

ORIGINAL ARTICLE

## Nature of Development in Health through Health Index in the Blocks of Paschim Medinipur District in West Bengal during 2005-06 to 2014-15

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ARTICLE INFO	ABSTRACT
Article history Received 10 October 2016 Accepted 1 December 2016	Health is one of the most perplexing and concerning aspects that builds a basic foundation to establish coherence between personal and social development. Development in health cannot be judge by a single variable and dimension in disaggregate level. The present study examines nature of development in health in the blocks of Paschim Medinipur District in West Bengal, India over the period 2005-06 to 2014-15 through the construction of Health Index (HI) by using Iterative Correlation Method (ICM) to attach proper weights to the variables and to dimensional indices i.e., Child Health Index (CHI) and Adult Health Index (ALI).
<b>Keywords:</b> Child Health Index; Adult Health Index; Health Index; Human Development; Iterative Correlation Method.	

### INTRODUCTION

Health is common but a sophisticated aspect leading to economic development in particular and human development in general of a country, state or a region as human capital is treated as one of the consistent aspects of economic development leading to population's efficiency to work more for further human and social development. Health has got both intrinsic and non-intrinsic values emphasizing on 'whole man concept' i.e., health anticipates and recognizes potentially harmful situations and applies engineering control to prevent diseases or infirmity. As health covers a positive and dynamic concept, in common parlance with increasing capacity of individual to make a stand socially and professionally a better health gradually shows the potentiality of a country's economy towards development. Health is not only a tool of enhancing efficiency but also an effective instrument of widening and augmenting individual's participation and upgrading the overall inheritance till future generations. It acts as a necessary condition for the development of any country which designates an individual's life proportionately into perpetual desirable channels. The growing health initiatives substantially elaborated the superiority of human capital in the development process as compared to all other forms of shields.

In allowance our economy's health depends not only on the individual worker but also on the environment in which he/she lives and works as it contradicts everyday life and a positive concept emphasizing physical capabilities that coagulates conspired level of functional efficiency of living beings and a general condition of a person's mind, body and spirit, i.e, free from illness, mental retardation and pain. It stagnates potentiality of an individual to modify himself continually in the face of changing conditions of life not only in order to function better in present but also to prepare for the future. Health improves human capability and helps to realize a person's potential towards overall development. It deprives the functional attainment of an individual to achieve sustaining power and adherence to become a proprietary option. Health development being multifaceted helps to build individual capabilities and enlarge the adherence between the citizens.

Health is a crucial and fundamental aspect that furnishes and contributes in achieving higher Human Development Index (HDI) in the world. Out of seventeen broad objectives of Universal Sustainable Development Goals to be achieved by the year 2030 six objectives directly point towards a long and healthy life. In its broadest sense of development, health is the most influential input for a longer life span because better health makes an important contribution to economic progress as healthy population lives longer and specialized as more productive. Increased value of health will increase the birth rate and decrease the death rate i.e, population tends to grow faster with higher health status. Outcomes in health are given directly in terms of

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life expectancy at birth, survival rate, and inversely in terms of infant mortality rate, maternal mortality rate etc.

Surpassing recent health developments and prospective health is been subsided as an important rationalizing factor in all over world. Sectioning these achievements various policies have been assorted in recent years by Government of India where health development is treated as center of concern across different states and districts of India. Though studies are found at the disaggregated level explaining variation in the attainment of health status still most of they are sectioned at the aggregate level on one or two indicators of health attainment. In this paper we agglomerate more than two available and reliable indicators that captures all aspects of health to procure proper weightage to assimilate dimensional indices i.e., composite of Child Health Index (CHI) and Adult Health Index (AHI) to adrift Health Index through Iterative Correlation Method (ICM) in the blocks of Paschim Medinipur District. Further we perspire to assess the nature of development in health in the blocks of concerned district over time.

### **OBJECTIVES**

In this paper we want to come across the following objectives:

- To develop a suitable methodology for constructing a composite Health Index (HI) (i.e., composite of Child Health Index (CHI) and Adult Health Index (AHI)) in the blocks of Paschim Medinipur District during the period 2005-2006 to 2014-2015.
- To examine suitability in determining the proper weights of different variables by using Iterative Correlation Method (ICM) to the groups and sub-groups.
- To determine the relative ranks of the blocks of Paschim Medinipur district of West Bengal with respect to Health Index (HI) over time.
- To analyse the trend of Health Index across the blocks of Paschim Medinipur District of West Bengal and over the time period from 2005-06 to 2014-15.

