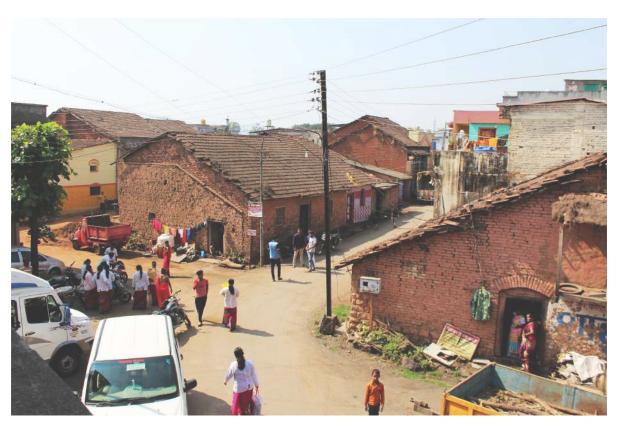
GRAM PANCHAYAT SPATIAL DEVELOPMENT PLAN

BORAVADE GRAM PANCHAYAT KAGAL TALUKA KOLHAPUR DISTRICT

Ministry of Panchayat Raj Government of India (G.O.I)

January 2021





सुनील कुमार, आई.ए.एस. SUNIL KUMAR, IAS



सचिव भारत सरकार पंचायती राज मंत्रालय SECRETARY GOVERNMENT OF INDIA MINISTRY OF PANCHAYATI RAJ

Dated: 23rd June,2020

D.O. No: M-11015/166/2020-PESA

Dear

The interdependency of villages, cities, industrial townships, urban centers call for spatial planning of villages for services and infrastructure. The unplanned development in Rural, Peri-urban areas and that in the vicinity of National & State highways, besides being inefficient in the use of resources, also has adverse social, environmental and health hazards.

- 2. The urban areas already have a system in place in terms of Master Plan for large cities / towns. However, at present there is no such perspective spatial planning process for rural areas.
- 3. I am happy to note that your esteemed institution has responded enthusiastically and agreed to collaborate with this Ministry in preparation of Gram Panchayat Spatial Development Plan. Gram Panchayats for the pilot are to be selected throughmutual consultation with the respective Institutes and the Panchayati Raj Department of the State Government, wherein priority is to be accorded to Panchayats located on or in the vicinity of the National or State Highways, having high potential for rapid economic development. This task must be completed by 30thJune, 2020 at the latest. Further details are in the enclosed Concept Noteon the Need for Spatial Planning in Rural Areas. Altogether, Master Plans for 32 GPs spread across 13 States will be prepared in the next four months. The Final Reports are to be made available to the Ministry latest by October 2020.
- 4. Keeping in view the strict time lines for completion of the exercise, a Video Conference (VC) meeting has been scheduled on 01stJuly, 2020 wherein consultation with all stakeholders will be held. The details of the VC may be seen in annexure. This will provide all of us an opportunity to discuss and understand the nuances and the modalities involved with the rollout of thisproject. It is important that all of us are on the same page since this project could lay the foundation for new 'drivers' of economic growth and social change in the country.

5. I look forward to your active participation in taking this unique initiative to its intended goals and objectives. I believe that this exercise will be a very good learning experience for all stakeholders.

Yours sincerely,

Encl: As Above

Sd/-(Sunil Kumar)

To

Institutions as per list attached.

Copy to:

- 1. Additional Chief Secretary / Principal Secretary/ Secretary, Panchayati RajDepartment (Andhra Pradesh, Assam, Chhattisgarh, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Gujarat, Tamil Nadu, Uttar Pradesh, Uttarakhand, and West Bengal)for information and request to appoint a Nodal Officer in the Office of Director / Commissioner Panchayati Raj to coordinate the effort with the respective Institution.
- 2. State Country & Town Planning Departments (as per list)for information.
- 3. Sh. Vishnu Chandra, DDG & Head of Group, RS & GIS Division, NIC HQ, A Block, CGO Complex, Lodhi Road, New Delhi for information and necessary action.
- 4. Dr. C.S. Jha, Chief General Manager, National Remote Sensing Centre, Hyderabad-500037, Andhra Pradeshfor information and necessary action.

Sunii Kumar)

Preface

To have been a part of a large-scale nation building project is the dream of every architect and citizen. As Students of Architecture, we were honored and humbled at the prospect of being able to aid in a venture than would shape the progress of our country.

To be able allocate land resources and a spatial hierarchy as a guide to sustainable and planned progress for the region, required a great depth of understanding of the daily functioning of all aspects of the residents' lifestyle. A participatory approach to the creation of the master plan was a high value asset to the planning process. To be able to understand the varying priorities and lifestyle requirements of various socio-economic communities within the village demographic would have been an impossible task to accomplish externally.

Giving the people of the village an opportunity to be an active part of the process of creating a master plan for their village also creates avenues that lead to active citizenship, starting a virtuous trend of active and responsible citizenship for generations to come, having seen a firsthand example of the benefits of participatory planning.

A well laid out hierarchical spatial plan also allows for the day-to-day activities of the village to go on without being hampered by the commercial/infrastructural development. This allows for the villages to grow into and prepare in advance, for the changes the development will bring, and grow into its position of a functional urban node.

The proximity of the chosen GPs to a Highway is also an asset that has been utilized to its maximum potential. Priority was given to creating non-temporary job creation aided by the existing transport/road network within the village. These industrial regeneration withing the village will go a long way in easing the migratory population load over the metropolitan cities in the vicinity, creating a meritorious cycle for both.

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Gram Panchayat Spatial Development Plan of Boravade, Kagal Taluka, Kolhapur District (January 2021)

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Gram Panchayat Spatial Development Plan of Boravade, Kagal Taluka, Kolhapur District (January 2021)

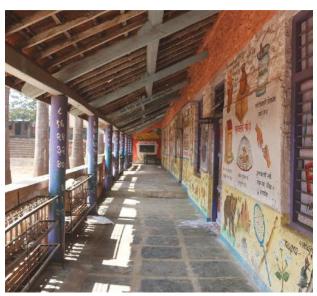
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CHAPTER 1

INTRODUCTION





CHAPTER 1 – INTRODUCTION

Panchayati Raj Institutions (PRIs) of India, are the grassroot level of a tri-fold democratic structure that allows the ideals of democracy to penetrate throughout the vastness of our society. They function as a vessel of self-governance: both for, and by, the people. These local governments are entrusted with the responsibilities to **prepare**, **plan**, **and implement schemes for economic development and social justice in rural India.** The Directive Principles of State Policy contained in the Constitution of India provide for the Panchayati Raj System. Following the 73rd Amendment of the Constitution, (73rd CAA), 1992 which came in to force on 24th April 1993.

The tripartite Panchayati Raj Institutional (PRI) system was institutionalized through Part IX of the Constitution. Key features of this basic framework, include:

- The three tiers of panchayats (Gram Panchayat, Intermediate Panchayat, District Panchayat)
- Gram Sabha
- A five-year term
- Reservation for SC, ST, and Women
- State Election Commission
- State Finance Commission.

The States are required to entrust these bodies with these powers, functions, and responsibilities so as to enable these institutions to function as institutions of self-governance. (Data sourced from: Concept Note for Spatial Planning in rural Areas)

1.1 INTEGRATING SPATIAL PLANNING AND GRAM PANCHAYAT DEVELOPMENT PLAN

As per the Census of 2011, 94% area of land is classified as "rural" and this is home to 69% of the population. Urban areas, in contrast, hold only 6% of land and 31% of its population. The Father of our Nation, Mahatma Gandhi, had suggested that-

independence must begin at the bottom, that every village ought to be a republic or panchayat with the right authority and resources to realize its full potential for economic and social development.

Rapid urbanization and growth of population in cities, mass rural- urban migrations for employment, a fast-degenerating agricultural sector and the changing socio-cultural fabric of villages in peri-urban regions are some of the issues that the 6.4 lakh villages of Rural India face today.

A review of the prominent pre-independence rural development initiatives in India, reveals that they were sector specific and community centric.

Post-independence, various rural development initiatives were taken up by Government of India during each of their Five-Year Plan periods. The 73rd amendment to the

The constitution allowed for a democratic, grass root governance of rural areas.

To further strengthen this notion, the XIV Finance Commission award created an opportunity for responsive local governance at the institutional level of the Gram Panchayat.

The guidelines issued by Ministry of Finance, instruct that proper, Gram Panchayat Development Plan(s) (GPDP) are to be prepared by the Gram Panchayat to account for basic services within the functions devolved to them as per State laws. These plans have to be participatory in nature, involving the community, particularly the Gram Sabha, in the formulation of priorities and projects. They will also have to ensure the mandates of social justice and economic development mentioned in Article 243G.

The GPDP is a comprehensive plan for the effective development of a village panchayat area. They aim to expand the scope of governance, of a village panchayat and to empower it as a development institution.

GPDP is generally aimed at Improving the basic amenities in a village panchayat.

This includes:

- Sanitation
- connectivity
- drinking water
- storm water drainage
- burial grounds, etc.
- Improving standard of living of poor families in a panchayat area.
- Eradication of absolute and relative poverty through convergence of
- government programmes and policies.
- Prevention and control of communicable diseases with the support of the health
- department.
- Providing social security to all sections of marginalized communities.
- Effective management of natural resources and sustainable development of
- livelihoods.
- Conserving soil and water.
- Ensuring 100 per cent enrolment in schools.
- Ensuring gender equality and equity in all aspects of development.
- Development of governing capability of village panchayats.
- Strengthening a Gram Sabha and improving the quality of a Gram Sabha.

GPDP has a clear component to address the vulnerabilities of the poor and marginalized Sections of the community and their livelihood through an integrated poverty alleviation plan. It allows for different, local models and innovations that are both appropriate and cost effective. It helps to transform GPs into institutions of local self-governance and to cement the GP's identity as a development institution. Overall, the process of participatory planning for a Gram Panchayat Development Plan is expected to improve service delivery, enhance citizenship, motivate volunteerism, create space for an alliance of people's institutions and groups and improve governance.

The content mentioned above refers only to the sectoral development of the villages/Gram Panchayats, while the spatial dimension is not incorporated in these

programs. Today, the flagship rural programs of the Government of India are utilizing Information Technology and Geo-Spatial technology, and have in-built convergence mechanisms; however the pressing need is to integrate these into a spatial planning framework that will take into consideration the dynamic settlement characteristics of Rural India. Spatial plans are the plans prepared for cities and towns popularly known as Master Plans and Development Plans and notified under their respective State/Town and Country Planning Acts, and Urban Development Acts. These Acts, in their title, include rural Planning, but in actual terms, there is no provision of preparing Master/Development Plans for countryside villages, nor has much attention been given by the State Governments to prepare the same.

There has been no serious attempt to prepare Spatial Plans for rural areas, and considering the vast rural population of the country that has been deprived of access to basic facilities, herein lays the importance of preparing a template for a spatially integrated version of the GPDP, namely the GPSDP (Gram Panchayat Spatial Development Plan)

Further, the situation during the COVID-19 pandemic, the lockdown, and the resultant 'reverse migration' of a vast population of daily wage labourers, employed mainly in the informal Sector, poses a huge socio-economic problem and challenge to the government and administration.

So, the major challenge now is to provide gainful employment to these reverse migrants in their home villages and to provide them better infrastructure to grow and sustain their lives. Many governments across the country have taken various stop-gap initiatives like leverage MGNREGA to provide a congenial living environment to them, but long term planning is the need of the hour. Areas native to the Tribal Communities, are the most vulnerable in terms of food and nutritional security, and require close attention. With the Government of India, in these trying times under our Hon'ble Prime Minister Shri Narendra Modi launching 'Átmanirbhar Bharat' to address the situation, the seeds of it must be planted at the grass-root level.

The proposed Gram Panchayat Spatial Development Plan (GPSDP) has been conceived to address the issue and make the GP a small hotspot for future migration and better work and living opportunities. By virtue of its location on NH the GPs have huge potential for economic development in near future. Proper planning of the GP will allow for rational and sustainable use of land catering to various needs, including social, economic, developmental, and environmental needs. Hence the Panchayat needs to be capacitated to take over the larger canvas of local economic development in all spheres amongst their constituent villages so as to elevate them to level of a growth centre in near future.

1.2 MISSION OF GRAM PANCHAYAT SPATIAL DEVELOPMENT PLAN (GPSDP)

Mission of the GPSDP is to:

"To build and sustain a Panchayat of having vibrant economy and diversity through strong partnership with stakeholders to provide better Quality of Life."

1.3 VISION OF GPSDP

The vision of the Spatial Planning initiative is to create.

- A rural base of diverse, vibrant, and inclusive economies.
- A panchayat characterized by sustainable infrastructure and resource management.
- A congenial place for living and growth with affordable homes and neighbourhoods.
- A panchayat having happy and healthy residents.
- An area of endearing character and local identity.

1.4 STUDY OBJECTIVES

The study objectives thus include:

- Laying down broad policies and directions for growth in the desired direction so as to transform the GP into an Urban Node
- Determining the hierarchy, the Road and connecting network
- Establishing the zoning of land use with specific zoning for lands abutting the NH.
- Determining the standards for common facilities for education, health & social needs of the resident population and planning provisions for the same.
- Identifying the social and physical infrastructural requirements of the GP and planning for the same in convergence with Central and State initiatives and Schemes.
- Developing a mechanism for sustainable developments that harmonize both the needs of the environment and of development, as well as guidelines for such developments.
- Identifying the requirement of investments, finance mobilization and avenues for economic revitalization of the area.
- Suggesting policies for integrating the neighbouring cities, town and villages so that a holistic integrated development can happen on ground.

1.5 SCOPE OF WORK

The Gram Panchayat Spatial Development Plan/Master Plan will primarily be the planning for Agriculture and Farms, residential purposes, local markets, and commercial, Institutional area (for Banks, Post Office, Anganwadis, PHC, Schools etc), Parks and Gardens, Water bodies, Industries (Argo-based or MSMEs), and for making Rest-stops/Service areas or Lay-by areas along the Highway.

The salient parts of the Gram Panchayat Spatial Development Plan / Master Plan include:

- Preparation of Vision Statement
- Current state assessment & gap analysis in term of socio-economic factors, social and physical infrastructure.
 - Map preparation and spatial analysis with respect to housing typology, household income, road network, infrastructure and land holding
 - Spatial indices including socio-demographic indicators, housing, environmental determinants, infrastructural attributes and natural resource management.
 - Analysis of the economic situation of the Panchayat and identification of economic drivers and proposals for economic revitalization of the area.
 - Investment and implementation planning for proposed activities and structures

1.6 METHODOLOGY FOR PREPARATION OF GPSDP

To aid in obtaining a detailed understanding of the requirements of the population and the available land and infrastructural resources, the following exercises were conducted:

- A meeting was hosted with all members of the GP and the entire team toured the village along with members of the Gram Panchayat committee for an in-depth understanding of the problems faced by the region.
- Interviews and interaction with locals and households (approximately accounting to 5% of total households in the village).
- The existing infrastructure was extensively documented and discussed among the committee and Sir J.J COA team to come with solutions on the spot.
- Visual analysis of existing infrastructure in the village, sensing the adequacy and visualization of potential future developments.
- Data collection through interaction with common meetings with the local population, consideration of the common perspective for future development.

The data acquired herein was analysed through meetings conducted among the **SirJ.J COA** team and both, the residents, and officials of the **Guha Gram Panchayat.** The nature of the discussion ensured a participatory approach to the creation of the GPSDP.

