

## **Kanyashree Prakalpa in West Bengal: An Inter District Performance Analysis**

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### **Structured Abstract:**

**Purpose:** The purpose of this article is to explore adherence of performance of the districts since the inception of Kanyashree Prakalpa in West Bengal.

**Methodology / Design / Approach:** The paper is based on secondary data only. For this purpose different reports published by the Government and different scholarly articles have been used. For analysis of data some simple statistical tools have been used.

**Findings:** The analysis of the data shows that despite the absence of significant regional disparities as well as variation in the rankings there is significant deterioration in the performance of the districts over the years.

**Practical Implication:** As a unique CCT programme towards women empowerment the scheme calls for systematic and consistent performance so as to ensure welfare of all the targeted beneficiaries.

**Originality and Value:** Introduction of the scheme has widened the scope of women empowerment by means of prevention of child marriage.

**Keywords:** Kanyashree Prakalpa, Scheme, Women Empowerment, Districts, Performance.

**Paper Type:** Performance Analysis.

### **Introduction**

India has long standing history of women empowerment. More than 3000 years ago, in Vedic period, women used to enjoy equal status at par with men in terms of education and all the other aspects of life. However there was deterioration in the status of women since 500 B.C. (Sen, 2016). In British colonial period Raja Rammohan Roy, Ishwar Chandra Vidyasagar, Swami Vivekananda made concerted efforts for women empowerment. After independence there are several provisions in the Constitution of India in general regarding protection of rights of women and part-III of the Constitution under Article 12 in particular, which confers right to equality irrespective of sex, caste, creed, etc. (Basu, 2005). The Prevention of Child Marriage Act, 2006 was enacted in the Indian Parliament primarily to safeguard Indian

women from social atrocities. Despite all these efforts in reality women empowerment is still remained in the state of illusion. Thus women empowerment has become one most important issue in 21<sup>st</sup> century not only in India but also at international level (Shetter, 2015).

West Bengal is no exception to this tragedy. In 2007-08, the state ranked fifth highest in the country in terms of child marriage and the problem was more acute in rural areas than that in urban areas. The Census of India, 2011 reveals that the percentage of child marriage in the state (40.24%) was above the national average (30.21%) (Ghara & Roy, 2017). It is also fact that premature marriage of girls brings lot of problems like high drop out of girl students, maternal and child ill health, possibility of women trafficking and all sorts of problems leading to financially and socially disempowerment of women (Adhikary, 2017). Considering the gravity of the situation the Government of West Bengal introduced the Kannayashree Prakalpa (herein after called scheme) with effect from 1<sup>st</sup> October, 2013. Though the scheme is unique in the state in terms of women empowerment, previously there were few initiatives in India in some other states like 'Bagyalakshmi' in Karnataka, 'Beti hai Anmul' in Hariyana, towards the same end (Sen & Dutta, 2018).

The scheme is a state sponsored conditional cash transfer scheme (CCT) which has two components viz. K1 and K2 from its inception. The former is a cash benefit to be paid annually to unmarried girl child, aged between 13 to 18 years and enrolled in VIII to XII standards and later is a onetime cash benefit to be paid to unmarried girl child, who are aged between 18 to 19 years and pursuing education, technical or vocational training. In both the cases annual family income of the girl child must not exceed Rs. 1,20,000 except in case of orphans, girls with special needs (GOWB, 2014). Very recently another new component namely K3 has been introduced according to which all K2 beneficiaries, who have enrolled herself in any post graduate courses in any University in West Bengal in regular mode and have obtained at least 45% marks at undergraduate level are entitled to have monthly cash benefit under Swami Vivekananda Merit Cum Means Scholarship (GOWB, 2017). The objective of the scheme is to ensure education of adolescent girl children and prevent their marriage before attaining the age of 18 years so as to create a favourable environment for ensuring their participation and meaningful contribution to the society (GOWB, 2016). Viewed from this angle the scheme may be identified as one of the major macro-economic weapon for ensuring women empowerment. The scheme has received wide spread recognition both at national and international levels. This scheme has been awarded by the

United Nations in Netherlands in the year 2017 being the first in Asia-Pacific group under the category 'reaching the poorest and most vulnerable through inclusive services and participation' (Sen & Dutta, 2018). The scheme has close approximation with sustainable development goals, which is a broad road map set by UN community in order to build a more prosperous, more equal and more secured World by 2030 (Ghara, 2018, Adhikari, 2017, GOWB, 2018, Mir, 2018).

