### **Challenge of Intellectual Capital Development through Higher Education**

#### Prof M Alimullah Miyan

IUBAT—International University of Business Agriculture and Technology Dhaka, Bangladesh miyan@iubat.edu

#### ABSTRACT

Higher education is the engine of growth for any nation through intellectual capital formation. This imparts necessary knowledge and skills to the people enabling them to contribute towards national development. Higher education is more critical to the developing countries. Higher education can also be a means of social mobility through intellectual capital formation. This will be possible when education is market driven, effective, dynamic and accessible by all. Funding is central in both capacity building and facilitation of access to higher education. The conventional mode of public funding suffers from some inherent limitations in quality and quantity. Private funding tends to be expensive and inaccessible to the average citizens and poor. The middle ground is a quasi-public funding with participation of the stakeholders. Alternative funding to facilitate accessibility can be arranged through Knowledge Based Area Development (KBAD). Students can avail loans refundable after gainful employment. KBAD can be made sustainable through initial funding by the state, donor agencies, community and civil society. Community participation would impose a sense of responsibility to repay the loans which in turn would create pressure to make higher education relevant and marketable. Loans can enable people from every segment of the community to avail higher education. Bangladesh made attempt to ensure quality and increase accessibility by establishing non-government universities as of 1992. Yet finance hinders accessibility by the poor. IUBAT practices a seed-model of KBAD providing repayable loans to students enabling them to break out of poverty trap which if extended in wider scale in any society, could lead to community self reliance for national growth through cultivation of intellects.

Keywords: knowledge based area development, intellectual capital, migration, higher education, development

#### Introduction

Knowledge is the engine of growth for any nation through intellectual capital formation. Advanced level of instrumental knowledge and skills enable people to contribute towards national development. All over the world, economies are changing as more and more, knowledge supplants physical capital as the source of present and future growth. Knowledge is also becoming the basis of large devide between developed, middle-income and developing countries. As knowledge becomes more important, so does higher education. The quality of knowledge generated within higher education institutions, and its availability to the wider economy, is becoming increasingly critical to national competitiveness. According to UNESCO, higher education is a long term social investment in productivity, social cohesion and cultural development. Basic and applied research within higher education in collaboration with international universities and national business and industry fosters innovation and economy in resource utilization with properly addressing environmental concerns. Higher education enhances knowledge generation and cultural development including institutional autonomy, intellectual freedom and a culture of peace based on democracy, tolerance and mutual respect. A well-functioning higher education sector can lead to enhanced quality in basic education too.

Funding is central to the success of higher education system in terms of both institution building and facilitation of access. The traditional public funding is falling far short in meeting quantitative expansion and qualitative parameters. Hence, alternative funding modalities are gaining ground. Non-government (private) universities are emerging as a substantial supplement and more importantly, as a model for market-driven, dynamic and quality higher education.

In developing societies, despite notable expansion in both government and non-government universities, the question of accessibility and equity remains as a burning policy issue. Wider social mobility through increased accessibility by marginal communities to higher education is an emerging strategy adopted by many developing societies. This Knowledge Based Area Development (KBAD) approach elaborated later in this paper envisages equitable and balanced proliferation of higher educational benefits to underdeveloped regions and marginalized communities embracing them into the mainstream development process for attaining community self reliance.

### **Critical Role of Higher Education in a Developing Country**

Higher education is more critical to the developing countries as it needs to cater to increasing numbers of students, specially from disadvantaged backgrounds, promote general education in edition to technical skills to ensure flexibility, innovation and continual renewal of socio-economic structures in a fast-changing world, adopt dynamic curricula and emphasize on research to select, absorb, and create new knowledge more efficiently and rapidly. Higher education in developing societies can ensure optimum utilization of limited resources and effectively make up for scarcity of material resources through developing human resources as an alternative to achieve socio-economic development. Many developing societies are endowed with people, but has very limited natural resources and financial capital. By developing the people into human capital, they can overcome some of the limitations of financial capital and at the same time lay the basis of generating capital resources. Education and skill development of the people may be chosen as the route for creating intellectual capital.

