

## **Poverty and Sustainable Development Goals in Chhattisgarh**

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### **Abstract**

Poverty is seen as a multi-dimensional phenomenon. It entails way more than just income and consumption expenditure, it also includes nutrition, child & adolescent mortality, maternal health, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing assets, and bank account. No Poverty: the first Sustainable Development Goal (SDG), out of the 17 SDGs established by the United Nations (UN) in 2015, calls for the end of poverty in all shapes. Therefore, the adoption of SDGs post-Millennium Development Goals (2000) by India, gave the measurement, and address of multi-dimensional poverty, economic development, social inclusion, and environmental sustainability great significance. The main objective of this paper is to analyse the headcount ratio and the multi-dimensional poverty index (MPI) of the districts of Chhattisgarh. Further, to compare the headcount ratio of Chhattisgarh with its neighbouring states and finally to suggest recommendations for future implications. The study is based on secondary data and the results of the study show that Dantewada has the highest headcount ratio (percentage of the population who are multidimensionally poor) at 54.59% in Chhattisgarh whereas Dhamtari has the lowest at 18.59%. Raipur being the capital of the state has a headcount of 21.82%. Similarly, the comparison of Chhattisgarh's headcount ratio with the neighbouring states deciphers that Jharkhand tops the list with the highest headcount ratio of 42.16%

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followed by Uttar Pradesh (37.79%), Madhya Pradesh (36.65%), Chhattisgarh (29.91%), Odisha (29.35%), Maharashtra (14.85%), Telangana (13.74%), and Andhra Pradesh (12.31%) with the lowest headcount ratio. Thus, on basis of the comparative analysis of the multidimensional poverty index across the districts of Chhattisgarh; the conclusion drawn is that as poverty exists predominantly in the tribal districts of the state. No poverty is one of the major goals of the SDGs and hence, it is the need of the hour to give more attention on it and focus on the policies that can help in reducing poverty.

**Keywords:** Education, Health, Headcount, Poverty, Multi-Dimensional Poverty Index, Sustainable Development Goals.

**JEL Code:** I1, I2, I32, Q01

## **1. Introduction**

Poverty is seen as a multi-dimensional phenomenon. It entails not just income and consumption expenditure but also includes nutrition, child & adolescent mortality, maternal health, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing assets, and bank account. According to Philadelphia ILO Declaration 1994, “poverty is a threat to the prosperity of every place”. Kankwenda (2002) defines poverty as: “A multidimensional phenomena influenced by a wide range of factors, these include poor people’s lack of access to income-earning and productive activities and to essential social services”. No Poverty: the first Sustainable Development Goal (SDG), out of the 17 SDGs established by the United Nations (UN) in 2015, calls for the end of poverty in all shapes. Therefore, the adoption of SDGs post-Millennium Development Goals (MDGs) by India, gave the measurement, and address of multi-dimensional poverty, economic development, social inclusion, and environmental sustainability great significance. This shift in development pathways to create a way of development that fulfils the need of the present without jeopardising the wants and resources of the future which is essentially the idea of SDGs that are to be achieved by 2030 is not yet advancing at the necessary scale.

The COVID-19 pandemic has devastated and shaken up almost every if not all aspect of our lives. Moreover, the incidence does not appear to end soon. The SDGs Report 2022 charts that the pandemic has wiped out more than four years of progress made on poverty eradication and shoved 93 million more people into extreme poverty in 2020 globally. While dealing with this contemporary intersecting crisis, economic development has secured a sustainable front. It has become important more than ever to practice and imbibe a sustainable way of development (Jain, Lall, and Singh 2020).

Chhattisgarh has the 7<sup>th</sup> highest headcount ratio, the percentage of the population who are multidimensionally poor in India. Chhattisgarh shares its boundaries with Uttar Pradesh, Madhya Pradesh, Maharashtra, Odisha, Jharkhand, Andhra Pradesh, and Telangana. It is appalling to observe that in the list of India's headcount ratio from highest to lowest, Chhattisgarh and its seven neighbouring states are in the top 20. Therefore, it is crucial to compare and evaluate the poverty trends in these states for providing recommendations for poverty reduction so that there is significant progress in achieving the goal of no poverty considering the serious data gaps in SDG monitoring observed by UN's Sustainable Development Report (UN, 2019).

