

## UNIVERSITY FUNDING - A WORLD VIEW

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### **Abstract**

*This paper aims to present a narrative literature review of papers published in the last two decades on the alternative methods of resource mobilization for funding higher education. Although there is large variation in methods of financing, generation of revenue and austerity measures, this study attempts to give a general overview of the different methods of resource mobilization, management strategies adopted by different Universities world over comprising countries from America, Europe, Australia, Africa and South Asia. In the Indian context, some literature from pre liberalization era on financing of higher education has also been included to depict a holistic picture on the need for alternative methods of resource mobilization.*

**Keywords:** *Resource Mobilization, Developing Countries, Diversified Funding, Self-Sufficiency, Environment Oriented Effort.*

### **Introduction**

A dominant theme of Higher Education in the nineties has been financial distress which was clear from the World Bank declaration in 1994 that higher education was ... "in crisis throughout the world"(World bank,1994) as government funding has declined. As a result, the quality of education was inevitably affected to a considerable extent such that universities have not been able to invest even in basic infrastructure like; electricity, telecommunication, computers and transport. The financial difficulties of the universities were partly due to their own limitations and partly due to circumstances beyond their control. Four major factors that have contributed to this condition are,

1. Enrollment pressure in countries with growing population of secondary school pass out in contrast with inadequate capacity building in higher education.
2. Sharp rise in unit cost of education as compared to unit cost of overall economy and the rapid change in the fields of study which are in great demand from time to time.
3. Mounting pressure on limited public revenue owing to ever increasing needs of basic education, health, public infrastructure, etc. compounded with the inability of many countries to rely on former methods of raising public revenues such as turnover taxes, etc.
4. Growing public sector austerity in so many countries which is essentially political in nature and effects of liberalization, privatization and globalization (Johnstone, 1998).

Seeking for greater diversity in funding sources and not simply relying on governments to provide the vast majority of funds has been widely understood as a major new development bearing a vital challenge for most of the higher educational institutions in general and research universities in particular (Douglas, 2005). As a result, three major categories of reforms have emerged over the past two decades:

1. Supplementing government revenue with nongovernment revenue,
2. Reform of public sector financing and
3. Restructuring of institutions of higher education (Johnstone, 1998).

The present study revolves around the first form of reform mentioned above.

### **Objectives of the Study**

The study has been conducted with the primary objectives of tracing the publications on alternative sources of revenue generation in Universities, to enable ease in quick access and systematic presentation of the outcome of the studies reviewed.

## Data and Methodology

This paper is based on the outcome of content analysis of review of 91 papers published in the area of Resource Mobilisation in Universities of 31 countries (from 23 referred Journals, 10 books, 9 international conference papers and 16 other sources including working papers, dissertation, reports etc). The exact distribution of articles reviewed from various sources is given in Table – I (Concept-wise), Table – II Journal-wise), Table – III(Country-continent wise).