### **DESCRIPTION OF THE STUDY AREA**

Paschim Medinipur, located in the southern part of West Bengal, has been carved from the erstwhile Medinipur district, then the largest district of India. It came into existence in the present form in January 2002 during the period of 10<sup>th</sup> Five Year Plan. It is situated between 22° 57' 10" and 21° 36' 35" North latitude and between 88° 12' 40" and 86° 33' 50" East longitude. It is bounded by Bankura district on the north, Purba Medinipur district on the east and south-east, Hooghly district on the east, and the states of Orissa and Jharkhand on the west and south-west. Located in the south-western part of West Bengal, Paschim Medinipur is one of the country's 250 most backward districts. Geographical area of the district is 9295.28 sq. km. There are 29 community development blocks and 8 municipalities distributed in 4 (four) subdivisions in the district. As per Census of India, it ranks 2<sup>nd</sup> in the state in terms of geographical area (9295.28 sq. km.), next to South 24-Parganas (9960 sq. km.) but is followed by Burdwan (7024 sq. km.) and Bankura (6882

sq. km.). As per the census 2011, population was 59.43 lakhs, out of which 29.05 lakhs are female population. Decadal population growth rate was 14.44 per cent during 2001-2011. The work participation rate has risen from 41.0 percent (in 2001 Census) to 42.4 percent (in 2011 Census) and in this case it ranks second in the State. Literacy rate of the district has been increasing at rapid rate over the census years. In 2001, literacy rate of the district was 70.41 per cent, which was higher than that of the State (68.64 percent). Again, in 2011 the district showed up higher propagation of literacy rate to 79.04 per cent as compared to that of the State (76.3 per cent). Examining the demographic and socio-economic characteristics, the district presents a unique opportunity to understand and illustrate the issues associated with the different aspects of development in health. However, a block level study in this district in terms of health attainment and construction of health index has hardly explored out.

### **REVIEW OF LITERATURE**

Since 1990, the United Nations Development Programme (UNDP) in its Human Development Reports (HDRs) introduces the concept of Health Index (HI) as a part of Human Development Index (HDI) assessed across countries for several years and considers Life Expectancy at Birth (LEB) as the simple and single indicator for achievement in health. The National Human Development Report of India (2003) has also used the same indicator for a long and healthy life. In the Human Development Report of West Bengal (2004) this indicator could not be used because of the non-availability of data on life expectancy at the district level. It has rather used infant mortality rate (IMR) as a negative indicator of development in health. Infant mortality is an indicator of child health and indirectly an indicator of maternal health, but is not a complete indicator of health in general. Hence, percentage evaluation of immunization and institutional delivery are used for child health index whereas percentage of adult survival rate and safe drinking water facility are used for adult health index and these two indices will accommodate us to construct a composite health index across blocks of Paschim Medinipur District in West Bengal.

Considering the importance of survival rate, rate of institutional delivery and immunization rate we want to enhance our study at disaggregated sector synthesizing numerous studies corresponded at block level in macro or aggregative levels.

Bhargava, A., et al. (2001) had used the adult survival rate as an indicator of health status. They found similar result when adult survival rate is replaced by life expectancy at birth. Mayer (2001) also used the probability of adult survival rate based on gender and age group as a measure of health status. Again, by using the average high adult survival rate and life expectancy as an indicator of health status Weil (2005) found that health is an important determinant of income variations in different countries. Further, Lorentzen, et al. (2005) analysed the impacts of adult mortality rate on economic growth explaining that high mortality rate reduces the economic growth by curtailing the time horizon and

## **Nature of Development in Health through Health Index**

Bleakley (2010) addressed properly vaccinated and adequately breastfed children are less likely to be malnourished and have better health, availing higher life expectancy.