Since the implementation of MDGs and the creation of Chhattisgarh as a state in the year 2000, good progress has been made in reducing the infant mortality rate (IMR), and maternal mortality rates, and in increasing the literacy rates, but the progress could not reach the tribal population as per expectations and the inter-district variations in achievements hampered the state's attempt to achieve the desired goals (Gebert and Namala, 2011). These enormous challenges called for a high political commitment and will, and effective decentralisation of quality services with greater levels of accountability and transparency.

Chhattisgarh has 39.9 percent of people living below the poverty and between the years 2004-05 and 2011-12, the percentage of people below the poverty line in Chhattisgarh has seen only a marginal reduction, from 40.9 percent to 39.93 percent. Chhattisgarh's percentage of households living in *kuchha* houses is 2.10, which is a parameter under SDG 1. NO POVERTY in which the index scores of Chhattisgarh is more than the score of India. The interconnected characteristics of the SDGs make them complex but at the same time

demonstrate complementary gains from some specific goals and targets.(N. Verma et al. 2020) Therefore, to study the complexity of poverty there is a scope to reap prospective benefits for other interlinked goals (NITI Aayog, 2019).

Chhattisgarh SDG Indicator Framework (CG-SIF) has been prepared by the State Planning Commission in collaboration with UNICEF whereby 106 out of 169 SDGs targets are addressed by 275 indicators aligned with the National Indicator Framework. The State Government has established three committees (i) State Level Steering Committee on SDGs (SLSC) (ii) State Level Implementation and Monitoring Committee (SLIMC), and (iii) District Level Implementation and Monitoring Committee (DLIMC)

The Chhattisgarh State Planning Commission prepared the 'District Indicator Framework (DIF)' and tasked it to ensure localization and continuous monitoring of the SDGs up to the district level. The 'District Indicator Framework' includes a total of 82 indicators related to social, economic, environmental, and other aspects. With the available SDG framework data, adequate steps towards achieving the goals can be extracted and put into effect by the respective departments. This would enhance the speed and approach towards fulfilling the targets by 2030 (Chhattisgarh State Planning Commission and UNICEF, 2021).

Given this background, the main objectives of this paper are twofold: one, to analyse the MPI of districts of Chhattisgarh; and two, to analyse the MPI of the state of Chhattisgarh and its comparison with its neighbouring states. Henceforth, the paper gives some suggestions to alleviate the state's poverty.

## **2. Methods and Materials**

The present study inculcates the use of secondary data from the National MPI Baseline Report 2021 based on the National Family Health Survey-4 (2015-16) collected from the official site of NITI Aayog. Data on the headcount ratio (percentage of the population who are multidimensionally poor) of 18 districts of Chhattisgarh was based on the 2011 census. Multidimensional poverty in India is reported by three distinctive statistics which are:

- The headcount ratio of poverty (known as H), which reflects the percentage of multidimensionally poor people.
- The intensity of poverty (known as A) is the average share of weighted deprivations that poor people experience.
- The MPI or adjusted headcount ratio (calculated as  $H \times A$ ) is reflection of the deprivations experienced by poor people as a percentage of the total deprivations that would be experienced if all people were deprived in all these indicators. (OPHI, 2020)

Further, the data has been interpreted for the state of Chhattisgarh as well as its seven neighbouring states namely: Uttar Pradesh, Jharkhand, Odisha, Telangana, Andhra Pradesh, Maharashtra, and Madhya Pradesh respectively. Among the 28 states and 8 union territories of the Indian union, only these states have been incorporated for the study because Chhattisgarh has been landlocked by these seven states.

