



THE GLOBAL GOALS

DISTRICT WISE ANALYSIS OF SDG GOAL 2 & 3 INDICATORS and HMIS vs NFHS-5

MADHYA PRADESH

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INTRODUCTION

The Sustainable Development Goals (SDGs), also known as Global Goals, are a set of 17 integrated and interrelated goals to end poverty, protect the planet and ensure that humanity enjoys peace and prosperity by 2030.

- **India is critical in determining the success of the SDGs, globally. At the UN Sustainable Development Summit in 2015, Prime Minister Narendra Modi noted, “Sustainable development of one-sixth of humanity will be of great consequence to the world and our beautiful planet. It will be a world of fewer challenges and greater hope; and, more confident of its success”.**
- **NTI Aayog, the Government of India’s premier think tank, has been entrusted with the task of coordinating the SDGs, mapping schemes related to the SDGs and their targets, and identifying lead and supporting ministries for each target.**

- **In addition, the Ministry of Statistics and Programme Implementation (MoSPI) has been leading discussions for developing national indicators for the SDGs.**
- **State governments are key to India's progress on the SDGs as they are best placed to 'put people first' and to ensuring that 'no one is left behind'.**
- **The UN Country Team in India supports NITI Aayog, Union ministries and state governments in their efforts to address the interconnectedness of the goals, to ensure that no one is left behind and to advocate for adequate financing to achieve the SDGs.**

- **MP, a state in central India has made significant progress towards achieving SDG goals since adoption. The state has taken several initiatives to achieve maximum of scores and is marked as front runner overall.**
- **In the context of SDG goal 2& 3 ,despite of continuous efforts and steps of improvement made by Government of Madhya Pradesh, the state is still a low performer in health indicators.**
- **This report highlights few of the indicators analyzed and identifies the poor performing districts with possible reasons for gaps present in the state**

PRIORITY SDGS



There are 17 SDGs and 169 targets in total. While they are all important and interrelated, some of the indicators of goal 2 and 3 are being discussed in this report.

This report talks about the current status of 52 districts of Madhya Pradesh on selected indicators with the SDG goals and targets



SDG GOAL 2

ZERO HUNGER

The SDGs aim to end all forms of hunger and malnutrition by 2030, making sure all people - especially children - have sufficient and nutritious food all year. This involves promoting sustainable agricultural, supporting small-scale farmers and equal access to land, technology and markets. It also requires international cooperation to ensure investment in infrastructure and technology to improve agricultural productivity. The goal also focuses at - doubling agricultural productivity, maintaining genetic diversity of seeds, plants and farmed animals, and strengthening capacity for climate change adaptive agriculture.



SDG GOAL 3

GOOD HEALTH AND WELL BEING

Good health is essential to sustainable development and the 2030 Agenda reflects the complexity and interconnectedness of the two. It takes into account widening economic and social inequalities, rapid urbanisation, threats to the climate and the environment, the continuing burden of HIV and other infectious diseases, and emerging challenges such as non-communicable diseases. It calls for a renewed focus on mental health issues as well. Universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality, and affordable medicines are integral to this goal.

MP's HEALTH

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- 1. Mothers who had at least 4 antenatal care visits (%) - 57.5**
 - 2. Mothers who consumed iron folic acid for 180 days or more when they were pregnant (%) - 31.8**
 - 3. Institutional births (%) -90.7**
 - 4. Children age 12-23 months fully vaccinated based on information from either vaccination card or mother's recall- 77.1**
 - 5. Women whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m²) 21 (%) -23.0**
 - 6. Children age 6-59 months who are anaemic (<11.0 g/dl) 22 (%) -72.7**
 - 7.. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) 22 (%) -52.9.**

SELECTED INDICATORS AND COLOUR CODING

- **Maternal mortality rate (MMR)**
- **Institutional deliveries**
- **Pregnant women anemia**
- **Under 5 mortality rate**
- **Full immunization coverage of 9-11 months**
- **New born weight < 2.5 kg**
- **Under 5 anemia**

ASPIRANT



PERFORMER



FRONT RUNNER



ACHIEVER



CALCULATION AND SCORING

- ♦ **GENERATING COMPOSITE INDEX**

- ♦ Composite index is obtained by combining a number of indicators in a standardised way. It is a useful statistical measure to assess overall performance of a region over a period of time.

- ♦ Generation of 7 indicators

- ♦ Identification of Max value and Min value

- ♦ Calculation of Index value for each district for each indicator

- ♦ **Positive indicator:** those indicators which are positively associated with development (higher value linked to better performance).

$$\text{Index Value, Xid} = \frac{\text{Xid} - \text{Min(Xid)}}{\text{Max(Xid)} - \text{Min(Xid)}}$$

- ♦ **Negative indicator:** those indicators which are negatively associated with development (higher value linked to poor performance).

$$\text{Index Value, Xid} = \frac{\text{Max(Xid)} - \text{Xid}}{\text{Max(Xid)} - \text{Min(Xid)}}$$