## International Scenario

The funds for higher education come mainly from three different sources, viz, Government, Students fee and other sources like philanthropy, etc. Tsang (1994) while studying on Costs of Education in China: Issues of Resource Mobilisation, Equality, Equity and Efficiency stated that after the founding of the People's Republic of China, public expenditure on education was consistently low till 1980 in terms of both fiscal-effort and national-effort. Since 1978, China regarded education as the strategic foundation for economic-oriented national development which marked substantial increase in public expenditure during 1980s and beyond, marking major turning point in public investment in education for want of developing human resources for further economic development under 'socialist-market economy '(Bray, 1991). Wang (2000) while studying Governance and Financing of Chinese Higher Education stated that China is also facing sever crisis as regards investment in educational infrastructure. Thus, the higher education financing system was restructured through decentralization in financing using head-count of enrolment approach, diversified financing to mobilize resources in any possible way including *Gongjian* (co-building), autonomy in spending money with a riding clause of 'spillover,' and income contingent loans with subsidized interest. The Hong Kong experience (1969-1984) in international perspective suggests that a loan scheme for higher education has been a particularly popular way of spreading the cost of education (Bray, 1986). The USA did better on fees but less well on income contingent loans, whereas Canada has actively considered income contingent loans. Australia has adapted to a fixed tuition fee model i.e., the same fee for all subjects at all universities besides introducing income contingent loans with interest subsidy but without covering living cost. New Zealand adopted the Australian model with minor modification as to better fee and income contingent loans covering living cost and has reintroduced interest subsidies since 2000. Barr (2005) in his study offered a threefold strategy to tackle the problem of ever increasing budget cut, viz; 1) Deferred variable fees, 2) Income Contingent loans, and 3) Active measures to promote access to higher education. The first two elements free up resources to finance the third. It may be concluded that the student income contingent loan has been one of the most prominent methods of effective solution to the problem of financing higher education (Barr, 2008). Since the focus is now on increasing internal revenue, let us summarise the literature on two pertinent areas - Tuition fee and self-generated funds.

## Tuition Fees

More and more developed nations have shifted cost of higher education from taxpayers to parents in the form of tuition fees in line with OECD countries like Australia, New Zealand and Netherlands. US had long established system of high tuition fees which was not so in UK, but it too, joined the fray(Wagner, 1998). The increase in tuition fee was supported by loan schemes in various countries, but upfront charges with mortgage type loans proved to be most beneficial to the rich and do not adequately address the issue of additional financing since it gives rise to the problem of equity of access (Young & Powell, 2011). A study of 10 countries comprising Australia, Denmark, Tennessee, France, Germany, New Zealand, Sweden, Netherlands, USA and UK conducted by Centre for Higher Education Policy Studies (CHEPS) *inter-alia* came up with following strong arguments in support of charging top-up tuition fee (Kaiser, Vossensteyn & Koelman, 2002):

- First, if the universities are to expand, the same can be realised with extra sources of income without deteriorating the quality of education.
- Second, if universities are to compete globally, need more resources.
- Third, since universities have different cost-structures, fees should vary accordingly.
- Fourth, fees would reflect the quality of teaching.

- Fifth, fee differentiation would allow universities to charge more to those students who are able to pay more.
- Sixth, it would mean greater market discipline and less need for costly regulation.

In Africa, the introduction of tuition fee towards almost full cost recovery on food and accommodations of students was found to be sound. Progress was seen through sporadic and slow application of the same in Kenya and Zambia in the late 80's and early 1990's (Blair, 1992 & Saint, 1992). The importance of user fee became all the more clear from the experience of Tunisia, which was badly suffering from want of investment because the user contribution was less than 1% of the actual cost of higher education (Millot, 1997). Letseka & Maile (2008) claimed that 40% of South African students drop out in the first year mainly because of financial difficulties owing to negative impact of high private cost of education on low income students (Vossensteyn, 2007). South African Universities have adopted differential pricing of various academic programmes and effecting regular increase in tuition fee both for cost recovery and income generation purpose (Ouma, 2010). Economies in transition like Russia, Ukraine faced with fiscal deficits and revenue diversification were blocked by their constitutions in implementing tuition fee. Reforms came in 1992, when Higher Education law allowed introduction of tuition fee only for non-degree short-term courses and programs termed as additional educational services and in private institutions of higher learning. Later with further expansion of the jurisdiction tuition fee charging population, State Committee for Higher Education recommended that such fee paying students cannot exceed 10% of total admissions (Bain, 1997). Poland is trying to interpret its new constitution so as to legalise tuition fee (Bollag, 1997). China has implemented universal University tuition fee from students admitted outside state plans, i.e. sponsored or self-financed. However, Tilak argues that in a developing country like India the introduction of fees and loans neither assure cost recovery nor assure equity of access to students (Tilak, 1992).