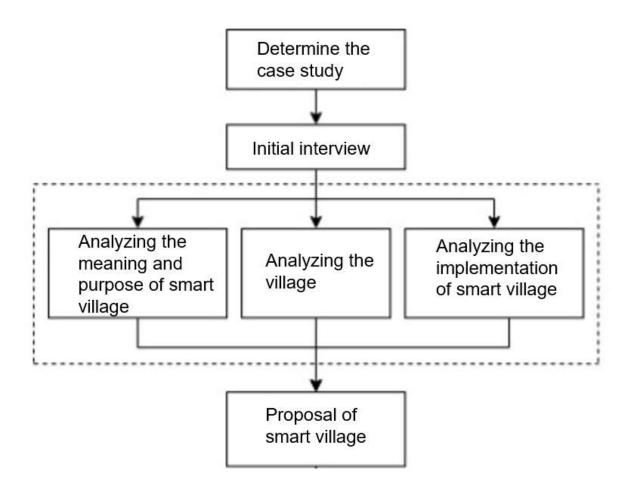


Fig 1.1: Methodology Chart (Source- Author)

Through the course of this discussion, a few key considerations emerged that guided the entire process:

- The zoning of the master plan needs to generate a distance in the various functions of the village, such as the administrative and educational day to day affairs and the more economic skill building centres and tourist rest stops, so that the circulation doesn't congest the proper functioning of the activities.
- A phase plan that prioritises the demands of the people, so as to be accommodative of changing trends in mentality and economic growth, and to be able to preserve the socio-economic and ecological character of the GP.

- Upon dialogue on all aspects of their lifestyles, it was agreed upon that a forceful change in agricultural and livelihood practices will damage the camaraderie of the people that forms the fabric over which any development stands. The phase plan will be able to accommodate any constructive changes in this aspect.
- The various Central/State government schemes under which the development projects have been proposed will also help make people aware of their rights and duties as citizens, this helps tying the grassroot tier to the rest of the Government bodies.



Image 1.1: After Discussion photo with Caretakers of Anganwadi (Source- Author)



Image 1.2: Discussion with Villagers in Primary school, Boravade (Source- Author)



Image 1.3: Discussion with Members of ZP and GP (Source- Author)



Image 1.4: Discussion with Members of ZP and GP (Source- Author)

1.7 PANCHAYATI RAJ LEGISLATIONS IN MAHARASHTRA (MAHARASHTRA PANCHAYATI ACT)

This section presents the Panchayati Raj Legislation in the State of Maharashtra. Maharashtra was amongst the first few states to implement the three-tier Panchayat Raj structure. The Maharashtra government constituted a committee for the same under the chairmanship of the then Revenue Minister Vasantrao Naik. Maharashtra already had the Mumbai Gram Panchayat Act, 1958 for governing Gram Panchayats. However, on the basis of recommendations of the Vasantrao Naik Committee report, the State enacted the Maharashtra Panchayat Samiti and Zilla Parishad Act, 1961. Consequently, the three-tier Panchayat Raj system was established and became functional in the State on 1st May, 1962.

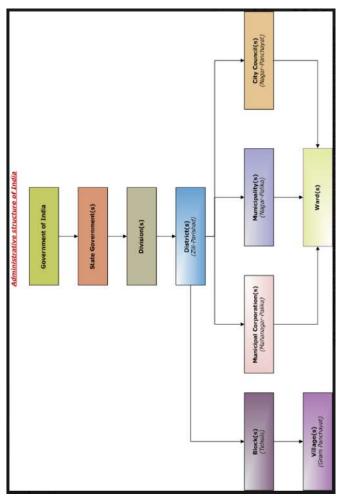


Fig 1.2: Administrative Structure of India (Source- GOI Website)

The Maharashtra government constituted several committees in the years ahead, to improve the functioning of the Panchayat Raj and strengthen PRIS. In 1970. the LN. Bongirwar Committee was constituted to evaluate the functioning of PRIS.

The committee emphasized the need of strengthening Pris financially and provide more autonomy to them in planning. One of the main recommendations of the committee was the constitution of District Planning and Development Boards. Such boards were established in 1972 and began formulating district level plans from 1974 Similarly, the P. B. Patil Committee was constituted for the evaluation of the Panchayat Raj system in 1984. The committee emphasised involving people and gave 184 recommendations for reforming the system and enabling greater participation. Due to the 73rd Constitutional Amendment Act, 1992.

The then existing Mumbai Gram Panchayat Act, 1958 and the Maharashtra Zilla Parishad and Panchayat Samiti Act were amended accordingly to comply with the 73rd constitutional amendment, Thus on 23rd April. In 1994 the amended Murnbal Gram Panchayat Act 1958 and the Maharashtra Zilla Parishad and Panchayat Samin Act, 1961 came into force in Maharashtra.

The Zila Parishad is composed of directly elected councillors and chairperson of the Panchayat Samitis as per the amendments made to the Zilla Parishad Act in the light of the 73rd Constitutional Amendment Act, 1992 The President Vice President and four Chairpersons of Subject Committees are elected from amongst the elected members. The Zila Parishad Act provides for a committee form of governance. According to the Maharashtra Zilla Parishads and Panchayat Samitis Act, 1961 (amended in 1966), each Zila Parishad has a standing committee. Besides, there are nine subject committees each dealing with finance, works, agriculture, animal husbandry, health, education. water management and sanitation women and child welfare and social welfare.

The members of Panchayat Samitis are elected from the electoral colleges in the Block for which each Zila Parishad electoral division is divided into two electoral colleges. The chairperson and deputy Chairperson of the Panchayat Samitis are elected from amongst the PS members. Unlike Zila Parishad, there is no subject committee system at the Panchayat Samiti level.

The Village Panchayat is composed of 7 to 17 directly elected members (depending upon the population). The Village Panchayat members elect the Sarpanch and the Upasarpanch for a five-year term.

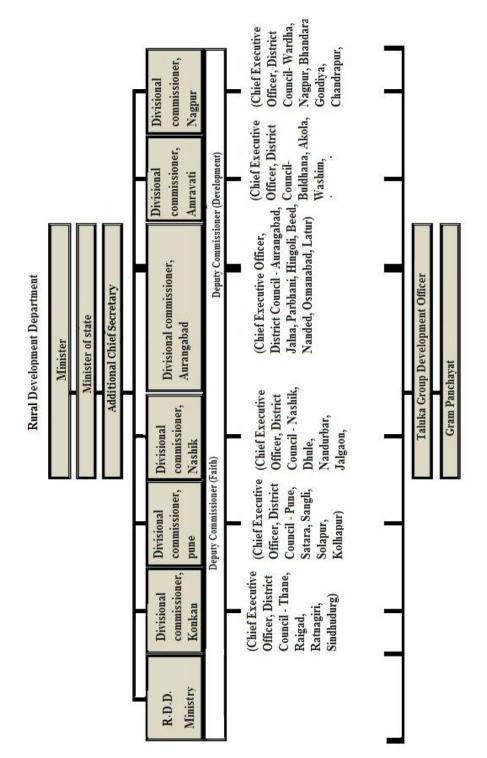


Fig 1.3: Administrative Structure of Maharashtra Rural Development Department (Source-Rural Development & Panchayat Raj, Government of Maharashtra Website)

1.8 CONCLUSION

- The zoning of the master plan has been generated to integrate the various functions of the village, such as the administrative and educational day to day affairs and the social infrastructure, like skill building centers, sports facilities, and tourist rest stops, along the lake, so that the circulation doesn't congest the proper functioning of the activities.
- The complete potential of the participatory planning project has been realized in the spirit of these discussions.
- The pressing infrastructural requirements for sports facilities, a new building for the PHC and the development of the Anganwadis have been given special priority in the phase development plan.
- The phase plan has priorities the demands of the people so as to be accommodative of changing trends in mentality and economic growth and to be able to preserve the socioeconomic and ecological character of the gram.
- Upon dialogue on all aspects of their lifestyles, it was agreed upon that a forceful change
 in agricultural and livelihood practices will damage the camaraderie of the people that
 forms the fabric over which any development stands. The phase plan will be able to
 accommodate the constructive changes, if proposed in the future, in this aspect.
- The various Central/State government schemes under which the development projects have been proposed will also help make people aware of their rights and duties as citizens, this helps tying the grassroot tier to the rest of the Government bodies.
- They were optimistic about future endeavors and understood deeply the need for sustainability to be added to their current development trends. The proposal for a water treatment plan and its location came from the people themselves.
- They were also familiar with current trends in terms of the pandemic and its effects on the economy as it affected them, they were aware of the changes they required to sustain their lifestyle.





CHAPTER 2

HIGH RESOLUTION SATELLITE DATA INFORMATION SOURCES FOR DEVELOPMENTAL PLANNING





CHAPTER 2 - HIGH RESOLUTION SATELLITE DATA INFORMATION SOURCES FOR DEVELOPMENTAL PLANNING

Indian Remote Sensing (IRS) satellites are providing timely information from regional level studies to farm level studies through multi sensor resolutions. Thus, Remote sensing and GIS are playing a rapidly increasing role in the field of land and water resources management and also becoming more and more important for environmental applications. There is a strong synergy between remote sensing and GIS, as remote sensing data are a major source of spatial information in GIS analysis and GIS data can be used as ancillary information to support remote sensing data interpolation. The synergy between these two technologies is a major advantage in the use of an integrated approach. Over the last two decades remote sensing and GIS have been widely used for the preparation of different types of thematic layers and integrating them for different applications that include land and water resources planning, agricultural applications, water resource management, disaster management, forestry applications, watershed management and urban applications etc.

2.1 SATELLITE DATA USED

- Potential tools such as remote sensing and GIS techniques are utilized for generation of various thematic resource maps in conjunction with collateral data.
- Data integration and generation of development plans are carried out in Geographic Information System environment.
- The data using GIS was provided by the NRSC, ISRO, Nagpur and is used for analyzing the current status and condition of the village land.

Gram Panchayat Spatial Development Planning

Boravade Gram Panchayat, Kagal Taluka, Kolhapur District, Maharashtra

Location Map

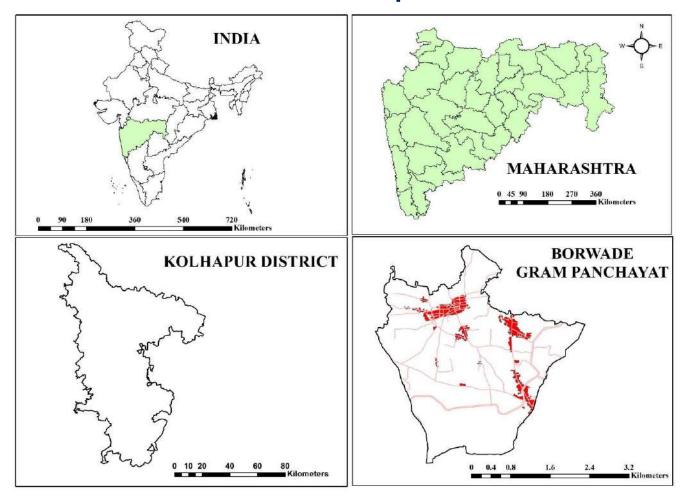


FIG.2.1. The above figure shows the location of Boravade G.P. area in Maharashtra, Kolhapur district.

Gram Panchayat Spatial Development Planning

Boravade Gram Panchayat, Kagal Taluka, Kolhapur District, Maharashtra

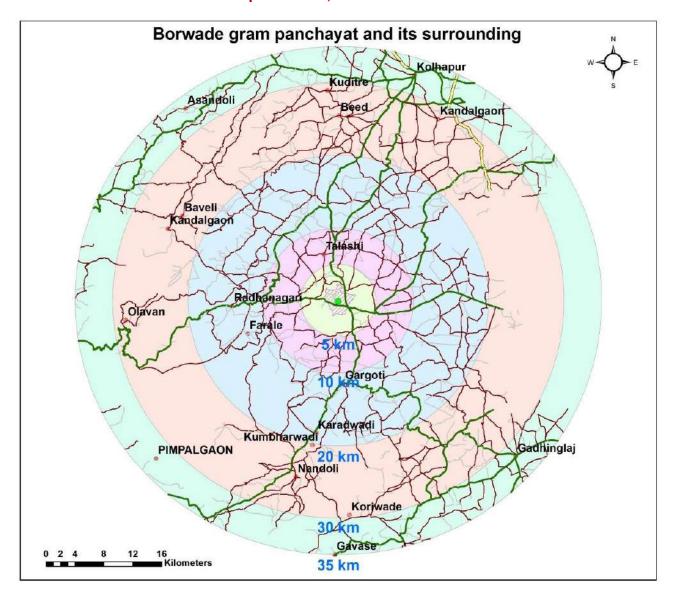


FIG.2.2. The above figure shows the Boravade G.P. area and surroundings with distance radius being 5km,10km,20km,30km and 35kms.

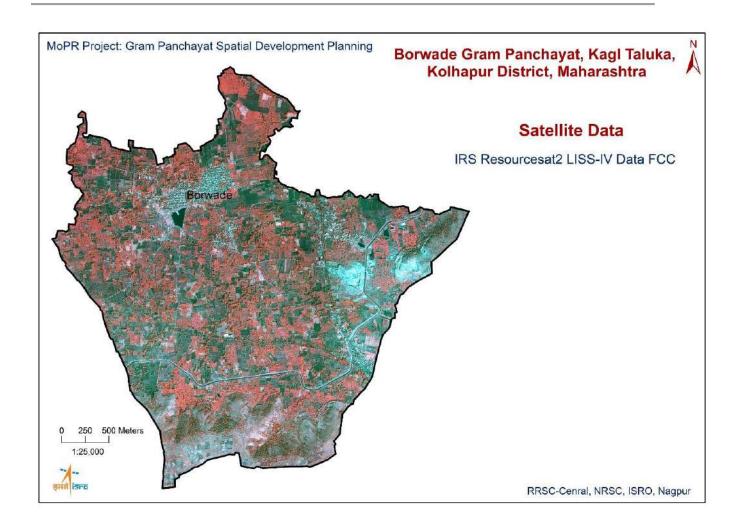


FIG.2.3. The above figure shows the satellite data for Boravade G.P area.

Gram Panchayat Spatial Development Planning

Boravade Gram Panchayat, Kagal Taluka, Kolhapur District, Maharashtra

IRS Carto sat 2E MX (Sub-meter) FCC Very High-Resolution Satellite Data



FIG.2.4. The above figure shows the very high-resolution satellite data for Borvade G.P from Google Earth.

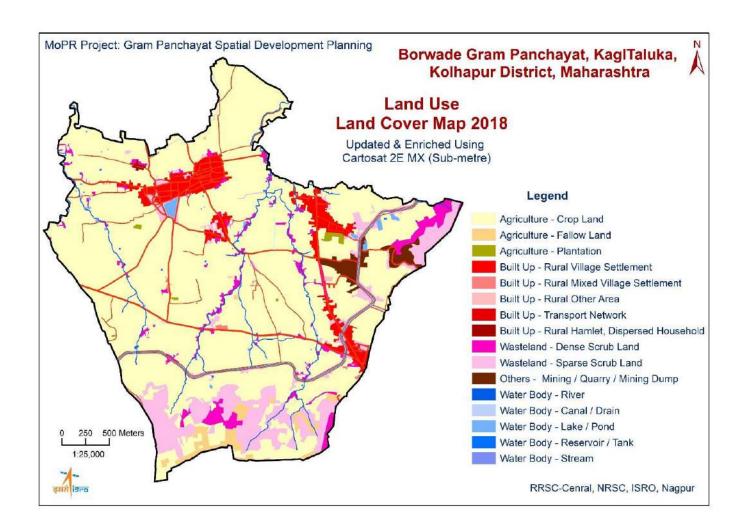


FIG.2.5. The above figure is the land use and land cover map for Boravade **G.P. Land cover maps** represent spatial information on different types (classes) of physical **coverage** of the **Earth's** surface, e.g., agricultural land, built up land, wastelands, forests, grasslands, croplands, lakes, wetlands.

