

INDUSTRIAL GEOGRAPHY OF MALWA PLATEAU

BY AMAL SARKAR JRF, GEOGRAPHY JIWAJI UNIVERSITY, GWALIOR, M.P.

ABSTRACT

Malwa plateau is situated in the heart of Madhya Pradesh, it is the most important physiographical part of the state. Malwa Plateau also includes minor areas of Rajasthan and Maharashtra, apart from Madhya Pradesh. The article focuses on the areas of Madhya Pradesh only. The purpose of the article is to study the industrial geography of the Malwa Plateau by looking into the various factors responsible for the location of industries. Further the article tries to find out the reason of location of specific industries. This region is not homogenous in socio- economic – physical features. The author has tried to apply economic models of Olof Jonasson's and Core-Periphery model in the context of Malwa Region. The application of Olof Jonasson's theory is true upto an extent as it deviates especially in Zone 3 and 4. The application of Core-periphery region as compared to the concentric zones of Olof Jonasson.

INTRODUCTION

Malwa Plateau is bestowed with rich agricultural and water resources but it is not so rich in mineral resources. It being located in the north-south and east-west corridor, therefore accessibility and transportation adds to its advantage. It is known as the food basket of Madhya Pradesh. Due to its geographical location, it has formed the industrial heart of the state. Various mineral rich regions like Vindhyas, parts of Bundelkhand and Baghelkhand transport their raw materials to the Malwa Plateau for both the footloose industries and for industries which have Material Index (weight of raw materials / weight of final products) close to 1. There are various kinds of industries located in the Malwa Region. The major industries are Agro-based (like wood, paper, sugar etc.) manufacturing



industries (like Metal and Mineral based, Chemical based) and specialised goods like Engineering and Electrical products.

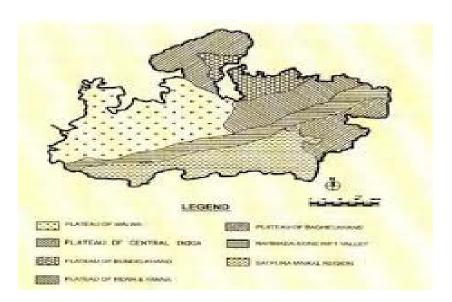


Figure showing Malwa plateau (dotted region) in the physical map of M.P.

NATURAL RESOURCES FOUND IN MALWA REGION

AGRICULTURAL:

Being the granary of the central India as a whole and Madhya Pradesh to be specific, it has large area under agriculture. This region is the largest producer of soybean in the country while it is the largest producer of wheat, maize, jowar, pulses, cotton, opium, groundnut, sugarcane and oilseeds in Madhya Pradesh.

WATER:

This region is gifted with many rivers and rivulets. It receives rainfall mostly in the monsoon season. The Vindhyas form the water divide between Narmada and her tributaries on its south and the tributaries of Yamuna in its north. Many dams and water reservoirs are made on the rivers, especially on river Narmada.

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MINERAL:

The region is not very rich in mineral wealth but still pockets of the region have valuable mineral wealth. These major pockets are graphite¹ in Betul, rock phosphate¹ and Mica² in Jhabua, tungsten in Hosangabad, Calcite in Barwani, Dolomite in Dewas³ and Slate in Mandasoor³.

ENERGY:

The region has developed various scales of hydro power projects, non-conventional and thermal power stations. Some of the major hydro-electric power projects are: Gandhi Sagar (on river Chambal) and on river Narmada- Omkareshwar, Maheshwar, Tawa and Narmada Sagar. While some of the major thermal power projects are Satpura-sarani, Sant Singaji and Malwa project⁴.

FACTORS RESPONSIBLE FOR INDUSTRIAL LOCATION

Industrial locations are complex in nature. These are influenced by availability of many factors like raw material, land, water, labour, capital, power, transport and market.

For ease of convenience we can classify the location factors into two: geographical factors and non-geographical factors. Each factor is given with respect of Malwa Region.

GEOGRAPHICAL FACTORS

- 1. Raw material: Nearly all of the agricultural products are found in the region while some minerals are mined locally while others are imported from the surrounding regions.
- 2. Power: Thermal and hydro power stations are the major energy producing units of Malwa region.
- 3. Labour: Malwa region has huge population base, both: skilled and unskilled.
- 4. Transport: Road/rail connectivity: The major national highways are N.H. 3,7,47 and 52. While major state highways in this region are SH1, 15, 18, 26 and 31.
- Storage and warehousing: MPWLC (Madhya Pradesh warehousing and Logistics Corporation) is running warehouses for the scientific storage of agriculture, manures, fertilizers, agricultural implements and notified commodities²².