### **Self-Generated Funds**

There is an increasing realization amongst Universities all over the World that regular operating subsidies will not grow. Further, solution to financial crisis being faced by the higher education system cannot be sought only at the expense of students, parents and institutions as discussed above. Thus, there is a need to be entrepreneurial in order to mobilise resources besides effecting increase in fees. Williams (1992) and Sanyal (1995) have stated that universities now-a-days are resorting to various demand oriented, locally specific, time tested income generating activities. The study has come out suggesting some possible sources of revenue generation viz.; contracts for research, intellectual property rights (IPR), consultancy, accommodation fee, printing, software, foreign aid, etc. Eastman (2005) however, concluded that by means of generating revenue from better management of resources, universities in no way should be treated at par with corporations; rather they developed strategies for doing so to offset the ever increasing cut in public funding which has crippled them for some time now. In the light of the above, the literature review can be presented in following

### **American, European and African Countries**

Departments have been interested in generating extra income with the involvement of faculty and students in various Universities in America, Europe, Mexico, and Argentina because they keep large percentage of locally generated income (Johnston, 1998). African Universities in Zambia and Mozambique have generated significant income by selling Internet nodes, which sell subscriptions to others. In more industrialized OECD countries entrepreneurship is an emerging concept of University service and as a laboratory for teaching and applied research. It puts institutions in self-defined basis, reduce governmental dependency and diversify income to reduce dependence on Government funding (Clark, 1998). A successful case of income generation is Makerere University of Uganda through consulting and University enterprise partnership programmes. Many Universities in Russia are also earning 50 % or more from entrepreneurial activities (Sanyal & Martin 2006).

In Europe too, certain Universities are beginning to show entrepreneurial spirit (Clark, 1998). In USA, major State Universities have increased their income from entrepreneurial sources. The sale of services like canteen, press, auxiliary services, and other project task award services, whether or not directly bound to be educational represented significant sources of funding higher education (Chevailler & Eicher, 2010). An important

observation from the developed countries is the concerted effort taken to map major sources of revenue and aim to identify opportunities to expand activity and raise discretionary levels of income. Thematically, these are divided in five major areas: International Student Recruitment, Online Course Provision, Revenue from Industrial Engagement, Knowledge transfer, IP & Consultancy and revenue from Alumni & Auxiliary sources (University of Manchester, 2006; California Community Colleges, 2010; and Stanford University, 2011).

A research study taken up on the American funding strategies conducted at seven most-funded universities including Harvard and Stanford, proposed to see the alternative funding avenues that African universities can adapt to their own social and cultural environments. It is not possible to compare the funding methods of universities in the United States and those used in African universities (Johnstone, 2004). Yet, Institutional advancement (defined as the “area of college and university administration that usually includes development, public relations, and alumni activities, international partnership”) needs to be adopted for fund raising. Development strategy involves major gifts, annual fund gifts, capital campaigns, partnering with corporations, foundations, planned giving, estate planning/deferred giving, and bequests/wills. Alumni strategies include class reunions, homecomings, alumni awards, alumni chapters and student advancement programs all of which provide ways of involving alumni in institutional advancement. Public relations combine activities such as publications, mailings, telephone, workshops, seminars, and news reports. The study has contributed to the body of knowledge dealing with institutional advancement at private institutions of higher education in the United States, and to provide African universities with invaluable information (Bongrila, 2006). Another study of Addis Ababa University of Ethiopia has advocated for concrete policy guidelines for using resources to generate revenue as alternative funding strategy through the following:

- Articulate the mission and objectives of the university body in-charge of business enterprise development;
- Provide a mechanism for the establishment and management of enterprises within the University;
- Reformulate and restructure the existing business enterprises of the university, if any, on a fully commercial basis;
- Provide for proper risk management of all commercial activities
- Limited liability of universities in respect of such enterprises and;
- Specify duty, responsibility and accountability of concerned commercial enterprise within the university administrative structure (Munyua, Abate, Huka & Dawe, 2011).

