

# **Sustainable Economic Development through integration of Road and Dam Infrastructure Development with the implementation of Corporate Social Responsibility (CSR) principals in the State of Madhya Pradesh (M.P), INDIA.**

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**Abstract:** *The paper on the basis of literature survey, empirical evidence and statistical analysis attempts at discussing and finalising the parameters that can be taken as representative of Economic Development in the state of Madhya Pradesh in India and proves that there exists a significant correlation between the levels of Economic Development achieved in the state of Madhya Pradesh and the development of Road and Dam Infrastructure in the same. It also aims at studying subjectively what part of the above could be attributed to the Corporate Social Responsibility (CSR) initiatives taken by the Infrastructure Development Agencies working in the state; and further suggests that scaling up of these (CSR) initiatives could eventually lead towards a sustainable and inclusive growth of the state of Madhya Pradesh.*

**Keywords:** *Road and Dam Infrastructure in Madhya Pradesh (India), Economic Development in Madhya Pradesh (India), Corporate Social Responsibility, Sustainable and Inclusive Growth in Madhya Pradesh (India).*

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## **I. Background And Introduction**

### **1.1 About Madhya Pradesh.**

Madhya Pradesh, abbreviated MP, is a state in central India. Its capital is Bhopal, the largest city is Indore and historical capital is Gwalior. Nicknamed the "heart of India" due to its geographical location in India, Madhya Pradesh is the second largest state in the country by area. With over 75 million inhabitants, it is the sixth largest state in India by population. It borders the states of Uttar Pradesh to the northeast, Chhattisgarh to the southeast, Maharashtra to the south, Gujarat to the west, and Rajasthan to the northwest.

After India's independence, Madhya Pradesh state was created with Nagpur as its capital: this state included the southern parts of the present-day Madhya Pradesh and north-eastern portion of today's Maharashtra. In 1956, this state was reorganised and its parts were combined with the states of Madhya Bharat, Vindhya Pradesh and Bhopal and removing Marathi speaking Vidarbha region to merge it with then Bombay State, to form the new Madhya Pradesh state with Bhopal as its capital.

This state was the largest state of India by area until 2000. In 2000, the Chhattisgarh region was split to create a new state, and Rajasthan became the largest state of India. In the recent years, the state's GDP growth has been above the national average. The state is rich in mineral resources, and has the largest reserves of diamond and copper in India. More than 30% of its area is under the forest cover. Its tourism industry has seen considerable growth, with the state topping the National Tourism Awards in 2010–11.

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## **1.2 Definition of Economic Development in Madhya Pradesh.**

Economic Development of the State of Madhya Pradesh largely can be defined as a measure of the following four parameters:

- 1.2.1 Demographic Indicators which specifically indicates betterment of the sex ratio in the study area as an indication of economic development. (Ref. Millennium Development Goals set by the United Nations).
- 1.2.2 Economic Indicators which include the income, accessibility to vital services like telephone, television, electricity, banking services, postage and courier services etc (increase of which indicates positive economic development. Also the exodus of youth from the region and a reduction of the same has been taken as Economic Development).
- 1.2.3 Human Development Indicators comprising of sub parameters like education, and health be taken as Economic Development.
- 1.2.4 Poverty and Hunger Indicators. Comprising inputs on the calorie undernourishment prevalent in the sample and steps in general which have been taken towards the safeguard of underweight children in the region be taken as parameters of Economic Development.

## **1.3 Scope of the term Infrastructure Development in Madhya Pradesh for the purpose of this paper.**

The scope of the term Infrastructure Development in Madhya Pradesh for the purpose of this research article is being limited to the twelve (12) large dams, twenty eight (28) state highways and eighteen (18) national highways in existing in the state (as on the year of preparation of this research article i.e. 2013).

## **1.4 Meaning of Corporate Social Responsibility**

Corporate social responsibility (CSR), also called corporate conscience, corporate citizenship, social performance, or sustainable responsible business/ Responsible Business, is a form of corporate self-regulation integrated into a business model. CSR policy functions as a built-in, self-regulating mechanism whereby a business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms. In some models, a firm's implementation of CSR goes beyond compliance and engages in "actions that appear to further some social good, beyond the interests of the firm and that which is required by law." CSR is a process with the aim to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere who may also be considered as stakeholders.

## **1.5 Corporate Social Responsibility in Madhya Pradesh**

The definition of CSR used in the state of Madhya Pradesh varies from the strict "stakeholder impacts" definition used by many CSR advocates to inclusion of charitable efforts and volunteering. Cases in the state may be cited where CSR has been based within the human resources, business development or public relations departments of the organisation, or may be given a separate unit reporting to the CEO or in some cases directly to the board. Some companies may implement CSR-type values without a clearly defined team or programme, but with reference to the state of Madhya Pradesh all the above needs to be verified on ground which is one of the objectives of this paper.