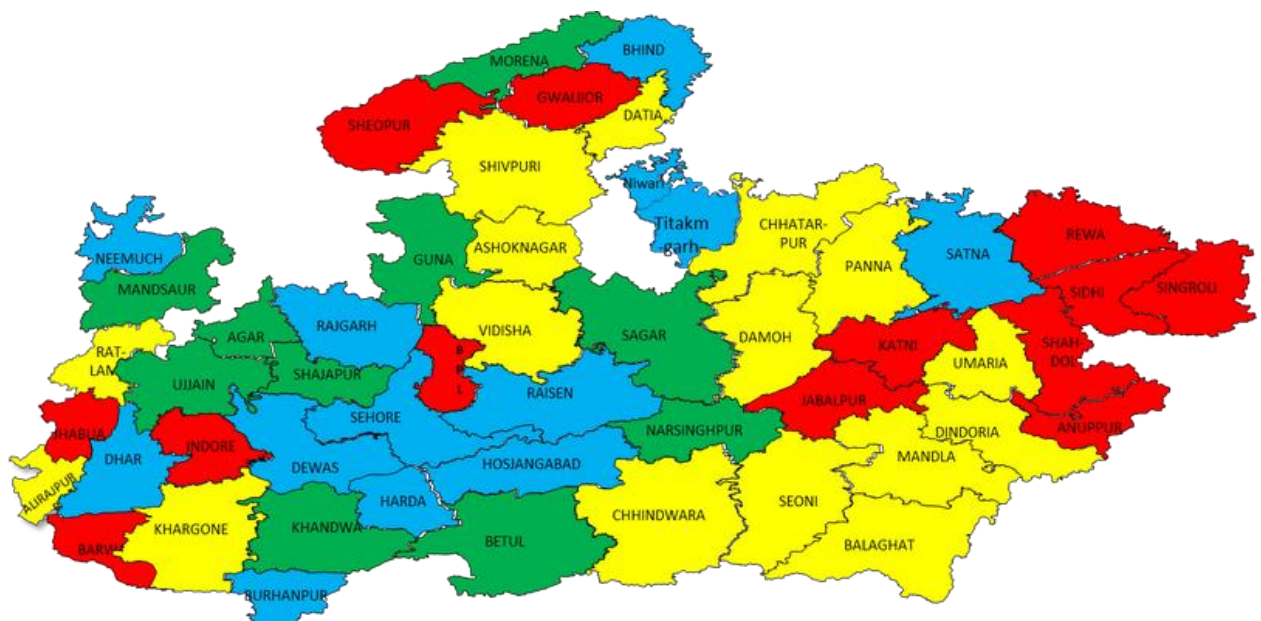
- ♦ Where, X_{Bid} represent the value of the i -th indicator in the d -th district of a state ($i=1,2,3,\dots,16$; $d=1,2,3,\dots,n$)

n is the number of districts in a State

$\text{Min}(X_{Bid})$ and $\text{Max}(X_{Bid})$ are, respectively, the minimum and maximum of (X_{B1B} , X_{B2} , $\dots, X_{Bn}$) for that particular indicator across districts in a State.

- ♦ After the above, the composite scores of the districts are divided into 4 parts (for individual category) using quartiles. The lowest ranking (lowest quartile) districts coded AS RED - DEPICT VERY LOW PERFORMANCE (ASPIRANT), YELLOW – LOW PERFORMING (PERFORMER), GREEN - PROMISING (FRONT RUNNER) AND BLUE – GOOD PERFORMANCE (ACHIEVER).

MATERNAL MORTALITY RATE



State Maternal mortality rate (MMR) talks about maternal deaths per 100,000 of total live births.

State aims to reduce it by 70 per lakh live births .Above mentioned scoring shows the least to best performing districts of Madhya Pradesh.

The analysis shows districts like Rewa ,Shehdol,Katni ,Anuppur ,Sidhi have significant low progress than others ,which majorly comprises of majority of state tribal area whereas districts like Bhopal ,Indore also depicts higher MMR in consideration to other districts .

GAPS IDENTIFIED-

- 1.DATA HANDLING AND MANAGEMENT-** Districts like Bhopal,Indore,Jabalpur,Gwalior who have absolute facilities and infrastructure still ranks in low performing districts .A possible reason identified is fine managing data and keeping a clean ,undisrupted and meaningfull data.
- 2.TRIBAL AREAS & THIER CULTURAL BELIEFS-** Districts like shahdol,sidhi,singroli,annupur,jhabua distributes in major tribal regions and follow their own set of norms which are difficult to mould.
- 3.POOR REPORTING OF MIGRATNTS-** another possible reason identified is the under reporting and monitoring of low skilled workers, as it becomed difficult to track and maintain records.
- 4.INTER STATE BORDER DATA -**with migrant workers , population who are in continous change of their area of working, makes the data loss and monitoring difficult.