### **3. Results and Discussions**

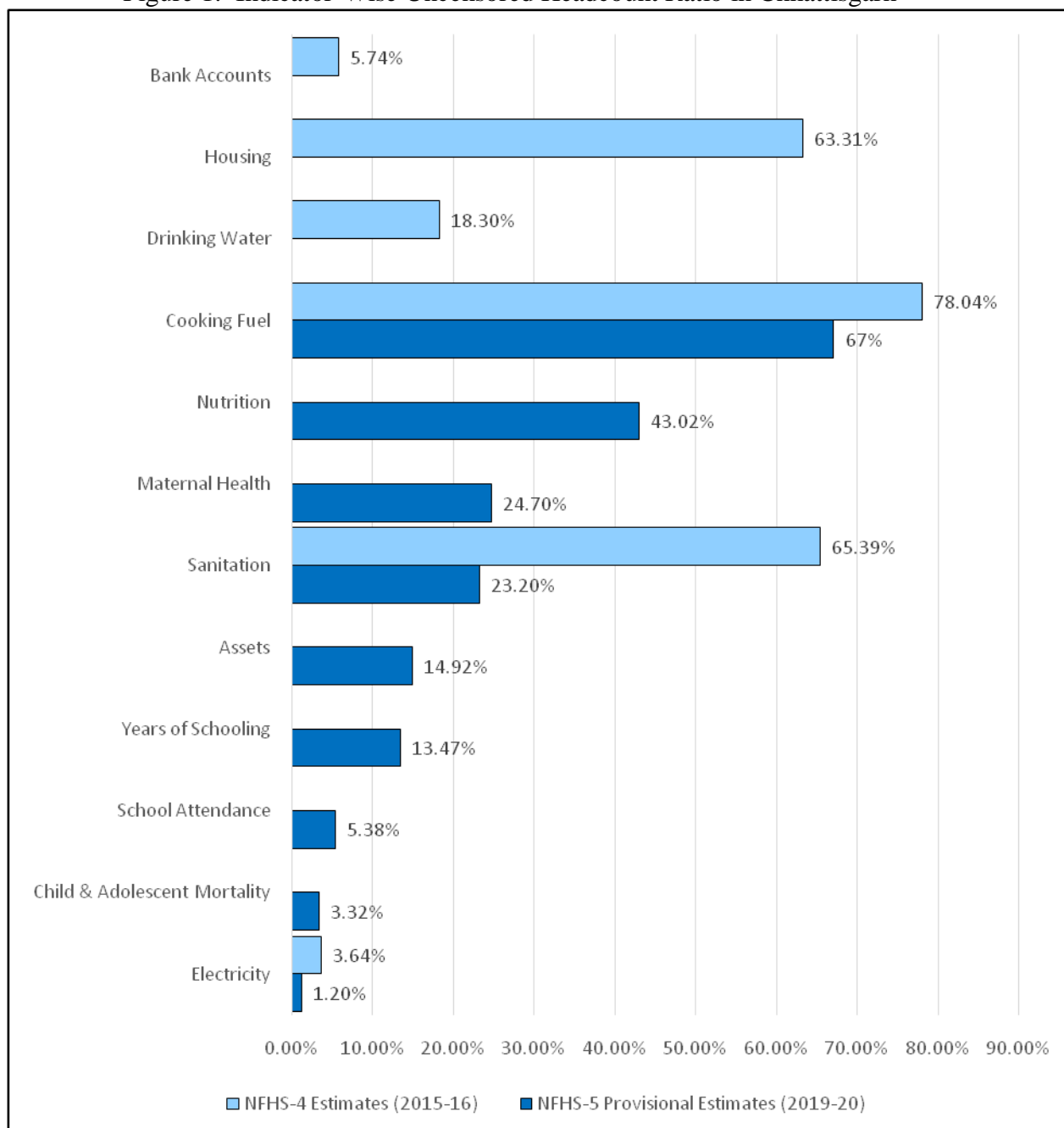
The multidimensional poverty rate was reduced from 70% to 37%, making about 7 million people escape poverty between the years 2005-2016. The MPI for Chhattisgarh was reduced more than half during that decade with significant cut in indicators like undernutrition, housing materials, solid cooking fuel, inadequate sanitation, and assets. The three dimensions of MPI (health, education, and standard of living) witnessed reductions (OPHI, 2020).