Despite long and rich tradition of philanthropy in Japan, there is a serious need for fundraising. But, very little research on Japanese fundraising is available. Growing professionalism by way of having paid services for guidance in the field of philanthropy and resource utilisation is a marked advancement in the field of fund raising (Onishi, 2007). A comparative study of the eight countries UK, Australia, Pennsylvania, Netherlands, Michigan, France, Germany and New Zealand suggests for stable revenue streams with the desire for operational autonomy to maintain the equilibrium between demand and supply of higher education funding (Salerno & Jongbloed, 2002).

### **South Asian Countries**

According to, Weifang, (1991), Bray & Shouxin, (1992) and Tsang, (1994) reforms in China brought institutional freedom for generating revenues. In Malaysia, “alternative sources of funding encompass endowments, alumni and income generating activities including contract research and investment activities directly related to the core business of Universities” (UNESCO, 1998). The expectation of Thai Universities to obtain large income from commercialization is yet to materialize and according to Leifner & Schiller (2007) alternative income generating activities not linked to academic tasks of universities is more likely to appear in developing countries like Thailand. In Pakistan, Jiminez & Tan (1985) suggested levy of user charges on equity and efficiency grounds. In Bangladesh, bigger Universities have few very negligible additional sources of income like rent, fishery, orchards, dairy (Monem & Baniaman, 2010). In Nepal too, though public finance is declining, so far no effort for mobilizing resources towards generating revenue has been made (Dhungel & Lamichhane, 2010).

## India

In order to assess the changing scenario pertaining to financing of higher education, literature review has been presented in two parts pre and post liberalization. The detailed literature review is as follows:

### ***Pre-liberalisation***

During 1970s and 1980s several studies have been made on **problems and prospects of university finances**. These studies have highlighted the problems of finances arising mainly due to expansion and growth (Kaul, 1974). ICSSR sponsored case studies (Raj, 1970; Mallik, 1971; Bose, 1971; Mukherjee, 1978; Nigam, 1978; Sharma, 1978 and Iyengar, 1982) have found that student enrollment has positive relationship with expenditure on higher education and negative relationship with students' fee. Tilak (1988) confirmed that the financial position of Indian universities during 1970s and 1980s was on a shrinking resource base, leading to a crisis or near crisis situation. Azad (1975, 1986) came out with a suggestion on need of adapting to 'differential fee system' by dividing the students at higher education in two strata. Accordingly, it suggested based on the concept of cost of service that higher fee should be charged from those students who are not academically capable for a course vis-a-vis usual fee is charged from those who are academically more capable. Qamar(1996) indicated that universities and colleges in India are not suffering from want of funds but from resource management. Narula (2000) and some others have highlighted that institutional inefficiency was not only because of decreased funding, but, also because of underutilization of resources made available to them. Thus, there exists a problem of inadequate funding, inefficient utilization as well as improper resource management.

### ***Post-liberalisation***

#### **How higher Education should be financed**

Karuppayil (2004) stated that the financing of higher education system in India presents a big paradox. With liberalization of economy since early 1990s and with a view to reduce dropouts at school level, universal elementary education gained momentum in India and to this effect the recent policy changes often favoured diversion of resources from higher to primary education (Agarwal, 2005). But, India cannot afford to neglect higher education which requires adequate financing. Rani (2004) also emphasized that for balanced achievement of educational and social mission, public funding is essential. Panchmukhi (1996), Narayanan (1998), Power (1998), Chauhan (1999), Goel (2001), Singh (2004), Pylee (2004), Gosai (2004), Kaw (2004), Narayanan and Sane (2005), Hyderabad and Hundekar (2005), have all concentrated on aspects like **how higher education should be financed**, increasing dependence on public funds, issue of subsidy, resource constraint and private financing. Although the authors pleaded for increased government funding till such time institution becomes self-sustaining, yet they stressed to develop innovative and creative methods of raising revenues. Yaspal Committee (2009) stated that while the State cannot walk away from its responsibility of financing higher education, imaginative ways will have to be devised to find complimentary sources of funds so that our universities can move beyond their current levels of engagement with students and excel in providing education.