INSTITUTIONAL DELIVERIES



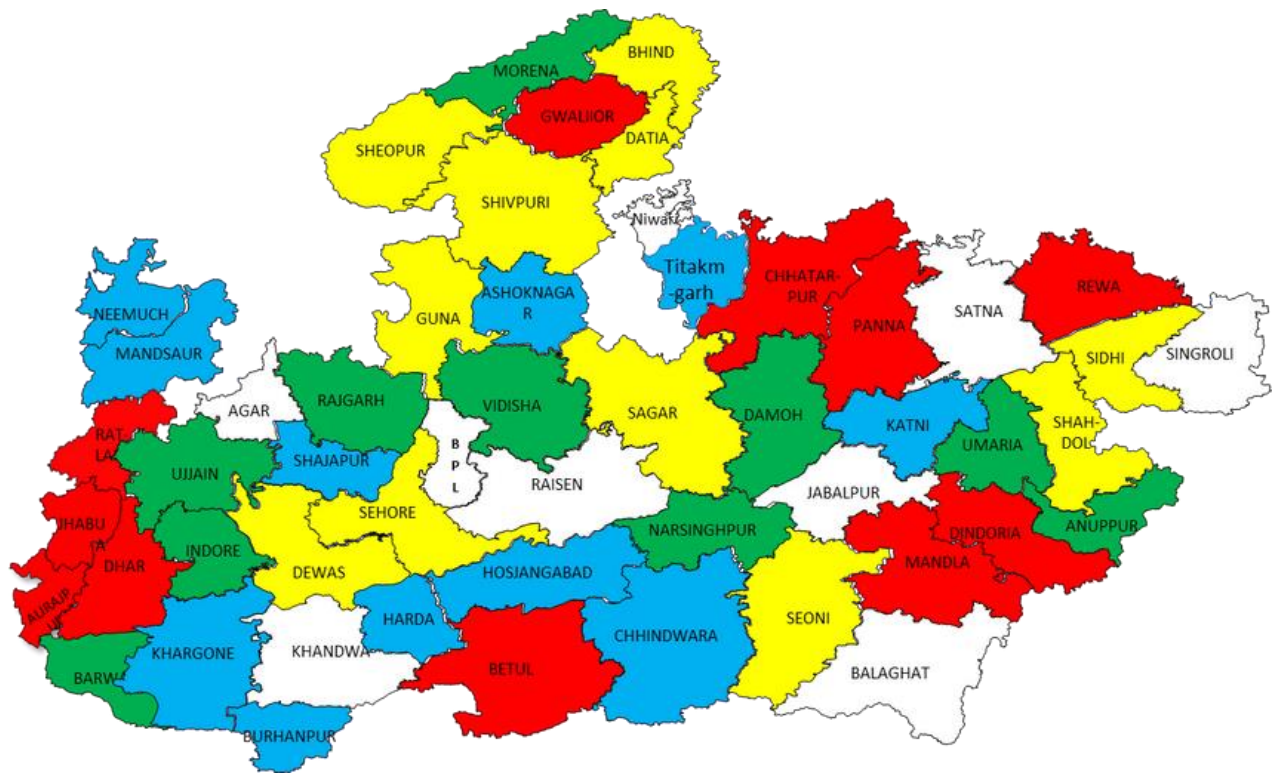
State institutional deliveries is derived from %of women who gave birth /total live birth *100.

Madhya Pradesh institutional deliveries describes the status of pregnant women health issues .Districts like chindwara, narsinghpur,umaria,annupur,balaghat,rajgargh,shahjapur,dewas,khandwa shows low rate in institutional deliveries.

GAPS IDENTIFIED-

- 1.CULTURAL AND SOCIAL NORMS- following their own rules and culture could lead to unwared population.
2. INDIRECT COST OF TRANSPORTATION ,FOOD AND ACCOMODATION- low income status reflects the burden on indirect cost of expenses.
3. LIMITED SKILLED BIRTH ATTENDENTS -low human resource for deliveries could be a possible reason.

PREGNANT WOMEN OF 15-49 YEARS ANEMIA

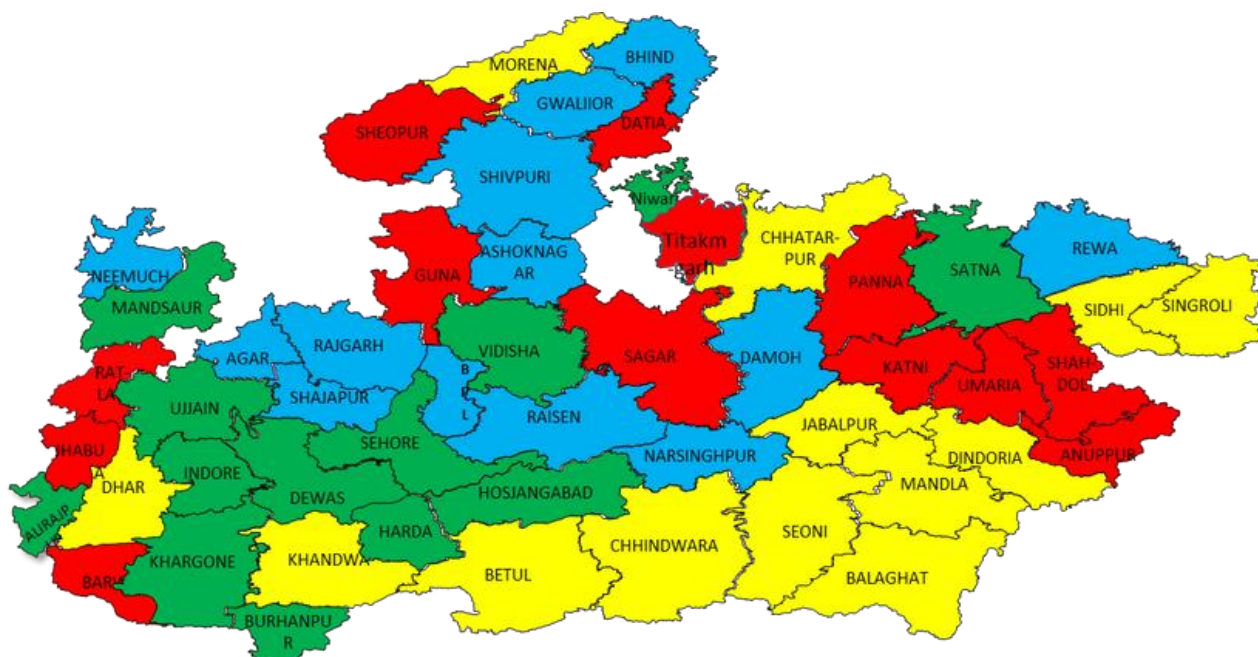


State pregnant women anemia prevalence rate is around 52. Districts like dhar, betul, chattarpur, panna, mandla, dindori show higher anemic rate according to NFHS-5.