To analyse the situation of Chhattisgarh post-2015-16, Figure.1 depicts the indicator-wise uncensored headcount ratio in Chhattisgarh. The data on the 12 indicators (Electricity, Child & Adolescent Mortality, School Attendance, Years of Schooling, Assets, Sanitation, Maternal Health, Nutrition, Cooking Fuel, Drinking Water, Housing, and Bank Accounts) are based on the NFHS-4 Estimates (2015-16) and NFHS-5 Provisional Estimates (2019-20).

Percentage of population deprived of cooking fuel is the highest at 67% (NFHS-4) and 78.04% (NFHS-5) while the lowest uncensored headcount ratio from NFHS-5 provisional

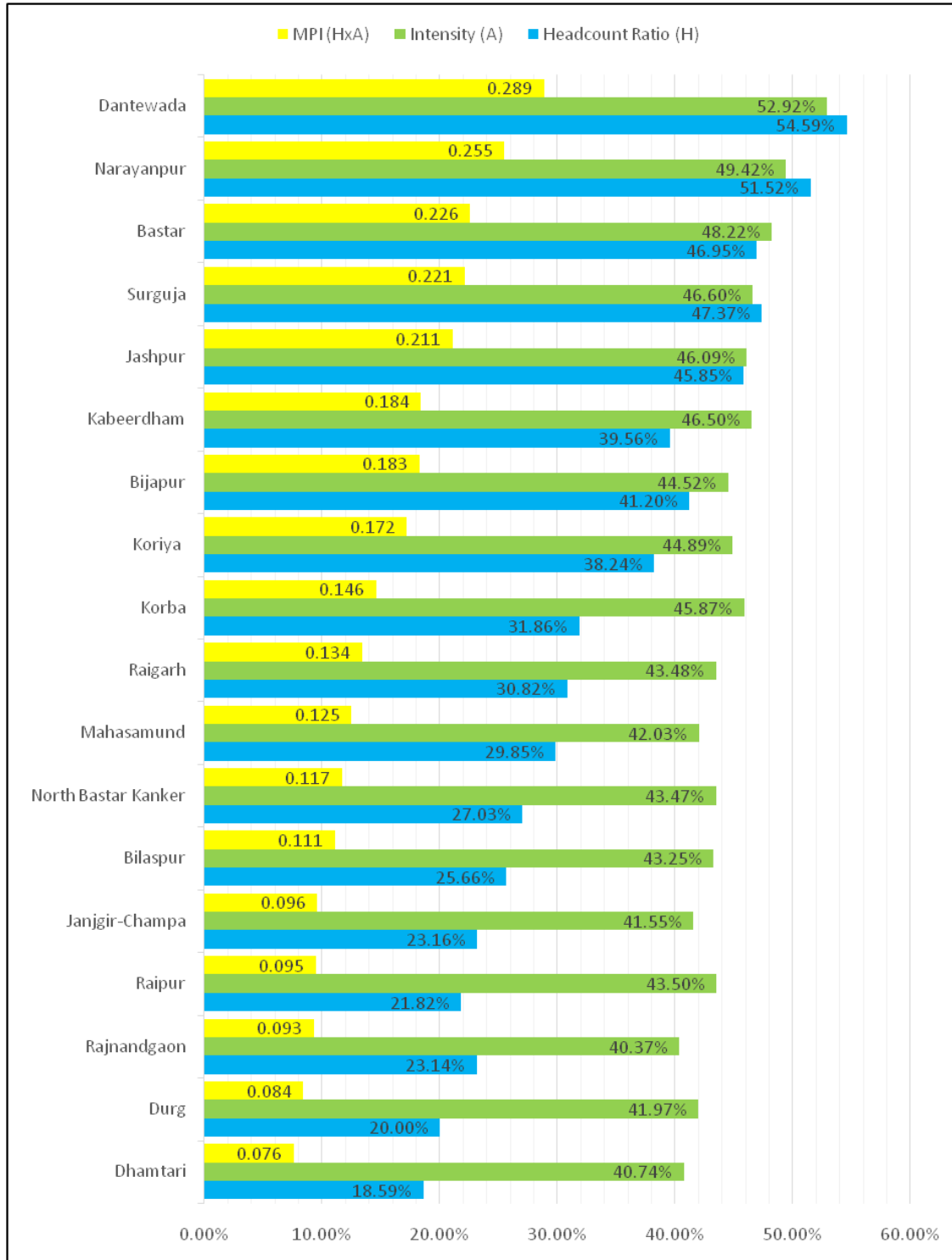
estimates is of electricity at 1.20 percent while that from NFHS-4 estimates is of child & adolescent mortality at 3.32 percent.