Higher education also acts as a means of attaining enhanced social mobility through intellectual capital formation. A vast number of people in the developing countries are captive in a vicious poverty trap. Spread of higher education among underdeveloped segments of the population can empower them to move up to a higher level of enlightenment and prosperity. Individual achievement benefits the wider community and acts as propellant for inducing others to pursue higher education. In terms of intellectual capacity building from individual, family, community level up to the national administration and policy making, higher education plays the most vital role. A quality higher education can result in more pro-poor and pro-people development policy framework and increased income generation from home and abroad by skilled human resources. Effective higher education plays central role in developing productivity, innovation, entrepreneurship, gender mainstreaming and overall socio-cultural advancement in a developing society. A new vision of higher education in developing societies should combine the demands for universality of higher learning with the imperative for greater relevance to the society. This vision stresses on the principles of academic freedom and institutional autonomy simultaneously emphasizing on social accountability.

### **Dimensionality of Higher Education**

To achieve its anticipated goals, higher education must be relevant, internationalized, effective, dynamic and accessible by all. Relevance dictates being responsive to market and society in terms of learning contents. Relevance is not confined to gainful employment alone. It also covers capacity building in policy issues and induction to ethical standards, democracy, peace and equity. Internationalization and cross-border cooperation can enhance relevance and marketability of higher education through exchange of experience and expertise between universities in the developed and developing countries and also through continuously adapting to the ever-changing skill requirements in a global perspective. Simultaneously, to be effective, the quality of education must also be of the highest standard encompassing the existing body of knowledge along with dynamic exploration to emerging frontiers. Besides, to ensure propagation of learning and diffusion of resultant benefits to all segments of the society, higher education must also be accessible specifically by women and low income groups. Accessibility is critical in formation of intellectual capital in a way that creates an urge for development encompassing the society as a whole.

Quality of higher education hinges on adequacy of infra-structure, curriculum, faculty, management and governance. Infrastructure in terms of premises, lab, library and modern teaching aids (internet, multimedia) constitute the basic prerequisite of quality in higher education. The curriculum must cover all the basic skills and knowledge required in the present and future context of market and society at home and abroad. Research should focus on creating newer knowledge on the local and international context. Competent faculty is a function of education, training, experience and research for continued advancement. Management signifies efficient administration of the higher educational

institutions in operational terms while governance relates to institutional autonomy and academic freedom in terms of meeting the quality parameters.

In developing societies, conventional approaches to meet the different dimensions of higher education is having a limited success. Increased public funding and emergence of new public and non-government universities only partially met the quantitative and qualitative challenges. More remains to be done in terms of devising comprehensive solution to the issues of relevance, internationalization, effectiveness, dynamism and accessibility. Policymakers and stakeholders in developing societies are searching for viable and sustainable alternatives.

### Present Scenario in Higher Education

Pressure on higher education is on the rise due to boosting demand worldwide. Today, higher education worldwide confronts the new realities including expansion, differentiation and knowledge revolution. The challenge gets more pronounced in developing countries, forcing policymakers to think creatively. Previously, higher education in developing countries was characterized by small number of students. Today, a dramatic shift from Class to Mass has occurred and half of the world's higher education students live in developing countries. As children complete primary and secondary education, demand for higher education keeps rising. Developing countries have also seen rising real income bringing higher education within reach.

Expansion has produced a variety of consequences. Existing institutions have grown in size and traditional institutions have been replicated by public or private means. A more creative response has been differentiation leading to new types of institutions and providers. Non-government institutions have joined public ones, while a range of vocational and professional schools now complement the traditional universities.

The public universities, despite substantial expansion, can not cope with the rising demand. Emergence of nongovernment universities has proven instrumental in making higher education responsive to changing demand while complying with quality parameters. The proportion of students in private institutions is on the increase, reaching over 50 per cent of total enrolments in some countries, mostly developing ones.