GAPS IDENTIFIED-

- 1. POOR DIETARY HABITS-** higher carbs consumption and low consumption of essential nutrients such as iron, vitamins could be a possibility.
- 2. LOW INTAKE OF IRON SUPPLEMENTS-** lack of follow up in consumption.
- 3. LACK OF AWARENESS-** awareness among population about anemia causes unbalanced eating patterns and low demand for nutritional and iron rich food.

UNDER5 MORTALITY RATE



State Under 5 mortality rate is number of children who die by the age of 5 years, per 1000 live births.

Districts such as Panna, Katni, Anuppur, Umariya, Guna, Sheopur, Sagar show relatively higher U5 mortality.

GAPS IDENTIFIED-

1. **NUTRITIONAL CARE AND IMPROVED SANITATION** - malnourishment prevalence is seen higher in state, whereas sanitation promotion needs to be accelerated.
2. **POST NATAL FOCUSED CARE**- an underlying cause of under 5 mortality could be unfocused post natal care.
3. **LOW INCOME ZONES OF TRIBAL**- poverty and low economic status of undeveloped districts.
4. **TRACKING DATA AND MONITORING**- missed out data on mortality should be strengthened.
5. **CAPACITY BUILDING OF ASHA & ANM** -to identify the serious and on risk under 5 age group.

FULL IMMUNIZATION FOR 9-11 MONTHS



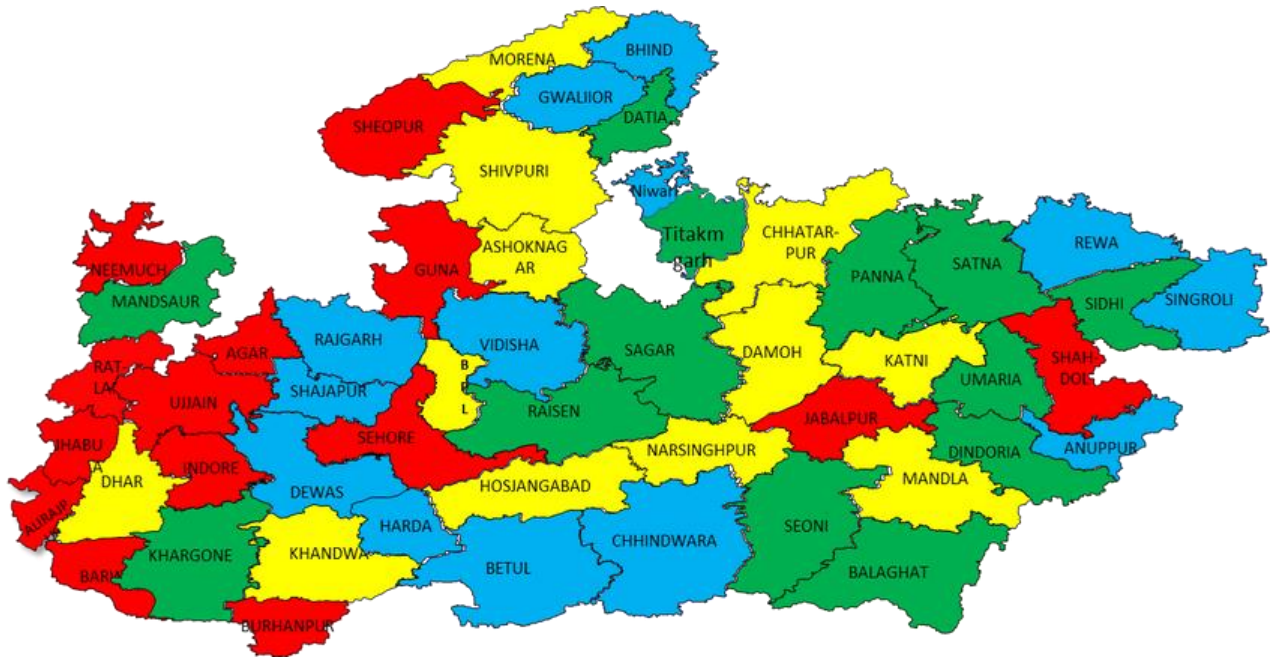
State full immunization works on full immunization coverage for 9-11 months of children and is one of the most critical aspect in detecting child health per live birth.

Madhya Pradesh immunization coverage shows that districts such as Betul, Chindwara, seoni,mandla ,balaghat have low coverage with respect overall state performance .

GAPS IDENTIFIED-

- 1. RURAL URBAN DIVISION**-districts who are in rural regions tend to have low immunization coverage with respect to urban.
- 2. AWARENESS AND ACCEPTABILITY** - low performing districts could fall in low awareness which results in hesitancy to adapt .
- 3. COLD CHAIN SUPPLY AND UNAVAILABILITY OF ACTIVE SUB CENTRES**- low rate of tackling vaccines and inactive sub centers could be a possible reason.

