



**BUDGETARY EXPENDITURE PATTERN OF NEHRU LIBRARY IN CCS
AGRICULTURE UNIVERSITY, HISAR (HARYANA)**

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Abstract: *In this study we have analysis the budgetary expenditure pattern of Nehru Library in CCS Agriculture University Hisar from 2005/06 to 2009/10 with the help of appropriate statistical tool and techniques and found that: 1). the per cent share of budgetary expenditure on books & journals has decreased. 2). through this study we found that on an average 39 per cent amount has been spent on books & journals, 36 per cent on salary, 12 per cent on Kirshi Parbha Project, 11 per cent on other items, while only 1 per amount of total budgetary expenditure has been spent on the provision of books for SC students and e-Granth Project respectively. 3). the elasticity of university library budgetary expenditure is 0.887 per cent in respect to books & journals expenditure. On the basis of foregoing analysis we suggests that the university library should increase the member ship other than student for getting the fund and we also suggests that the UGC and Central and State governments should reduce the time taken in the process of fund sanction and disbursement for the university.*

Keywords: *Human Capital, Budgetary Expenditures, Library, Elasticity*

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INTRODUCTION

In early stage of industrialization physical capital¹ was limited and the rate of return on human capital² was lower than the rate of return to physical capital³. Therefore, the process of industrialization in first stage was stimulated by physical capital accumulation. While, in later stage of industrialization, the demand of human capital accumulation increased significantly as compared to physical capital accumulation. This was because; in later stage of industrialization human capital accumulation was compulsory due to three basic reasons (1) first; capital and skill are complimentary in later stage of industrialization, (ii) secondly; skill-based technological changes are the general phenomenon in changing business environment; and (iii) thirdly, an unbiased technological acceleration, reflecting the comparative advantage of educated individuals in coping with a changes technological environment (Nelson and Phelps: 1966; Schultz: 1975; Foster and Rosenzweig: 1996). Thus, today the human capital has become the key driver of industrialization as well as economic growth in the world (Gaolr and Moav: 2004, Gaolr: 2011). For Example, during the period from 1890 to 1999 the contribution of human capital accumulation to the growth process of the United States nearly doubled. As a consequence, today, the replacement of physical capital accumulation from human capital accumulation is a general phenomenon across the world. Therefore, human capital accumulation has a prime engine of economic growth in currently developed countries across the globe (Gaolr: 2011). Thus, on the basis of foregoing discussion, we can conclude that the human capital is the real wealth of the nation (UNDP: 1990) and it is most important for faster, sustain rate of economic growth as well as maintaining the rate of industrialization for any country in the dynamic world. So, developing as well as under developing countries should emphasize on the accumulation of

¹Capital formation refers to net additions of capital stock such as equipment, buildings and other intermediate goods.

²The concept of Human capital has relatively more importance in labour-surplus countries. These countries are naturally endowed with more of labour due to high birth rate under the given climatic conditions. The surplus labour in these countries is the human resource available in more abundance than the tangible capital resource. This human resource can be transformed into Human capital with effective inputs of education, health and moral values.

³Generally, the higher the capital formation of an economy, the faster an economy can grow its aggregate income. Increasing an economy's capital stock also increases its capacity for production, which means an economy can produce more. Producing more goods and services can lead to an increase in national income levels.



human capital through creation good quality of human development⁴. In this context Adam Smith argued that investment in human beings helps in building technical, professional and other capabilities on human beings which ultimately determine the long term of growth and development of a nation. Moreover, Lewis emphasized also the role education in economic development. Thus, education in modern times has come to be treated as an investment which produces an important capital good, called human capital. Therefore, policy makers and planner across the globe including India are given more attention on human capital. While, the development and growth of human capital in any nation across the World's is depends on the quality of education in general and higher education is particular. Because, education creates motivation for progress and brings revolution in the ideas necessary for the progress of the country. Hence, we can say that education is the engine of economic growth and social change. Today, the time is technological advancement, while universities are the excellent place of development of technology and improvement in existing technology. In this regard {development and improvement in new and existing technologies}, university library play a significant role. Both, university and university library are the non-profit organization. Therefore, both university and university library always depends on government grant for their expenses, while sanction and disbursement of grants is very lengthy process. So, both organizations i.e., university and university library always face the problem of finance at reasonable time and quantity since long time. Further, university library is the heart of any university, so the success of any university {in term of qualitative research} is depend on the proper functioning of university library in large extent, while the proper functioning of university library depends on the efficient utilization of limited fund. Thus, today financial management of university library is the important issue in the country. Therefore, the present study was made to analysis the fund employment pattern {budgetary expenditure} of university libraries in Haryana. For this purpose, Nehru Library in CCS Agriculture University Hisar was selected at randomly among all university libraries of Haryana, due to following reasons {Nehru Library in CCS Agriculture

