



# Khandesh Vikas Manthan

A document on Khandesh Region Development

*Policy Interventions and Implementation*

*An initiative by PARC*



केशवस्मृती  
प्रतिष्ठान



# Khandesh Vikas Manthan

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9th December 2023

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## Preface

Centralization is the core of integration between components. In the socio-economic sector, this method assures consistent decisions, systematic procedures, and defined vision. In diverse contexts 'decentralized approach' with a 'centralized system' could be a tool to proceed toward the goal. Maharashtra is a very crucial State in the National development. Despite its growth as a state, the regional imbalances continue to foster. Vertical infiltration through the administrative framework and horizontal distribution through community participation is required for sustainable growth. The engagement of regional participation has a crucial role in planning-execution, thus responsible for infiltration and distribution. This not only values the contribution of every stakeholder but also forms an efficient system to transfer the designed facilities to the citizens. The vision was to organize a series of symposiums to bring all the experts, grassroots, researchers, and all other stakeholders to brainstorm on the regional challenges, and hurdles to design or discover solutions for inclusive development of Vidarbha, Konkan, Khandesh, Marathwada, and Western Maharashtra regions. The first symposium 'Vidarbha Vikas Manthan' was held on 09th July 2023, 'Kokan Vikas Manthan' on 9<sup>th</sup> September 2023 in Mumbai which was followed by 'Khandesh Vikas Manthan' on 22<sup>nd</sup> October 2023 at Jalgaon. It was jointly organized by Vivek SPARC Foundation, Jalgaon Industries Association (JINDA), Khandesh Udyog Prabodhini, Nandurbar District Development Council (NDDC) and Keshavsmruti Pratisthan. More than 160 experts from the sectors of Health, Education, Agriculture, Industry, Art & Culture, Social, Tribal Development, Cooperatives, Water, and Environment discussed the current challenges, interventions in the policies, and solutions for effective implementation; with a Khandesh-centric approach.

The symposium was marked by the presence of the Hon. Minister of Tribal Development of Maharashtra, Shri. Vijaykumar Gavit, Hon. Minister of Rural Development and Panchayat Raj, Shri. Girish Mahajan, Hon. Minister of Water Supply & Sanitation of Maharashtra, Guardian Minister of Jalgaon Shri. Gulabrao Patil. Distinguished personalities, representatives of industrial associations, Government officials, and social organizations, etc. were also present for this symposium. This report is the documentation of these inputs as well as discussion points which were further processed based on primary and secondary findings. Expert engagement helped us to identify the distinctive issues in the particular sector. There can be many other factors or necessary interventions in the respective sectors other than the particulars mentioned in this report. We have tried to make it very comprehensive yet crisp to trace the major lead specks which can be a path for channeling the growth and addressing various challenges faced by the Khandesh region like necessary interventions for the development of industries, exploring tourism potential, water scarcity issues and improving the livelihood of the tribals etc. This symposium will initiate a structured dialogue between the various stakeholders and the Government framework for further guiding the action-oriented work for the identified areas of work. We intend that region-specific Expert Insights (EI) and Solution-Action-Oriented (SAO) work will lay the foundation for a brighter and more prosperous future for the region.

**Mahesh Pohnerkar**

CEO

Vivek SPARC Foundation

**Ravindra Ladhha**

President

Jalgaon Industries Association

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## Agriculture

## 1. Introduction



The agricultural and allied sectors in the Khandesh region of Maharashtra form the bedrock of its economy, culture, and livelihoods. Situated in the northwestern part of the state of Maharashtra, Khandesh has a rich agricultural landscape characterized by fertile plains, robust crop diversity, and a profound agrarian heritage. This introductory glimpse into Khandesh's agricultural and allied sectors unveils a dynamic tapestry of farming practices, livestock rearing, forestry and agro-based industries, all central to the region's growth and prosperity. With a history steeped in traditional farming methods and an evolving contemporary approach to sustainable agriculture, Khandesh stands at the crossroads of tradition and modernity, where the cultivation of grains, oilseeds, pulses, and horticultural produce intertwines with the pursuit of rural development, agri-entrepreneurship, and the diversification of rural income streams.

## 2. Current Scenario

- Soil type: Medium-Deep black soil in Eastern Khandesh region, coarse soil, majorly light medium soil in Western Khandesh region
- Rainfall Pattern: Average rainfall of Khandesh region is 750mm
- Major agricultural food-crops: Jowar, Bajara, Maize, Wheat, Black gram, Pigeon pea, and Green gram, Minor millets like Nachani, dadar etc.,
- Major oilseeds: Soybean, Groundnut, sesamum, Sunflower.
- Major cash crops: cotton, Sugar cane
- Major horticultural crops, vegetables and spices: Banana, sweet orange, lime, papaya, pomegranate, melons, mango, custard apple, okara, chillies, coriander, turmeric and garlic.
- Traditional forage crops are prevalent in Nandurbar district.



