



## Total Allocation for Primary Education and Regional Disparities in Karnataka

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**Abstract:** *There is a positive relationship between resource allocation and educational development. However, allocation to education may not be equally distributed to all regions and places due to various reasons. In this paper an attempt has been made to examine the regional disparities in total allocation for the primary education in Karnataka. Knowing the importance of education, government of Karnataka has been given considerable importance primary education and its allocation for primary education has been significantly increased. Even-though, there are differences in allocation between South and North Karnataka these differences are not very significant, but the division-wise differences are significant. Therefore, in Karnataka, disparities in allocation to primary education exist only among the divisions; particularly between Bengaluru division and Gulbarga division not between South and North Karnataka. Hence, government of Karnataka has to give attention to solve the divisional disparities in allocation of resources to primary education in order to ensure equity in educational development of overall Karnataka.*

**Keywords:** *Education, Investment, Regional Disparity, and Government Intervention*

### Introduction:

There is a positive relationship between resource allocation and educational development (Chakravarthy, 1981), (Amitab Kundu, 1999). However, allocation to education may not be evenly distributed to all regions and places due to various reasons (Chandan, 2010). Disparities in resource allocation lead to disparities in educational infrastructure development which result in uneven educational development of the state (Nanjundappa.D.M., 2001), (Gayathri.k., 2007), (Mishra S.N., 2001), (Gulati, 2001), (Meade, 2012). Hence, in this paper an attempt has been made to examine the regional disparities Total allocation for the primary education in Karnataka. The major focus of this

analysis is to examine whether the allocation has been evenly distributed or not to all regions and divisions of Karnataka. For the purpose of analysis, Karnataka has been identified as South and North Karnataka based on regional specification as identified by government of Karnataka. Further, there are four divisions in Karnataka and all these divisions have been considered for the disparity analysis; these divisions are, Bangalore, Mysore, Gulbarga and Belgaum divisions.

### Review of Literature:

Literature about the importance of infrastructure and its requirement in the development of an economy were presented by development economists like Albert Hirschman (A.O, 1958).



Hoffman (W.G, 1958), Lewis (Lewies, 1954), Nurkse (Nurks, 1954),and Rostow who have expressed their opinion as infrastructure is a pre-condition for economic development. Isaac M Ntshoe has analyzed the political economy of access to education and equitable allocation of resources to higher education. (Ntshoe, 2003). Konstantions Angelo Poulos,Jim Malley,Apostalis,Philippoulos have analyzed the welfare implication of resource allocation and public education. It appears, according to authors it is possible to design allocation improving education policy rules (Konstantions Angelo Poulos, 2011). Mehmet Mercan,S evgi Sezer have analyzed the effect of education expenditure on economic growth. A Greater allocation of resource on education expenses could make the Turkish economy more dynamic (Mehmet Mercan, 2014). Xuejuan Su examined the endogenous determination of budget allocation and education. In developed economies, the budget allocation is more balanced (Su, 2006). Mukhopadhaya P have attempted to analyze the income disparity and equality in education in Singapore. The occupational disparity has a strong impact on overall in income equality through education resource allocation (P, 2003).

D.M. Nanjundappa (Nanjundappa.D.M., 2001), P.R. Brahmananda (P.R., 2001) A.K. Bhargawa (A.K, 2001), S.K. Chopra (S.K, 2001), K. Gayathri (Gayathri.k.,

2007), Jayaram M.S (Jayaram M.S, 2005), S.N. Mishra and Sweta Mishra (Mishra S.N., 2001), Nanda Dhameja (Dhameja, 2001) and Yatish Mishra (Mishra, 2001), have also traced some aspects of infrastructure and disparities. However, these studies have not examined the regional and divisional disparities in non-plan resource allocation for primary education and the present study will fill this gap.

**Methodology:**

The time series data on Total allocation for primary education (TAPE) has been used for the analysis. Since, resource allocation is a financial variable; it has been deflated before use for analysis. Trends have been computed to identify the direction of growth and performance. The t-test has been used for the mean comparison of variables between the regions. The F-test has been used for the comparison of variance of the variables between the regions. ANOVA and Duncan tests have been used for comparison among the divisions.

**Growth and Trends in TAPE:**

Total allocation to primary education is one of the major determinants of development of education. Positive growth in the total allocation is a positive indication of educational development. The following table presents the growth in total allocation and its direction.