According to Nuffic Conference 'A Changing Landscape', The Hague, 23-25 May 2005, the major challenges facing governments and higher education institutes in the developing societies are related to Access, Massification, Privatization, Commoditization, Quality Assurance and Maintenance, Relevance, Digital Divide, International Mobility of Staff and Trends in Donor Policies.

Access relates to improved chances for women and students from poor families or regions. Massification relates to coping with the enormous growth in number of students. Privatization signifies growing need of private funds and means to attract private investment without compromising the accessibility and quality.

Commoditization implies maneuvers by the developed countries to create a free global market for higher education as a commodity. The challenge for developing countries is to resist flooding by second-rate, standard courses that do not match their cultural setting or socio-economic needs. Regarding Quality Assurance and Maintenance in a backdrop of proliferation by national, private and cross-border institutes, the challenge is to ensure minimum quality and pursue continuous improvement.

Relevance signifies connection to the world of work where curricula are geared to the local circumstances, developed in conjunction with employers avoiding blind replication of irrelevant foreign values and ideas. This issue is critical for the human capital for its engagement within the country or globally for the development of the society. Digital Divide relates to new ICT opportunities implicating huge investments. The challenge is to attract donor support and private funds to facilitate ICT access and simultaneously matching online theoretical teaching with guidance and practical

assignments. International Mobility of Staff while offering great opportunities for the individuals can easily lead to a brain-drain for the developing societies. Challenge is to resist the brain-drain and create better perspectives for well educated staff within the country. Finally, Trends in Donor Policies related to minimizing the cost of donor support and maximizing the benefits.

### Premise for Knowledge Based Area Development (KBAD)

The pressure of quantitative expansion, though uneven across countries and region, is more pronounced in case of the developing countries. Apart from population growth, facilitation in primary and secondary education under "Education For All" (EFA) has created rising demand for higher education in developing societies. Moreover, higher education is considered instrumental in developing societies for ushering social, cultural and political changes to counteract the legacies of colonialism and more recent undemocratic systems. Besides, the ongoing process of globalization has accentuated the efficacy of investment in higher education.

In many developing countries, the local higher education institutions and specially the ones in the public sector is failing dismally in being responsive to changes or even to be operational in their traditional and stagnant way of delivering obsolete body of knowledge. As a result, a vast number of students from these countries are migrating to developed countries for higher education. Few return to the country of origin, leading to a gaping brain-drain, that further stagnates the development prospect of the developing societies. Absence of competent faculty and policy-makers also acts adversely on the overall quality of higher education creating a vicious circle.

Although, higher education is hugely subsidized even in developed economies, the growth of non-government universities is on the rise in the developing world to meet quantitative as well as qualitative demands. The latter is more critical as it helps to fight back rampant brain-drain and creates dynamic internationalization within local non-government institutions. The issue of relevance is also ensured by default as the very existence of such institutions hinges on delivering marketable knowledge and skills. Thus, despite being expensive, enrollment in non-government universities is rising persistently.

The public universities are to some extent accessible by the low income segments as it is hugely subsidized. Yet, owing to the socio-economic reality, the prerequisite higher secondary education available to poor students are not at par with that available to the well off segments of the society. As a result the poor can have access to the public universities more as an exception than as rule. Moreover, due to lack of responsibility and ownership in the funding process, education in public universities are taken by the students less as a long term investment and more as a windfall advantage. Consequently, the pressure for being market driven is also much less in case of public universities. In many developing countries, the public universities are beset with myriads of problems. Both students and teachers indulge in partisan politics, the administration is also stagnant and the curriculum is obsolete. Disruptions in academic schedule result in very long tenure of study that ultimately proves to be devastating for the students, the society and the nation. On the other hand, the non-government universities are dictated by the market forces making it more responsive to the changing demand by default. But, access to these universities are expensive and hence out of reach of the vast majority of population in developing societies.