## **II. Objectives And Methodology**

### **2.1 Objectives of the paper.**

2.1.1 To examine whether there exists a correlation between the existence of Roads and Dams Infrastructure in Madhya Pradesh and the betterment as noticed in the parameters which are considered to be representative of Economic Development in the state.

2.1.2 To examine whether the above correlation would hold even if the companies were not embarking upon any Corporate Social Responsibility activities.

**2.2. Research Methodology adopted for preparation of the Paper.**



To study objective 2.1.1 from the perspective of the geographic spread of the state following districts were identified as representative of the state and random samples were taken from them for the specific analysis of this objective. The same with their justifications are mentioned as under:

Sampling Region No.	District Name	Dam	National Highway	State Highway
1	Khandwa (East Nimar)	Indira Sagar	None	MP SH 26
2	Mandsaur	Gandhi Sagar	NH 79	MP SH 1
3	Shivpuri	Mandikheda	NH 3, 25, & 76	MP SH 06
4	Jabalpur	Bargi	NH 7, 12, 12A,	MP SH 22
5	Chhindwara	None	NH 69 (just touches)	None

To study objective 2.1.2 results thus derived from the data collected during the study of objective 2.1.1 were in an open ended discussion taken up with senior executives of Infrastructure Development Companies working in the region and their views sought independently on the topic. These views were juxtaposed with views collected during the study of objective 2.1.1 and inferences were thus drawn.

The number of independent (random) responses thus collected for the article were as follows Khandwa (63), Mandsaur (52), Shivpuri (61), Jabalpur (67) and Chhindwara (65); a total of (308) independent responses.

In addition to this open ended interviews of three companies working in the infrastructure development / consultancy in roads and dams were taken to study objective 2.1.2.

**III. Data Analysis**

For the purpose of analysis of this research paper the authors used the following bivariate statistic.

- 3.1** For objective 2.1.1, T Test was used initially to test the significance of the parameters of Economic Development in the State.
- 3.2** Further for objective 2.1.1, and subsequent to step 3.1, Correlation Analysis was used to test the level of correlation between the Parameters of Economic Development and Existence of Road and Dam Infrastructure.
- 3.3** For objective 2.1.2, as mentioned earlier open ended interview method was used and thus a subjective analysis was done by the authors to ascertain if there exists any correlation between the CSR initiatives taken by the Infrastructure Development Companies in the region and

**IV. Analysis And Findings**

**4.1** Using statistical analysis based on the T Test the authors found that the Demographic Indicators of Economic Development in the sample regions where National Highways, State Highways and Dams were present were found significant with t test values for Khandwa **(-4.307)**, Mandsaur **(-4.045)**, Shivpuri **(-3.106)** and Jabalpur **(-3.813)** all of which were lesser than table values considered at 5% significance level. The t test value for sample region Chhindwara was found not to be significant with value **(1.042)** which was greater than the table value considered at 5% significance level.

The correlation analysis of the above significant factors in all cases were between **(0.679 and 0.872)** for the districts of Khandwa, Mandsaur, Shivpuri and Jabalpur. The same for the district of Chhindwara was as low as between **(0.263 and 0.396)**.

**Hence it was inferred that for the state of Madhya Pradesh the demographic indicators of economic development are significant in the regions where road and dam infrastructure exist and they show a high degree of correlation.**

**4.2** Using statistical analysis based on the T Test the authors found that the Economic Indicators of Economic Development in the sample regions where National Highways, State Highways and Dams were present were found significant with t test values for Khandwa **(-4.289)**, Mandsaur **(-4.076)**, Shivpuri **(-3.567)** and Jabalpur **(-3.678)** all of which were lesser than table values considered at 5% significance level. The t test value for sample region Chhindwara was found not to be significant with value **(1.176)** which was greater than the table value considered at 5% significance level.

The correlation analysis of the above significant factors in all cases were between **(0.671 and 0.912)** for the districts of Khandwa, Mandsaur, Shivpuri and Jabalpur. The same for the district of Chhindwara was as low as between **(0.271 and 0.389)**.

**Hence it was inferred that for the state of Madhya Pradesh the economic indicators of economic development are significant in the regions where road and dam infrastructure exist and they show a high degree of correlation.**

**4.3** Using statistical analysis based on the T Test the authors found that the Human Development Indicators of Economic Development in the sample regions where National Highways, State Highways and Dams were present were found significant with t test values for Khandwa **(-4.567)**, Mandsaur **(-4.987)**, Shivpuri **(-3.567)** and Jabalpur **(-3.098)** all of which were lesser than table values considered at 5% significance level. The t test value for sample region Chhindwara was found not to be significant with value **(1.456)** which was greater than the table value considered at 5% significance level.