## 3. Interventions

1. Abolish the single window system of the agriculture department to enhance efficiency and streamline processes, enabling a more responsive and dynamic agricultural administration.

Under a single window system of agricultural extension Agriculture, Horticulture, Soil conservation and Watershed Development Department were re-organized and a single agency responsible for agricultural development at village level- 'Single Window System' was implemented on 1st July, 1998. In the earlier system only 64% staff was available at grass root level and 36% at apex level. Now, due to the single window system, 81% staff will be made available at grass root level and 19% at apex level.

Over the past 25 years, the single window system has encountered challenges such as ensuring interoperability, which is vital for integrating various systems and technologies used by different agencies. Additionally, aligning diverse policies and regulations among agricultural departments poses a significant challenge, impacting the efficiency of work and leading to administrative challenges. Therefore, it is recommended to discontinue the single window system and consider bifurcation into different departments to address these issues.

2. Establish a steadfast policy on the import and export of agricultural products, ensuring stability and predictability in trade, thereby safeguarding the interests of both farmers and consumers. Changes in import-export policies for agricultural produce can impact farmers by altering market dynamics and affecting prices. This can lead to financial losses for farmers and potentially higher costs for consumers. To address this, the government could implement compensation schemes or subsidies to support farmers financially during the transition and stabilize the agricultural sector.

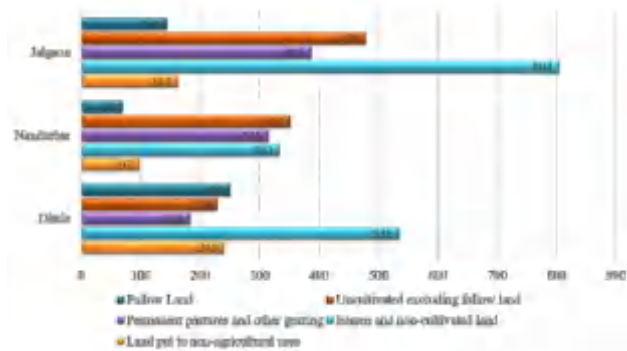
3. Implement the Organic Farming with Public-Private Partnership (PPP) model to encourage sustainable agricultural practices, providing environmental stewardship and economic opportunities for farmers.

4. Launch a Pulses, and Oilseed Mission specifically tailored for the Khandesh region, promoting self-sufficiency, enhancing crop diversity, and addressing the unique agricultural needs of the area. The Khandesh region of Maharashtra benefits from favorable weather conditions for pulses and oilseed production, with a conducive climate and fertile soil. Executing a mission for pulses and oilseeds is crucial as it enhances local agricultural self-sufficiency, ensures food security, and contributes to the economic prosperity of the region through increased crop yield and income for farmers. Within this mission, specific measures are essential:

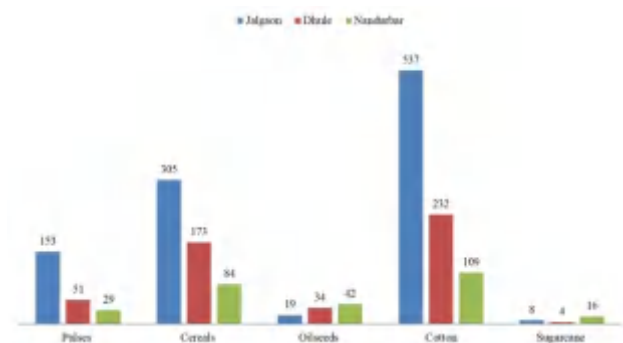
- 1) Upgrade reservation centers to modern standards.
- 2) Augment subsidies for dal mills and oil mills.
- 3) Establish processing centers at the village level.
- 4) Utilize byproducts for diverse purposes such as manuring, fodder, and energy generation.
- 5) Implement nutrition-centric projects.

5. The Millet Mission for the Khandesh region aims to revolutionize agriculture by promoting the cultivation and consumption of millets. This initiative seeks to address food security, environmental sustainability, and the well-being of local communities. By encouraging farmers to shift from conventional crops to millets, the mission aims to enhance biodiversity, improve soil health, and adapt to climate change. Additionally, it strives to boost the nutritional intake of the population, as millets are rich in essential nutrients. The mission involves awareness campaigns, providing farmers with training, seeds, and financial support to facilitate the transition. Ultimately, the Millet Mission in Khandesh aspires to create a resilient and sustainable agricultural ecosystem while fostering economic growth and improving the overall health of the community.