Thus, an attempt has been made in this article to explore the adherence of the performance of the different districts since the inception of the scheme<sup>1</sup>. Divided in five sections in section II we have reviewed related literature to show the research gap on the issue, our objectives and methodology have been discussed in section III, our findings, analysis of result and discussion have been presented in the chapter IV and finally in section V we have made some concluding remarks.

### **Review of Existing Literature and Research Gap**

There are numerous studies on the issue of women empowerment in India and abroad. But there are few studies on issue of Kanyashree Prakalpa in West Bengal. Since its inception, one Annual Report (2016) and two rapid assessment reports (2014 & 2015) have been published by the Government of West Bengal. Those apart there are also some scholarly articles on issue of impact of the scheme since its inception.

Pannels (1998) on the basis of case studies found that in India almost 50% of girls do not have any access to education and the most of the victims belong to socially and economically backward communities. Doepke *et al.* (2011) on the basis of experience from developing as well as industrialized countries found that women in developing countries are to face a number of unique challenges like son preference, which is not present in developed countries in the world. Dufflo (2012) observed that equity between men and women is the outcome long term policy decisions and it can yield very positive result in some other aspects children welfare in general and health and nutrition in particular. Ranjana and Yadav (2014) on the basis of secondary data found that social development and ranks in women's status are highly correlated and for the purpose special policy attention is required for enhancing the status of women in the society. Shettar (2015) on the basis of secondary data observed that women

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<sup>1</sup> Details of objectives have been given in section-III.

empowerment has become one of key agenda in 21<sup>st</sup> century not only India but also at the international arena and for this purpose the initiative of the state alone is not sufficient to meet the purpose. Saha (2015) on the basis of secondary data observed that despite lot of possibilities two years' experience of Kanyashree Prakalpa in West Bengal shows some drawbacks, which are needed to be corrected for the interest of achievement of the goal of the same. Sen (2016) on the basis of primary data collected by means of socio-economic survey at a slum area at Barasat Municipality, North 24 Parganas found that the scheme has potentials to promote social power and self-esteem of girls. Ghara & Roy (2017) observed that the scheme has definitely minimized the tendency of girl students to drop out and has also positive impact on the prevention of child marriage; however there is evidence of asymmetry in performance among the districts. They used secondary data for that purpose. Adhikari (2017) on the basis of secondary data also found that during the period 2013-15 the Kanyashree scheme generated unprecedented enthusiasm and goodwill and has become a household word in the state. Faruk (2018) on the basis of primary data collected from Deganga Block of North 24 Parganas, West Bengal found that the scheme has very positive impact on the feelings of the adolescent girls and to enable them to fight against the child marriage. Halder (2018) on the basis of secondary data argued that the introduction of Kanyashree Prakalpa in West Bengal has started to yield positive result in the continuous decrease in girls' dropout rate and early marriage, though the problem is yet to be fully wiped out. Sen & Dutta (2018) on the basis of primary data collected from selected districts of West Bengal observed that being the unique CCT scheme in the state, it has attempted to bring the social change. They also argued the scheme will definitely ensure socio-economic transformation of girl children, who will be brought under the safety net of the same and for that reason they also suggested to bring more and more girls under its safety net. Mir (2018) has also observed that the effect of Kanyashree Prakalpa is very deep-rooted and it has become the boon of the adolescent girls in the state. He used secondary data for that purpose. Again, Ghara (2018) on the basis of secondary data has observed that though Kanyashree Prakalpa in West Bengal has minimized the drop out of girl students and premature marriage of girls, in the practice all the adolescent girls in the state are yet to be sensitized about the scheme and as per his findings about 48-49% have been sensitized in the state as whole.

From above literature, we found that most of the studies have dealt with the need of the policy decisions on women empowerment and possible impact of Kanyashree Prakalpa since its inception in the state. Very few of them have dealt with analysis of the performance of

different districts in the state, which is need of the hour to ensure achievement of the great objective of the scheme.