Figure 1: Indicator-Wise Uncensored Headcount Ratio in Chhattisgarh



Source: NITI Aayog: National Multidimensional Poverty Index Baseline Report 2021

Figure 2: District-Wise Headcount Ratio and MPI Score in Chhattisgarh



Source: NITI Aayog: National Multidimensional Poverty Index Baseline Report 2021. Districts of Chhattisgarh are as per the 2011 Census of India

To intuitively evaluate the headcount ratio, intensity and the MPI scores of various districts of Chhattisgarh along with its neighbouring states these parameters were analysed and compared.

According to Figure 2, Dantewada has the highest headcount ratio (percentage of the population who are multidimensionally poor at 54.59% in Chhattisgarh whereas Dhamtari has the lowest at 18.59%. Raipur being the capital of the state has a headcount of 21.82%. There is a striking diversity observable in the data highlighting the difference and unequal poverty in the state. This is evident in the difference in the respective headcount ratios where the extreme ranking districts have a difference of 36% points which is a grave situation for the state. Moreover, the bars in the figure effectively present the inequality, and therefore there emerges a dire need for policy formulation and implementation to prevent the worsening of the condition. Socio-economic condition of the tribal in Chhattisgarh is depicted by the higher headcount ratio of the Dantewada, Narayanpur, and Bastar, and other districts with tribal population.