#### **Need for Mobilizing Resources**

Sanyal and Michaela (1998) in their work on New Strategies for the Management of Finance in Universities have attempted to give a bird's eye-view about the management of university finances both from the view point of the fund provider i.e., the government and the fund user i.e. the universities. Various models as regards distribution of financial autonomy (authority) including input based funding and output based funding (where the university gets paid for its services) have been analysed and opined that output based funding brings a sea change in university's relationship with external agency as well as its management and academic staff and relieves pressure on much burdened public funds. But, in reality, there could be a combination of more than one model. The culture of availing public subsidies as a major source of institutional funding fails to ensure the financial stability of any growing institution. The **need for mobilizing resources** with the legal framework granting autonomy over the use of revenue so earned on institutional projects constitutes an incentive for diversification of operations. Rani (2002) noted that diversification of funding resources without compromising with academic quality is essential.

Coming to North-East India, Pathak (2004), Rymbai (2006) and Naskar (2008) where they discussed the problems of higher education in the region, assigned political instability and insurgency, lack of proper infrastructure, poor connectivity and high cost of development and opined that efforts are necessary to mobilize internal resources.

### **Resource Mobilisation and Self-Sufficiency**

Nanjundappa (1994) suggested universities to mobilize resources from philanthropists and also stressed on the need of having linkages with industries to augment their resources. He also emphasized on the need for granting recoverable loans rather than making outright grants to students. Qamar (1996) in his study confirmed that though some of the reputed universities in past have grown with voluntary contribution alone, such contributions have decreased over the years both as a part of changed socio - political scenario as well as lack of initiative on the part of universities. Patil and Kothari (2001), Rao and Das (2001), Singh (2003), Khanna (2004), Welukar, Page and Vaidya (2004), Varghese (2004), Chatterjee (2004), Rajpurohit and Suri (2005), Bhowmick (2006) and Azad (2008), all have studied the aspects of **resource mobilization and self-sufficiency** in higher education. Rajpurohit and Suri advocated imposition of graduate tax, while Welukar and Vaidya suggested schemes like Gratefulness Fund. Bhowmick explored the use of strategic cost management in financial governance whereas Vargese offered win-win formula of continuous interaction between university and industry apart from students' loan, donations from alumni and institutional collaboration. Khanna confirming institutional collaboration said privatization in its present form is a lucrative commercial venture whereas Rajpurohit and Suri viewed privatization as a way for expansion through self-financing. In the wake of privatisation, Singh insisted on rigorous implementation of regulatory norms and standards prescribed by apex agencies like AICTE, UGC, etc. In this direction North Maharashtra University, Osmania University and Pune University have initiated steps towards resource mobilization. However, their significance is yet to be known. Self-generated income has also seen a dwindling graph as compared to the need for enormous revenue required to match the proportionate increase in expenditure (Gupta, 2005). According to Azad (2005) in a resource deficient country like India, "no amount of resource generation will be of any significance unless the existing infrastructure is put to maximum use. It is observed that physical and academic facilities available within a University are less than optimally utilized."

### **Policy Alternatives**

Tilak and Varghese (1991) examined several policy alternatives including students' fee, student loans, graduate tax and privatization. Siri (2003) observed that the entrepreneurial potential of universities is seriously constrained by various administrative and financial regulations. The study offered two fold solutions to the problem: one, promoting revenue generating activities through a separate unit equipped with all infrastructural facilities especially valuation of university services and liasioning of the same with beneficiaries of university services; second, promoting entrepreneurial activity without compromising with academic responsibility and integrity of a particular university. Das (2007) and Bray (1998) mentioned that many higher educational institutions encourage not only donation, consultancy services even moving directly into the business ventures. Yaspal Committee (2009) stated that while the State cannot walk away from its responsibility of financing higher education, imaginative ways will have to be devised to find complimentary sources of funds so that our universities can move beyond their current levels of engagement with students and excel in providing education.