NEWBORN WEIGHT <25KG



State low birth weight is a major health issue with prevalence of more than 22% according to NFHS.

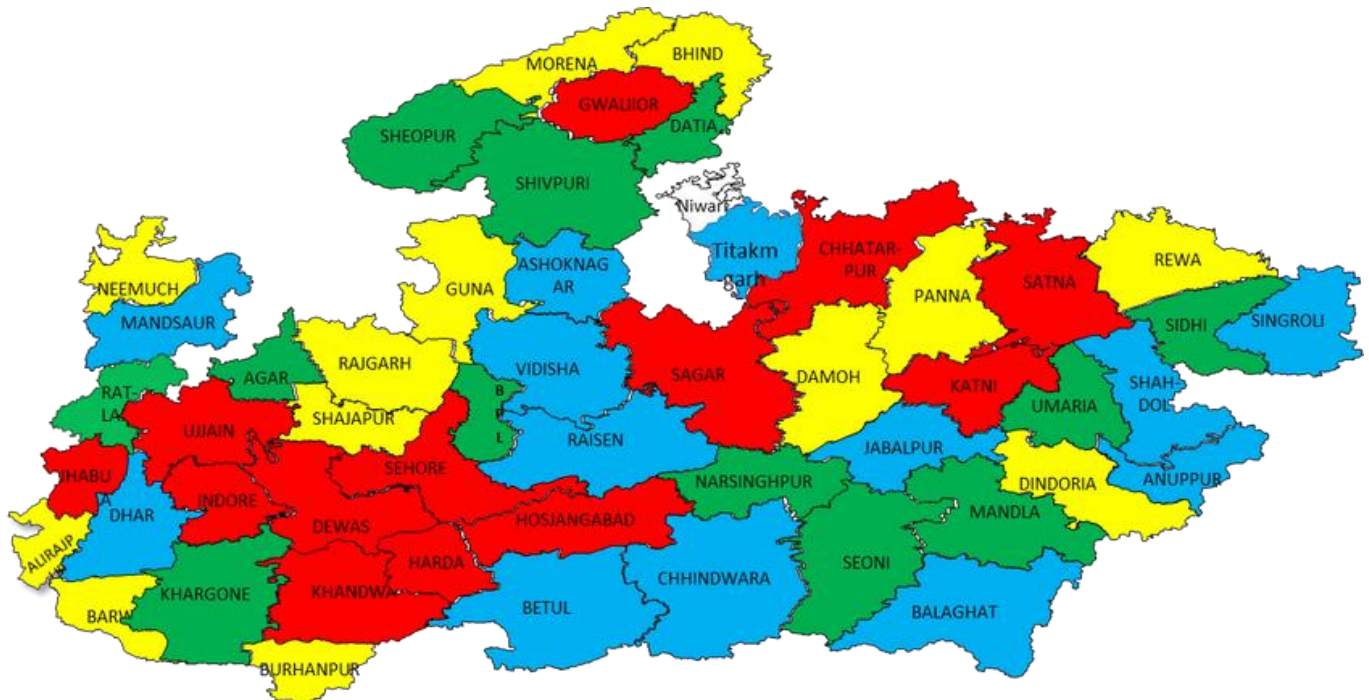
Madhya Pradesh low birth weight reflects neonatal morbidity and mortality directly.

Districts like Ujjain, Indore, Ratlam, Jhabua, Alirajpur, Barwani, Burhanpur, Agar malwa shows higher number of low birth weight.

GAPS IDENTIFIED-

1. LOW MATERNITY NUTRITION- low intake of iron folic acid, calcium and other supplements could lead to low maternal nutrition.
2. PNC AND ANC DATA - track records of total ANC and PNC could hinder the state indicator.
3. EARLY MARRIAGES AND CHILD BEARING - unaware family planning and teen pregnancies can cause higher low new born weight.

UNDER 5 ANEMIA



State under 5 anemia prevalence rate among 5-59 months is 55.8% according to NFHS-5.

Districts such as khandwa, Indore, harda, hoshangabad, dewas, jhabua, sehore, ujjain shows higher prevalence rate in the state.

GAPS IDENTIFIED-

1. **POOR DIETARY HABITS**- higher carbs consumption and low essential nutrients such as iron, vitamins could be a possible.
2. **LOW INTAKE OF IRON SUPPLEMENTS**-lack of follow up in consumption.
3. **LACK OF AWARENESS**- awareness among population about anemia causes unbalanced eating patterns and low demand for nutritional and iron rich food.