Governments in the developing world are making continuous efforts to expand the educational base at all levels despite serious resource constraints. The targeted education of women with stipend and tuition waiver up to Higher Secondary (12<sup>th</sup> Grade) level is an example of this effort in the context of Bangladesh. Although there is uneven spread of education in the developing societies, most urban/rural communities have many young men and women with higher secondary level education, if not higher. However, most of these people are educated in non-marketable skills or cannot pursue higher education due to opportunity/resource constraints and hence remain unemployed. A way out should be found to transform their previous investment in education into productive outcome through further

investment in marketable knowledge and skills. This is the basic premise of Knowledge Based Area Development concept.

In many developing societies, area based development approach (rural and urban) is going on under the umbrella of micro-credit by the government and non-government organizations (NGOs) targeted to ultra-poor and certain special segments of population. This micro-credit has obviously contributed to alleviation of poverty to some extent but has not created prosperity for the recipients for many reasons. Thus the people continue to remain in the cycle of poverty and do not get an opportunity to break out of the poverty trap.

### Funding Higher Education

Traditional public funding is shrinking and more alternative funding approaches are being tried involving all stakeholders to ensure social accountability and ownership. No country nowadays is able to support a comprehensive system of higher education from public funding alone. Alternative funding is gaining ground in the 'policy landscape' in higher education. The consequence demands a modified distribution of cost-sharing responsibilities, increasing or introducing tuition fees and other charges and through various income-generating activities such as contract research, a broad range of academic and cultural services and short-term courses.

The search for alternative funding has proved much more difficult for the developing countries. In most instances, growth in enrolment has not been matched by allocation of resources leading institutions to cutback budgets, study programs, modernization of infrastructure, library holdings, international co-operation and even academic staff. Shortage of funds combined with growing public debate on the issue of allocation brought about a reduction of state funding for higher education, in both developed and developing countries.

Rising social expectations from higher education under diminishing resources presents a major dilemma for the developing countries. According to UNESCO's statistics, developing countries spend a much higher proportion of their GNP on the public higher education sector. Yet, these countries are far from able to allocate the level of support they need or that given in developed societies. On average expenditure per student in absolute terms is ten times lower in the developing countries than in the industrialized world. Such problems reveal a policy dilemma with regard to public spending on higher education: the poorer the region, the higher the relative cost per student, estimated in terms of the percentage of GNP allocated to higher education.

Funding is central in both capacity building and facilitation of access to higher education. It dictates extent of achievement in terms of both quality and quantity. The conventional mode of public funding suffers from some inherent limitations in quality and quantity. More and more, governments, specifically in developing world, are finding it difficult to expand and improve delivery of higher education, chiefly due to dearth of fund. Private funding in the form of non-government universities has been able to address some of the inherent deficiencies in public universities. Yet, the extent of coverage is limited for obvious reasons and the education tends to be expensive and hence inaccessible to the low income groups. The middle ground is a quasi-public funding with participation of the stakeholders. In the short run, it can prove more effective in facilitating accessibility while the issue of funding for institution-building may also be addressed in the long run through participatory funding modalities.

### Knowledge Based Area Development (KBAD)

Under KBAD, young men/women from each urban/rural locality would be given opportunity to go for higher education and acquire a degree/diploma/post higher secondary certificate in marketable (within and outside the country) knowledge and skills. Such educated/trained person would be expected to make efforts to pull up his/her family, neighbors and the village/urban/community through access to knowledge for economic and social development. The achievement of the individual will also have a demonstration effect in the village/locality and act as an eye opener to other young people in the area. This can also bring hopes and dreams to the impoverished village

community. The young men or women should reach the minimum qualification (Higher Secondary, i.e. 12 years of formal education) or equivalent to gain entry to university level institutions.

Financing of education and skill development would be a barrier to realization of Knowledge Based Area Development concept. It is expected that the family of the individual would bear the cost of such education/training. However, economic situation in developing societies may not permit most families to bear the cost of such education. The introduction of an Educational Loan Scheme can partially alleviate this problem. The government and/or NGOs should consider developing and operating such an Educational Loan Scheme. Eventually Educational Bank(s) may be established to facilitate access of the middle class and poor to market oriented higher education for social mobility and as a step towards realizing the vision of Knowledge Based Area Development approach. In this process, it may be possible to break away from the poverty cycle. The Education Bank could be the conduit to finance such persons on easy terms but on a repayable basis. This would be a radical approach to break the poverty cycle but this might also work as a catalyst as well as a role model.