H.R. Senviratne (2000) assessed his study that in many developing countries large proportion of deliveries (47%) takes place outside the formal health care system often assisted by a relative or Traditional Birth Attendant. This decline attributed high foregone rate of institutional delivery attended by midwives whereas Bawa S.B. et al. (2004) circulated his study in south-western Nigeria that most of the respondents delivered at home without the supervision of trained personnel which attributed to advanced labor and persuaded poor quality of the health facilities. Again, Zupan.J (2005) enunciated maternal mortality as a global problem. The study accumulated that majority of maternal health complications and deaths occurred in low and middle income countries (LMIC) where three quarters of the deaths are due to direct obstetric complication or non-institutional delivery and Ulf Hogberg (2004) sanctioned out his work and concluded that in Sweden maternal mortality decline mainly to high rate of institutional delivery (90%) attended by midwives. Moreover, WHO, UNICEF, UNFPA and the World Bank in 2008 estimated that 358,000 maternal deaths occurred worldwide from preventable complications of pregnancy and childbirth.

Lastly, C. McCord (2006) emphasized on a study done in Gambia on Emergency Obstetric Care (EmOC). The Study observed that 30.4% institutional delivery is done despite the high Antenatal Care (ANC) coverage of 96%. This concluded the importance of institutional deliveries in maternal mortality reduction.

### **DATA AND METHODOLOGY**

The entire article is based on the secondary data which have been drawn from two authentic sources like Census Reports (1991, 2001, 2011) and District Statistical Hand Books (Government of West Bengal). We use data from these two sources to apply the Iterative Correlation Method (ICM) for calculation of a composite Health Index (HI) and dimension indices (i.e., Child Health Index and Adult Health Index). As Paschim Medinipur District came into existence after 1<sup>st</sup> January 2002 all the proper and reliable information is being taken from 2005-06. In our analysis we authenticate the percentage evaluation of immunization and institutional deliveries which are major sections of Child Health Index whereas percentage of adult survival rate and safe drinking water facility are assessed for calculating the Adult Health Index and these two indices will integrate composite Health Index.

The percentage of babies who has undergone complete immunization process to total child population from 0-5 age group is known as immunization rate which is a saprophytic indicator of child health as well as approaching generations. Again, institutional delivery is been attired by procuring ratio of institutional delivery to projected total delivery. Further, these two rates are combined for Child Health Index.

From the projected population of the age group 5 and above years the number of adult's mortality is divided by

sum of projected alive adults and the number of adult's mortality which is again subtracted by 1000 provides precise adult survival rate per thousand. Systematically, safe drinking water persuades persistent ratio of availability of safe drinking water in number of mouzas divided by number of total mouzas. Combining these two rates we approach towards Adult Health Index. Lastly, we recombine Child Health Index (CHI) & Adult Health Index (AHI) for allocating Health Index (HI).

The choice of weights is the most crucial problem in the construction of HI and also the dimension indices. This study offers an alternative measure for estimating HI and its dimension indices which is based on Iterative Correlation Method (ICM). It proposes the weights of individual components that are proportional to the correlation with the final index. This method is further enlarges attachment of proper weights with prospecting groups and sub-groups. The detailed methodology is as follows:

Let,  $I_1$ ,  $I_2$  and  $I_3$  are the three indices of a composite index to be developed on the basis of  $I_1$ ,  $I_2$  and  $I_3$ . We propose that the weight of any dimension index should be proportionate to its correlation with the final composite index. As the final index cannot be calculated unless the weights are determined and as the weights (or the correlations) cannot be calculated unless the final index is determined, they are calculated simultaneously through an iterative process. The process starts with some arbitrarily fixed weights of the individual indices, preferably equal weights for all. On the basis of these weights a development index is determined. In the third step correlations of the individual indices with the development index are obtained and these are used as weights to arrive at the new development index. In the next step new correlations and new weights and so another new development index is obtained. The process is repeated until the correlations converge to their earlier values and the final weights along with the final development index are obtained. Thus for the calculation of health index we pertain 70.9% weightage to adult health index and 29.1% weightage to child health index.