⁴According to United Nation Development Programme (UNDP), Human Development (HD) is concerned with the process of widening people's choices and the level of well-being they achieve. Such choices are neither finite nor static. But, regardless of the level of development, there are three essential choices for people. They are (1) to lead a long and healthy life, (2) to acquire knowledge, and (3) to have access to the resources needed for a decent standard of living.



University, Hisar is one of the oldest university of the State, easy availability of necessary data, the budget of this university library is very high as compared to other university libraries in the State}.

OBJECTIVES OF THE STUDY

1. To study the trends in growth of university library budgetary expenditure.
2. To examine the composition of budgetary expenditure in the university library.
3. To find out the elasticity of university library budgetary expenditure in respect to book & journals outlay.

RESEARCH METHODOLOGY

The present study is based on secondary data, which were collected from the Annual Reports of Nehru Library. Further, to achieving the above objectives appropriate statistical tools and techniques were applied {i.e., ACGR, Regression Model and Chi-Square Test}. The present study covered only the period from 2005 to 2010.

Average Compound Growth Rate (ACGR)

The average compound growth rate is calculated by employing formula:

$$Y = ab$$

By using logarithm, it may be written as:

$$\log y = \log a + t \log b$$

$$Y^* = a^* + t.b^* \text{ (where } \log y = y^*, \log a = a^* \text{ and } \log b = b^*)$$

The value of b^* is computed by using OLS method. Further, the value of ACGR can be calculated by followed method:

$$ACGR = (\text{Antilog } b^* - 1) \times 100$$

Simple Regression Model

Simple linear regression represents a logical extension of between two variables analysis. Under it one independent variable is used to estimate the values of a dependent variable. The simple regression equation describes the average relationship between two variables and this relationship is used to predict or control the dependent variable. The equation of the simple regression model is given below.

$$Y_i = a_0 + a_1 X_1 + \mu \dots \dots \dots (i)$$



Where:

X₁: Regresses Variables,

a₁: Parameters to be estimated and

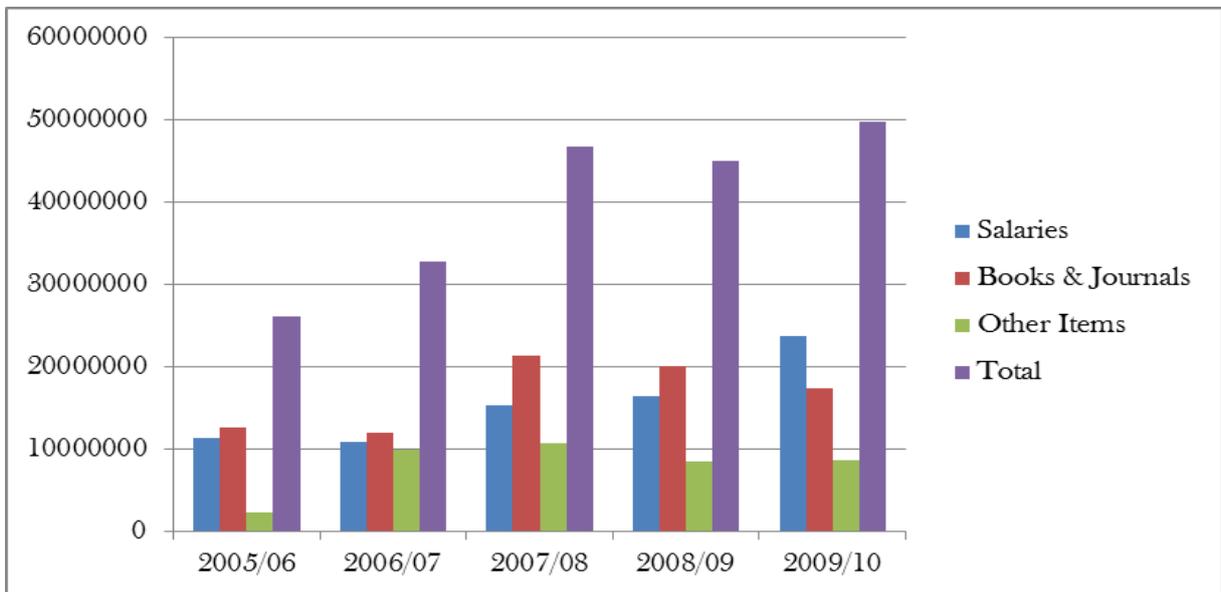
μ: is the error term.