**Table 1 :Trends and Disparities in TAPE in Karnataka (In Lakh Rupees)**

Year	Karnataka	AGR	SK	AGR	NK	AGR
<b>2000-01</b>	155449.4		88797.61		66651.75	
<b>2001-02</b>	155493.5	0.028	87998.06	-0.90	67495.48	1.27
<b>2002-03</b>	147864.3	-4.906	82632.27	-6.10	65232.01	-3.35
<b>2003-04</b>	116592.7	-21.149	60049.47	-27.33	56543.19	-13.32
<b>2004-05</b>	147122.4	26.185	78274.32	30.35	68848.09	21.76
<b>2005-06</b>	173340.1	17.820	94053.43	20.16	79286.63	15.16

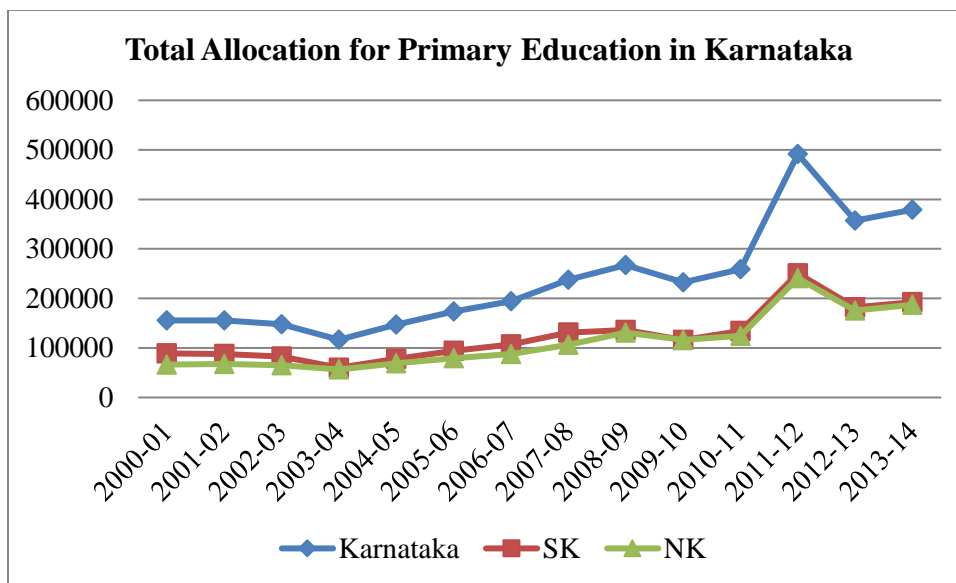


<b>2006-07</b>	194333.2	12.111	106874.7	13.63	87458.42	10.31
<b>2007-08</b>	237425.3	22.174	130907	22.49	106518.4	21.79
<b>2008-09</b>	267572.2	12.697	136395.7	4.19	131176.6	23.15
<b>2009-10</b>	232445.4	-13.128	116086.7	-14.89	116358.7	-11.30
<b>2010-11</b>	258938	11.397	134509.5	15.87	124428.5	6.94
<b>2011-12</b>	491383.4	89.769	250596.2	86.30	240787.2	93.51
<b>2012-13</b>	357219.6	-27.303	181772.6	-27.46	175447	-27.14
<b>2013-14</b>	379125.7	6.132	192209.7	5.74	186916	6.54
<b>AAGR</b>		10.141		9.39		11.18

Source: Source: 1.Economic survey of Karnataka  
2. Budget reports of Karnataka

It has been found from the above table that the average growth of financial total allocation for primary education in Karnataka is 10.141 percent. However, there has been greater instability in the growth. Meantime, growth of allocation is more in North Karnataka compared to

South Karnataka. Instability in the growth presented in the following graph. Therefore, in relative terms there is regional disparity in growth of total allocation for primary education in Karnataka.



Source: 1.Economic survey of Karnataka

2 Budget reports of Karnataka

The following table presents trends and disparities among divisions of Karnataka.



**Table 2 : Trends and Disparities among Divisions of Karnataka in TAPE (In Lakh Rupees)**

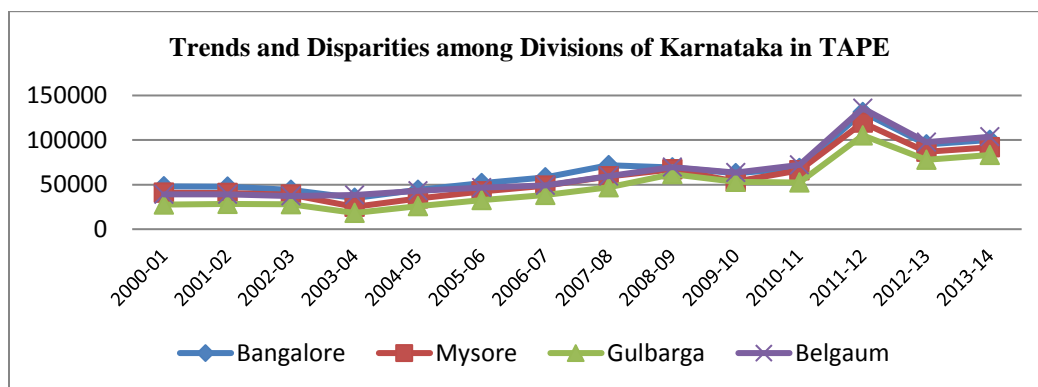
Year	Bangalore	AGR	Mysore	AGR	Gulbarga	AGR	Belgaum	AGR
<b>2000-01</b>	47980.62		40816.99		27573.52		39078.23	
<b>2001-02</b>	47576.56	-0.84	40421.5	-0.97	28415.36	3.05	39080.12	0.00
<b>2002-03</b>	44017.55	-7.48	38614.72	-4.47	28061.18	-1.25	37170.84	-4.89
<b>2003-04</b>	34977.5	-20.54	25071.97	-35.07	18230.17	-35.03	38313.02	3.07
<b>2004-05</b>	43975.66	25.73	34298.66	36.80	25924.3	42.21	42923.79	12.03
<b>2005-06</b>	51723.68	17.62	42329.75	23.42	32642.83	25.92	46643.8	8.67
<b>2006-07</b>	57950.55	12.04	48924.18	15.58	38193.84	17.01	49264.58	5.62
<b>2007-08</b>	71821.77	23.94	59085.18	20.77	47012.21	23.09	59506.17	20.79
<b>2008-09</b>	69351.93	-3.44	67043.73	13.47	61688.5	31.22	69488.05	16.77
<b>2009-10</b>	62673.92	-9.63	53412.82	-20.33	52905.04	-14.24	63453.63	-8.68
<b>2010-11</b>	68505.75	9.31	66003.75	23.57	52323.23	-1.10	72105.28	13.63
<b>2011-12</b>	131179.7	91.49	119416.6	80.92	105228.3	101.11	135558.9	88.00
<b>2012-13</b>	94973.04	-27.60	86799.58	-27.31	77942	-25.93	97505	-28.07
<b>2013-14</b>	100203.1	5.51	92006.7	6.00	83289.5	6.86	103626.5	6.28
<b>AAGR</b>		8.93		10.18		13.30		10.25