### **Methodologies used in the studies under review**

In the process of reviewing literature on Alternative Sources of Resource Mobilization in Universities world over, studies covered here have been presented in four categories *viz*: conceptual, descriptive, empirical and exploratory cross-sectional based on their methodology. Conceptual papers are those covering basic/fundamental concepts in Alternative Sources of Resource Mobilization in Universities, while studies providing explanation as to content, process and implementation issues of Alternative Sources of Resource Mobilisation in Universities are classified as descriptive studies. Empirical studies cover those which were based on analysis and interpretation of databases, reviews and case studies. Studies in which data collection is done through survey, interview, and questionnaire have been classified as exploratory cross-sectional.

### Research Gap

Gaps in financing of higher education cannot be filled through public revenues only, new sources must be explored. The International Task Force on Innovative Financing for Higher Education is presently exploring the possibility of global mechanism on innovative financing. But, the higher education sector is characterized by lack of demand for research and innovation in the area of funding activities (UNESCO,2011).

Although some comparative studies on alternative funding mechanism between developed Countries and African countries could be found, the researcher is yet to come across similar studies between Developed countries and developing countries of South East Asia like India, Pakistan, Sri Lanka, Bhutan, Thailand, China, etc.to see whether such methods could be suitably applied.

### Conclusion

From the above, it can be stated that financing of higher education all over the world has undergone sea changes during the last two decades. Though, there are no reasons to believe that a portrait drawn here is inaccurate, it does not claim to be definitive either, yet the studies covered here are indicative of supporting a systematic environment oriented effort as the key to successful revenue generation by Universities. Countries and institutions are trying to meet the shortfall in financing of higher education in various ways. In this respect taking lead from African countries, studies could be taken up to see if, South Asian countries can adopt systematic channelization of internal resources for generating additional revenue. However, one has to remain alert as to the extent to which marketability can be welcomed in developing countries where access to higher education is still limited due to lack of resources.

**Table I Distribution of Methodology used in various papers.**

Conceptual	10
Descriptive	56
Empirical	18
Cross Sectional	7

**Table II - List of Journals**

Name of Journal	No. of Articles Referred
University News	22
Higher Education	9
The Chronicle of Higher Education	1
Higher Education in Europe	2
JHEA/RESA	1
Pakistan Journals of Social Sciences (PJSS)	1
International Journals of Business and Public Management	1
International Journals of Educational Advancement	1
ICSSR Research Abstract Quarterly	3
Oxford Review of Education	1
Education Economics	1
Banking Journal	1
GUNI	1
Higher Education Policy Analysis Archives	1
European Journal of Higher Education	1
Economic and Political Weekly	1
IMF	1
Chronicle of Higher Education	1
Journal of Educational Planning and Administration	1
Issues In Higher Education	1
Indian Journal of Economics and Business	1

Prospects	2
Social Scientist	1
International Conference Papers	9
Thesis, Working Papers, Reports and Others	16
Books	10
Grand Total	91

**Table III - Countries Covered in the Study**

Continents	No. of countries covered in the study	Name of the Countries
America	6	USA, Canada, Mexico, Argentina, Michigan, Tennessee, Pennsylvania
Europe	6	Netherlands, France, Germany, Denmark, Sweden, U.K.
Africa	6	Uganda, Kenya, Mozambique, Zambia, Ethiopia, Tunisia
Asia	11	China, India, Bangladesh, Pakistan, Thailand, Russia, Hongkong, Macau, Sri Lanka, Japan, Malaysia, Nepal
Australia	2	New Zealand, Papua New Guinea

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