The Education Bank can also finance educational institutions on easy terms for institution building but on repayable basis and also provide loans to teachers for higher education and training. The capital for Education Bank can be mobilized through aids and loans from development organizations and share subscription from individuals with expectation of reasonable return on capital and philanthropic orientation. Development of human capital of the society would be the intrinsic return to donors, while financial return at a reasonable rate (?) would be the additional return to subscribers to the capital. The Education Bank is to be operated on business principles but targeted to investment in education, skill development and institution building activities relating to the same. The Education Bank can take the form of an educational cooperative.

#### **Bangladesh Scenario**

Historically, higher education in Bangladesh was organized in the public sector only. That is, all universities were funded by the government through its budgeting process and there was hardly any involvement of the community in running and managing of these institutions of learning.

A number of commissions have been set up since the 1960s to scrutinize the performance of the education sector and bring some uniformity in the policies and programmes of the different institutions. As of this year, a new commission has been established which is presently carrying out its deliberations.

Among these, the 1974 Bangladesh Education Commission was the most comprehensive, addressing issues like mission and vision, and considering education as an agent of social change. It proposed the introduction of mother tongue as medium of instruction at all levels of education, and increased budgetary allocation to education (and within that allocation a higher proportion for sciences). The commission placed education in a broad national perspective, suggesting continuous quality development and making relevance a key word. The other commissions that followed also came up with the issues of quality, governance, finance, relevance and the national developmental perspective and suggested measures for improvement. The reports also raised concerns on the decline of quality and, in their various ways, proposed measures for improvement.

However, none of the reports made any real dent on the education system, because of lack of consensus on approach and recommendations. In retrospect, it can be said that implementation of these reports could have made the education scenario more chaotic. Planning education for 100 to 150 million people through a central commission or committee may not be good idea after all.

In Bangladesh, at present a little more than 7% of 17-23 cohorts receive higher education. The percentage is 12 in India, 30 in Malaysia, and 48 in Thailand and the rates in these countries are on the rise. Furthermore a 1996 review

estimated that poor households receive only 15 percent of public spending on higher education. If parity in this area has to be achieved, a way has to be found to bring students from poor households to the university. This can be done through a generous scholarship scheme and an increased budgetary allocation to meet the demands of poor students.

Bangladesh spends about 14 percent of public expenditure in the education sector. Of this, the share of higher education is about 11 percent. Total expenditure in education in the public sector constitutes little over 2 percent of GDP of which about 0.17 percent is spent for higher education. Compared to the developing countries, Bangladesh is experiencing a very low investment in higher education. For example, in India 20.3% of the total education budget is spent on higher education; in Thailand it is 19.2% and in Malaysia 33.3%. However, the share of the university education in Bangladesh has been increasing over the years (7.66% in 1995 to 8.88% in 2005).

At the moment Bangladesh has one of the lowest ratios in the SAARC region. Thus while Bangladesh spends only 2.3 percent of its GDP in education, India spends 4.1 percent.

There are several arguments in the related literature that justify public subsidization of education including higher education. The most common argument derives from the constitutional obligation of the state to provide education to every citizen. The general poverty level of the country also indicates a need to subsidize education. The questions of equity, fairness and social responsibility are also raised.

Outdated curricula irrelevant to the needs of the society led to widespread educated unemployment in the country. On the other hand, government is not in a position to create job facilities for these people. This resulted in a large group of educated, unemployed young people in the society who felt very frustrated but are not in the position to translate their knowledge and skill into any meaningful productivity. This situation may be cited as creation of liability as opposed to intellectual capital formation through higher education. Avoiding such situation is one of the challenges to policy planners in high education across the world.

