. The intension of this scheme is that no student from a poor background will be worse off because of the reforms in fee structure. For this purpose, student loan may be provided through income contingent repayments, and scholarships may be offered to those who are capable of pursuing high degree with merit marks. Thus, the strategy for each university today is to bring in additional resources and strengthen competition for quality education.

The other strategy may be to involve students enrolled in higher education by providing part time assistance. They will do part time jobs in college premises to pay their tuition fees. Through this strategy, the students pursuing higher education may complete their degree in time. In this way, resource generated in universities will be utilized properly to produce qualified graduates, postgraduates as well as research scholars. This strategy will be more appropriate for financial sustainability in technical education where the student number is limited.

NPC (2002-07) has emphasized on the principle of cost recovery while financing higher education. The number of student enrolled in certificate level is higher than other levels in universities. Thus, to manage the larger demand for certificate level in universities, 10+2 education should be extended throughout the country (under the Higher Secondary Act of 1992), and thereby facilitating to phase out PCL program from universities. In this regard, the Second Higher Education Project (2006) has also set some strategies for the improvement of quality and financial sustainability of TU constituent campuses and other universities by providing incentives and making easy access of meritorious and needy students to higher education.

With the strategy of enhancing study of the Lord Buddha and Buddhism, TU has provided affiliation to a number of scholars and college groups who come to Nepal for research on Buddhism. Research in these areas can prove to be prolific in further understanding and disseminating the idea of Lord Buddha across the national boundary. (Khatry, 2006:4). Recently it has been realized the importance of Buddhist University, and approved one 'The Lumbini Buddha University' in 2005. In this regard, it is also argued that if this university is developed with the holy purpose of creating an academic atmosphere for Buddhist learners and researchers, it would be a belated justice to million of Buddhists worldwide and to enhance peace and loving image of Nepal everywhere.

Resource Allocation in Higher Education

University Grant Commission (UGC) secretariat was established in 1994 to allocate resources through annual budget among different universities with the objective of facilitating and maintaining the quality in higher education in the country. This will be clear from Table 3 as below:

Table 3: Budgetary Operation in Universities (Rs. in 10 million)

(Regular Expenditure Allocated by UGC)

Description	1998/99	1999/00	2000/01	2001/02	2003/04	2004/05
Tribhuvan University	82.56	85.77	122.32	134.00	138.83	149.63
Nepal S.University	6.21	6.47	8.72	9.53	9.10	10.60
Kathmandu University	0.69	0.68	0.71	0.71	0.76	0.79
Purbanchal University	1.74	1.74	1.76	1.76	1.82	1.94
Pokhara University	0.31	0.33	0.70	0.72	0.92	1.25
Affiliated Campuses	1.52	1.53	1.63	1.68	1.82	2.19
Quality Dev. Program	0.99	0.99	1.00	1.00	1.00	1.00
Total	**94.02**	**97.51**	**136.84**	**149.40**	**154.25**	**167.40**

Source: UGC Annual Reports (Various Issues), Kathmandu.

Regarding the budget operation of UGC, the regular budget sanctioned in each academic year was spent by the different universities. Table 3 shows the regular budget allocation of 5 universities and the affiliated campuses in the country. Under the quality improvement program, almost 1 crore was allocated by UGC for each year to organize refresher courses, seminar, workshops, computer training, research fellowship, physical facility development, library strengthening and equipment as well as teaching materials development.

As regards the regular expenditure made by different universities and affiliated campuses, actual expenditure was found to be more than the expenditure sanctioned as had been reported in various UGC Reports. A total amount of Rs. 167.40 crore in FY 2004/05 compared to total Rs. 94.02 crore in FY 1998/99 was increased by 78.05% within the periods of 7 years. On the contrary, the development budget could not take momentum due to political instability, resource constraints and inadequate funds for development projects. In front of regular expenditure, there was a serious problem in expenditure management due to increasing burden of debt servicing and salaries as well as allowances. As a result, considerable amount was spent on salaries, allowances, pensions, and government subsidy. Besides, due to the uncontrolled increase in the operating expenses, only a small portion of revenue could be allocated for the development purposes. Thus, to eliminate the imbalance between revenue and expenditure in higher education, there was no alternative way of solution except to provide added emphasis on expenditure management and resource mobilization.

Regression Results

The quality of education plays an important role in economic growth. Due to absence of qualitative data, few quantitative variables have been incorporated in statistical regression model. The regression model, which includes the number of students enrolled in universities, inflation rate represented by GDP price index explains the substantial portion of the variation

in actual expenditure made by different universities for higher education. This will be clear from the following regression model.

RE = -943.877 + 3.718 ST + 3.097 PI F= 3.218

t-values (-1.545) (1.828) (1.523) N= 6

R^2 = 0.68 Adj. R^2= 0.47 DW= 1.432

Note:

RE= Regular expenditure

ST= Students enrolled in universities

PI= Price Index

Sources: *Government or Nepal, Ministry of Finance, *Economic Survey*, FY 2005/06: p. 7.

*UGC Annual Reports, (various issues)

As can be seen from the above model, each of the estimated coefficients confirms a priori notion in terms of both sign and magnitude. The coefficient of student enrolled in university education explains that 1 unit increase in student number will increase in regular expenditure by 3.72 units and the inclusion of inflation rate in terms GDP Price Index shows 3.1 units variation in regular expenditure consequent upon 1 unit change in price inflation. For the statistic, the model gives high R^2, Adj.R^2 with insignificant F values and DW statistics. The percentage of variation explained by the regression R^2, in general, produces better result indicating 68 percent. The DW statistic lies in the zone of indecision and does not conclude whether auto-correlation exists or not. All the statistics become insignificant in the model that may be due to the lower degrees of freedom. The other reason may be the omission of relevant socio-economic variables from the model, which were expected to be responsive to the regular expenditure allocated to the universities education in Nepal. Thus, a summary of the results obtained from regression model presented above leads rather tentative conclusion:

- The increasing number of students in higher education appears to be the most relevant determinant of increasing regular expenditure in university education.
- The inflation rate is also responsive to increase regular expenditure in higher education, but both the coefficients are not statistically significant due to lower degree of freedom.

Conclusion

One common concern about this type of empirical analysis is that only student enrollment might not be the cause of increasing university expenditure, but instead reflect other attributes of universities that are beneficial to manage investment in higher education. To test this proposition, we should investigate a number of other factors that might explain the relationship between quality of higher education and economic growth.

From the above discussion it is clear that the world has become accessible for all if they

have competent and qualitative for higher education. When a country cannot produce competent people in its own boundary, the people from other parts of the world are likely to grab the available opportunities. Thus, we should not lose opportunities to improve higher education in the light of the needs of the country. Furthermore, a successful transformation in higher education lies in the ability to provide high quality products driven by individual charges and equitable loan finance system. In this context, we should enhance our potential sources for making competent education and should consider our potentiality in selling education abroad and thereby generating adequate resources for economic growth.

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