MoPR Project

Gram Panchayat Spatial Development Planning

Boravade Gram Panchayat, Kagal Taluka, Kolhapur District, Maharashtra

Land Use / Land Cover Area Statistics, 2018

LULC Class	Area ha
Agriculture - Crop Land	726.9
Agriculture - Fallow Land	15.6
Agriculture - Plantation	2.4
Built Up - Rural Hamlet and Dispersed	
Household	0.9
Built Up - Rural Mixed Village Settlement	1.7
Built Up - Rural Other Area	0.7
Built Up - Rural Village Settlement	46.8
Built Up - Transport Network	3.3
Others - Mining / Quarry / Mining Dump	13.8
Wasteland - Dense Scrub Land	34.3
Wasteland - Sparse Scrub Land	95.1
Water Body - Canal / Drain	20.7
Water Body - Lake / Pond	4.5
Water Body - Reservoir / Tank	1.1
Grand Total	967.6



MoPR Project Gram Panchayat Spatial Development Planning

Boravade Gram Panchayat, Kagal Taluka, Kolhapur District, Maharashtra

Change in Land Use / Land Cover 2011 - 2018

Changes in LULC classes	Area (ha)
Agriculture Plantation to Crop land	0.6
Crop land to Built-up	8.8
Crop land to Canal/Drain	12.6
Crop land to Mining/Industrial	2.5
Crop land to Scrub land	27.8
Forest to Scrub land	4.5
No Change	878.5
Scrub land to Crop land	27.1
Scrub land to Mining/Industrial	5.2
Grand Total	967.6



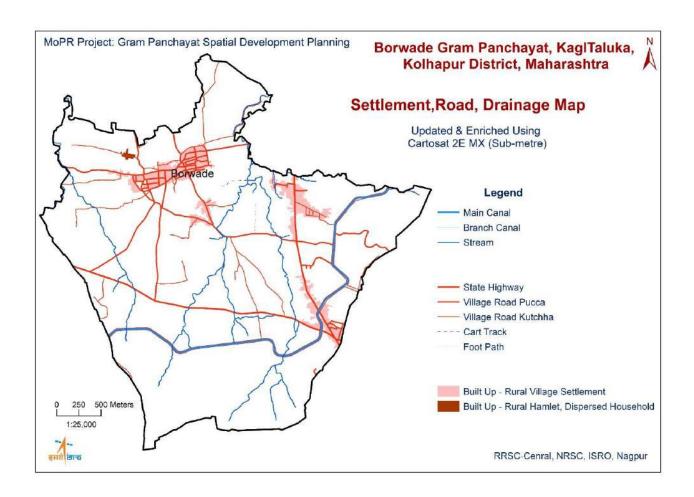


FIG.2.6. The above figure shows the settlement, road and drainage map for Boravade G.P. The G.P. is connected by state highway 116 and 179 to nearby cities. With Boravade and Bidri being the main settlements. And Doodhganga river and subsequent canals from Doodhganga dam being the major irrigation sources.

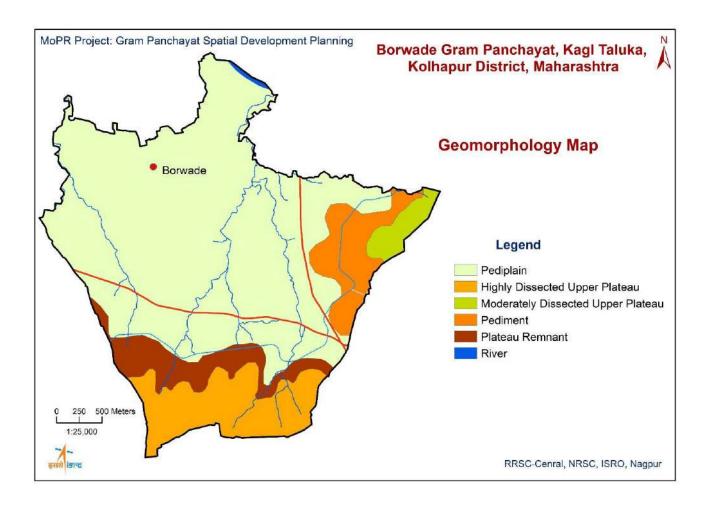


FIG.2.7. The above figure shows the Geomorphology map of Boravade G.P.

area, Geomorphological maps can be considered graphical inventories of a landscape depicting landforms and surface as well as subsurface materials. Geomorphological mapping is a preliminary tool for land management and geomorphological risk management.

*In geology and geomorphology, a pediplain is an extensive plain formed by the coalescence of pediments.

*A pediment, also known as a concave slope or waning slope, is a very gently sloping inclined bedrock surface.

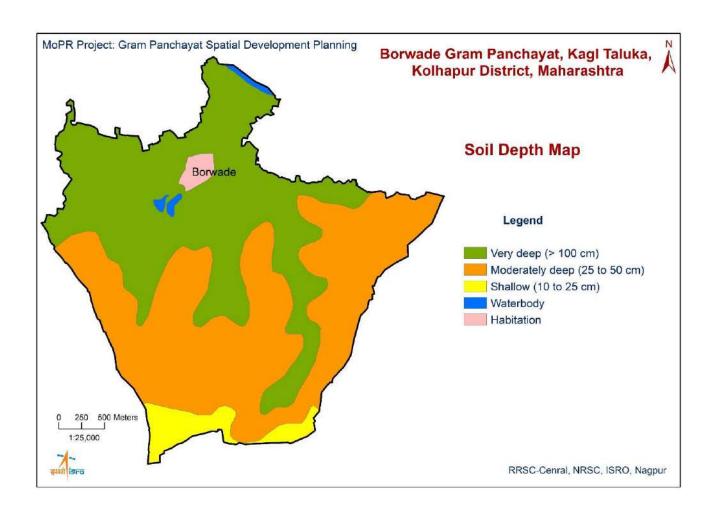


FIG.2.8. The above figure shows the soil depth map for Boravade G.P. area.

Soil water-storage capacity and effective rooting depth are mainly related to the soil depth. Soil degradation due to soil erosion is a serious threat to the soil quality and productivity in hilly areas.

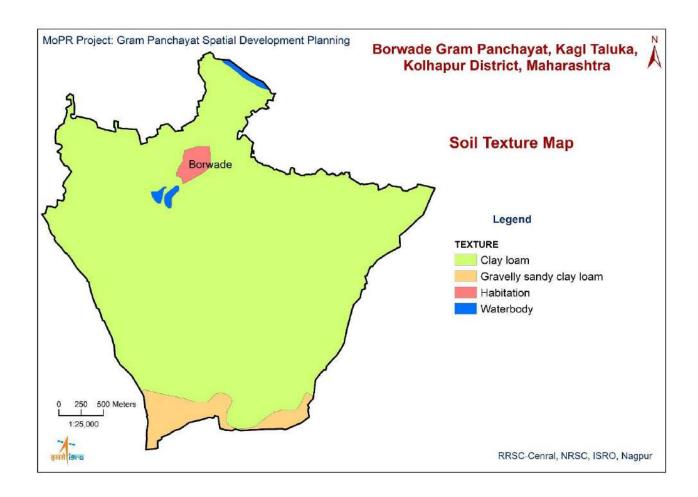


FIG.2.9. The above figure is the soil texture map for Boravade G.P. area.

The **ideal soil texture** is a mix of sand, silt, and clay particles, known as a loam. In most cases the particles will not be balanced, and the **soil** will need to be altered by adding organic amendments.

Most area of Boravade G.P is covered with clay loam which is excellent for agriculture.

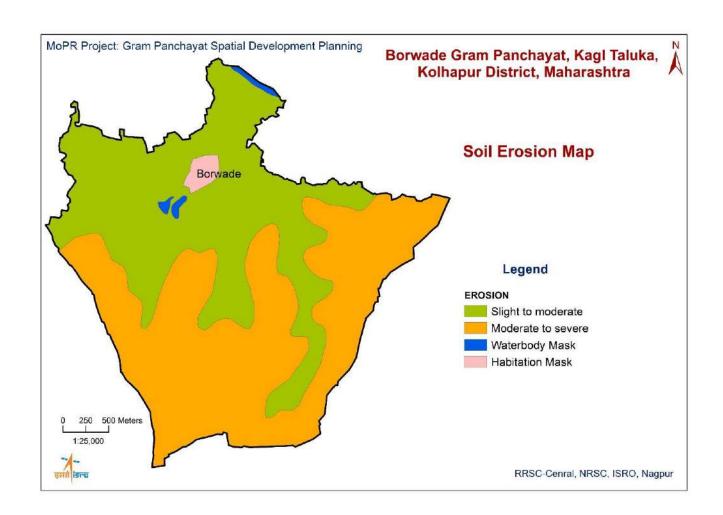


FIG.2.10. The above figure is the soil erosion map for Boravade G.P. area. The map illustrates the soil erosion rates divided into two classes the color gradation from green and orange indicates the intensity of the predicted erosion rates. Running water is the leading **cause** of **soil erosion**, because water is abundant and has a lot of power. So, as we can see in the figure, there is a problem of moderate to severe soil erosion in Boravade G.P.

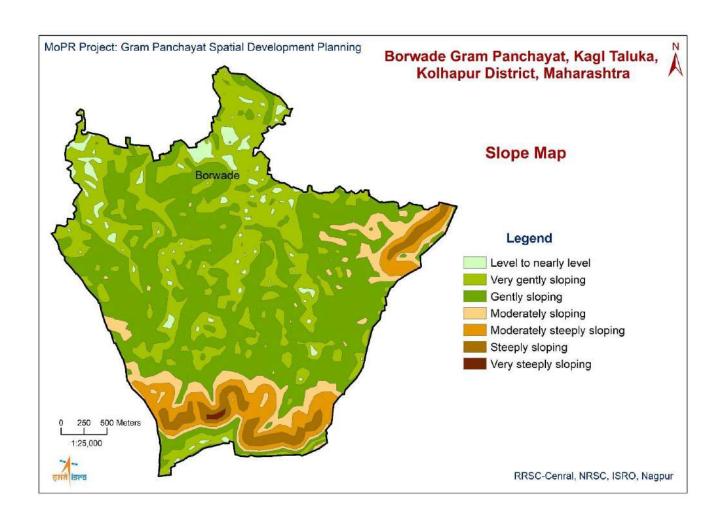


FIG.2.11. The above figure is the slope map for Boravade G.P. area. Slope maps are isoline (lines of equal value) maps of selected slope categories. This map provides a colorized representation of slope, generated dynamically using server-side slope function on Terrain service. The degree of slope steepness is depicted by light to dark colors - flat surfaces as gray, shallow slopes as light yellow, moderate slopes as light orange and steep slopes as red-brown.

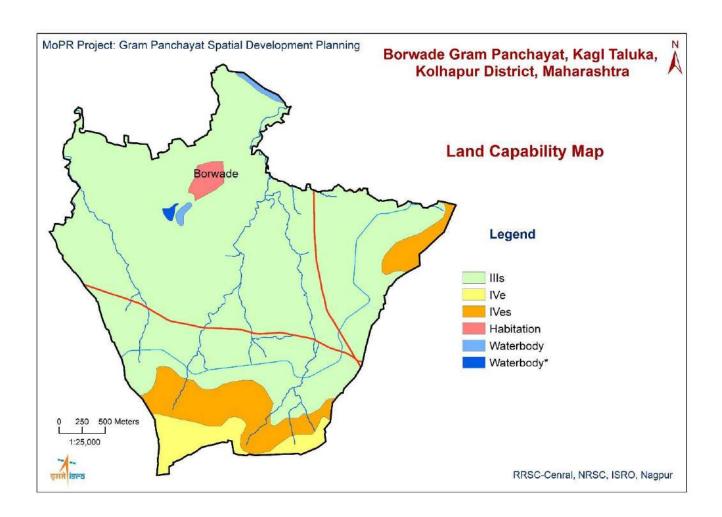


FIG.2.12. The above figure is the land capability map for Boravade G.P. area. Land use capability maps are maps created to represent the potential uses of a "unit"

of land. They are measured using various indicators, although the most common are five physical factors. In more scientific terms, these can be classed as lithology, edaphology, topography, gradient, and biotic features.

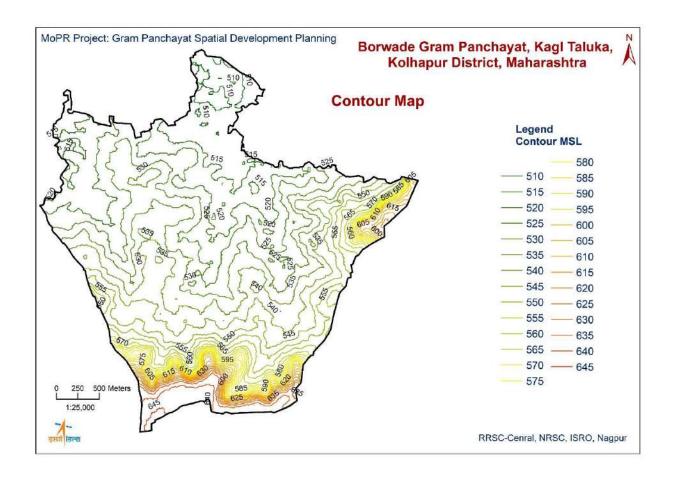


FIG.2.13. The above figure is the contour map for Boravade G.P. area.

a **contour** line (often just called a "**contour**") joins points of equal **elevation** (height) above a given level, such as mean sea level. A **contour map** is a **map** illustrated with **contour lines**, for example a **topographic map**, which thus shows valleys and hills, and the steepness or gentleness of slopes.

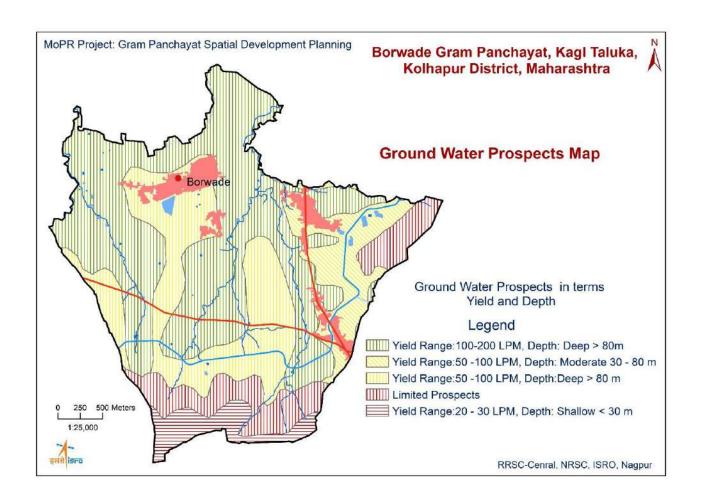


FIG.2.14. The above figure is the ground water prospects map for Boravade

G.P. area. Ground water being a hidden resource is difficult to dig out without proper understanding. Hence NRSC/ISRO has brought out nationwide scientific database on prospective ground water information from the state-of-the-art ground water prospects maps generated for the past one and half decade through Bhuvan-Bhujal portal. This information can be utilized by the govt/private agencies for development of ground water. It provides the required information on geological parameters connected to ground water exploration and the probable ground water prospects.