### **Objectives and Methodology**

In the light of the research gap, given in the preceding section we have tried to address the following research questions:

- a) What is the state of performance of different districts in West Bengal in the matter of implementation of the scheme?
- b) Whether there are any regional disparities in the performance of the same?

This paper is based on secondary data only. For this purpose we have used different published scholarly articles. Again for collecting necessary data relating to performance of the scheme during the period from 2013-14 to 2018-19 we have used status reports published at the official website of Kanyashree Prakalpa maintained by the Department of Women and Child Welfare, Government of West Bengal. On having the same in terms of its two components viz. K1 and K2<sup>2</sup> during last six years we have calculated the performance of two components by comparing number of the applications sanctioned and targets<sup>3</sup> in each of the years in all the districts<sup>4</sup> of the state.

For the purpose of analysis of data we have used different statistical tools viz. arithmetic mean, Spearman's rank correlation coefficient, linear regression. For the purpose of combined score of the districts we have used Principal Component Analysis (PCA). For testing the significance of results we have used Fishers's 'paired t' test and Spearman's rank correlation test.

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<sup>2</sup> Though very recently one new component K3 has been introduced, in this article we have concentrated within K1 and K2, since the last component is very recent in origin and necessary data relating to its performance is yet to be published.

<sup>3</sup> The relation between application sanctioned and targets in each year is the indicator of performance.

<sup>4</sup> We have merged the districts Purba Bardhaman and Paschim Bardhaman into one district Bardhaman, Alipurduar with Jalpaiguri, Kalimpang with Darjeeling and Jhargram with Paschim Medinipur for ensuring better comparison from 2013-14 to 2018-19. So, total number of districts for our study are 20.

## **Major Findings, Analysis of the Result and Discussion**

Our preceding section reveals that the Kanyashree Prakalpa in West Bengal is a milestone initiative on the part of the Government to ensure women empowerment. Now this section we proceed to analyze our findings from available data.

For the purpose of better comparison of performance of the districts we have grouped the first three years from 2013-14 to 2015-16 into Phase-I and the last three years into Phase-II<sup>5</sup>. The relative position of the districts in Phase-I and Phase-II are highlighted in figure 1. On comparison of relative performances in two phases, a mixed picture can be revealed. In case of 11 districts namely Bankura, Bardhaman, Coochbehar, Darjeeling, Hooghly, Kolkata, Malda, North 24 Parganas, Paschim Medinipur, Siliguri and Uttar Dinajpur the relative position over two phases have been found to be asymmetric. Among those districts in case of Kolkata, Bardhaman, North 24 parganas, Siliguri and Darjeeling there have been deterioration in the relative performance over the phases of our study. But in case of other six districts there have been improvement in the situation. Apart from those 11 districts the relative position of the other districts has been found to be more or less symmetric. It may be mentioned here that most of the districts, where the asymmetry as well as deterioration in the relative position have been found are mainly belong to Kolkata and its surrounding areas.

On the basis of the aforesaid findings we now proceed to analyze the data collected from the same. At the first stage of our analysis we tried to find the degree of association of between of relative performance of the districts in terms of their ranking by using Spearman's rank correlation coefficient. The rank correlation coefficient between relative performance of the districts in Phase-I and Phase-II, as shown in table 1 indicates that there exists negative association in the same. However the said rank correlation coefficient has been found to be statistically insignificant by applying Students' 't' test. Thus at this stage of our analysis it may be revealed that there is no statistically significant association between relative performance of the districts in Phase-I and Phase-II, which was also revealed from our findings.

At the second stage of our analysis we proceed to compare the performance of the districts in Phase I and Phase II. The result, as highlighted in table 2 by applying arithmetic mean and

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<sup>5</sup> Herein after Phase-I and Phase-II will indicate same meaning.

Fishers' 't' test depicts that there is statistically significant difference between performance in the districts in two phases. It has also been revealed that the performance of the districts in Phase-I is better than that in Phase II. So, it may be conferred that performance of the districts have been significantly deteriorated over the years.