A COMPARITIVE REPORT ON HMIS vs NFHS-5 FOR THE YEAR 2019-20 & 2022-23

MADHYA PRADESH



INTRODUCTION

- **There is an urgent need to improve the data system in health for timeliness, accuracy and relevance. The Niti Health Index makes it clear that the overall performance of the system monitored through NFHS-5 does not guarantee a high quality of information**
- **All these raise a question if actual information could be compared with the estimated one.**
- **Data triangulation exercise is been done to evaluate the potential differences between the two indicators i.e institutional deliveries and low birth weight.**

- **Independent indicator verification would provide the most realistic understanding about the difference existed.**
- **Thus, this report is been initiated using two different data sets one from NFHS-5 and HMIS, where two individual indicator ,institutional deliveries and low birth weight is been analyzed to provide potential differences between the two .**

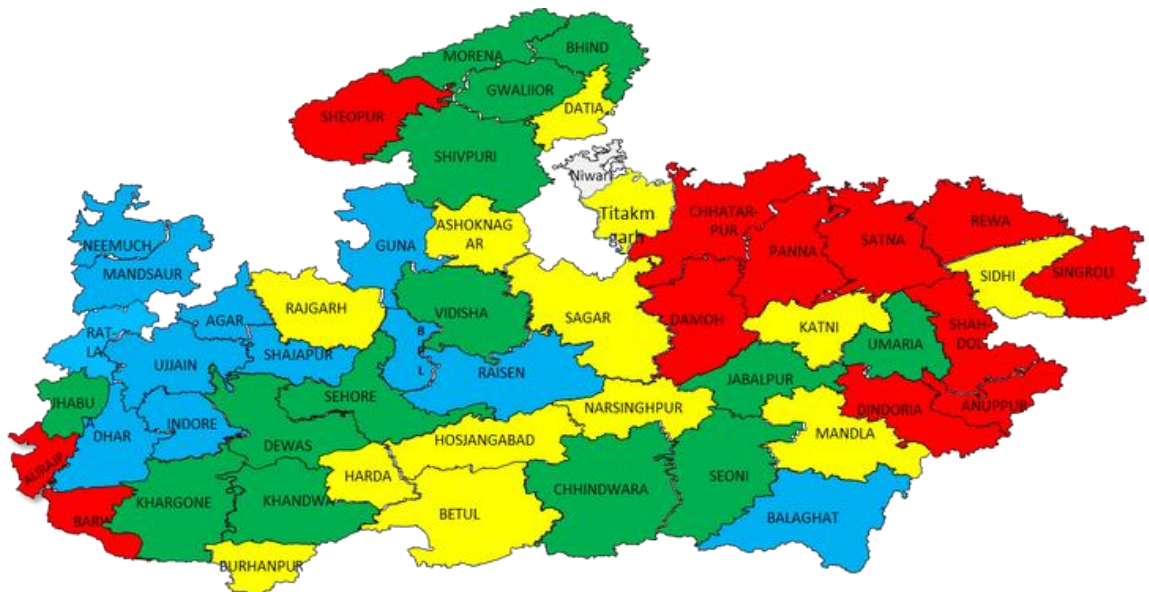
BRIEF ABOUT TWO DATA SETS

- ❖ **NFHS is a representative sample survey conducted throughout India. NFHS 5 which was conducted during 2019-21 included collection of information on health indicators from 29 states and six union territories.**
- ❖ **It collected evidence of trends population, health and nutrition indicators.**
- ❖ **The health indicators focused on maternal child health and selected communicable and non-communicable diseases.**

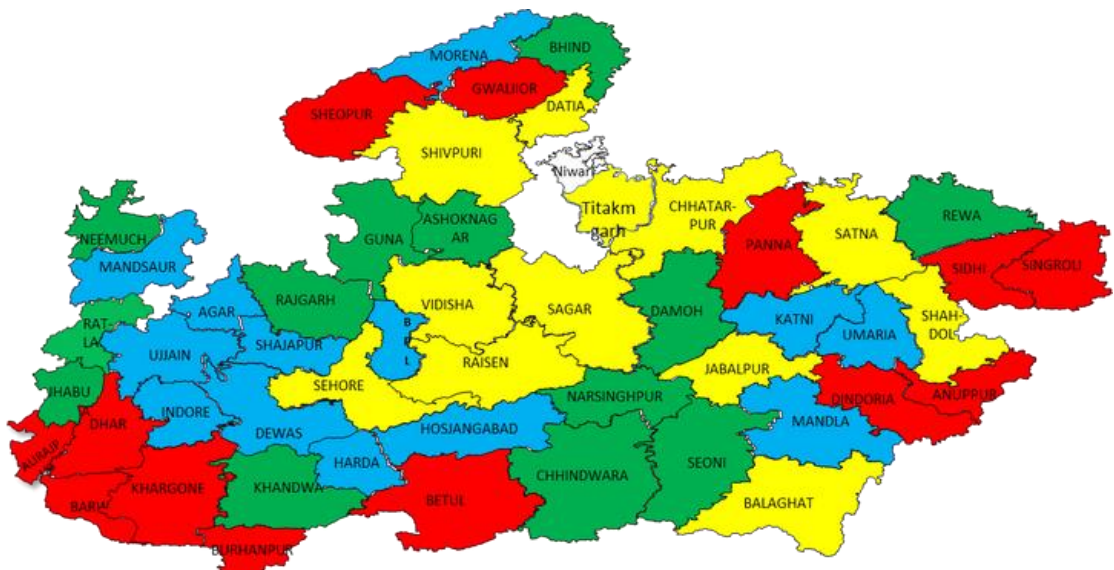
- ❖ **The recent evolution of National Health Mission (NHM) has provided an opportunity for the health system to gather real-time information and has gradually moved towards digitalization leading to the strengthened base of health information in Indian health system.**
- ❖ **Health Management Information System (HMIS) is an initiative launched in 2008 by NHM which is a digital platform for monitoring of service delivery with a focus on reproductive, maternal and child health.**
- ❖ **It captures 70 data items at sub-centers and 117 items at Primary Health Centres .**
- ❖ **HMIS has provided a platform for collection and aggregation of information which can be further analyzed and the information could be used for monitoring and thus better performance of health systems .**