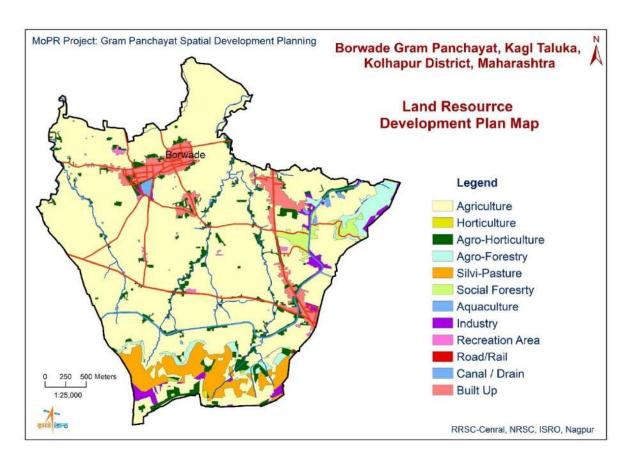


FIG.2.15. The above figure is the land resource development map for Boravade G.P. area. The land resource development plan has been made considering all the important factors like soil conditions, depth, erosion, water resources, etc.

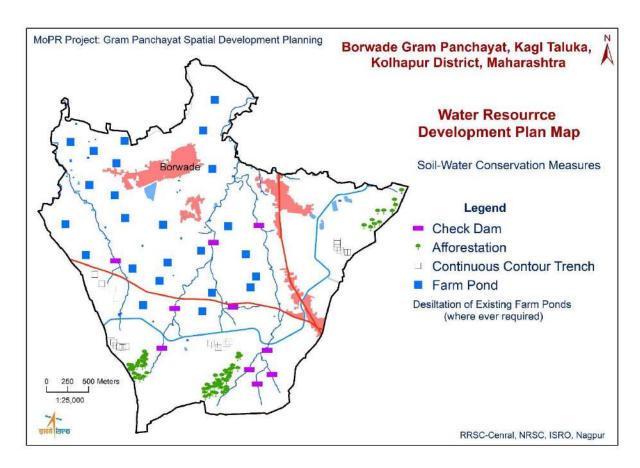


FIG.2.16. The above figure is the water resource development plan map for Boravade G.P. area. The water resource development plan has been made considering the current as well as future water considerations.

2.2 CONCLUSION:

The mapping data provided by NRSC, ISRO has been studied to understand and analyze the current status of the Boravade Gram panchayat region. More focus was on the Boravade Village region and in-depth study of that region is done and other region under Boravade GP are also being studied to have data for immediate context to village. All the necessary factors are being taken into consideration for the proposal for development of the village.





DEMOGRAPHY





3. DEMOGRAPHY

Demographic profile of a habitation forms a very important segment of analysis. The present profile of Boravade GP is diversified and is characterized by proportionate distribution of people of various age, sex, religion, caste and occupation.

3.1 DEMOGRAPHIC ASPECTS OF BORAVADE GP

Boravade Gram Panchayat is situated in the Kagal Taluka of Kolhapur District, Maharashtra with a population of 6240 as per census 2011 with 3082 female population (49.3%) and 3158 male population (50.7%).

In Boravade village the population of children with age 0-6 is 659 which makes up 10.56 % of the total population of the village. Average Sex Ratio of Boravade village is 976 which is higher than Maharashtra state average of 929. Child Sex Ratio for the Boravade as per census is 851, lower than Maharashtra average of 894.

Scheduled Caste Population constitutes to 11.8% which sums upto 737 persons while Scheduled Tribe Population constitutes to 0.5 % 35 persons.

3.2 AGE STRUCTURE, SEX RATIO AND LITERACY

Boravade is a large village located in Kagal Taluka of Kolhapur district, Maharashtra with a total of 1348 families residing. The Boravade village has a population of 6240 of which 3158 are males while 3082 are females as per Population Census 2011.

Boravade village has a lower literacy rate compared to Maharashtra. In 2011, literacy rate of Boravade village was 76.56 % compared to 82.34 % of Maharashtra. In Boravade Male literacy stands at 85.51 % while female literacy rate is 67.54 %.

Schedule Caste (SC) constitutes 11.81 % while Schedule Tribe (ST) were 0.56 % of total population in Boravade village.

This is basically because of the lack of awareness and absence of adequate social infrastructure. This gap is required to be filled to achieve the goals of community development and up gradation of Village.

Census Parameter	Census Data
Total Population	6240
Total No of Houses	1348
Female Population %	49.3 % (3082)
Total Literacy rate %	50.7 % (3158)
Female Literacy rate	30.1% (1877)
Scheduled Tribes Population %	0.6 % (35)
Scheduled Caste Population %	11.8 % (737)
Working Population %	51.8%
Child (0 -6) Population by 2011	659
Girl Child (0 -6) Population % by 2011	46.0 % (303)

The table represents the demographic data of Boravade gram Panchayat of Kagal Taluka according to Census 2011.

2.2.1 AGE STRUCTURE

The population distribution as per age has remained more or less constant in the village as per the Census of India data.

3.2.2 SEX RATIO

The sex ratio in the Village has increased in the last three decades but still; the proportion is not at all close to one. This gap is supposed to be filled through education and awareness in the community to promote and sustain societal balance.

3.3 FACTORS FOR THE GROWTH OF POPULATION

The village is well connected. With the increasing rate of trade and transport, there has been an increase in residential and commercial activities in the village. The growth of the city is towards the village and major changes have been witnessed in the land use pattern of the village and surrounding areas. The main occupation of sugarcane involves a steady income for all villagers also adding to the self-sustainability of the village.

3.4 IMPACT OF THE POPULATION GROWTH ON BASIC SERVICES

It is obvious with the increase in Population the requirement of basic services in the village has increased rapidly. It is important to maintain the existing one, upgrade the services to the standards and provide the services in case of deficiency. The village has to withstand the impact in respect of basic services like water supply, sewerage, storm water drainage, roads & building infrastructures, employment opportunities, sanitation, educational, medical facilities, transportation, electrification and security. This will ensure the requirements by 2030 and support a healthy and prosperous community living in the Village.

3.5 ECONOMIC BASE AND OCCUPATIONAL DISTRIBUTION

In Boravade village out of total population, 3234 were engaged in work activities. 90.63 % of workers describe their work as Main Work (Employment or Earning more than 6 Months) while 9.37 % were involved in Marginal activity providing livelihood for less than 6 months. Of 3234 workers engaged in Main Work, 1769 were cultivators (owner or co-owner) while 476 were Agricultural labourers.

The main occupation of the village being Sugarcane Agriculture where 75% of the income is produced which takes place over a period of three to four months only, the people can engage themselves in other work and side crops.

The development of PHCs and schools can add to the progress of the village where people are encouraged and incentivised.







SOCIAL INFRASTRUCTURE





CHAPTER 4: SOCIAL INFRASTRUCTURE

Social Infrastructure is an important aspect in the economic development of a community as well as its quality of life. It enhances the wellbeing of the society at large and helps in facilitating growth, business and development in all aspects.

Under social infrastructure, the following facilities can be introduced-

- Healthcare
- Education
- Socio Cultural
- Commercial
- Administrative
- Other Basic Facilities

4.1 HEALTHCARE

Good healthcare facilities are very essential to sustain a healthy and independent society. As per the norm, 1 PHC should be provisioned for every 20,000 people in Hilly/ Tribal/ Difficult Access areas and 1 PHC for every 30,000 people in Plain Areas. The bed norm is 4 to 6 beds in every PHC.

There is one PHC that is located in the neighbouring village. Borawade has one sub- health centre within the Gram Panchayat which is used for basic health check ups, treating small injuries, for raising awareness related to medical issues and for deliveries.

The sub centre has one doctor (female) who takes care of the functioning, with a number of ASHA workers employed to assist her.

The structure of the health centre is a ground floor structure with dilapidating walls. The small room available for carrying out deliveries is unhygienic and old.

Under the proposal, the Health centre should be redeveloped and brought to a better condition for a good quality of medical service within the village.

Sources: Indian Public Health Standards
Primary Survey



Image 4.1: Health Sub- Centre at Guha Gram Panchayat (Source- Author)



Image 4.2: Bad Condition of Room for Childbirth (Source- Author)

4.2 EDUCATION

The essence of Human Resource Development is education, which plays a significant and remedial role in balancing the socio-economic framework of the country. The Sarva Shiksha Abhiyan (SSA) is Government of India's flagship programme which aims to help India achieve Universal Elementary Education by making free and compulsory Education to the Children of 6-14 years age group, a Fundamental Right.

Currently, there is one major school within the Gram Panchayat, which consists of anganwadi, primary and middle school. Further classes and degree college is present in the neighboring village of Bidri. There are currently 6 anganwadis in the village, out of which 4 are under construction.

Many small improvements are required within the infrastructure of the school to make it more lively and a safe environment for the students. This includes better lighting conditions inside classrooms, better toilets for students and separate toilets for the teachers and to make improvements to the structure to be able to shelter the students during the rains.

Minor developments can be made within the school campus to improve the playground and garden without disturbing the existing structures.

The anganwadi's can be made into G+1 structure in which the first floor can be used for various activities like gymkhanas, skill development and for the public use of villagers.

(Sources: Sarva Shiksha Abhiyan Website Primary Survey)



Image 4.3: School Campus in Boravade (Source- Author)



Image 4.4: Back side of School, Boravade (Source- Author)



Image 4.5: School Campus in Boravade (Source- Author)



Image 4.6: Inside Classroom (Source- Author)

4.3 SOCIO CULTURAL

'Kusti', or wrestling, is a very popular sport in Kolhapur district which has been carried forward through many generations. Wrestling tournaments are held here almost every week and it is important to help carry this culture forward in the village and make the opportunity to learn easy and accessible to anyone who wishes for it.

The proposal is to create a good place for professional training and competitions for wrestling. By providing good infrastructure for this sport, the village can gain better recognition among its neighbors and also provide opportunities for young talent to develop. This amenity can be provided by making an additional floor over the existing gymkhanas.

(Source: Primary Survey)

4.4 RECREATIONAL

The village consists of a lake that is now used for washing of clothes and of cattle. The lakefront is now being cleaned and developed by the initiative of the local government.

Additional funds need to be provided to get it cleaned so that the area can become a good space for interaction and attraction of outsiders.

To continue the function of the dhobi ghat in this lake without polluting the water, an intervention is proposed to create a partition in the lake where a small portion can be used for washing of cattle, the wastewater of which will go into the newly proposed drainage system.

(Source: Primary Survey)



Image 4.7: Boravade Lake (Source- Author)

4.5 OTHER

The following miscellaneous facilities required and as suggested by the villagers are mentioned-

- Solar farming Can be set up on roofs of anganwadis and near the crematorium to deal with the problem of electricity in the village.
- Develop a social relationship between the sports facility near the crematorium and the tallim.

4.6 CONCLUSION

The infrastructure for education, recreation and social activities is in decent condition in the village and has enough revenue assigned to be improved. The infrastructure for healthcarewhich should be a priority given the current situation of the pandemic, has been neglected in the village and requires attention and funding. The building for the health sub-Centre is dilapidated and must be rebuilt to suit the needs of the facility.





HOUSING





CHAPTER 5: HOUSING

Housing in the country has been identified as a basic human need. Housing and housing amenities are an important aspect to assess the human wellbeing of the area. According to the Census in 2011, Boravade had 1348 houses for a population of 6240.

5.1 HOUSING CHARACTERISTICS

The local houses are built out of stone with Mangalore tile roofing, with wooden doors and windows. Laterite stone is a common building material which is available locally. Newer houses of the wealthier class have started making the use of brick and RCC, which stand out in the street.

The village does not have any houses that can be classified as heritage structures, as the oldest houses are 60 to 70 years old. These consist of a stone plinth, wooden openings, walls made of laterite stone and Mangalore tile roofs.

It is important to educate the villagers about the benefits of their local crafts and traditions to build their homes.

Source: Primary Survey



Image 5.1: Typical Houses in Boravade

(Source- Author)



Image 5.2: Old House in Boravade (Source- Author)



Image 5.2: Old House in Boravade (Source- Author)







Image 5.3 Housing (Source- Author)

5.2 CONCLUSION

The residential structures in the city are in good condition but can be improved upon. Most newly built houses are made out of RCC when the locally available material of laterite stone can be used for the same. The residents need to be made aware of the advantage of building with local materials and should be taught the skills to build and innovate using these.





AGRICULTURE AND ANIMAL HUSBANDRY





CHAPTER 6 - AGRICULTURE AND ANIMAL HUSBANDRY

Boravade is a small village located in Kagal Tehsil of Kolhapur district in Maharashtra, India. Total geographical area of the village is 1192 hectares. The village is surrounded by agricultural land that is owned and worked on by the residents of the village. The cultivation of sugarcane is prevalent as it is the most revenue generating crop of the area.

6.1 LAND CLASSIFICATION

Land is the basis for agriculture and other rural land uses, encompassing soils, climate, vegetation, topography and other natural resources. The land in Boravade GP can be classified as follows-

TABLE 6.1

LULC Class	Area ha
Agriculture - Crop Land	726.9
Agriculture - Fallow Land	15.6
Agriculture - Plantation	2.4
Built Up - Rural Hamlet and Dispersed Household	0.9
Built Up - Rural Mixed Village Settlement	1.7
Built Up - Rural Other Area	0.7
Built Up - Rural Village Settlement	46.8
Built Up - Transport Network	3.3
Others - Mining / Quarry / Mining Dump	13.8
Wasteland - Dense Scrub Land	34.3
Wasteland - Sparse Scrub Land	95.1
Water Body - Canal / Drain	20.7
Water Body - Lake / Pond	4.5
Water Body - Reservoir / Tank	1.1
Grand Total	967.6

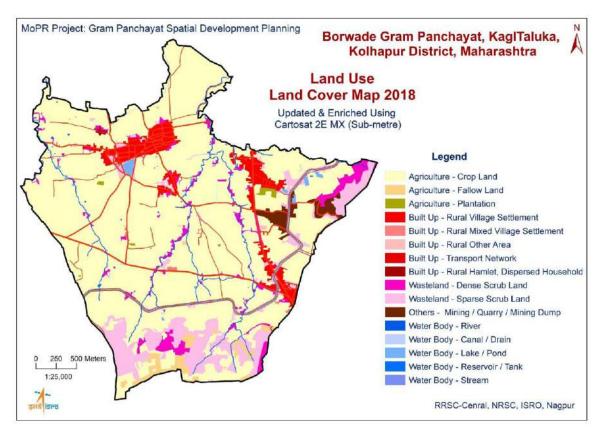


Fig 6.1: Temple, Guha (Source- Author)

6.2 AGRICULTURE

In Maharashtra, almost 82% of the rural population depends on agriculture. Both food crops and cash crops are grown in the state. Similarly, in Boravade most of the families depend on agriculture and cultivation of both food crops and cash crops can be seen in the village. In Boravade, sugarcane is cultivated in greater amounts. There is a sugar factory located in Boravade. Other than sugarcane- cultivation of rice, cabbage, fenugreek, coriander, corn and other local leafy vegetables can be found.