Phenomenal quantitative expansion in higher education in Bangladesh chiefly during the last decades was an outcome of widespread advancement of free primary and secondary education through state financing and donor funding. More and more, the public universities found themselves incapable of handling the quantitative expansion, despite the fact that good number of new public universities have been established to meet the growing demand. Thus, the government induced by the leading academicians and policymakers, decided to introduce private initiative in the field of higher education. Ultimately, the Non-Government University Act 1992 was enacted facilitating establishment of non-government universities. Today, there are 54 non-government universities delivering modern, market driven education through international cooperation, competent faculty and modern teaching methods. The enrollment in these universities is nearly equal to campus based public universities. Total enrollment has reached around 170,000 by 2007. The enactment of 1992 in Bangladesh is a pioneering one among the South Asian Association of Regional Cooperation (SAARC) countries which provided the framework for establishment of different universities without resorting to separate enactment for each university and as a model that can be emulated in other societies. The legislation survived changes in government and went through minor amendment in 1998. Thus, the non-government university concept has been accepted across the political divide and has become a social reality in Bangladesh.

The relevance of private higher education to socio-economic needs is noteworthy as reflected in the employment records of its graduates. Much needed discipline in the academic arena has also been established in the non-government universities by eradicating the session jam concept. Academic life in these universities is devoid of student and faculty politics. The burden on public exchequer has been reduced, permitting in turn better funding and reform of the public institutions. Non-government universities are also market responsive, reflecting global perspectives in higher education. Brain drain has been minimized through retaining students and faculty and attracting faculty and young scholars from abroad. Through the establishment of non-government universities, a homegrown reform agenda in

higher education has been set in motion, which has begun to produce positive results. The knowledge culture is being created by non-government universities. Most significantly, the non-government universities are inducing changes even in the way the government universities operate.

Although, non-government universities have succeeded in supplementing the capacity of the public sector, their contribution is more commendable in terms of modernization of content and delivery. By definitions, non-government universities are tuned to the demand of the market at home and abroad, facilitating propagation of critical expertise and resisting the abysmal brain-drain that is considered devastating to the nation.

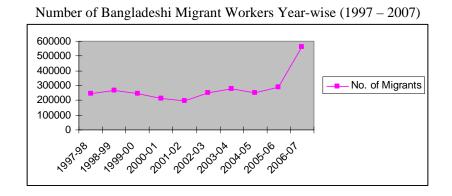
In terms of funding, non-government universities are run on self-reliant funding on full-cost-recovery approach. Thus a big chunk of the cost is passed on to the students in the form of full fees. Yet, many of the non-government universities suffer from dearth of capital that limits their capacity to deliver in compliance with quantity and quality. As far as students are concerned, education in non-government universities is expensive by definition, barring the low income groups from availing the more modern education available within the country. The emergence of non-government universities was a condition of necessity but far from being sufficient to address the challenges facing the higher education sector in Bangladesh. Any alternative funding modality both for institution-building and for financing accessibility can play a vital role in enhancing the contribution of non-government universities to the higher education scenario. KBAD can provide such a strategic alternative.

### **Dynamics of Manpower Export from Bangladesh**

The aspect of manpower export from Bangladesh can be seen as an illustration of intellectual capital formation for national development. The expansion of the base of skill and capacity development through institutional arrangement like the non-government universities is preparing the premise for higher value manpower creation for domestic market and exports.

Despite having a labor intensive economy, Bangladesh is left with a significant imbalance in the human resources market in the country. Pressure on land arising from rapid population growth and depletion of resources through natural calamities (e.g., floods, cyclones, drought) have led Bangladeshi people to migrate to other countries for employment and better earning.

The number of migrants between 1976 to 1999 has been officially reported to be 3.24 million. As the graph below shows despite some oscillations, there is an overall rising trend in migration for employment from Bangladesh. Since then, the migration has further accelerated through re-opening of new markets, removal of restrictions in some of the earlier markets and overall increase in labour mobility across the world.