With goalpost made fixed for future projection, the cross-section analysis becomes less meaningful than that with goalposts determined by observed maxima and minima, and the inter-temporal analysis becomes dependent on the time span and on the method of projection. On the other hand, goalposts determined by observed maxima and minima in any year persecute meaningless analysis of inter-temporal. But if maxima and minima is observed over all the years for the desired comparison goalposts for both cross-section and inter-temporal analyses can be analysed meaningfully. Concentrating on this reason, we have taken the goalpost for the concerned variables which is projected before 5 years and after 5 years from the concerned year and are made fixed for meaningful trend analysis of the HI. Thus, immunization rate is proportionated to have maximum and minimum values as 1000 (Daspur-II, 2019-2020) and 401.45 (Kharagpur-I, 2000-2001) respectively whereas maximum and minimum values for institutional delivery rate is observed to be 1000 (Daspur-II, 2019-2020) and 14.61 (Nayagram, 2000-2001). Again, adult survival rate

is observed to conquer maximum and minimum values as 999.99 (Chadakana-II, 2010-2011) and 994.96 (Mohanpur, 2009-2010) and maximum and minimum values for safe drinking water facility is been estimated as 100 (Daspur-II, 2005-2006) and 77.22 (Binpur-I, 2005-2006) respectively.

**RESULTS AND DISCUSSION**

**Trend of Health Index (HI) in the Blocks of Paschim Medinipur District over the period 2005-06 to 2014-15**

We procured our assessment on overall position in the blocks of Paschim Medinipur District in West Bengal on the composite evaluation of Child Health Index (CHI) and Adult Health Index (AHI) to Health Index (HI) in the blocks of Paschim Medinipur District in West Bengal on the basis of 0.291weightage of Child Health Index (CHI)and 0.709 weightage of Adult Health Index (AHI) over the period 2005-06 to 2014-2015 in Table 1.

It shows that the growth rate of Health Index(HI) is highest in Gopiballavpur-I (4.82) with higher level of significance at 3.8E-04 level followed by Jhargram (4.81) and the lowest in Kharagpur-II (0.54) preceded by Chandrakana-II(0.68). However, Daspur-II and Mohanpur illumine same rate of growth in HI by 0.96 with different

level of significance within the block. Further it's been enunciated that blocks with lower initial value of HI are gradually proposing higher growth rate so as to satisfy the convergence hypothesis over time. Average estimation of HI for all the blocks of Paschim Medinipur District taken together is 0.611which implies that the rural area of Paschim Medinipur District has attained 61.1% success in health (a more than 3/5<sup>th</sup> success) and the remaining 38.9% is yet to be achieved. Analysing the absolute value of the Health Index (HI), we assess that 12 blocks in 2005-06, 15 blocks in 2006-07 and 2007-08 ease, 16 blocks in 2008-09 and 2009-10, 17 blocks in 2010-11, 2011-12, 2012-13, 2013-14 and 2014-15 had absolute value of HI which is greater than to 0.611(average HI of all HI) designating over time improvement in the blocks of Paschim Medinipur District.

**Relative Ranks in the Blocks of Paschim Medinipur District in Health Index during 2005-06 to 2014-15**

Here the assessment proposesan explanation based on the pattern showing the overall concerning situation through their respective ranks of blocks of Paschim Medinipur District in West Bengal on the basis of Health Index (HI) during the period of 2005-06 to 2014-15 in Table 2.