Boravade comes under sub montane zone.



Image 6.1 Agricultural land, Boravade (Source- Author)

Total geographical area- 967.6 hectares

Climate- Temp.- max. 40°C- min. 24°C in summer

max. 30°C- min. 10°C in winter

Rainfall-750mm-2200mm

Soil type- black clayey soil

Crops- sugarcane, rice, cabbage, fenugreek, coriander, corn, & other local leafy vegetables.

6.3 IRRIGATION

The irrigation system practiced in Boravade are-

Canal system- water is brought in through means of canals from the reservoirs-Radhanagri dam and Kalammwadi Dam. Canals are- canal from kalammwadi dam and doodhganaga river used as an irrigation source.

Groundwater is extracted using wells and hand pumps.



Image 5.3 Well (Source- Author)



Image 5.4 Pond (Source- Author)

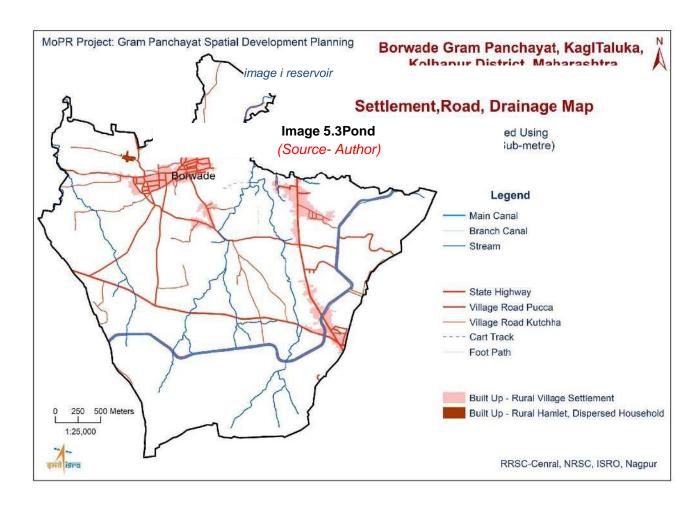


Fig 6.1: Location of Canals, Drainage and road (Source- Author)

6.4 LIVESTOCK

Most of the households in Boravade own cattle. The cattle are used for farming and transportation purposes. Some own buffaloes for dairy. A branch of Kolhapur Zillah Dudh Sangh is located in Boravade. Many raise chickens for eggs and meat. They also raise goats for mutton, which is a popular dish in Boravade.









TRANSPORTATION AND COMMUNICATION





CHAPTER 7 - TRANSPORT AND COMMUNICATION

Road network are an important aspect to develop a village. Proper connectivity with the cities around not only helps in making the facilities from out of the developed towns available for the village but also opens up opportunities from people from outside the village come and experience the village and gives us a scope for generating employment opportunities. Boravade is a village located in the Kolhapur district in the state of Maharashtra. The village is well connected to the city of Kolhapur by NH 166. The village has a nearby sugar factory in the village of Bidri which is 20km away from Boravade.

7.1 EXISTING ROAD NETWORK

The village is well connected with the surrounding villages and cities. A 4-lane national highway (NH 166) connects Boravade to the city of Kolhapur. The village has proper road connectivity internally as well. The existing roads were 3m wide which were now widened to 5.5m. The road widening process is ongoing in some parts of the village.

All the roads are made of concrete and the roads near the village squares are paved. There are many public squares around the village were the villagers gather on different occasions. These roads also connect different clusters of houses to these squares and these squares are interconnected throughout the whole village.

7.2 MODE OF TRANSPORT

The road widening project has been taken up because of the vehicular traffic that takes place in the village. In the village most of the people have their personal mode of transport, be it motor cycles, cars, tractors or even bullock cars. The tractors are not only used for farming but also used to transport their produce. The sugarcane produce that they harvest is directly sold to the nearby sugarcane factory.

For commuting in and out of the village people mostly use their personal vehicle. But those who do not own any vehicle use local transport like rickshaws or bus service maintained by Maharashtra State Road Transport Corporation.



Image 7.1 Public Square with Paved roads, Boravade (Source- Author)



Image 7.2 3m Wide internal old Roads of Boravade (Source- Author)



Img 7.3: Ongoing construction and widening of roads



Img 7.4: Newly constructed 5.5m wide roads.

7.3 CONCLUSION

The village is well connected to major cities and other villages and the road connectivity and quality inside the village is also in good condition and are widen to 5.5m for better usage. Most roads that connect major points inside the are also well maintained.

The major mode of transport to other villages is by bus or rickshaw. The frequency of buses and availability of rickshaws is adequate. Further effort needs to be taken to ensure safe travel of students, especially girls to other villages for higher education.

The current development of roads in the village is catering to the growth of population and increasing vehicles in village





CHAPTER 8

PROGRAMS AND SCHEMES





CHAPTER 8: PROGRAM AND SCHEMES

8.1 PROGRAMS AND SCHEMES

This are Some of the Schemes which runs under the **Government of India** under which different departments Ministries are listed below which can be helpful for the better future:

All below Departments fall under Central Government.

MINISTRY OF AGRICULTURE

The Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW) is one of the three constituent Departments of the Ministry of Agriculture & Farmers Welfare, the other two being Department of Animal Husbandry, Dairying & Fisheries (DAHD&F) and Department of Agricultural Research and Education (DARE).

- Pradhan Mantri Kisan Samman Nidhi Yojana (PM-KISAN):- started with a view to augment the income of the farmers by providing income support to all landholding farmers' families across the country, to enable them to take care of expenses related to agriculture and allied activities as well as domestic needs
- 2. **2. Pradhan Mantri Kisan Maan-Dhan Yojana (PM-KMY):-** started to provide social security to all landholding Small and Marginal Farmers in the country
- 3. **3. Pradhan Mantri Annadata Aay Sanrakshan Abhiyan (PM-AASHA):-** implemented to ensure Minimum Support Price (MSP) to farmers of notified oilseeds and pulses qualifying Fair Average Quality (FAQ) norms.
- 4. Pradhan Mantri Fasal Bima Yojana (PMFBY): Restructured Weather Based Crop Insurance Scheme (RWBCIS) implemented to yield index based PMFBY and weather index based WBCIS from Kharif 2016 to provide financial support to farmers suffering crop loss/damage arising out of natural calamities, adverse weather incidence and to stabilize the income of farmers etc.
- 5. **Promotion of Agricultural Mechanization for in: -** Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi.
- 6. **National Food Security Mission (NFSM): -** The scheme is implemented since 2007-08 to increase the production of rice, wheat and pulses through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy.

- Mission for Integrated Development of Horticulture (MIDH): The scheme is implemented for holistic growth of the horticulture sector covering fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.
- 8. **Rastriya Krishi Vikas Yojana: -**Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR): RKVY-RAFTAAR aims at making farming a remunerative economic activity through strengthening the farmers' effort, risk mitigation and promoting agribusiness entrepreneurship.
- 9. Paramparagat Krishi Vikas Yojana (PKVY): -The PKVY Scheme is implemented for promotion of Organic farming in our country 11. Mission Organic Value Chain Development for North Eastern Region (MOVCDNER):- MOVCDNER is implemented to promote organic farming in the North Eastern Region of the country for development of certified organic production in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification and creation of facilities for collection, aggregation, processing, marketing and brand building initiative.

MINISTRY OF RURAL DEVELOPMENT

For uplifting the rural sector of our country, the Ministry of Rural Development is implementing various schemes. These schemes are formulated to benefit the citizens of rural India who will eventually become the pillars of Indian Economy in the long run.

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): Programme Outlay Mahatma Gandhi NREGA entitles every rural household with 100 days of wage employment, adult members of which agree to do unskilled manual labour.
- 2. **Interventions and Initiatives:-** To enhance the reach and effectiveness of the programme, use of latest technology has been pre-dominant.
- 3. **Support during COVID:** In the wake of COVID and lockdown conditions, Mahatma Gandhi NREGA proved to be the safety net for employment and distressed migrants.
- 4. Launched in 2011, the **Deendayal Antyodaya Yojana National Rural Livelihoods Mission** (DAY-NRLM) aims at mobilizing about 9 crore rural poor households into Self Help Groups (SHGs) in a phased manner and provide them long-term support such that they diversify their livelihoods, improve their incomes and quality of life.
- 5. Rural Housing Knowledge Network: The 'Rural Housing Knowledge Network' was launched in collaboration with IIT, Delhi with the objective of compiling a comprehensive nationwide updatable repository of practitioners, institutions and practices related to affordable and sustainable solutions for rural housing and to develop a multilingual web portal in the public domain.

- 6. **Pradhan Mantri Gram Sadak Yojana (PMGSY)** was launched on 25th December,2000 with the objective to provide single all-weather road connectivity to all eligible unconnected habitations of the designated population size (500+ in plain areas, 250+in North-Eastern and Himalayan States) in rural areas of country.
- 7. **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)** is a key component of the National Skill Development Policy with a unique focus on the rural poor youth.
- 8. (National Social Assistance Programme) NSAP (National Social Assistance Programme) NSAP is a Centrally Sponsored Scheme of Ministry of Rural Development wherein monthly financial assistance is provided to elderly, widows and disabled persons belonging to BPL families.
- 9. **Saansad Adarsh Gram Yojana (SAGY)** was launched on 11th October 2014 by Hon'ble Prime Minister with the aim to develop model Gram Panchayats under the leadership of Hon'ble Members of Parliament.
- 10. **Skill development through Rural Self Employment Training Institutes (RSETI),** which provides skilling, thereby enabling the trainee to take Bank credit and start his/her own Microenterprise
- 11. **The Shyama Prasad Mukherji Rurban Mission (SPMRM)** was launched by the Honorable Prime Minister on February 21st, 2016 to deliver catalytic interventions to rural areas on the threshold of growth.

MINISTRY OF EDUCATION

To achieve the universalization of elementary education, the government has started numerous projects and programs under the National Policy of Education.

The main aim of these schemes is to improve access to quality education, learning capacity and cognitive development.

- 1. **Samagra Shiksha** an overarching programme for the school education sector extending from pre-school to class 12 has been proposed by the Union Budget for holistic school education in 2018-19.
- 2. **National Program for Education of Girls at Elementary Education (NPEGEL)** aims to reach girls, not enrolled in schools. The main focus of this program is to break gender stereotypes and to make sure girls get a good education at the elementary level.
- 3. **Mid-day Meal Scheme**: Otherwise known as the National Programme of Nutritional Support to Primary Education, this plan was launched in 1995 to provide mid-day meals to children studying in primary class.
- 4. National Means-cum-Merit Scholarship Scheme (NMMSS) The Central Sector Scheme 'National Means-cum-Merit Scholarship Scheme Was launched in May, 2008

- with the objective of awarding scholarships to meritorious students of economically weaker sections @ Rs. 500/- per month (i.e., Rs. 6000/- per annum) to arrest their drop out at class VIII and encourage them to continue study at secondary and higher secondary stage up to class XII.
- 5. National Scheme of Incentive to Girls for Secondary Education (NSIGSE) -The centrally sponsored was launched in May 2008. The objective of the scheme is to establish an enabling environment to reduce drop outs and to promote the enrolment of girl child belonging to SC/ST communities in secondary schools and ensure their retention.

MINISTRY OF WOMEN AND CHILD DEVELOPMENT

Ministry of Women & Child Development promoting social and economic empowerment of women through cross-cutting policies and programmes, mainstreaming gender concerns, creating awareness about their rights and facilitating institutional and legislative support for enabling them realize their human rights and develop to their full potential.

- 1. Pre-School-Education (PSE) focuses on total development of the child, in the age up to six years, mainly from the underprivileged groups. ÿ Beneficiaries between the age groups of 3 to 6 are to be provided Preschool Education, before they enter class 1. It is provided at the Anganwadi Centre, by the Anganwadi worker and includes nonformal education and playful activities.
- 2. **Supplementary Nutrition:** The objective of the component is to focus on supplementary feeding and growth monitoring for prevention of Vitamin A deficiency and nutritional anemia.
- 3. **Immunization:** Immunization of pregnant women and infants (0-9 months) to protect children from six preventable (through administering vaccines) diseases e.g., poliomyelitis, diphtheria, pertussis, tetanus, tuberculosis and measles. ÿ Beneficiaries are immunized on specific.
- 4. **Health Check and Referral Services:** Health care to children and antenatal care of expectant mothers and postnatal care of nursing mothers.
- 5. **Nutrition and Health Education: Behavior Change Communication (BCC)** strategy for women so they can look after their own health, nutrition and development.
- 6. **POSHAN Abhiyan** It is a known fact that undernutrition is an outcome of not one but multiple detrimental factors. These factors play their role in helping sustain this continuous burden of undernutrition; leading to our inability to achieve our desired

human resource potential, generation after another. In order to achieve its true potential and play the role as a global superpower India will need to focus on eradication of malnutrition so as to ensure that the coming generations are healthy, enabling higher intellectual potential, leading to enhanced work productivity.

MINISTRY OF HEALTH AND FAMILY WELFARE

The National Health Mission targets to improve the primary and secondary health care which are provided through public health institutions including Sub Health Centre's (SHCs) and Primary Health Centre's (PHCs), Urban Primary Health center's (UPHCs), Community Health Centre's and Sub-district/District Hospitals.

- Ayushman Bharat Health and Wellness Centres (AB-HWCs): Sub-Centres and Primary Health Centres are upgraded as AB-HWCs to provide Comprehensive Primary Health Care (CPHC), by expanding the services from existing Reproductive and Child Health (RCH) and Communicable Diseases services to include services related to Non-Communicable Diseases (NCDs), Mental Health, Ear Nose Throat (ENT), Ophthalmology, Oral health, Geriatric and palliative health care and Trauma care as well as health promotion and wellness activities like Yoga.
- Janani Suraksha Yojana (JSY): JSY is a safe motherhood intervention which aims to reduce maternal and neonatal mortality by promoting institutional delivery among pregnant women.
- 3. **Janani Shishu Suraksha Karyakram (JSSK):** JSSK aims to eliminate out of pocket expenses for pregnant women (PW) delivering in public health institutions, antenatal and postnatal complications of pregnancy and sick infants up to 1-year accessing public health institutions for treatment.
- 4. **Immunization**: Universal Immunization Programme (UIP) is one of the largest public health programmes for reduction of vaccine-preventable under-5 mortality rate.
- 5. Home Based Care of Newborn and Young Children (HBNC/HBYC): Under this programme, home visits are undertaken by ASHAs to assess the health status of the child and provide counselling to the family on healthy child care practices
- Rashtriya Bal Swasthya Karyakram (RBSK): Under RBSK, comprehensive healthcare
 for children is provided to ensure that the children thrive and grow to their fullest
 potential through early detection of birth defects, diseases, deficiencies, development
 delays including disability (4Ds).
- 7. **Family Planning: Services** are provided to the eligible couples to adopt family planning measures through temporary/ spacing methods such as oral contraceptive pills, IUCDs,

- Injectable Contraceptive MPA (Antara), condoms and permanent/ limiting methods including male and female sterilization.
- 8. **National Ambulance Service (NAS):** Free ambulatory services are provided by two models, namely Dial 102 and Dial 108. Dial 102 essentially consists of basic patient transport aimed to cater the needs of pregnant women and children. Dial 108 is primarily an emergency response system that is designed to attend to patients of critical care, trauma, accident victims, etc.
- 9. **Disease Control Programs:** Under various disease control programs, free treatment and diagnostics are ensured for Tuberculosis, Leprosy, Malaria, Dengue, Chikungunya, Japanese Encephalitis, Kala Azar, Filariasis, Viral Hepatitis, etc. Long Lasting Insecticidal Nets (LLINs) are distributed for protection against vector borne diseases.
- 10. **Direct Benefit Transfer (DBT):** DBT schemes such as Janani Suraksha Yojana (JSY) and Nikshay Poshan Yojana (NPY) are being implemented.
- 11. **Convergence:** MoHFW has partnered with MoPR to provide the essential Health services to the rural community by the National Rural Health Mission (NRHM) and Integrated Child Development Scheme (ICDS).