At the last stage of our analysis we tried to ensure inter districts comparison in terms of performance of the project. For this purpose we have calculated combined scores of the each of the districts and for that purpose we have developed a model with the help of Principal Component Analysis, which may be formed by the following equation:

$$\text{Score} = 0.4917XP_{34} + 0.2378XP_{45} + 0.2096XP_{56} + 0.0993XP_{67} + 0.0144XP_{78} + 0.1059XP_{89}$$

Where 0.4917, 0.2378, 0.2096, 0.0993, 0.0144 and 0.1059 are regression coefficients for the year 2013-14, 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 respectively.  $P_{34}$ ,  $P_{45}$ ,  $P_{56}$ ,  $P_{67}$ ,  $P_{78}$  and  $P_{89}$  are the performance of the districts during the years of our study respectively.

On the basis of the aforesaid equation we have found the combined score for each of the districts under our study and the same have been highlighted in table 3 and table 4. Now with a view to ensuring inter district comparison we have divided total 20 districts into two groups on the basis of their nearness to state capital. The former group consists of 10 districts, namely Kolkata, North 24 Parganas, South 24 Paraganas, Howrah, Purba Medinipur, Paschim Medinipur, Hooghly, Bardhaman and Bankura. Another group consists of the remaining 10 districts under our study<sup>6</sup>. Now in order to compare the performance of two groups in terms of their respective combined scores we have applied same statistical techniques as applied at 2<sup>nd</sup> stage of our analysis. The result, as may be discerned from table 5 shows that though the mean performance of the group-I districts are marginally better than that in case of group-II, but the said difference is not statistically significant. So, it may be revealed that though the Kolkata surrounding districts stand at comparatively better position in terms of combined performance of the scheme, but statistically there is no significant difference between the two, which entails very marginal and statistically insignificant urban effect on the performance of the same.

Our finding shows a mixed picture in the relative performance of the districts. It has also confirmed the deterioration of the Kolkata and surrounding districts in terms of relative

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<sup>6</sup> Herein after the former group will be called group-I and the later will be called group-II.

performance in the implementation of the project over the years. At the same time our analysis highlights the absence of statistically significant association in the relative performance of the districts over the years. Again it has also highlights significant deterioration in the performance of the districts over the years. However it has also discerned very marginal and insignificant urban effect on the implementation of the project in the state. Thus as a major vehicle towards women empowerment Kanyashree Prakalpa in West Bengal may be highlighted as a land mark CCT scheme to prevent feminization of poverty, inequalities between boys and girls, vicious circles of maternal ill health arising out of premature marriage. These potentialities of the scheme call for systematic and consistent implementation of the same throughout the state. So, far as our study is concerned though there is absence of significant regional disparities in the implementation, there is significant variation in the relative performance and deterioration in the performance of the same over the years.

### **Concluding Remarks**

Our study confirms that Kanyashree Prakalpa in West Bengal aimed at the sustainable women empowerment by means of eliminating the curse of the child marriage resulting in gender inequality, feminization of poverty, maternal ill health. The scheme is also unique in the state in terms of Conditional Cash Transfer, aim of which is to ensure more resilient, more prosperous, more equal and secured society. In an ideal situation these types of schemes call for systematic and consistent implementation so as to ensure that welfare of all the targeted beneficiaries irrespective of their geographical locations. Our analysis of data also confirms that since inception there has been very marginal and insignificant regional effect on the scheme in terms of performance of the districts. But at the same time it also reveals that there exists wide case of variation in the performance of the districts over the years and it is worth mentioning that the same has been found in mainly Kolkata and surrounding districts. Moreover it has also been found that there is significant deterioration of the performance of the districts over the years. Thus on the basis of our study we may arrive at the conclusion that in spite of importance of scheme in terms of ensuring an equal and sustainable socio-economic environment, the implementation of the scheme in the state is yet to be reached at its desired situation.



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**APPENDIX**

**Table 1: Rank correlation coefficient values of relative performance of the districts in Phase-I and Phase-II**

<b>Variables</b>	<b>Value of R</b>	<b>DF</b>	<b>Significance level</b>
R <sub>1</sub> and R <sub>2</sub>	-0.197	38	No

Note: R<sub>1</sub> and R<sub>2</sub> indicate the combined ranks of the districts in Phase-I (2013-14 to 2015-16) and Phase-II (2016-17 to 2018-19) respectively.

Source: Government of West Bengal (2019).