6. Formulate a licensing policy for nurseries of plants and cultures, regulating the quality of agricultural inputs and promoting the use of healthy and disease-resistant planting



Graph 3.1. District wise Nonagricultural land use in 00'ha (2021-22)



Graph 3.2. Area under Crops in 00'ha (2021-22)





materials. The absence of a licensing system for nurseries in the Khandesh region of Maharashtra poses challenges to agriculture and farmers. Without proper regulations, there's a risk of substandard plant material affecting the large number of banana and pomegranate nurseries in the region.

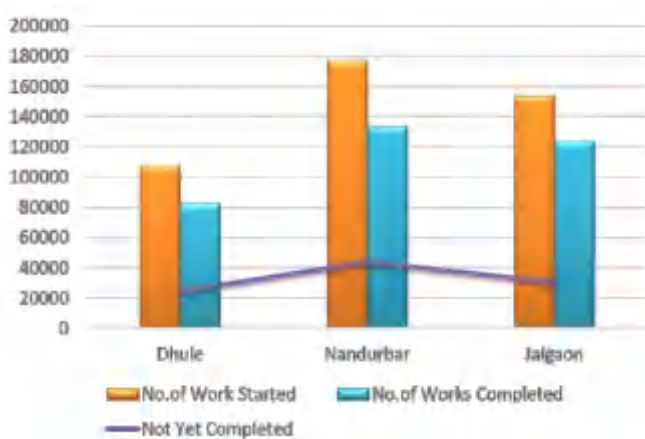
7. Implementing a licensing system is crucial to ensure quality control, disease prevention, and sustainable farming practices. It safeguards farmers by promoting the availability of healthy and certified planting material, promoting agricultural productivity, and maintaining the overall integrity of the horticultural sector.

### 3.1 Schemes and other related interventions

1. Kisan samman cards: Issuing Kisan Samman cards, functioning as property cards for farmers, is essential. These cards will serve as crucial documentation, enabling farmers to use their agricultural land as collateral when seeking loans. This initiative is vital for financial inclusion, providing farmers with a valuable asset that can facilitate easier access to credit, enabling agricultural development and economic growth.

2. Remove agricultural inputs from the GST ambit to alleviate the financial burden on farmers and ensure affordability of crucial resources, promoting sustainable and profitable farming practices.

Agricultural Inputs	GST Rate Applied
Fertilizers	5% and 12%
Tractors and other machinery	12%
Poultry incubators	12%
Milking and dairy machinery	12%
harvesting and threshing	5%
Cold storage lease center	18%



Graph: 3.1.1 NAREGA work progress (2019-23)

3. MGNREGA: Enable agriculture-related work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to create additional livelihood opportunities for rural communities, ensuring economic resilience.

4. Utilize funds from the Kisan Samman Nidhi to support agriculture-related initiatives like establishing agricultural infrastructure, ensuring that financial resources are effectively allocated to promote sustainable farming practices and improve farmers' livelihoods. Investing in agricultural infrastructure is crucial for long-term economic growth, ensuring sustainable food production, and rural development. While freebies may provide short-term relief, a robust agricultural foundation strengthens the backbone of a nation's economy.

5. Initiate projects to promote startups in the agricultural sector under Start Up India scheme, stimulating innovation, technology adoption, and economic growth within the farming community.

The Start-up India scheme, if eligibility criteria are relaxed, will promote agricultural industry growth by offering financial and infrastructural support to startups. This empowers innovative solutions, encourages agri-tech advancements, and enhances the overall efficiency and sustainability of agricultural practices.



6. Undertake efforts to secure Geographical Indication (GI) tags for products like eggplant, Indian Jujubes, and taro leaves, safeguarding the unique identity and market value of these regional agricultural products. Implementing special provisions and schemes for promoting Geographical Indication (GI) products in the Khandesh region of Maharashtra is crucial. This would protect and promote local agricultural products, like Khandeshi Turmeric or Jalgaon Banana, providing a unique identity and market advantage.

7. Implement the Farm to Plate initiative to establish a seamless and efficient supply chain, ensuring the availability of fresh produce, reducing wastage, and promoting food security.

8. Simplify the certification process for organic farming to encourage more farmers to adopt sustainable practices, ensuring environmental conservation and meeting the increasing demand for organic products.

Organic farming holds immense promise in Khandesh's tribal areas, where subsistence farming prevails. By promoting sustainable practices, preserving traditional knowledge, and providing economic empowerment, organic farming can enhance soil health, elevate incomes, and strengthen community bonds. Key factors for success include community participation, government support, and cultural sensitivity to ensure a harmonious integration of organic farming practices into the existing tribal agricultural landscape.