INSTITUTIONAL DELIVERY

NFHS -5

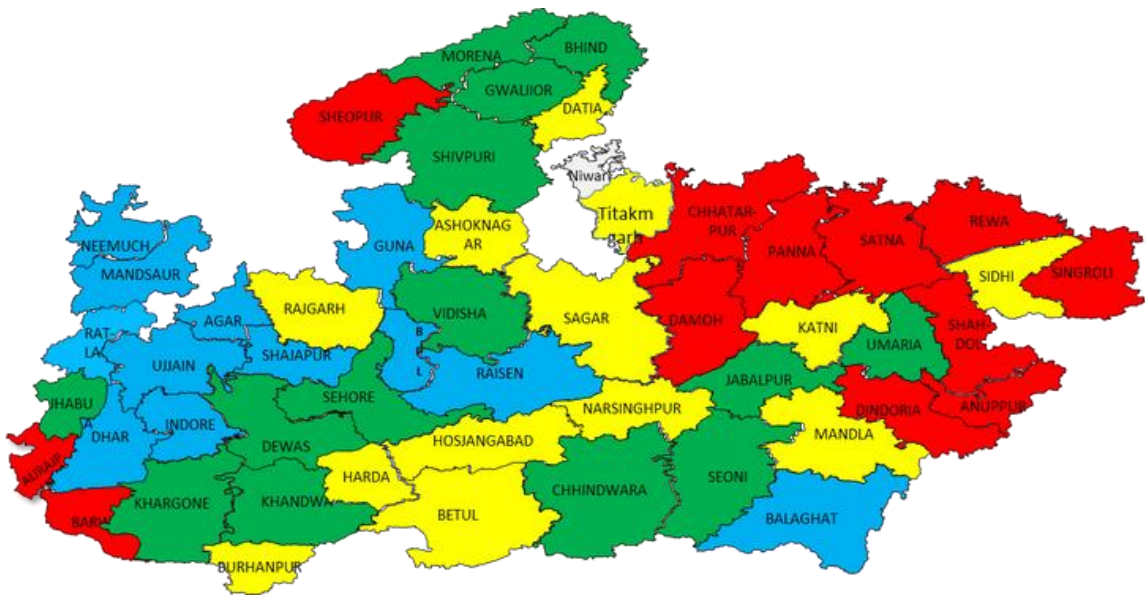


HMIS 2019-20

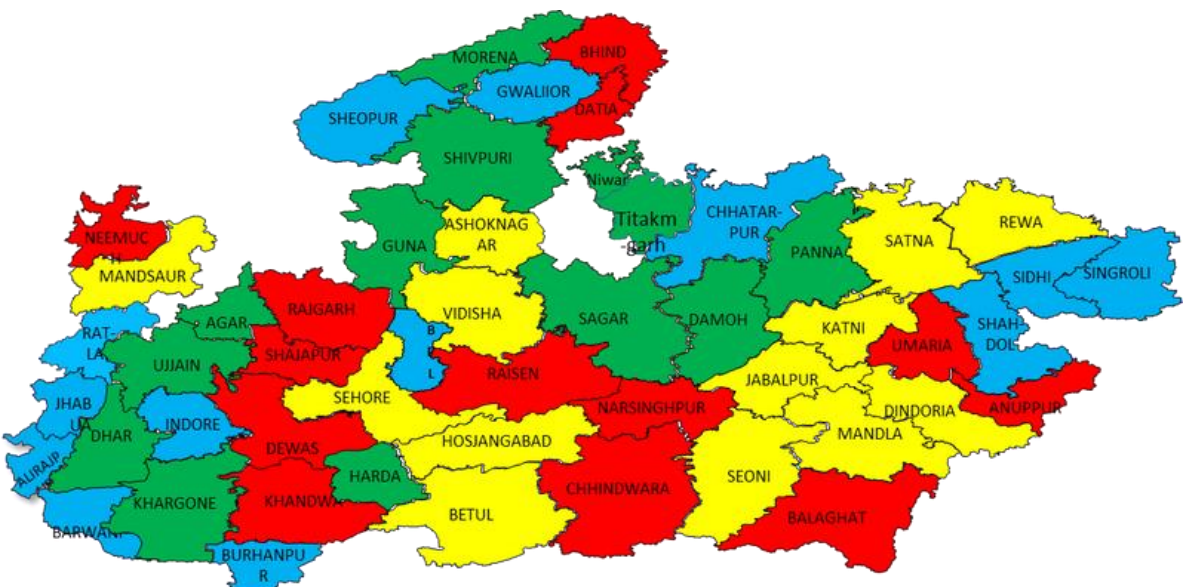


INSTITUTIONAL DELIVERY

NFHS -5

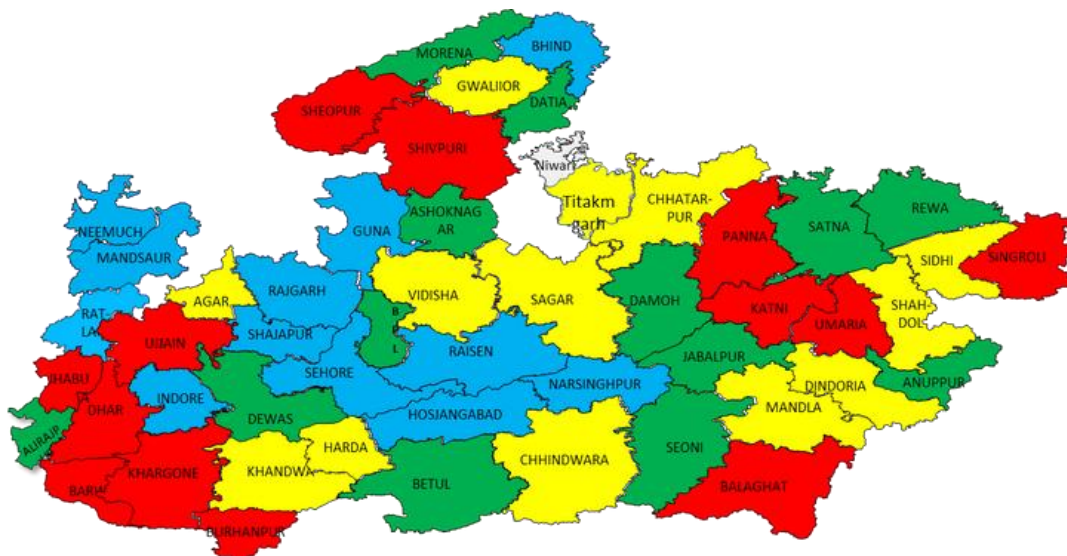


HMIS 20 22-23

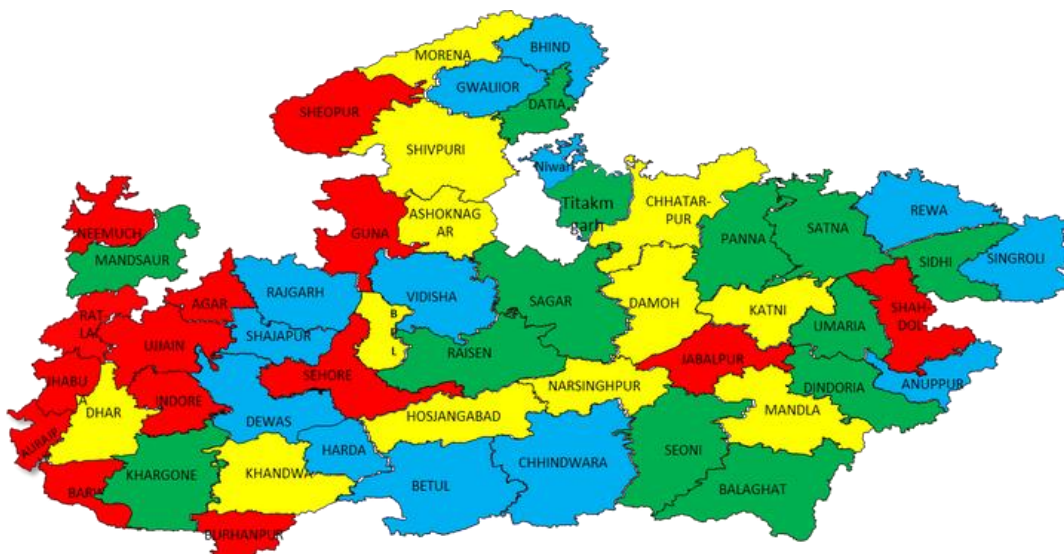


LOW BIRTH WEIGHT

NFHS -5



HMIS 2022-23



KEY OBSERVATIONS:

The above mapping is of institutional deliveries ,where both NFHS-5 and HMIS data for the year 2019-20 and 2022-23 is been taken.

Significant differences is been depicted here on comparing two data sets,which shows:

(A)According to NFHS-5,districts like Bhind(93.8%), Datia(89.4%),Neemuch(97.5%),Narsinghpur(91.4%),Chindwa ra(92.2 %),Damoh(85 %),Dindori(77.5%),Satna(85.5%)are low performing in institutional deliveries whereas according to HMIS 2019-20 , Khargone(86.9 %),Dhar(93.9%),Sheopur(86.7%),Gwalior(90.3 %),Betul(92.4%)are significant low performer.

(B) According to HMIS 2022-23 dataset, raisen (94.9 %), vidisha (93.95), Khandwa (96.7%),neemuch(98.25 %),Anuppur(82.(%) ,seopur (86.7%),panna(92.9%).

The map denoting low birth weight %here denotes, both in NFHS-5 and HMIS 2022-23 where significant variation is been observed which includes-

According to NFHS-5 , Balaghat (44.9%), Barwani (41%),Burhanpur (47.2%),Dhar (35.9%),Katni and Khargone (44%), Ujjain(36.2%),Umaria(36.6%)are some of low perfoming districts whereas HMIS 2022 -23 shows Jabalpur, Alirajpur, Indore,Sehore,Neemuch ,Ratlam,Guna ,Shahdol as low performer.

CONCLUSION

While there are significant improvements in some of the health indicators ,there are several challenges that are yet to be addressed.

Data monitoring and capturing is still a major challenge to overcome as some of the developed districts of MP lacks in performance due to inadequate data management.

THEREFORE,

Madhya Pradesh is still a long way to go to achieve SDG GOAL 2& 3 ,by addressing challenges and strengthening health care system to ensure access to quality health services to all.

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