- 6. Marketing feasibility: The core areas of Malwa Region, other nearby markets are Nagpur and Gujarat plain.
- 7. Characteristics of land and soil: Mostly black soil is found in Malwa Region.
- 8. Climate: Tropical climate is found in Malwa Region.
- 9. Precipitation and water resources: Rivers like Narmada, Betwa and Chambal and its tributaries flow in Malwa Region. Rainfall is restricted to Monsoon season.
- 10. Vulnerability to natural resources: the vulnerability of natural resources in Malwa is due to urbanization, illegal mining, deforestation and pressure on land.

NON-GEOGRAPHICAL FACTORS

- 1. Capital investment: it is promoted by encouraging investment through various MOU's between the government and private or public companies.
- 2. Technology: To turn the resource into an asset with value.
- 3. Availability of loans: Madhya Pradesh Financial Corporation is the premier institution of the state, engaged in providing financial assistance and related services to small to medium sized industries²¹.
- 4. Investment climate: Less labour unrest and Political stability in the region promotes the investment climate.
- 5. Government policies/regulations: The state government is active in promoting the industrial development through concessional industrial plots and other benefits by M.P. industrial and mining policies.
- 6. Influence of pressure groups: there are various think tanks and NGO's which engage itself in reflecting the lacunas of the government policies and actions.

INDUSTRIAL HUBS IN MALWA REGION¹:

Nearly every district has industrial areas but the major industrial bets are located in:

- 1. Pithampura in Dhar district
- 2. Manidweep in Raisen district



- 3. Pilukeri in Rajgarh district
- 4. Javara in Ratlam
- 5. Govindpura in Bhopal⁵
- 6. Kosmi industrial area in Betul⁶

TYPES OF INDUSTRIES FOUND IN MALWA REGION

AGRO BASED INDUSTRIES:

Malwa being an agricultural region produces a variety of food and non food crops. The major industries related to agriculture are Pesticides industry at Sagar, Organic fertiliser factory at Bhopal, Cattle food factory at Dhar. Sugar mills are located in Ujjain, Ratlam and Mandsaur³. Other agrobased industries are located in Ratlam⁷, Sagar⁸, Bhopal⁵, Khandwa⁹, Dhar¹⁰, Dewas¹¹, Mandsaur¹² and Guna¹³.

WOOD AND WOODEN BASED FURNITURE:

The southern and western parts of the Malwa region have high percentage of forest areas to the total areas. Hence the districts lying in these areas have wooden based industries. The raw materials are also transported to developed industrial districts for value addition. They are mostly located in Ratlam⁷, Bhopal⁵, Khandwa⁹, Khargone¹⁴ and Burhanpur¹⁵.

PAPER AND PAPER PRODUCTS:

Paper industry has a vital role to play in the socio-economic development of the nation. The raw materials of this industry are soft wood, bamboo, grasses, bagasse and waste paper. Besides cellulosic raw materials the industry also needs chemicals lie caustic coda, chlorine, lime, sulphuric acid and sodium-sulphate. It is a footloose industry. The major industries are located in Dewas¹¹, Bhopal⁵, Indore¹⁶, Ujjain¹⁷ and Dhar.



TEXTILE INDUSTRY:

The textile industry includes cotton, wool, jute, silk and synthetic fibres India is one of the leading producers of textile goods in the world.

COTTON TEXTILE:

This industry requires raw material (i.e. cotton) from the primary sector. They are located in Ratlam, Indore, Dhar, Bhopal, Burhanpur¹⁴ and Dewas¹¹.

READYMADE GARMENTS:

They are located nearly in all major districts. Significant readymade garments industries are located in Ratlam⁷, Betul⁶, Sagar⁷, Indore, Khandwa, Dhar, Bhopal, and Harda¹⁸.

WOOL AND SILK:

These industries are mostly located in Khandwa and Indore¹⁶.

MINERAL BASED:

These industries are based on the mining of minerals, found mostly in the local areas. They are located in Dhar, Sagar⁸, Indore, Dewas, Shajapur¹⁹, Alirajpur²⁰ and Khargone.

METAL BASED:

These industries are based on the valued addition of various metals like iron and steel plants. The metal based industries are located in Dhar, Indore, Dewas¹¹ and Bhopal.

ENGINEERING AND ELECTRICAL UNITS:

These industries cover a wide range of industries and contribute substantially to the manufacturing of industrial machines, machine tools, transport, transmission, building and construction, telecommunication equipments and modern sophisticated goods. The majority of them are located in Bhopal⁵, Dewas and Khandwa.