Source: 1.Economic survey of Karnataka  
 2 Budget reports of Karnataka

It has been found from the above table that the average growth of total allocation for primary education in Bangalore division is 8.93 percent, 10.18 percent in Mysore division, 13.30 percent in Gulbarga division and 10.25 percent in Belgaum division. However, there has been greater instability in the growth.

Graph.5.A

Meantime, growth of allocation is high in Gulbarga division and less in Bangalore Division. Therefore, in relative terms there are disparities in growth of total allocation for primary education in Karnataka. Instability in the growth presented in the following graph.



Source: 1. Economic survey of Karnataka  
 2. Budget reports of Karnataka



**Table 5.16: Comparison of TAPE between SK and NK**

Regions	N	Mean	Std. Deviation	Std. Error Mean
South Karnataka	14	124368.3758	52628.29228	14065.50275
North Karnataka	14	112367.7116	55211.33727	14755.85057
F-value: 0.058 Sig: 0.811		t-value: 0.589 Sig: 0.561		df: 26

Source: 1. Economic survey of Karnataka  
 2. Budget reports of Karnataka

During the last fourteen years, the average total allocation for primary education in South Karnataka is 124368.3 lakh rupees and it is 112367.7 lakh rupees in North Karnataka. It is found from the F-test that difference in the variance between the series is not significant. Hence, equal variance assumed. It is found from the t-test that

difference in the mean value between South Karnataka and North Karnataka is not significant. Hence, there are no significant differences between South and North Karnataka in terms of total allocation to primary education. Therefore, in absolute terms there is no regional disparity in Karnataka in terms of total allocation to primary education.

**Table 3: Status of TAPE in Divisions of Karnataka**

Divisions	N	Mean	Std. Deviation	Std. Error
Bangalore Division	14	66207.9483	26577.84901	7103.22893
Mysore Division	14	58160.4378	26135.09749	6984.89861
Gulbarga Division	14	48530.7130	25642.58252	6853.26845
Belgaum Division	14	63836.9901	29760.25862	7953.76368
Total	56	59184.0223	27210.19011	3636.11460

**Source:** Computed by Authors.

The above table presents the division-wise status of TAPE in Karnataka. Accordingly, the average TAPE is high in Bangalore and Belgaum divisions. The average TAPE is less in Gulbarga and Mysore divisions.

**Table 4 : ANOVA: Comparison of TPAPPE among Divisions of Karnataka**

Groups	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2597369185.886	3	865789728.629	1.181	.326
Within Groups	38124325330.963	52	733160102.519		
Total	40721694516.849	55			

**Source:** Computed by Authors.

It has been found from the ANOVA that none of the divisions is significantly differ from other divisions in

terms of total allocation to primary education in Karnataka. Therefore, no significant difference found among the



divisions of Karnataka in terms of TAPE. Hence, the multiple comparisons LSD test was not conducted to find significant

### Conclusion:

Education is an important means of achieving development in general and human development in particular. Knowing the fact, government of Karnataka has been given considerable importance to primary education and its allocation for primary education has been significantly increased. Even-though, there are differences in allocation between South and North Karnataka these differences are not very significant, but the division-wise differences are significant. Therefore, in Karnataka, disparities in allocation to primary education exist only among the divisions; particularly between Bengaluru division and Gulbarga division not between South and North Karnataka. Hence, government of Karnataka has to give attention to solve the divisional disparities in allocation of resources to primary education in order to ensure equity in educational development of overall Karnataka.

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