Skill status of migrants is an indication of type of market demand and the nature of preparation that can be made through intellectual capital formation. The manpower of Bangladesh working in different parts of the world is primarily made up of unskilled and semi skilled male persons. In 2001 the professionals constituted only three percent of the migrant worker against 58 percent of unskilled workers, 16 percent of semiskilled workers and 23 percent skilled workers. Migration for employment is a significant phenomena in the economic and social life of Bangladesh.

The flow of official remittances in Bangladesh by non-resident Bangladeshis (NRB) between 1996 and 2002 was about US dollar 23.7 billion. This figure represents the remittances officially recorded by the central bank of Bangladesh. However, it has been variously reported in the media and in the banking channels that a significant amount of remittance is made outside the banking channel for reasons of better exchange rate, time saving, low transaction cost and ease of remittance. Some sources, estimate that the size of unofficial remittance may be around the same amount as the remittance made in the official channel. The remittances make significant contribution to the GNP and helps in offsetting the unfavorable balance of payments by providing about 49.09 percent of the export earnings and 8.83 percent of the GDP. Thus, the remittances of the migrant workers constitute a large percent of the national savings of the country.

The trend of remittance is also on the increase every year, with some slumps in intervening years because of disruption in normal life or economic down turn in labour receiving countries. This can be observed from the data given below:

	Remittance (US\$
Year	Million)
1997-98	1525.43
1998-99	1705.74
1999-00	1949.32
2000-01	1882.10
2001-02	2503.44
2002-03	3060.31
2003-04	3372.49
2004-05	3848.30
2005-06	4801.88
2006-07	5978.47

In recent years there has been steady increase which is likely to continue with resolution of difficulties in the Malaysian market, opening up of South Korea and other markets as well as the recent decision of the Bangladesh government to remove the ban on migration of female workers. The estimated figures for recent years confirm this observation as follows:

Year	US\$
2000-01	1882 million
2001-02	2503 million
2002-03	3060 million
2003-04	3372 million
2004-05	3849 million
2005-06	4801 million
2006-07	5978 million

An examination of the remittances from different countries in terms of size in fiscal 2006-07, indicate the dominance of Middle East but despite relatively low in number, USA and UK stands out quite prominently as follows:

Country	<b>Remittance in Million US\$</b>
KSA	1734.70
USA	930.33
UAE	804.84
Oman	196.47
Qatar	233.17
UK	886.90

The remittance data from USA and UK have reflection of professional category of migration and is significant for higher education. This is also substantiated by the classification of migrants by skill as of 2006:

Professional	925
Skilled	1,15,468
Semi-skilled	33,965
Unskilled	2,31,158

Arrangements for development of skills of the migrants and prospective migrants are not adequate in Bangladesh. In developing the human resource, skills of the migrants need to be developed to make them efficient to cope with the needs of their overseas employment prospect. Of course, it does not need very sophisticated education nor does it require an abundance of wealth to vie for foreign jobs. Some efforts at providing vocational training, computer skills, housekeeping, gardening, etc. can supply the manpower needed for foreign countries in low skill categories. However, higher education is required to generate instructors to nurture such skills. Many young men and women in Bangladesh are educated in non-marketable skills nor they can pursue higher education due to opportunity/resource constraints and are unemployed. These people can be transformed into skilled and professional manpower for overseas market through educational and training keeping in view the international labour market and its projected growth as well as changes. Appropriate institutional arrangement should be made through pursuing a policy framework conducive to development of a knowledge and skill based society through harnessing energies of non-government and private sectors.

Professional education can also contribute to large scale migration and consequent earning. The example of nursing as a profession can be cited. IUBAT—International University of Business Agriculture and Technology started BS in Nursing program only 4 years back and already have signed contract for placement of 2000 nurses in USA at annual salary range of 45-65000 dollars plus other facilities. Available information indicate that there will be shortage of 1 million nurses in USA alone in the coming decade. This is an indication of how manpower can be developed through higher education keeping in view the demand reflected in the international labour market index.