CHEMICAL BASED INDUSTRIES:

Chemical and allied industries constitute one of the most vital and essential components of the country's economy. This industry is still in the nascent stage of development. The development has been more perceptible after the liberalisation of industrial policy in 1991. In Malwa region, the significant industries are located in Indore, Dhar, Bhopal and Ujjain¹⁶.

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RUBBER, PLASTIC & PETRO BASED:

Rubber covers a wide range of products such as tyres and tubes of all kinds, footwear, instruments, sports goods, rubber coats etc. these industries are located in Mandsaur, Dhar¹⁰, Dewas¹¹, Bhopal⁵ and Indore.

LEATHER INDUSTRIES:

Malwa region produces a variety of leather goods including footwear, bags, suitcases and several industrial accessories. Malwa region constitutes mostly of small, medium and micro scale cottage industries. They located mostly in Burhanpur¹⁵, Dewas, Mandsaur and Khandwa⁹.

APPLICATION OF ECONOMIC MODELS

OLOF JONASSON'S THEORY

Olof Jonasson was a Swedish geographer who modified Von Thunen theory. His observations based on studies of Europe and North America. The zone 3 of Von Thunen, which was firewood and lumber production (i.e. forests), was shifted to last peripheral zone in Olof Jonasson's theory. The demarcation of zones is based on Economic rent (concept given by Von Thunen). It is inversely proportional to distance. The article applies the Olof Jonasson's theory in Malwa Region with minor modifications. The region is divided into 5 regions based on land use. It is observed that the most populated cities of the Malwa region are located nearly in the centre. Bhopal, Indore and Ujjain are the major populated areas. The other important populated centres are Dewas, Itarsi, Hosangabad and Shajapur. These places have higher population density and urban population and higher income levels. These centres act as market, which is presented by Zone 1. Dairy and truck products (like flowers) growing areas act as Zone 2. The next zone belongs to intensive and extensive agriculture i.e. Zone 3. The industrial belts of Malwa act as Zone 4. Most of the industrial hubs fall in this zone (like Pithampura, Pilukeri, and Manidweep). Some of the centres in zone 1 also act the as industrial hubs. The last zone in the outer periphery is the Forests i.e. Zone 5. This zone consists of districts having high percentage of forest and tree cover like Betul, Burhanpur, Jhabua, Alirajpur, Barwani etc. As a result the theory is applicable to a great extent but it is not applicable everywhere. There are places in zone 3, which are industrialised. Hence theoretically they should be located in zone



4.Similarly there are agricultural areas in Zone 4. According to the theory these zones should be homogenous but it reality it is not true.

Olof Jonasson's Theory Hpplication region TI N Zore I: City + suburbs In: Indore TI: Dairy + Truck Products B: Bhopal III: General Farming Ujain IV: Industrial Region S: Stajabur V: Forests: Outermast Itansi peripheral area H: Hosangabad V: Vidisha

CORE PHERIPHERY MODEL:

The core-periphery model was developed in 1963 by John Friedmann and it identifies the spatial distances from the core. The core-periphery model works on many scales, from towns and cities, to a global scale. The idea is that core (be it cities, regions or countries) will develop at much faster rate than peripheral areas. The core areas will develop because they possess physical or human advantages e.g. developed market, good transport links and capital. Malwa region has a core area consisting of Indore, Bhopal and Ujjain as major cities. Urban places of Vidisha, Itarsi, Hosangabad, Dewas and Shajapur act as the minor parts of core. The rest of the Malwa region acts as a periphery



to this core. The periphery provides labour to the core whereas the core provides capital to the periphery in return.

CONCLUSION:

The Malwa region is the "land of future" as it has huge untapped potential. Being located nearly at the centre of the nation, it can cater to both the northern and southern parts of the country. In the last few years it has shown tremendous growth in primary and secondary sector. New initiatives like "The Global Investors Summits" of the Madhya Pradesh government are attracting a lot of investments in the region. The state government is proactively encouraging industrial development with its policies like New Industrial Promotion Policy- 2014. There various industrial hubs act as the growth poles in the region. Establishing more SEZ (Special Economic Zones) and bringing more PPP (public private partnership) ventures for manufacturing shall bring greater industrial development in the region, along with creation of infrastructure and employment generation. The core region acts as the growth pole of the Malwa Region. The Malwa Region has all the integrants for industrial development (resources, energy, transportation, political stability and cheap labour force). In the years to come, it will be among the major industrial belts of the country.

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