Further, all variables should be use in natural logarithm form for economic estimation. Because Ehrlich (1977) and Layson (1983) argued that on theoretical and empirical grounds the log linear form is superior to the linear form. Both Cameron (1994) and Ehrlich (1996) also suggested that a long-linear form is more likely to find evidence of a restraints effect than a linear form. Thus, the equation of the study is:

Log-linear form: log Y_i = a₀ + a₁ logX_{1i} + μ (ii)

Figure 1: Trends in Growth of Budgeted Fund of Nehru Library in CCSA University, Hisar {Haryana}

[Amount in Rs.]



Source: Annual Report of Nehru Library in CCS Agriculture University, Hisar {Haryana}

Figure 1 illustrates the growth trends of employed fund of Nehru library from 2005/06 to 2009/10 in term of aggregate amount. The employed fund of Nehru library was Rs. 26211385 in 2005/06 and it increased to Rs. 49852190 in 2009/10. Further, it is clear from figure 1 the amount of employed fund of Nehru library has been continuous increased during the entire period of the study. Moreover, the average amount of Nehru library fund



employed has been Rs. 40154930.60, while the coefficient of variation has 25.18 per cent during the period under consideration. In addition, the average compound growth rate of same amount was 13.72 per cent. In addition, the figure also illustrated that the expenditure on salary has been increased during the same period except 2008/09, while expenditure on Book & Journals and other items [i.e., Kirshi Parbha Project, provision for the book for SC student, and e-Granth Project] has also been increased up to 2007/08 and further, it has been decreased over the period.

H_{01} = there was no significant difference in the amount of budgetary expenditure in Nehru Library during the period from 2005/06 to 2009/10.

To test the null hypothesis $\{H_{01}\}$, one way Chi-Square test has used. The calculated value of χ^2 is -1.094, while the tabulated value of χ^2 is 7.82 on 5% level of significance at 3 degree of freedom. Further, the calculated value is much below to tabulated value. Therefore, the null hypothesis has been accepted and our conclusion is 'there was no significant difference in the amount of budgetary expenditure in Nehru Library during the period under study or other words we can say that there was no structural changed in amount of fund employed by Nehru Library in same period.

Table 1: Fund Employment Pattern of Nehru Library in CCSA University, Hisar, Haryana

[Amount in Rs.]

Particular	2005/06	2006/07	2007/08	2008/09	2009/10
Salaries	11300099	10923245	15386774	16439380	23823970
Books & Journals	12568416	11979675	21307096	20091317	17405340
Other Items	2342870	9984274	10712846	8533486	8624880
Total	26211385	32887194	46759701	45064183	49852190

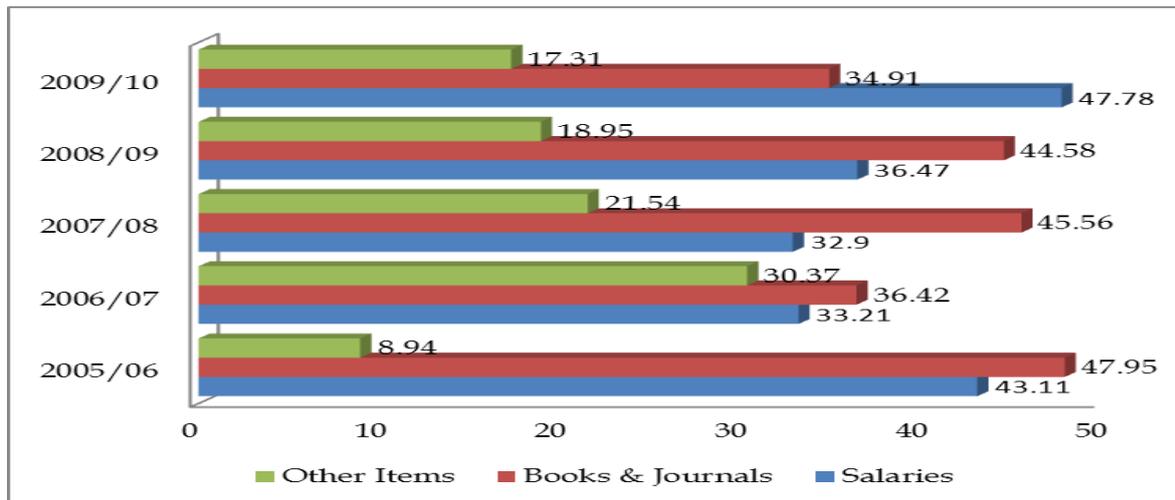
Source: Annual Report of Nehru Library, Haryana Agriculture University, Hisar