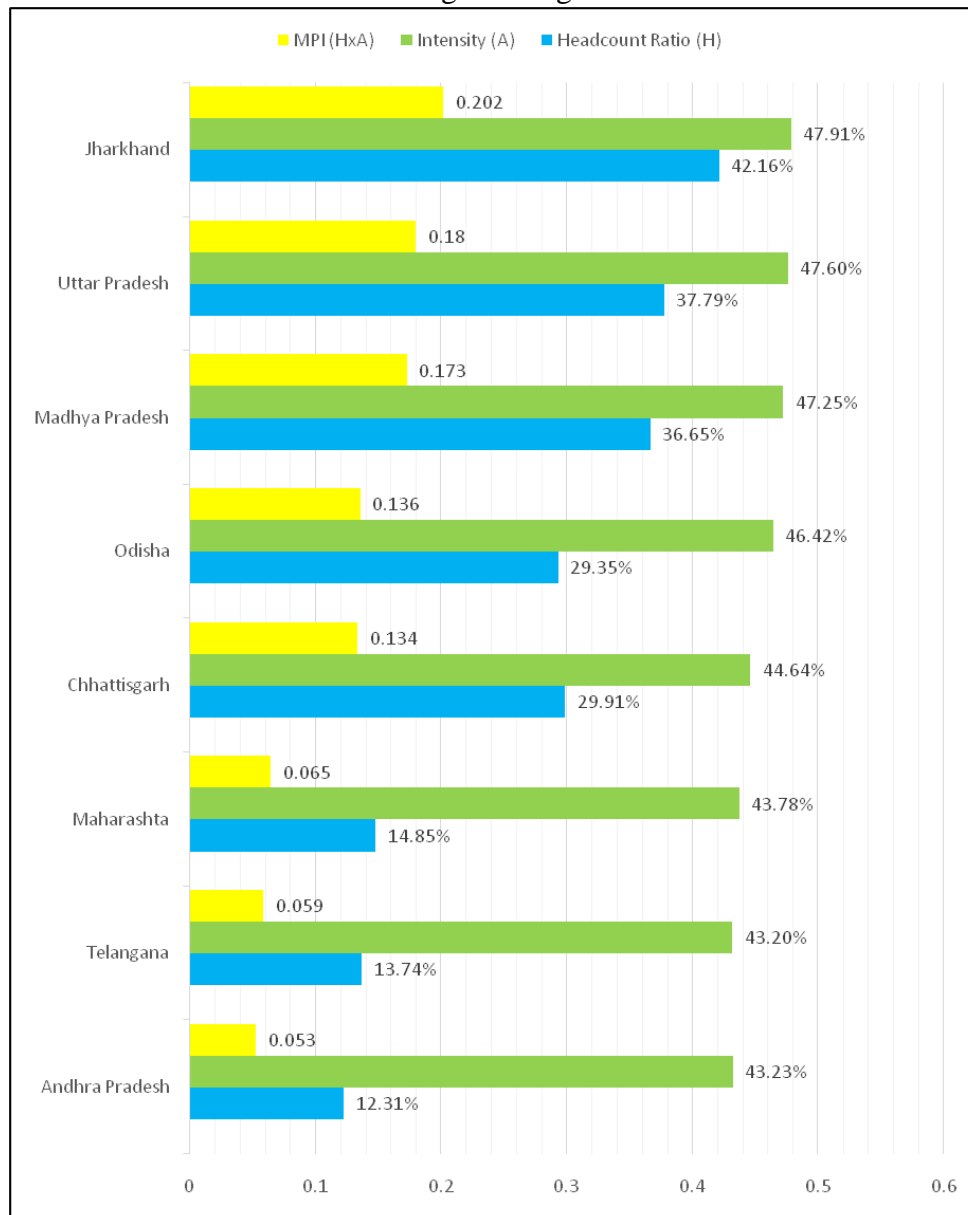
Banerjee (2015) establishes the MPI as the first global measure to reflect the intensity of poverty (the number of deprivations that each household faces at the same time). The ranking remains almost intact with just a shift in six districts in the intensity and MPI score for the 18 districts. Dantewada emerges with the highest MPI score of 0.289 while Dhamtari has the lowest MPI score of 0.076. The highest intensity of poverty (the average number of deprivations experienced by each household) is of Dantewada at 52.92% and Rajnandgaon has the lowest intensity of poverty at 40.37% preceded by Dhamtari at 40.74%. This can be because of the formula of  $MPI = H \times A$  (Headcount ratio  $\times$  Intensity). Therefore, the headcount ratio, intensity of poverty, and the MPI score depict a similar picture.

Figure 3 highlights the comparative analysis of the headcount ratio, intensity of poverty, and MPI of Chhattisgarh and its 7 neighbouring states (Uttar Pradesh, Madhya Pradesh, Maharashtra, Odisha, Jharkhand, Andhra Pradesh, and Telangana). It points out that Jharkhand tops the list with the highest headcount ratio (percentage of the population who are multidimensionally poor) of 42.16% followed by Uttar Pradesh (37.79%), Madhya Pradesh (36.65%), Chhattisgarh (29.91%), Odisha (29.35%), Maharashtra (14.85%), Telangana



(13.74%), and Andhra Pradesh (12.31%) with the lowest headcount ratio. In terms of intensity of poverty, Jharkhand again tops the list with highest value (47.91%) while Telangana (43.20%) performs better than Andhra Pradesh (43.23%).

Figure 3: MPI Score, Headcount Ratio and Intensity of Chhattisgarh and its Neighbouring States



Source: NITI Aayog: National Multidimensional Poverty Index Baseline Report 2021

Based on the data available, Jharkhand appears to be the worst performer as it has the highest headcount ratio (42.16%), intensity of poverty (47.91%), and subsequently highest MPI score of 0.202 and it is second only after Bihar in terms of headcount ratio in India. Andhra Pradesh and Telangana amongst this set of states are the better-performing states with a significantly lower headcount ratio, intensity of poverty and MPI.