**Table 2: Fisher's 'paired t' test result for comparison of variances of among the districts over last six years in phase I and phase II**

<b>H<sub>0</sub></b>	<b>H<sub>1</sub></b>	<b>N</b>	<b>DF</b>	<b>Calculated 't' value</b>	<b>Pr(T &lt; t)</b>	<b>Pr( T  &gt;  t )</b>	<b>Pr(T &gt; t)</b>
$\mu_2 = \mu_1$	$\mu_2 \neq \mu_1$	20	19	5.6240	1.0000	0.0000	0.0000

Note:  $\mu_1$ ,  $\mu_2$  indicate means arithmetic mean of Phase-I (2013-14 to 2015-16) and Phase-II (2016-17 to 2018-19) respectively. N indicates Number of observations, DF indicates degrees of freedom. Pr (T < t) indicates left tailed test, Pr (|T| > |t|) indicates both tailed test, Pr (T > t) indicates right tailed test.

Source: Government of West Bengal (2019).

**Table 3: Combined Scores of Group-I Districts**

Sl. No.	Districts	P <sub>34</sub>	P <sub>45</sub>	P <sub>56</sub>	P <sub>67</sub>	P <sub>78</sub>	P <sub>89</sub>	S <sub>1</sub>
1	Kolkata	223.70	108.87	141.45	108.78	118.24	76.15	186.10
2	N 24 Parganas	132.12	113.86	131.73	98.46	100.40	94.71	140.90
3	S 24 Parganas	108.84	129.20	147.30	101.03	112.06	66.79	133.83
4	Howrah	132.51	116.75	109.41	112.44	95.31	95.20	138.47
5	Purba Medinipur	95.10	108.71	108.33	92.36	108.26	96.37	116.25
6	Paschim Medinipur	107.08	103.93	122.54	98.85	107.98	99.80	124.99
7	Hooghly	80.95	118.78	110.98	104.43	102.07	93.27	113.03
8	Nadia	121.75	105.44	112.87	96.63	100.19	89.57	129.12
9	Bardhaman	155.94	95.71	115.07	96.48	103.21	88.56	144.00
10	Bankura	108.90	115.99	113.10	101.53	102.04	105.80	127.59

Note: P<sub>34</sub>, P<sub>45</sub>, P<sub>56</sub>, P<sub>67</sub>, P<sub>78</sub>, P<sub>89</sub> indicate % of performance during the year 2013-14 to 2018-19 respectively and S<sub>1</sub> indicates combined scores of Group-I districts.

Source: Govt. of West Bengal (2019).

**Table 4: Combined Scores of Group-II Districts**

Sl. No.	Districts	P <sub>34</sub>	P <sub>45</sub>	P <sub>56</sub>	P <sub>67</sub>	P <sub>78</sub>	P <sub>89</sub>	S <sub>2</sub>
1	Purulia	134.76	110.79	111.00	105.59	116.13	95.16	138.11
2	Birbhum	168.12	107.65	115.41	98.44	109.14	95.56	153.92
3	Murshidabad	204.55	111.87	136.91	97.52	105.14	92.28	176.85
4	Malda	85.09	124.23	114.05	101.50	132.39	94.11	117.24
5	Dakshin Dinajpur	105.02	96.09	110.88	92.27	100.38	90.07	117.88
6	Uttar Dinajpur	92.82	105.58	129.79	98.15	110.64	93.73	119.21
7	Siliguri	166.08	98.47	103.99	99.59	111.54	96.29	148.57
8	Jalpaiguri	122.58	100.69	109.57	102.25	102.35	92.30	128.58
9	Coochbehar	82.21	105.74	114.43	96.51	110.47	103.25	111.66
10	Darjeeling	119.21	113.04	108.92	85.22	120.57	87.66	127.81

Note: P<sub>34</sub>, P<sub>45</sub>, P<sub>56</sub>, P<sub>67</sub>, P<sub>78</sub>, P<sub>89</sub> indicate % of performance during the year 2013-14 to 2018-19 respectively and S<sub>2</sub> indicates combined scores of Group-I districts.

Source: Govt. of West Bengal (2019).