**Table 1: Trend of Health Index (HI) in the Blocks of saidDistrict during 2005-06 to 2014-15**

Block	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	% of Growth	P-value
Jhargram	0.225	0.238	0.292	0.283	0.286	0.385	0.363	0.341	0.327	0.346	4.81	3.7E-03
Binpur -I	0.154	0.159	0.162	0.172	0.157	0.191	0.199	0.207	0.214	0.217	4.25	5.1E-05
Binpur -II	0.355	0.359	0.371	0.362	0.371	0.459	0.462	0.461	0.464	0.462	3.75	4.0E-04
Jamboni	0.365	0.386	0.389	0.390	0.382	0.413	0.417	0.424	0.421	0.423	1.61	1.5E-04
Nayagram	0.598	0.622	0.659	0.643	0.663	0.734	0.747	0.767	0.778	0.795	3.30	2.1E-06
Sankrail	0.422	0.429	0.447	0.443	0.453	0.467	0.480	0.494	0.493	0.505	2.04	1.3E-07
Gopiballavpur-I	0.625	0.640	0.647	0.643	0.644	0.858	0.858	0.870	0.876	0.882	4.82	3.8E-04
Gopiballavpur-II	0.592	0.643	0.637	0.632	0.631	0.663	0.670	0.675	0.674	0.673	1.22	1.2E-03
Salboni	0.244	0.246	0.281	0.274	0.277	0.380	0.372	0.349	0.337	0.339	4.55	3.4E-03
Keshpur	0.461	0.470	0.469	0.463	0.459	0.472	0.478	0.492	0.515	0.518	1.24	1.7E-03
Garbeta-I	0.390	0.395	0.403	0.399	0.409	0.455	0.460	0.469	0.463	0.472	2.49	6.9E-05
Garbeta-II	0.284	0.334	0.326	0.321	0.317	0.371	0.388	0.404	0.419	0.432	4.35	5.5E-05
Garbeta-III	0.363	0.387	0.406	0.406	0.390	0.408	0.412	0.430	0.445	0.468	2.19	1.8E-04
Medinipur	0.305	0.312	0.355	0.350	0.343	0.373	0.380	0.400	0.405	0.405	3.21	2.5E-05
Debra	0.782	0.802	0.848	0.851	0.869	0.902	0.914	0.912	0.908	0.918	1.78	8.0E-05
Pingla	0.655	0.648	0.708	0.713	0.723	0.782	0.775	0.785	0.783	0.787	2.32	1.1E-04
Keshiary	0.576	0.625	0.625	0.622	0.600	0.645	0.658	0.674	0.670	0.682	1.59	6.5E-04
Dantan-I	0.673	0.667	0.669	0.680	0.689	0.781	0.794	0.807	0.828	0.839	3.05	4.2E-05
Dantan-II	0.603	0.607	0.668	0.662	0.651	0.732	0.733	0.733	0.717	0.718	2.20	1.1E-03
Narayangarh	0.541	0.543	0.553	0.546	0.607	0.635	0.644	0.646	0.634	0.646	2.42	2.4E-04
Mohanpur	0.792	0.796	0.847	0.837	0.809	0.890	0.884	0.882	0.853	0.851	0.96	3.1E-02
Sabong	0.719	0.735	0.737	0.756	0.773	0.871	0.879	0.889	0.911	0.918	3.16	9.5E-06
Kharagpur-I	0.532	0.467	0.487	0.490	0.515	0.517	0.532	0.546	0.541	0.545	1.26	2.3E-02
Kharagpur-II	0.803	0.822	0.834	0.828	0.818	0.841	0.847	0.847	0.848	0.849	0.54	1.3E-03
Chandrakona-I	0.792	0.799	0.823	0.821	0.821	0.844	0.854	0.865	0.869	0.874	1.13	7.9E-07
Chandrakona-II	0.707	0.709	0.729	0.718	0.716	0.744	0.748	0.743	0.746	0.749	0.68	6.3E-04
Ghatal	0.802	0.812	0.812	0.823	0.825	0.847	0.918	0.924	0.923	0.933	1.97	5.3E-05
Daspur-I	0.831	0.836	0.861	0.857	0.873	0.884	0.903	0.914	0.941	0.944	1.48	8.2E-08
Daspur-II	0.826	0.903	0.901	0.899	0.931	0.899	0.918	0.913	0.931	0.951	0.96	9.9E-03

Source: (i) Government of India, Census of India, 1991, 2001, 2011

(ii) Government of West Bengal, DSHB-2005-06 to DSHB-2014-15.

Table 2: Relative Ranks in the blocks of said district in HI during 2005-06 to 2014-15