The correlation analysis of the above significant factors in all cases were between **(0.712 and 0.913)** for the districts of Khandwa, Mandsaur, Shivpuri and Jabalpur. The same for the district of Chhindwara was as low as between **(0.113 and 0.395)**.

**Hence it was inferred that for the state of Madhya Pradesh the human development indicators of economic development are significant in the regions where road and dam infrastructure exist and they show a high degree of correlation.**

**4.4** Using statistical analysis based on the T Test the authors found that the Poverty and Hunger Indicators of Economic Development in the sample regions where National Highways, State Highways and Dams were present were found significant with t test values for Khandwa **(-4.234)**, Mandsaur **(-4.428)**, Shivpuri **(-3.145)** and Jabalpur **(-3.682)** all of which were lesser than table values considered at 5% significance level. The t test value for sample region Chhindwara was found not to be significant with value **(1.685)** which was greater than the table value considered at 5% significance level.

The correlation analysis of the above significant factors in all cases were between **(0.723 and 0.931)** for the districts of Khandwa, Mandsaur, Shivpuri and Jabalpur. The same for the district of Chhindwara was as low as between **(0.265 and 0.358)**.

**Hence it was inferred that for the state of Madhya Pradesh the poverty and hunger indicators of economic development are significant in the regions where road and dam infrastructure exist and they show a high degree of correlation.**

**4.4** In reference to the above the open ended interviews which were taken with officials of some of the infrastructure development and consulting firms working in the region brought out specific initiatives in domains of **(a)** improvement of sex ratio through education, **(b)** improvement of income of the region by providing ancillary business opportunities to locals, **(c)** improvement of connectivity of the region with the outer world, **(d)** improvement of electricity by arranging alternate sources of power, **(e)** improvement of primary education, **(f)** improvement of health by setting up health centres for the locals, **(g)** educating and providing opportunities which lead to reduction in cases of calorie undernourishment, and **(h)** using health centres and health workers for purposes of safeguard of underweight children in the region.

Though the company does all this because from its perspective operating in a region which is developing at a steady pace with no apparent overflowing dissent from the locals is much easier than is the case otherwise but nevertheless even if the same is done with business perspective in mind it is leading to a greater degree of economic development in the state of Madhya Pradesh.

Thus, it may be inferred that the greater degree of economic development in the region where road and dam infrastructure is present in the state of Madhya Pradesh may be attributed (amongst other factors) substantially to the initiatives being taken by the Infrastructure Development Companies working in these regions.

## V. Recommendations

- 5.1 In the event of it being proved that there exists a significant degree of correlation between the Corporate Social Responsibility initiatives being taken by the large infrastructure development companies and the economic development happening in the related regions it is recommended that the State Governments have representation with the committees of Ministry of Company Affairs and related Government of India bodies in the formulation of policies which necessitate a part of the net profit being attributed as mandatory CSR expense for all the listed entities. This would put the state government in the position to necessitate CSR in the state if a project in the state is being initiated.
- 5.2 In the light of the discussions above it is recommended that the mandatory CSR allocation be made on the project to project basis as a percentage of the project revenue with accounting being mandated in such a fashion. For this purpose State Governments may be put on committees on the Ministry of Company Affairs and Securities and Exchange Board of India which form public disclosure guidelines. Such disclosures if made on a state to state basis would better the prospects of allocating percentage of the earnings from the state towards mandatory CSR in the state.
- 5.3 It is seen that the large companies do their bit as proven in the discussion above but the same is evaded by the companies with smaller turnovers or who are not in the limelight or the ones whose operations find overlap with geographies of larger and more responsible companies. It is recommended that a structured discussion on this be initiated at a State Government, Ministry of Company Affairs and other stakeholder levels to find suitable solutions. The same may also be extended to non listed entities which have turnovers large enough to be engaging in socially responsible activities for the societies they work in.

## VI. Conclusion

- 6.1 To conclude it may be said that the paper proved empirically and substantially that there exists a correlation between the existence of Roads and Dams Infrastructure in Madhya Pradesh and the betterment as noticed in the parameters which are considered to be representative of Economic Development in the state.
- 6.2 Also that the above high degree of correlation may be attributed (amongst others) primarily to the Corporate Social Responsibility initiatives that the Infrastructure Development Companies take in the region that they are operating and thus steps should be taken to acknowledge, strengthen and further these initiatives.
- 6.3 The recommendations thus made in the light of furtherance of the above (6.2) and towards finding a systemic way which could be looked as an incorporation at a policy level post discussion amongst State Governments, Ministry of Company Affairs, Securities and Exchange Board of India and other stakeholders.

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