The on-going global recession has created some turbulence in the traditional labour markets of Bangladesh which calls for more investment in skill and knowledge for market diversification. In this effort, higher education plays significant role by producing graduates as well as higher level educated individuals to be instructors and/or entrepreneurs.

### **IUBAT and KBAD**

IUBAT has set out the long term vision of producing one technical graduate from each village/ward under the KBAD concept as a step towards community self reliance. To materialize this vision and to translate the concept into reality, IUBAT has special provision for supplementing the family resources of a student through scholarship, grant, fee waiver, deferred payment, campus job, student loan and the like. It is IUBAT policy to cater to needs of all qualified students who aspire for higher professional education regardless of the income level of his/her family through appropriate educational financing arrangements.

To institutionalize the educational financing IUBAT has established an educational cooperative in the form of IUBAT Multipurpose Cooperative Society Ltd. (IMCSL), with a share capital of 50 million taka (US \$0.72 million) divided in 500 thousand shares of Tk 100 each. One of the prime objectives of IMCSL is to mobilize funds for providing educational loan and scholarship to the members and their dependents to help them pursue higher education and professional training. IMCSL is looked upon as a prelude to establishment of an Educational Bank (Shikkha Bank) with a wider mandate. Anyone can contribute to the share capital by becoming a member and pave the way for educational financing.

IUBAT has also introduced Career Development Loan scheme for students out of the IMCSL as well as Financial Assistance Fund (FAF) established at IUBAT. Besides facilities of deferred fees payment have been introduced at IUBAT. Loan under FAF is free of any service charge, while the loan from IMCSL or deferred payment from the university carry service charge. Students after graduation and employment are required to repay the loan on easy monthly installments, consistent with the earning potential of the degree/diploma/certificate.

Through this process, IUBAT is already practicing the concept of Knowledge Based Area Development to a limited extent. To materialize the concept on a wider scale, it is proposed to pick up one young man or woman from each village/ward and give him/her degree/diploma/certificate in marketable skills on the basis of self financing or in combination with deferred tuition payment facilities to be extended by IUBAT or Career Development Loan to be availed from IMCSL or from the FAF of IUBAT.

### Extending KBAD

To make the KBAD concept operational, each educated member in the developing society who made productive use of education, could be urged to motivate one 12<sup>th</sup> grade or equivalent passed young man or woman belonging to his/her place of birth to enroll in any of the degree/diploma /certificate programs in a quality non-government university. Professional educational programs available at such universities (for example in IUBAT) include subjects like business administration, computer science, engineering, agriculture, economics, hospitality and tourism and nursing.

Besides motivation to enroll, the referee should make an assessment of the individual's/ family's ability to pay the relevant university fees during the study period and recommend to the university authority for granting of loan under the deferred payment facility or other alternatives for those who do not have the ability to pay the full fees during the study period.

Furthermore, the concerned member of the society should assist in development of the referred student through encouragement and psychological support during his/her difficult educational transition period. The university would send a copy of the result of the student every semester, until graduation, to the referee for information and continued motivational support. This will enable the individual to observe the outcome of his/her referral effort for development of an individual.

Through such enrollment motivation, facilitation, and encouragement through the study period each educated person will have an opportunity to repay his/her debt to the place of birth by facilitating knowledge/skill acquisition for area development and lay the seeds for community nay national self-reliance.

### **Concluding Remarks**

Under KBAD concept, an approach is sought to make a bold attempt to prepare a section of the population to break out of poverty and enter into an era of prosperity. If replicated in a sustainable manner, the approach can go a long way in achieving socio-economic advancement in developing societies through facilitating wide scale accessibility to higher education for intellectual capital formation.

This knowledge based development will require considerable capital resource as well as institutional infra-structure which can be addressed through establishment of Educational Bank(s) in communities.

#### Active participation of every educated in

dividual of a country in building a prosperous society based on knowledge will give rise to a drive towards nation building. This will be worth emulating paving the way for development of the country as a self-reliant, prosperous and self-respecting nation.

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