Block	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Jhargram	28	28	27	27	27	25	28	28	28	27
Binpur -I	29	29	29	29	29	29	29	29	29	29
Binpur -II	24	24	24	24	24	21	21	22	21	23
Jamboni	22	23	23	23	23	23	23	24	24	25
Nayagram	14	15	13	14	12	13	13	12	12	11
Sankrail	20	20	20	20	20	20	19	19	20	20
Gopiballavpur-I	12	13	14	13	14	6	7	7	6	6
Gopiballavpur-II	15	12	15	15	15	15	15	15	15	16
Salboni	27	27	28	28	28	26	27	27	27	28
Keshpur	19	18	19	19	19	19	20	20	19	19
Garbeta-I	21	21	22	22	21	22	22	21	22	21
Garbeta-II	26	25	26	26	26	28	25	25	25	24
Garbeta-III	23	22	21	21	22	24	24	23	23	22
Medinipur	25	26	25	25	25	27	26	26	26	26
Debra	7	5	3	3	3	1	3	4	5	5
Pingla	11	11	10	10	9	10	11	11	11	12
Keshiary	16	14	16	16	17	16	16	16	16	15
Dantan-I	10	10	11	11	11	11	10	10	10	10
Dantan-II	13	16	12	12	13	14	14	14	14	14
Narayangarh	17	17	17	17	16	17	17	17	17	17
Mohanpur	5	7	4	4	7	3	5	6	8	8
Sabong	8	8	8	8	8	5	6	5	4	4
Kharagpur-I	18	19	18	18	18	18	18	18	18	18
Kharagpur-II	3	3	5	5	6	9	9	9	9	9
Chandrakona-I	6	6	6	7	5	8	8	8	7	7
Chandrakona-II	9	9	9	9	10	12	12	13	13	13
Ghatal	4	4	7	6	4	7	1	1	3	3
Daspur-I	1	2	2	2	2	4	4	2	1	2
Daspur-II	2	1	1	1	1	2	2	3	2	1