MINISTRY OF AYUSH

Centrally Sponsored Scheme of National AYUSH Mission (NAM) is a flagship scheme of Ministry of AYUSH approved and notified on 29.09.2014.

National AYUSH Mission (NAM) launched during 12th Plan for implementing through States/UTs.

The basic objective of NAM is to promote AYUSH medical systems through cost effective AYUSH services, strengthening of educational systems, facilitate the enforcement of quality control of Ayurveda, Siddha and Unani & Homoeopathy (ASU&H) drugs and sustainable availability of ASU&H raw-materials.

It envisages flexibility of implementation of the programmes which will lead to substantial participation of the State Governments/UT

- Scope of Convergence with MoPR Health has multiple determinants and therefore to successfully address the issue multi-sectoral coordination is necessary and therefore the linkages with line ministries & departments to successfully plan and carryout public health activities has already been envisaged in the scheme guidelines.
- Proposed activities for convergence at Anganwadi centres The Panchayati Raj Institution with its three-tier system functions as a units of local administration and governance.

MINISTRY OF SKILL DEVELOPMENT

The Ministry of Skill Development and Entrepreneurship (MSDE) has been set up in November 2014 to drive the 'Skill India' agenda - to converge existing skill training initiatives and to combine scale and quality of skilling efforts.

Schemes of Department are:

- Pradhan Mantri Kaushal Vikas Yojana (PMKVY) Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was launched in 2015 to encourage and promote skill development in the country by providing short duration skill training and incentivizing through monetary rewards to youth for skill certification.
- 2. **National Apprenticeship Promotion Scheme (NAPS)** "Apprentices Act, 1961" was enacted with the objective of regulating the program of training of apprentices in the establishments by utilizing the facilities available therein for imparting on-the-job training.
- 3. **Jan Shikshan Sansthan** the scheme (previously known as Shramik Vidyapeeth) is being implemented through NGOs in the country since 1967. The scheme was renamed as Jan Shikshan Sansthan in 2000. It is mandated to provide vocational skills to non-literate, neo-literates, persons with rudimentary level of education up to 8th and school dropouts up to 12th standard in the age group of 15-45 years.
- 4. Scope of Convergence with the Ministry of Panchayati Raj MSDE has partnered with MoPR to integrate skill development planning in the Gram Panchayats (GP) and to make skill training relevant to the needs of the rural population.
- 5. **Mahatma Gandhi National Fellowship (MGNF):** MGNF was launched to support the District administration in improving skill development program delivery as well as developing a cadre of committed and competent development leaders.
- 6. **Skills Acquisition and Knowledge Awareness** for Livelihood Promotion (SANKALP) SANKALP has four key result areas Institutional Strengthening; Quality Assurance of skill development programmes; Inclusion of marginalized population in skill development programmes; and Expanding Skills through PPPs.

There are several programs and schemes under Ministry Department which are for the benefit of the rural development.

Below listed are some useful programs run under Ministry Department:

Si.No.	Name of the Ministry	Major Deliverables	Applicable Scheme under GP
		All eligible habitations connected by all-weather roads	Pradhan Matri Gram Sadak Yojana (PMGSY)
		Wage employment and community as well as individual durable assets under MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
		Housing for All	Pradhan Matri Awas Yojana – Gramin (PMAY-G)
		All deprived households as members of SHG with bank linkages	DeenDayal Antyodaya Yojana – National Rural Livelihood Mission (DAY- NRLM)
1	Ministry of Rural Development (MoRD)	Mission Water Conversation under MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
		Pension for old, widow and disabled	National Social Assistance Programme (NSAP)
		Placement based and selfemployment skills for all eligible youths	Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDUGKY)
		Village roads with MGNREGA	Rural Self Employment Training Institute (RSETI)
		Solid and liquid Waste Management	Shyama Prasad Mukherji Rurban Mission
		N/A	Sansad Adarsh Gram Yojana (SAGY)
2	Ministry of Panchayat Raj	Capacity development of elected Panchayat representatives and Functionaries	Sabki Yojana and Sabka Vikash
2	(MoPR)	PES based office automation e.g. planning, monitoring, accounting, etc. and public service delivery	Rashtriya Gram Swaraj Abhiyan (RGSA)

			e-Governance: e-Gram
			SWARAJ, ePanchayat Mission Mode Project – Panchayat Enterprise Suit.
		100% student attendance and learning outcomes	Samagra Siksha
		Higher Secondary facility for girls	Mid-Day Meal
	Department of School Education and Literacy	Adequate School infrastructure with Sports facility	National Scheme of Incentive to Girls for Secondary Education (NSIGSE)
		Adult Education	National Means-cum-Merit Scholarship Scheme' (NMMSS)
3		N/A	Scheme for Providing Quality Education to Madrasas/Minorities (SPEMM)
		N/A	Right to Education Act
		N/A	Adult Education Programme under National Literacy Mission Authority)
		N/A	Scheme of Support to NGOs for Adult Education and Skill Development
1	Ministry of Health and Family Welfare	Health sub-centre as Wellness centre	National Health Mission (NHM)
4		Coverage under Health Protection Scheme	Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana

Emergency ambulance facility	Programmes are: National Programme for Health Care of the Elderly (NPHCE) Poor Patients-Financial Support Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)Pradhan Mantri Bima Yojana (PMBY)	
100% immunisation	Infrastructure Maintenance Programme	
100% institutional delivery	Universal Immunization Programme (UIP)	
100 % treatment for Malaria, Tuberculosis, Filaria, Kala Azar	Pulse Polio Programme	
PHC-Primary Health Centre	Janani Shishu Suraksha Karyakram (JSSK)	
CHC-Community Health Centre	Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)	
Health insurance	Family Planning	
N/A	Home based care for newborn and young child	
N/A	National Vector Borne Disease Control Programme (NVBDCP)	
N/A	Prevention and Management of Diarrhoea	
N/A	National Deworming Day - Free Deworming campaign organized twice a year	
N/A	National Iron Plus Initiative	
N/A	Nutritional Rehabilitation Centres	

		N/A	Leprosy –(National Leprosy Eradication Programme)
		N/A	Universal screening of NonCommunicable Diseases
		N/A	National AIDS Control Programme
		N/A	National Tuberculosis Elimination Programme
		N/A	Rashtriya Bal Swasthya Karyakram and Early Childhood Development
		N/A	Adolescent Health Rashtriya Kishori Swasthya Karyakram- Scheme for promotion of Menstrual Hygiene Adolescent Friendly Health Clinics (AFHC) Weekly Iron Folic acid Supplementation
		N/A	Extension of Pradhan Mantri Garib Kalyan Package: Insurance Scheme for Health Workers fighting COVID-19
		Piped drinking water for all households	Swaccha Bharat Mission- Gramin (Phase-II
	Ministry of Jal Shakti	IHHLs for all households	Jal Jeevan Mission
5	Department of Drinking Water and Sanitation	Sanitation including Solid and Liquid Waste Management	N/A
		Water Conservation and Rain-Water Harvesting	N/A

		Soil Health Card for all and optimal fertilizer use.	Pradhan Mantri Kisan Samman Nidhi Yojana (PM- KISAN)
		Timely and quality inputs – seeds, fertilizers, pesticides Organic agriculture	Pradhan Mantri Kisan Maan-Dhan Yojana (PM- KMY
		Horticulture	Pradhan Mantri Annadata Aay Samrakshan Abhiyan (PM-AASHA)
		Horticulture potential use	Pradhan Mantri Fasal Bima Yojana (PMFBY)/Restructured Weather Based Crop Insurance Scheme (RWBCIS)
		Crop insurance coverage	Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)- Per Drop More Crop
6	Ministry of Agriculture and Farmers Welfare	Value chain development	Promotion of Agricultural Mechanization for in-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi
		Quality Seed	National Food Security Mission (NFSM)
		Insurance	Mission for Integrated Development of Horticulture (MIDH)
		N/A	Rashtriya Krishi Vikas Yojana - Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY- RAFTAAR)
		N/A	Paramparagat Krishi Vikas Yojana (PKVY)

		N/A	Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)
		N/A	Rainfed Area Development (RAD)
		N/A	Sub-Mission on Agroforestry (SMAF)
		N/A	Sub-Mission on Agriculture Extension (SMAE)
		N/A	Sub Mission on Seed and Planting Material (SMSP)
		N/A	Sub-Mission on Agricultural Mechanization (SMAM)
		N/A	Integrated Scheme for Agricultural Marketing (ISAM)
		N/A	National Agriculture Market (eNAM)
		N/A	Development and Upgradation of Rural Haats in to Gramin Agricultural Markets (GrAMs)
		N/A	Integrated Scheme on Agricultura Cooperation
		Full potential use in dairy, goatry, poultry	Rastriya Gokul Mission
7	Department of Animal Husbandry & Dairying	Full potential use of Fisheries	National KamdhenuBreeding Centre(NKBC)
		Immunisation services for animal resources and veterinary care	RGM Award

		Value chain development.	E_Pashu Haat
		N/A	National Awards
		N/A	Embryo Transfer Technology
		Scholarships for SCs / OBCs / Minorities	Scholarships Pre-Matric Scholarship to the SC Students studying in classes IX & X Pre-Matric Scholarships to the Children of those Engaged in occupations involving cleaning and prone to health hazards Post-Matric Scholarship for SC students Upgadation of Merit of SC Students
		Skill Training or Social Security for all differently abled persons	Free Coaching Free Coaching Scheme for SC and OBC Students
8	Ministry of Social Justice & Empowerment	Aids and Appliances	Schemes for Economic Development Credit Enhancement Guarantee Scheme for the Scheduled Castes (SCs) National Safai Karamcharis Finance and Development Corporation (NSKFDC) National Scheduled Castes Finance and Development Corporation (NSFDC) Special Central Assistance to Scheduled Caste Sub Plan (SCA to SCSP) Scheme of Assistance to Scheduled Castes Development Corporations (SCDCs) Self Employment Scheme for Rehabilitation of Manual

9 Ministry of Finance Full coverage under Suaraksha Bima Yojana Full coverage under Atal Pension Yojana Full coverage under Pradhan Mantri Jeevan Jyoti Beema Yojana Banking correspondent with micro ATMs Pradhan Mantri Jan Dhan Yojana Electricity connection for all deprived households N/A Pradhan Mantri Sahaj Bijli Harghar Yojana				Scavengers (SRMS) Venture Capital Fund For Scheduled Castes
9 Ministry of Finance Full coverage under Atal Pension Yojana Full coverage under Pradhan Mantri Jeevan Jyoti Beema Yojana Banking correspondent with micro ATMs Pradhan Mantri Jan Dhan Yojana Electricity connection for all deprived households N/A Pradhan Mantri Sahaj Bijli			Unisex toilets for differently-abled	
Full coverage under Atal Pension Yojana Full coverage under Pradhan Mantri Jeevan Jyoti Beema Yojana Banking correspondent with micro ATMs Pradhan Mantri Jan Dhan Yojana Electricity connection for all deprived households Pradhan Mantri Sahaj Bijli				
Full coverage under Pradhan Mantri Jeevan Jyoti Beema Yojana Banking correspondent with micro ATMs Pradhan Mantri Jeevan Jyoti Beema Yojana Pradhan Mantri Jan Dhan Yojana Electricity connection for all deprived households Saubhagya Pradhan Mantri Sahaj Bijli			Full coverage under Atal Pension	
ATMs Yojana Compared to the proper	9	Ministry of Finance		
households Ninistry of Power N/A Pradhan Mantri Sahaj Bijli				
households Ninistry of Power N/A Pradhan Mantri Sahaj Bijli		-		
Pradhan Mantri Sahaj Bijli	10	Ministry of Power		Saubhagya
	10	iviiiisti y di Power	N/A	

11	Ministry of Petroleum and Natural Gas	LPG Gas Under Pradhan Mantri Ujjwala Yojana for all deprived households	Pradhan Mantri Ujjwala Yojana
	Ministry of Food and	Food security	Village Grain Bank Scheme
12	Public Distribution	N/A	Targeted Public Distribution System
		Creation of non-farm employment opportunities	Prime Minister Employment Generation Programme(PMEGP)
	Ministry of Micro, Small and Medium Enterprises	Bank linkages for clustered economic activity	Credit Guarantee Trust Fund For Micro and Small Enterprises(CGTMSE)
		Skill training for rural youths	Interest Subsidy Eligibility Certificate(ISEC)
		Development of rural markets	Science and Tecjnology Scheme
		Development of Micro & Small Enterprises Cluster	Market Promotion and Development Scheme(MPDA)
13		N/A	Scheme of Fund for Regeneration of Traditional Industries (SFURTI)
		N/A	A Scheme for Promoting Innovation,Rural Industry and Enterpreneurship(ASPIRE)
		N/A	Khadi Gramodyog Vikas Yojana(KGVY)
		N/A	Coir Vikas Yojana(CVY)
		N/A	Coir Industry Technology Upgradation Scheme(CITUS)

		•		-
			N/A	Science Aand Technology (S & T) for Coir
			N/A	National SC & ST Hub (NSSH)
			N/A	Skill Upgradation & Mahila Coir Yojana(MCY)
			N/A	Entrepreneurship and Managerial Development of SMEs through Incubators
			N/A	A scheme for Prom,oting Innovation.Rural Industry and Entrepreneurship Skill Development Programme(ESDP)
			N/A	Assistance to Training Institutions(ATI)
L				
	14	Department of Sports	Sports activities at Gram Panchayat level	Scheme of Human Resources Development in Sports
			Established of Sports Hub at Gram Panchayat level	
			Provide focused resource support to tribal Gram Panchayats covered under 'Mission Antyodaya'	National Fellowship and Scholarship for Higher Education of ST students
			Scholarship to STs students	National Overseas Scholarship for ST candidates
	15	Ministry of Tribal Affairs	Minimum Support Price (MSP) to Minor Forest Produce (MFP)	Pre-Matric Scholarship (Class IX and X)
			Vocational Training Centres for the tribal youths	Post Matric Scholarship (PMS) for ST students
			Marketing support to tribal products	Eklavya Model Residential Schools

		N/A	Institutional Support for Development and Marketing of Tribal Produce
		N/A	Minimum Support Price for Minor Forest Produce
		N/A	Grant in Aid to Voluntary Organizations working for welfare of STs
		N/A	Strengthening education among ST Girls in a low literacy Districts
		N/A	Pradhan Mantri Van Dhan Yojana
		N/A	Vocational Training Centres in Tribal Areas
		N/A	Establishment of Ashram Schools in Tribal Sub-Plan Areas
		N/A	Hostels for ST boys and ST Girls
		Development of Agro Processing Cluster under Pradhan Mantri Kisan SAMPADA Yojana	Central Sector - Pradhan Mantri Kisan Sampada Yojana (PMKSY)
16	Ministry of Food Processing Industries	Backward and forward linkages	Centrally Sponsored- Prime Minister Formalisation of Micro Food Processing Enterprises (PM-FME)
		Cold chain development	N/A
		Creation/Expansion of Food Processing / Preservation Capacities	N/A
		_	

		Pucca Anganwadi buildings for all 0-6 children with all services including addressing malnutrition	Anganwadi Service Scheme			
		All women – led deprived households as per SECC to be provided adequate livelihoods options or social security	Poshan Abhiyan			
		N/A	Scheme for Adolescent girls			
17	Ministry of Women and Child Development	N/A	Beti Bachao Beti Padhao Scheme			
		N/A	Pradhan Mantri Matru Vandana Yojna			
		N/A	Support to Training and Employment Programme for Women (STEP)			
		N/A	Integrated Child Protection Scheme			
		Afforestation	National Afforestation Program			
10	Ministry of Environment, Forest and Climate Change	Agro-forestry	National Mission for Green India			
18		Social Forestry	National Forestry Action Programme			
		Minor forest produce	Joint Forest Management Programme			
		Placement and self – employment skills for all eligible youths	Pradhan Mantri Kaushal Vikas Yojna (PMKVY)			
19	Ministry of Skill Development and	N/A	Pradhan Mantri Kaushal Kendras (PMKK)			
	Entrepreneur	N/A	National Apprenticeship Promotion Scheme (NAPS)			

	N/A	Capacity Building Scheme
	N/A	Udaan
	N/A	Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP)
	N/A	Standard Training Assessment and Reward (STAR)
	N/A	Skill Loan Scheme
	N/A	Pilot Project on Entrepreneurship
	N/A	Craftsmen Training Scheme
	N/A	Advanced Vocational Training Scheme
	N/A	Vocational Training Programme for Women
	N/A	Schemes for upgradation of ITIs

Table 8.1: Schemes and Departments of state government

(Source- By Framework for preparation of Block and District Development Plan)

The marked schemes are specifically chosen for the generation of funds and development of Boravade village

8.2 CONCLUSION

The above mentioned schemes from Central Government are being refered in order to analyse the current situation of schemes and programmes run in India .Accordingly the study of the programmes and schemes runs under State Government are also being studied in order to know the schemes implemented in district level and Grampanchayat level.