#### **4. Conclusion and Recommendations**

The present paper revolved around headcount ratios, MPI scores, and intensity of poverty. These indices are not just results but can be a very powerful tool to determine the apt policies and effective implementation of the same. There is a huge variation in the MPI witnessed in the tribal districts as compared to the non-tribal ones. (Dantewada has the highest headcount ratio of 54.59% in Chhattisgarh whereas Dhamtari has the lowest at 18.59%). Thus, on basis of the comparative analysis of the multidimensional poverty index across the districts of Chhattisgarh; the conclusion drawn is that as poverty exists predominantly in the tribal districts of the state.

Similarly, when we look at the comparative MPI among the neighbouring states of Chhattisgarh; again, the picture shows a gleaming result that the state which has formulated in the same year with Chhattisgarh has a highest MPI (Jharkhand with 0.20); whereas Andhra Pradesh, Telangana and Maharashtra have in the lowest range respectively. Hence; it is the need of the hour to focus more attention on uplifting the poor and eradicating poverty to achieve the SDGs by 2030.

Thus, as it is clear from our observations and descriptions that there is a dire need to identify the low-performing areas and improve their condition. Based on these observations, the following steps are recommended:

- **Empowerment of the tribal communities:** Since the implementation of MDGs Chhattisgarh has been attempting to improve the living conditions of the minorities and the tribal communities. According to the census 2011, Chhattisgarh's tribal

population is 30.62% of the total population yet the Infant Mortality Rate, Maternal Mortality Rate, and other parameters like literacy rates are low for these communities. The ST population in Chhattisgarh, Madhya Pradesh, Jharkhand, Odisha and Rajasthan states had 11-14 additional infant deaths per 1000 live births compared to respective state's averages.(A. Verma, Sharma, and Saha, 2021)According to the Tribal Development Framework report presented by the department of Chhattisgarh only 18% of ST households had drinking water on their premises in 2012, compared to 65% of non-ST/non-SC households.

There should be the availability of the social sector (healthcare and education) provided to these communities. This would improve the overall performance of the state against poverty.

- **Regional targeting:** The data available highlights the diversity in the achievements towards reducing poverty in all the districts. This should be converted into a regional targeting policy with the upliftment of the weak-performing districts like Dantewada and Narayanpur. Farmer FIRST programme was implemented in the year of 2016 by ICAR-NIBSM, Raipur with an aim to improve the tribal farmer's livelihood and socio-economic status through agricultural enterprises integration in rice growing areas. A cluster of five tribal villages namely Bakla, Kharaha, Bamhani, Kurraha and Kharri in the Kasdol block of Baloda Bazar district, Chhattisgarh, were adopted for this programme.(Singh and Ghosh, 2022)Such growth models from the high-performing districts can be applied to these with modifications pertaining to socio-economic factors and such schemes should be applied to a larger number of districts.
- **A more inclusive and holistic approach towards poverty alleviation:** As we discussed earlier poverty is a multi-dimensional phenomenon so, income and expenditure are not the only determining factors. Other important indicators include the health, education, and living standards of the population. Therefore, the state needs to assess its progress through the above-mentioned factors for a more inclusive and holistic growth toward poverty alleviation.

- **Focused work towards the social sector:** Since it is now established that health and education can play a role in the fight against poverty, the next recommendation would be to avail hospitals and schools at greater convenience in all districts.
- **Recognizing the role of different sectors and industries in poverty eradication:** The policies must be optimised on the diverse geographical and natural features and the various industries associated with them. Chhattisgarh for instance has various cultivation practices under the agroforestry system. (Raj & Chandrawanshi, 2016)

With the incorporation of these recommendations, it can be hoped that the pace of achieving the target of no poverty by 2030 will be fastened. Even though the target of halving the poor by 2015 has been partially achieved, there still reside an ample number of scopes to completely eradicate it to fully bring Chhattisgarh under the plethora of no poverty by 2030. (Krishnan, 2022)

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