Source: From Table1

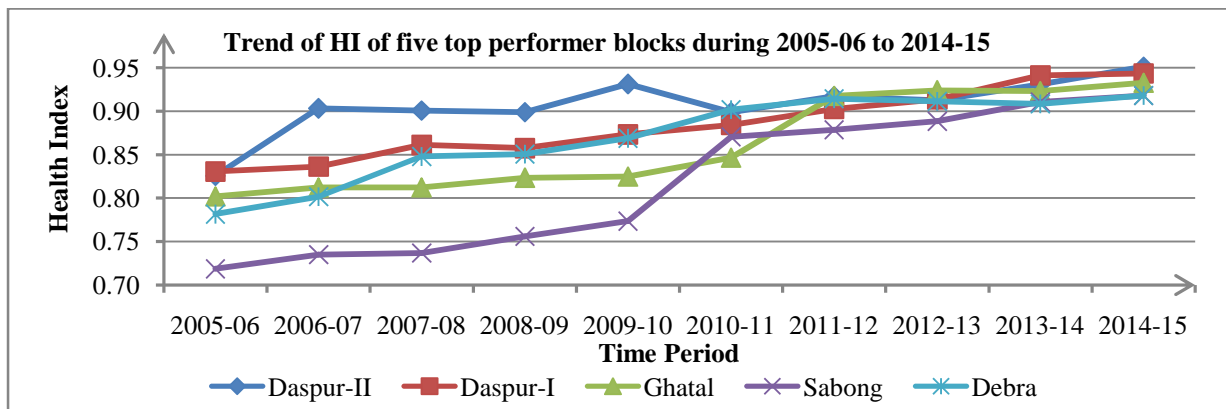


Figure 1

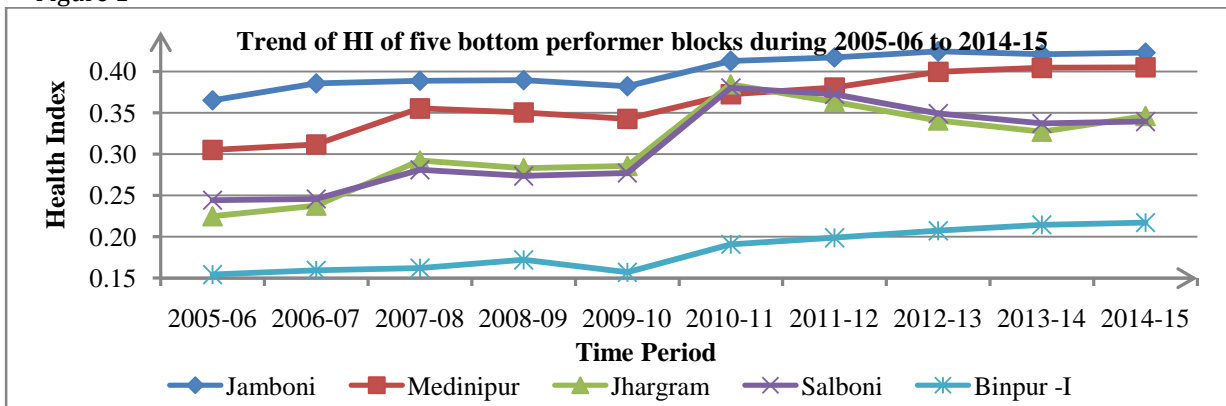


Figure 2

Here the study contradicts the rank-wise variation in the assessed blocks where in year 2005-06 Daspur-I showed a good result but since the period 2006-07 it ranked 2<sup>nd</sup> till the year 2009-10. In comparison to Daspur-II, Daspur-I gradually decreased its rank, in the year 2010-11, and 2011-12 is and it ranked 4 but after three years the blocks overcome the limitations and at cost it got ranked at number 2. In the year 2011-12 Daspur-II constantly kept its rank in 2<sup>nd</sup> position in 2012-13 it got demoted to 3<sup>rd</sup> position and then again rise to rank 2<sup>nd</sup> in 2013-14 and to 1<sup>st</sup> place in 2014-15. Binpur-I and Jhargram were constantly lagging behind in health services. From the year 2005-06 to 2014-15 Jhargram is constantly in the range of 28<sup>th</sup>, 27<sup>th</sup> and only once in 2010-11 it showed same sign of improvement as it rose to 25<sup>th</sup> place but again in 2011-12 it was ranked as low as 28<sup>th</sup> whereas Binpur-I remained at 29<sup>th</sup> place from 2005-06 to 2014-15. If we take a closer look at the state of health services in Gopiballavpur-I and compare it with Chandrakana-II we can see Gopiballavpur-I remained at 12<sup>th</sup> to 14<sup>th</sup> in the year 2005-06 to 2009-10, but showed drastic improvement to reach 6<sup>th</sup> spot in 2010-11. It remained at 7<sup>th</sup> in 2011-12 and 2012-13 but again reached 6<sup>th</sup> position in 2013-14 and 2014-15. Chandrakana-II on the other hand was at 9<sup>th</sup> position from 2005-06 to 2008-09 but it constantly showed downward movement. In 2009-10 it was 10<sup>th</sup> and 12<sup>th</sup> in 2010-11 and 2011-12 then got demoted to 13<sup>th</sup> from 2012-13 to 2014-15. Here we considered five top performer blocks and five bottom performer blocks to show trend of HI during the time period 2005-06 to 2014-15 for assessing growth rate in HI.

In figure-1 we compare and contrast trend of HI of five top performer blocks during 2005-06 to 2014-15 where

we find that Daspur-II pre-mating second position in the initial year showed persistent increment thereafter till 2009-10 adhered 1<sup>st</sup> position in 2014-15 whereas Daspur-I perceiving 1<sup>st</sup> position in start-up time perceived 2<sup>nd</sup> position till 2009-10 showed up decrement to 3<sup>rd</sup> place in after year finally prospering to 2<sup>nd</sup> position in 2014-15. Sabong here perspire to rise continuously and acquired 4<sup>th</sup> position in 2014-15.

Similarly, we can archive comprehensible concept of the five bottom performer blocks from the time period 2005-06 to 2014-15 in figure 2. Here Binpur-I had occupied 29<sup>th</sup> place from the bottom showing increment from initial year persecuting a fall in 2009-10 and again an over rising throughout. Jamboni on the other hand showed gradual rise showing a little strike during 2009-10 whereas Jhargram and Medinipur proportionated a combined rising and accorded increment in 2010-11 and then again observed to be decreasing at increasing rate.

### CONCLUSION

In this study we have constructed a suitable composite Health Index (HI) (composite of Child Health Index (CHI) and Adult Health Index (AHI)) by using Iterative Correlation Method (ICM) to attach proper weight on the basis of all important and stimulating indicators of health attainment for the blocks of Paschim Medinipur District in West Bengal, India over the period 2005-06 to 2014-15. Among the blocks Daspur-II, Daspur-I, Ghatal are the overall top performers and Binpur-I, Jhargram, Salbani are bottom performers in attainment of health. Our study further reveals that most blocks of Paschim Medinipur District have achieved improvement in respect of attainment in health over time.

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