The proposal made for the development of the village will fall under this schemes so that the implementation process gets simplified.

The interrelation between the existing programmes and schemes and the proposals made for the spatial development plan for the village should go hand in hand. Therefore the study of programme and schemes of under central government and state government was important.





CHAPTER 9

RECOMMENDATIONS, STRATEGIES AND PROPOSALS





CHAPTER 9: STRATEGIES & RECOMMENDATION

9.1 THE GRAM PANCHAYAT VISION, STRATEGIC GOALS AND SPATIAL DEVELOPMENT

Gram Panchayat Spatial Development Strategy helps to give direction, to identify and create opportunities, to create consensus, to mobilize resources, and finally, to achieve results. Keeping in mind preparing Boravade Gram Panchayat (GP) competitively and at par with the national level Gram Panchayats, a vision needs to be created and achieved by 2030. In order to gear up the development process of Boravade, strategies need to be made both at block level and sectoral level.

9.1.1 RECOMMENDATIONS

- Skill Development (for small business guidance. small workshops)
- Anganwadi with proper development and sports facilities.
- Ghantagadi (garbage vehicle)
- PHC (primary health care center): Though the PHC is already available in the village it required some additional provision.
- Ambulance and parking facility.
- Gymkhana (Along with professional gym) and Sports Ground for the Village
- Beautification of lake
- Running track around the lake
- Dhobi ghat (Clothes and Cattle washing)

9.1.2 TOWARDS 2030

The next 10 years will see significant growth of the panchayat in terms of population and infrastructure. The benefits of this growth must be fairly distributed and must adhere to directions obtained from analysis. Through this, goals for strengthening the development process of the GP may be met and Boravade GP by 2030 may be:

• Spatially distributed and equipped physically and infrastructurally to accommodate future growth.

- Planned for the future thereby promoting integration through sustainable access to panchayat resources of all kinds.
- Integrated industrial, commercial and social sectors which provide access to a range of panchayat resources.
- Model GP for others to take the path
- Economically competitive on both district and state arena.

9.1.3 STRATEGIC GOALS

The panchayat vision mandates five main goals for the Spatial Development Strategy which may be listed below as:

To promote planned growth of all the villages under Boravade GP in an integrated approach: This includes promoting growth in the GP so as to accommodate future migration from the hinterlands.

To create more efficient and productive rural areas through the growth and development of agriculture: The aims to consolidate and promote future agriculture-based opportunities.

To rapidly reduce existing disparities in infrastructure and facilities: This aim is to improve infrastructure services at GP level with an aim towards 2030.

To improve the overall quality of the rural environment through best practices: This aims at judicious and sustainable use of rural resources so as to improve local economic development.

To address the issue of employment through creation of opportunities: This aims to create avenues for employment and make the inhabitants of the GP 'Atma Nirbhar'.

To create educational opportunities for the youth of Boravade and neighboring villages by proposing Anganwadi's and Schools.

9.2 DEVELOPING BORAVADE AS AN INTEGRATED GP

To formulate 'Gram Panchayat Spatial Development Strategy' for Boravade GP, first step would be to strengthen the different sectors through minimizing the critical backlogs found through analysis. The broad strategies in this regard may be:

- To foster development at the regional level by strengthening the GP;
- To strengthen the panchayat level infrastructure in terms of basic services and sustainability;
- To integrate policies of central government with these strategies so as to achieve national objectives;
- To create more economic opportunities for the current residents and the future so that the GP grows up as an important growth node.

9.3 STRENGTHENING OF INDUSTRIAL SECTOR

- The cash crop of Kolhapur District being sugarcane the people should be encouraged:
- To establish small industrial area as innovation and incubation center with basic industrial infrastructure like connectivity, uninterrupted power, water, therein;
 - To encourage private sector participation in infrastructure upgrading;
 - To provide special incentives to encourage establishment of small-scale industries and household industries specially related to agro-processing;
- To create an eco-system for supporting rural-nano and growth-nano enterprises;
- To provide special package necessary for startups of household industries;

9.4 STRENGTHENING OF PHYSICAL INFRASTRUCTURE

As has been clarified in the analysis water supply, power supply, sanitation facilities, solid waste management and education needs augmentation of resources in Boravade GP. Strategies for strengthening of these sectors which also induce development include:

- According to the needs of the residents of Boravade village, one of their main necessities was that the PHC in the village is underdeveloped which is to be widened and also with proper infrastructure.
- proper structures for anganwadi's and Schools.
- A separate area for professional gym.
- Community hall: For functions and ceremonies in Boravade village. For halt and stay for the pilgrims passing Boravade village towards various historical places in Kolhapur
- Ambulance and parking facility.

- Recreational areas such as Playgrounds, parks.
- To provide LED street lighting throughout all metaled roads of Boravade at a spacing of 25 m
- To augment all possible resources to supply tapped water to households, establishments of proper purification plant for the same and regulating the same by use of water-meter.
- To augment all possible resources to supply uninterrupted power to households and establishments. Electrification of all houses and establishments needs to be taken up immediately.
- To make proper waste disposal mandatory for public premises, restaurants, dhabas, small stalls, chicken & meat centers etc.;
- To create awareness amongst the community about sanitation and its importance for a
 healthy life, especially the areas that needed the toilets most, so as to promote healthy
 sanitation practices. For the same, the school children may be educated to reach out to
 their family. An intensive campaign is proposed to be launched in schools for this
 purpose
- To ensure recycling of bathroom water (through its reuse in kitchen gardens), separation
 of biodegradable and non-biodegradable waste at source and transportation of only the
 remaining waste to the waste disposal system;
- To make it mandatory for landlords to construct separate bathing and toilet facilities for their tenants
- To declare the Boravade GP as Open Defecation Free (ODF) after successful completion of sanitation program;
- To make provision for management of waste by construction of Solid Waste Processing Centre (SWPC) along with maintenance of organic vermin compost unit. This will help in providing employment to a portion of unskilled labors;
- To upkeep Panchayat infrastructure with proper annual maintenance and cleaning;
- To make provision for drainage cleaning in the GP area once in six months
- To plan for leadership for evening and morning baradari (Vigilance/Patrolling);
- To rehouse the existing road-side vegetable market into a proper permanent market at selected location;
- To propose an LPG distribution center integrating it with Common Service Center;
- To plan for creating a future competitive environment and enhanced ICT applications by providing free Wi-Fi facilities to the residents of the Panchayat.

9.5 STRENGTHENING OF SOCIAL INFRASTRUCTURE

The GP of Boravade is deficient in terms of academic attainment and related infrastructure. Moreover, the healthcare facilities, religious institutions have very weak infrastructure. Hence, strategies for strengthening of these sectors which also induce development include:

- To plan for adequate level of basic health facilities for 24 hours in Primary health center and to provide ambulance services for the residents;
- Currently there is a primary school and nursery school (Anganwadi) in Boravade village, also for further studies the students in the village have to travel 1km away from the village in Bidri. Anganwadi's in village are underdeveloped and so, to avoid that and to create the provision of proper Anganwadis as well as primary school for the neighboring village of Boravade with some sports facilities included in it the existence of the Anganwadi and school with all the facilities is necessary.
- Requirement
 - Anganwadi's
 - Sports facilities
 - Projector rooms
 - Poshan Ahar facilities
- To plan for adequate tree plantations along all roads and lake within GP;
- To plan for upkeep and maintenance of all religious places and create ample spaces for congregation;
- To create library and computer training center within the proposed common service center so as to benefit the future generation;
- To improve literacy of all the inhabitants of the Boravade GP through Sarva Shiksha Abhiyan. For the same, intermediate camps of short duration has to be organized in school buildings / Anganwadi beyond working hours to make 100 % of population literate
- To plan for alternate routes of resource generation for school including donations from local donors, builders and CSR initiatives for provision of school furniture, school uniform and school kids achievement.
- To strengthen educational institutions and promote education at Panchayat level so as
 to improve the educational attainment level of all stakeholders along with creation skill
 development and training center so as to develop a pool of skilled workforce;
- To utilize state government schemes like Student Scholarship Scheme, Tribal School Scheme for establishing schools and supporting meritorious students; Ø To plan for compulsory implementation of midday meal schemes;

- To plan for provision of every household with Pradhan Mantri Ujjwal Yojana so as to ensure that 100 % of the households, Anganwadis have LPG gas connection.
- To plan for celebration of birthdays of children whose birthdays fall within a particular month, so as to attract the children community
- Cleanliness program
- Public toilets
- Road construction
- Lamppost
- Proper provision of electricity
- Security room in administrative sector
- Internet connection
- Solar energy system
- Memorial for freedom fighters
- To plan for Child-friendly Gram Panchayat through
 - Vaccination and immunization program
 - Making mandatory school enrolment
 - Attendance of teachers and students in school
 - Reducing dropout rates in school
 - Distributing free sanitary pads to improve girl child hygiene
 - Maintaining good nutrition level of children

9.6 STRENGTHENING OF AGRICULTURAL AND ANIMAL HUSBANDRY SECTOR

The future revitalization of Boravade GP largely depends on the benefaction of resources in the agricultural sector. To capitalize on this production and channelize these resources, the following strategies are proposed:

- > To provide solar farming
- > To adopt micro planning and project development in agriculture to convert single agricultural land into double;
- > To convert non-irrigable land area to irrigable land to boost agricultural production;
- > To provide more source of irrigation so as to increase cropping intensity;
- ➤ To add to value addition, fodder development, market linkage infrastructure at Panchayat level through linking of SGH entrepreneurs;
- To give 100 % farmers coverage under Pradhan Mantri Fasal Bima Yojna;

- ➤ To mobilize formation of a Federation of Farmers at Panchayat level so as to increase household income from enterprise activity;
- ➤ To develop Agricultural Service and Processing Center, Warehouse for cold and dry storage, Sorting and Grading centers;
- ➤ To provide government grants and technical support for projects supporting poultry development, goatary development and other livestock extension services in individual plots;
- ➤ To provide milk collection centers, milking routes and chilling centers for supporting residents with cattle breeding. The "Chilling Center" is proposed to be integrated with the Cold Storage.

9.7 FUTURE LANDUSE CONTROL AND DEVELOPMENT STRATEGY

The GP of Boravade because of its close proximity to Kagal taluka. Some complexes are propping up as isolated developments showing signs of future trajectories of growth. There needs to be a strict plan for abiding by land use control, sanctioning process and byelaws so as to control future developments. The GP with the support of the government should also start and implement SWAMITVA which will provide the residents of Boravade GP with ownership of their residential houses so as to empower them and open up opportunities.

Construction in Boravade GP Area

Any plot of above 100 sq. m and a subdivision plan above 1000 sq. m area, needs approval from sanctioning authority before construction on site. The plan should strictly abide by development control and building regulations and should have the signature of a registered Architect having Council of Architecture (COA) active membership and a structural engineer. The Mukhiya of the Boravade GP may be delegated powers to release the plans duly signed by him / her, but only after the approval of the BDO in respect of any building plan on The Architect and Junior Engineer from Rural Engineering Department of the State Government shall on technical matters assist Boravade GP. This segment will be reviewed in 2030 relooking into the development scenario and fresh mechanism of sanctions may be repaid if necessary.

9.8 FUTURE ECONOMIC REVITALISATION OF PANCHAYAT

Analysis of the current situation, leads us to the path of strengthening development in the GP. The development initiatives are required to start at the grass-root level and should be meant to serve and benefit the entire GP population. Boravade panchayat should provide all kinds of inputs and services for establishment of social enterprise and create opportunities for employment of rural youth, farmers and women.

Since the strength of the GP lies largely in work force participation through supply of semiskilled and unskilled labour as well as agricultural activities in some pockets, there is a need to orient these two sectors for better performance and orientation towards skilled development. As a step towards "Atma Nirbhar" Panchayats, Boravade GP needs to plan for:

9.10. PROPOSED DEVELOPMENT ACTIVITIES

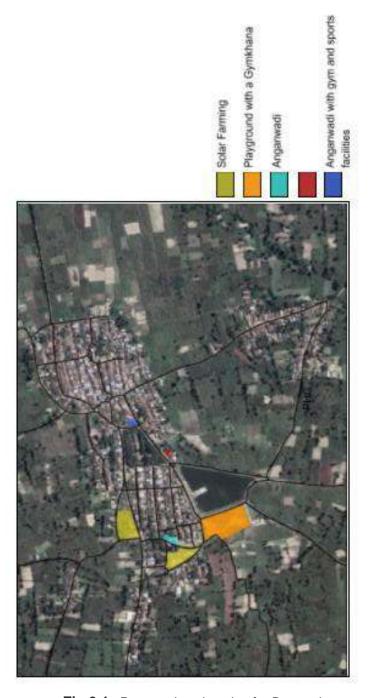


Fig 9.1: Proposed zoning plan for Boravade

(Source- The above figure shows the very high-resolution satellite data for Borvade G.P from Google Earth.)

Administrative:

- Agriculture Office
- Skill Development (for small business guidance, small workshops)

Educational:

Currently there is a primary school and nursery school (Anganwadi) in Boravade village.