Note: Figure in Brackets is per cent to Total



Figure 2: Fund Employment Pattern of Nehru Library in CCSA University, Hisar, Haryana

[In Per cent]



Source: Author Calculations from Table 1

Table 1 shows the allocation pattern of budgetary expenditure by the university library from 2005/06 to 2009/2010. It is clear from table 1 that 43.11 per cent amount of total budgetary expenditure was spent on salary in 2005/06 and it decreased to 32.90 per cent in 2007/08 and, further it increased to 47.78 per cent in 2010. The per cent share of budgetary expenditure on books & journals has decreased from 47.95 to 34.91 per cent during the same period. Further, it can be observed from same table that the provision of budgetary expenditure on the other items has dramatically increased from 8.93 to 30.35 per cent from 2005/06 to 2006/07 and later years it has been continuous decreased and stood 1.57 per cent in 2009/10. The Kirshi Parbha Project was launched in 2007/08 and the fund allocated for the project has been continuous increased from Rs. 3158000 to Rs. 6798000 (6.75 to 13.63 per cent) from 2008 to 2010. The provision for the book for SC student was also made since 2007/08 and 1.38 per cent amount of university library budgetary expenditure was spent on this head and further it decreased to 0.88 per cent in 2008/09 and later year it increased to 1.09 per cent in 2009/10. Moreover, e-Granth Project also started by the library in 2009/10 and 1.18 per cent amount of total budgetary outlay was made for the project in initial year.



Elasticity of University Library Budgetary Expenditure in Respect to Book & Journals Outlay

Table 2: Statistical Results

Particular	Elasticity of University Library Budgetary Expenditure in Respect of Book & Journals Outlay		
		t-value	p-value
Constant	.833	.410	.709
Beta	.887*	2.926	.061
S.E.	.0678		
R-Square	0.740/74.0%		
Adj. R-Square	0.654/65.40%		
F-Statistics	8.560 [p-value .061]	-	.061
D-W Statistics	2.577		

Source: Author Calculations

Note: *significant at 10 per cent

To study the elasticity of university library budgetary expenditure in respect to book & journals, long-linear equation was used. The long-linear regression equation clearly indicates that 0.88 Rs. increases in university library budget for book & journals due to increases in university library budget for every one Rs. The elasticity indicates that there is a need of fund for spent on book & journals in the library. Therefore, without appropriate quantity and quality of book, a library can't contribute a significant contribution in the field of education in general and research in particular.

CONCLUSION AND POLICY RECOMMENDATIONS

In this study we have analysis the budgetary expenditure pattern of Nehru Library in CCS Agriculture University Hisar from 2005/06 to 2009/10 with the help of appropriate statistical tool and techniques and found that there was no significant difference in the amount of budgetary expenditure in Nehru Library during the period under study, the per cent share of budgetary expenditure on books & journals has decreased. Further, through this study we found that on an average 39 per cent amount has spent on books & journals, 36 per cent on salary, 12 per cent on Kirshi Parbha Project, 11 per cent on other items, while only 1 per amount of total budgetary expenditure has spent on the provision of books for SC students and e-Granth Project respectively. Moreover, the elasticity of university library budgetary expenditure is 0.887 per cent in respect to books & journals expenditure. On the basis of



foregoing analysis we suggests that the university library should increase the member ship other than student for getting the fund and we also suggests that the UGC and Central and State governments should reduce the time taken in process of fund sanction and disbursement for the universities.

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