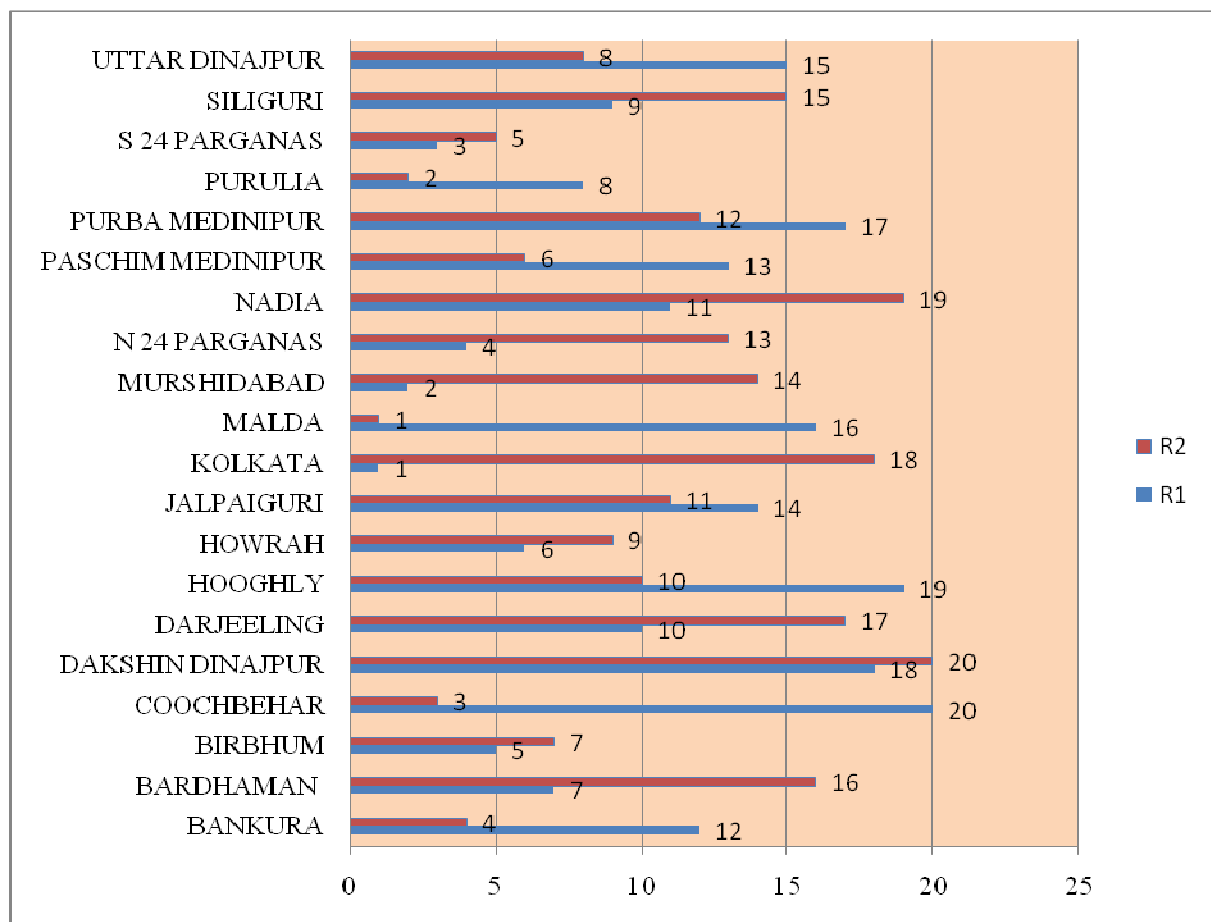
**Table 5: Fisher’s ‘paired t’ test result for comparison of variances of among the districts over last six years**

H <sub>0</sub>	H <sub>1</sub>	N	DF	Calculated ‘t’ value	Pr(T < t)	Pr( T  >  t )	Pr(T > t)
$\mu_4 = \mu_3$	$\mu_4 \neq \mu_3$	10	9	0.1627	0.5628	0.8743	0.4372

Note:  $\mu_3, \mu_4$  indicate arithmetic means of group-I districts and group-II districts respectively. N indicates Number of observations, DF indicates degrees of freedom. Pr (T < t) indicates left tailed test, Pr (|T| > |t|) indicates both tailed test, Pr (T > t) indicates right tailed test.

Source: Government of West Bengal (2019).

**Figure 1: Relative performances of the districts in Phase-I and Phase-II**



Note: R1 and R2 indicate ranks of the districts in Phase-I and Phase-II respectively.

Source: Op. sit.