- Requirements:
 - o Anganwadi with proper development and sports facilities.
 - Performing arts academy

Services:

- Water management
 - Underground drainage
 - · Water purification plant
 - Adequate water supply
 - Water reservoir
 - ESR
 - Mineral water station
 - Waste management
 - Waste disposal & management system
 - Ghantagadi (garbage vehicle)

Health:

- PHC (primary health care center): Though the PHC is already available in the village it required some additional provision.
- Ambulance and parking facility.

Others:

- Gymkhana (Along with professional gym) and Sports Ground for the Village
- Beautification of lake



Image 9.1: Saresagar Renovation of lake at Gujrat (to be proposed)
(Source- Google)

- Running track around the lake
- Dhobi ghat (Clothes and Cattle washing)
- Solar Farming



Image 9.2: Solar Farming (Source- Google)

Lamppost with solar charging



Image 9.3: Lamppost (Source- Google)

- Public Toilets
- Road construction

- Proper provision of electricity
- Internet connection
- Solar energy system

9.11 CAPACITY BUILDING INITIATIVES OF GOVERNMENT

Formulation of a comprehensive and holistic GPSDP calls for interaction amongst stakeholders by understanding the processes, identification of the problem and earmarking the priority areas, projectization, implementation etc. Capacity Building & Training (CB&T) of the stakeholders is an utmost necessary step for smooth functioning of the process. UNDP defines "Capacity Building as the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time". Government of India has launched restructured Centrally Sponsored Scheme (CSS) of Rastriya Gram Swaraj Abhiyan (RGSA) for implementation from 01.04.2018 to 31.03.2022 with the primary aim of strengthening Panchayati Raj Institutions (PRIs) for achieving Sustainable Development Goals (SDGs) with main thrust on convergence with Mission Antyodaya and emphasis on strengthening PRIs (Basic Statistics of Panchayati Raj Institutions, 2019, MoPR, Government of India).The Government of Jharkhand has released Rs. 98.24 crore during 2014 - 19 for Rastriya Gram Swaraj Abhiyan with an aim for capacity building. The Government of Jharkhand through this process has outreached 2,61,084 Elected Representatives, Panchayat Functionaries and other Stake holders for Capacity Building.

9.11.1 CAPACITY BUILDING AT BORAVADE GP

The Capacity Building Program of Boravade GP should aim to:

- > Form and consolidate an efficient team of the major stakeholders at various levels to launch and implement the GPSDP precisely;
- Orient towards basic training for the Elected Representatives of Panchayats; Raise community awareness for proposed initiatives and motivate them towards participatory planning;
- Mobilize community effectively and call for greater public ownership of flagship programs of the Government;
- ➤ Create a vision for the GP, so as to utilize the allocated funds under various schemes and create opportunities for additional resource mobilization;
- ➤ Channelize Sustainable Development Goals within the Boravade GP through identification of priority areas of interventions for achieving socio-economic goals;
- ➤ Equip the GP with strong leadership marked by efficient partnership with line departments for quick implementation of the developmental schemes and program;

- > Strive for better service delivery through use of e-governance and technology driven solutions at Panchayat level so as to attain administrative efficiency, improved service delivery, and greater accountability while implementing GPSDP;
- ➤ Enable GPs to come out as strong institutions of local government with all round development of their people and to empower them to provide skilled human resources for the state.

To develop an efficient Capacity Building mechanism at the Gram Panchayat level, the State Institute of Rural Development & Panchayati Raj (SIRD&PR) or designated Jharkhand State Nodal Institution should provide Training and Capacity Building of Panchayat Raj and Rural Development Functionaries at State level for the selected GPSDP. To improvise the process, the state of Jharkhand should coordinate action-oriented training and field-based practices of the members including the elected representatives, functionaries of GPs, community leaders and employees of the line departments operating at the GP level for organized planning, implementation and monitoring of GPSDP. A District Level Monitoring Cell should be constituted in Kolhapur with officers / Panchayat leaders selected from District administration / Boravade Panchayat level and Block/Intermediate Panchayat level. This will help to develop an appropriate strategy and action plan for implementing various schemes of the center and state government through convergence in the GP. Taking directions from the National Capacity Building Framework (NCBF) initiated by the Ministry of Panchayati Raj, Government of India, and the following strategies are prescribed for Boravade GP:

- To prepare a self-realization report to understand capacity assets and needs and define a vision and mandate; To engage stakeholders on every initiative of capacity development;
- ➤ To create opportunities for Panchayat elected representatives to upgrade their knowledge and skills for better performance;
- ➤ To orient key officials associated with the devolved functions to (a) better function as technical advisors and trainers and (b) respect, be more receptive and learn from the ground-level experience of elected Panchayat representatives;
- ➤ To develop mechanism to respond to the situation based on availability of budget, and managerial capability;
- ➤ To adopt for Information and Communication Technology (ICT) through incorporation of DISHA –dashboard, MGNREGS-NREGASoft, SBM Rural, Gram Sanvad Mobile App, PRIASoft-PFMS and integrating them to daily governance integration;
- ➤ To leverage Smart Governance Services through Common Service Center;
- > To improve the Gram Sabha functioning;
- > To evaluate capacity development;
- > To sensitize the media, political parties, representatives in the legislatures, civil society organizations and citizens.

As a step towards enabling public information of the activities of the panchayat, it is advised that the Panchayat may have its own website or link up with government website to disseminate year-round information. Publication of an Annual Administrative Report every year in the local language is recommended which should contain details of meetings held, members who attended them, honorarium paid, total funds received (plan and non-plan) and corresponding expenditure, job vacancies announced and filled, the number of elected members and officials who have attended the training programs, number and kinds of grievances addressed, departmental progress, developmental works progress, etc. The Panchayat is also required to publish the action plan for the forthcoming year in the website.

9.12 BEYOND 2030

With the strengthening of Boravade GP, the surrounding regions of GP by 2030 are also going to be benefitted in the due course of time. The next strategies would revolve around consolidating the position in the national forefront and becoming the model for GP development in the country. The strategies may be:

- > To keep pace with national development including reforms in varied sectors;
- > To create spatially distributed rural township to curb migration;
- > To create an aura of sustainable development based on longevity of resources present and their reserves.

9.13 PHASING

The entire planning proposals cannot take place at a time. The desirable development is that which takes place in phases as per the varying demand of the area. So the phasing plan may incorporate:

Phase I (2020-2023) For existing areas:

- WATER MANAGEMENT
 - water purification plant
 - water reservoirs
 - · mineral water station
 - ESR

WASTE MANAGEMENT

- underground drainage
- · waste disposal and management system
- Public Toilets
- Completion of street lighting along main spines;
- Completion of piped water supply connection along the main spine including installation of water treatment plant;
- Construction of processing plant for manure production at identified location and commencement of decentralized solid waste management system;
- Construction of toilets for schools, anganwadi.
- Completion of construction of Skill development center, Agricultural service processing center, Warehouse for cold and dry storage (extension), Common Service Center and starting their respective operations.
 - Internet connection
 - Road construction and lamppost
- Setting up of LPG distribution center;

Phase II (2023-2026) For existing areas and newly developed areas:

- Anganwadi
- Community hall
- Primary Health Care center
- Gymkhana
- introducing new technological methods in overall development process

Phase III (2026-2030) For existing areas and newly developed areas:

- Anganwadi
- Solar energy system
- Playgrounds and parks
- Lake Beautification

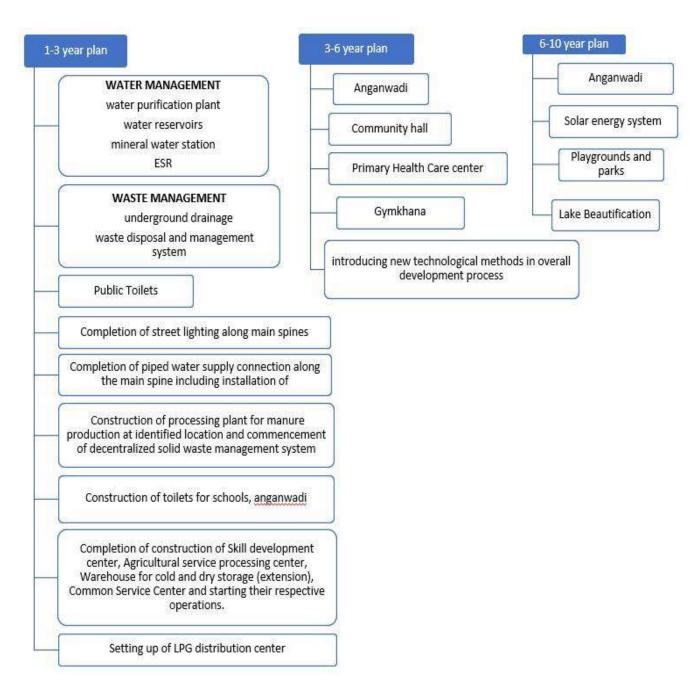


Fig 9.2: Development plan phase wise

(Source- Author)

9.14 CONSTRUCTION AND MATERIALS

Smart village is the concept of village development that provided solution of village problems by utilizing technology to make the community life of villagers easier and improve its economy.

Building those structures (maximum G+2) for the villagers, the construction techniques and the materials used in the construction should be known to them for keeping the maintenance in future which will be easier for them.

Stone: In Boravade, there are some buildings which are 100 years old or more than that, and people also live in there. The use of stone for the wall in construction will be easier to maintain for them and also which will maintain the historical identity of the village.

- Appearance
- Strength
- Specific gravity
- Weathering

Bricks: In the Boravade village, there are several buildings made up of brickwork which can be easily available there.

- High compressive strength
- Flexural strength of high pressure
- Excellent stability

Laterite: Laterite stone blocks are being used as masonry material for housing construction in Boravade for ages, because of being abundant, relatively easy to cut and shape and showing good performance in many applications.

9.14.1 CONSTRUCTION TECHNIQUES

In Boravade, stone and laterite is used in the construction of houses, schools and plinth of various structures. Quarried stones were piled on top of one another to create piers, columns, and walls.

There are also many r.c.c structure which are recently made but the oldest house in the village was made of stone and wood

Source: By Primary Survey (Team of Sir J.J.C.O.A.)



Image 9.4: NH 160 over Canal of the Village (Source- Author)



Image 9.5: NH 160 over Canal of the Village

(Source- Author)

9.15 SUMMARY

The recommendations set forward through this research will prepare Boravade GP for future growth on a scale higher than present one. The future of the Boravade GP begins now. The investment and development activities to be made in the region over the next ten years will crucially determine their structure and functioning as well as their capacity to accommodate and manage the inevitable future growth.

9.16 CONCLUSION AND REMARK ON ACHIEVING THE OBJECTIVES OF THE PROJECT

- The zoning of the master plan has been generated to integrate the various functions of the village, such as the administrative and educational day to day affairs and the social infrastructure, like skill building centers, sports facilities, and tourist rest stops, along the lake, so that the circulation doesn't congest the proper functioning of the activities.
- The complete potential of the participatory planning project has been realized in the spirit of these discussions.
- The pressing infrastructural requirements for sports facilities, a new building for the PHC and the development of the Anganwadi's have been given special priority in the phase development plan.
- The phase plan has priorities the demands of the people so as to be accommodative of changing trends in mentality and economic growth and to be able to preserve the socioeconomic and ecological character of the gram.
- Upon dialogue on all aspects of their lifestyles, it was agreed upon that a forceful change
 in agricultural and livelihood practices will damage the camaraderie of the people that
 forms the fabric over which any development stands. The phase plan will be able to
 accommodate the constructive changes, if proposed in the future, in this aspect.
- The various Central/State government schemes under which the development projects have been proposed will also help make people aware of their rights and duties as citizens, this helps tying the grassroot tier to the rest of the Government bodies.
- They were optimistic about future endeavors and understood deeply the need for sustainability to be added to their current development trends. The proposal for a water treatment plan and its location came from the people themselves.
- They were also familiar with current trends in terms of the pandemic and its effects on the economy as it affected them, they were aware of the changes they required to sustain their lifestyle.

Annexure:

DOMAIN	PARAMETER DESCRIPTION	VILLAGE STATUS	GP STATUS
	Is the village open defecation free	Yes	Yes
Health and Sanitation	Community Waste disposal system	No	No
	Availability of Community bio gas or recycle of waste for production use	No	No
	Availability of drainage facilities	No	No
	Availability if PHC/ CHC sub centres	Yes	Yes
	Availability of Veterinary Clinic Hospital	No	No
	Availability of Govt Seed Centre	Yes	Yes
Agriculture, allied and	% households engaged exclusively in non farm activities	25%	25%
Livelihood	Availability of markets	Yes	Yes
Housing	% of household with kuccha wall kuccha roof	25%	25%
Land	Availability of soil testing centres	Yes	Yes
Improvement	Availability of Fertilizer shops	Yes	Yes
Animal Husbandry	% of households supported by village based Livestock Extension Workers	75%	75%
Drinking water	Availability of piped tap water	Yes	Yes
Roads	Connected to all roads	Yes	Yes
	Internal roads	Yes	Yes
	Availability of public transport	Yes	Yes
Rural Electification	Availability of electricity for domestic use	Yes	Yes
Non conventional Energy	% of household using clean using clean energy (bio gas/ LPG)	NA	NA
Vocational Education	Availability of Vocational Education Centre	No	No
Women and Child development	Availability of Anganwadi Centre	Yes	Yes
	% of children age 0 to 3 years registered under anganwadi	100%	100%
	% of children age 0 to 3 years immunized	100%	100%
	% of children age categorized as non stunted ICDS record	0%	0%
Social Welfare	Availability of Post Office	Yes	Yes
	Telephone Services	Yes	Yes
	Internet Cafes/ Common Service Centre	Yes	Yes
	Availability of Banks	Yes	Yes
	Availability of ATM	Yes	Yes
Education	Availabillity of Schools	Yes	Yes
Public Distribution System	Availability of PDS	Yes	Yes

1. LOCATION PA	,			
State: District:	Maharashtra Kolhapur Kagal			
Taluka:	Boravade			
Gram				
Panchayat:				
Pin Code:	567699			
2. BASIC PARAMETERS				
Sr. No.	Question	Census 2011 Status		
1	Total population	6240		
2	Male	3158		
3	Female	3082		
4	Total Household	1348		
5	Working Population %	51.80%		
6	Total area (in hectares)	1192 ha		
8	Total no of SHGs promoted	NA		
3. KEY INFRASTRUCTURE PARAMETERS				
10	% households engaged in farm activities	75%		
11	% households engaged in non farm activities	25%		
12	Availability of banks	Yes		
13	Availability of bank/ Business correspondent with internet conncetivity	Yes		
14	Availability of ATM	Yes		
15	Whether the village is connected to all weather road	Yes		
16	Whether village has internal cc/ brick road	Yes		
17	Availability of Public Transport	Yes		
18	Availability of Internet Cafe/ Common service centre	Yes		
19	Availability of Electricity for domestic use (in hrs)	6-8 hrs		
20	Availability of public Distribution System (PDS)	Yes		
21	Availability of markets Availability of	Yes		
22	piped tap water	No		
23	Availability of telephone services	Yes		
24	Total no of household using clean energy	NA		
25	Availability of Post Office/ Sub Post Office	Yes		
26	Availability of school	Yes		
27	Availability of vocation Education	No		
28	Availability of Sub centre/ PHC/ CHC	Yes		
29	Availability of Veterinary Clinic Hospitals	No		

Acknowledgements

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Gram Panchayat Spatial Development Plan of Boravade, Kagal Taluka, Kolhapur District (January 2021)