9. Expedited the establishment of a Banana Development Board to centralize efforts, promote research, and streamline the banana industry, ensuring sustainable growth and market competitiveness.

10. Undertake restructuring and administrative coordination changes in all agricultural schemes to improve their effectiveness, enhance synergy, and optimize resource allocation for maximum impact.

11. Impact assessment system: Conduct a comprehensive assessment of agricultural schemes, discontinuing unproductive ones to ensure that resources are channeled efficiently, promoting effective and impactful agricultural development.

12. Man- Animal Conflict: Addressing the issue of man-animal conflict in the Khandesh region is crucial, particularly concerning the impact on Bajara farms. The prevalence of bird infestations poses a significant threat, leading to substantial financial losses for farmers. Implementing effective measures to control and mitigate this conflict is imperative to safeguard agricultural livelihoods and ensure sustainable farming practices.

Snake bites pose a significant threat in the Khandesh region, emphasizing the urgent need for awareness campaigns. Implementing accidental insurance coverage for farmers could mitigate financial burdens, while ensuring every village has easy access to anti-venom is crucial to preventing casualties and improving emergency response.

Promote agro-tourism development to diversify rural economies, create employment opportunities, and enhance the agricultural sector's resilience through increased income streams. Enhancing infrastructure in the Khandesh region of Maharashtra is vital for agro-tourism development. Improved road connectivity, irrigation facilities, and modern amenities in farm stays can attract tourists. Upgrading processing units and creating educational centers also enhance the overall agro-tourism experience, promoting sustainable development in the region.

### 3.2 Agriculture inputs and practices

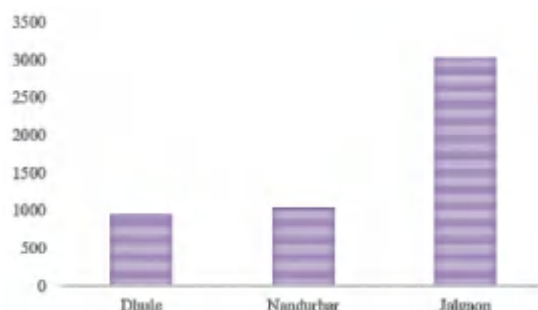
1. Implement price control measures for Plant Growth Regulators (PGR) and fertilizers to ensure affordability for farmers, promoting the judicious use of these essential agricultural inputs and safeguarding economic viability. At present, there is a lack of specific provisions for price control of PGR.

2. Advocate for a shift in cropping patterns to enhance agricultural sustainability, diversify income sources for farmers, and mitigate risks associated with climate change, thereby promoting a resilient and adaptable farming sector.

3. The cropping pattern in the Khandesh region of Maharashtra is characterized by a significant reliance on mono cropping, particularly of cotton. This practice can lead to soil degradation, increased pest susceptibility, and economic vulnerability. There is a pressing need for diversification to enhance sustainability, mitigate risks, and promote a more resilient agricultural system in the region.

4. Conduct regular soil and weather surveys through collaboration between the agriculture department, utilizing soil testing and satellite-based weather data. Tailor cropping patterns, especially for horticultural plants, and disseminate this information effectively to farmers.

5. The region faces significant challenges with rampant black marketing of fertilizers, diverting crucial resources for industrial purposes and causing shortages during peak periods, ultimately impacting farmers' production. It is imperative to implement a stringent regulatory and monitoring system to address this issue and safeguard agricultural productivity.



**Graph 3.2.1. Chemical fertilizer use in 00'MT (2018-19)**

### 3.3 Water management

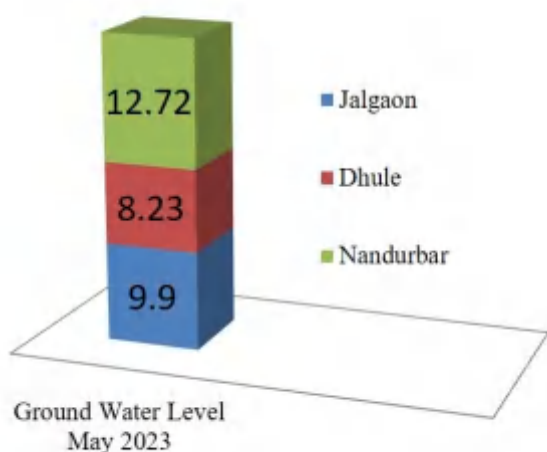
1. Reduce the subsidy time limit from 7 years to five years for drip irrigation under micro-irrigation schemes, promoting quicker adoption and ensuring that farmers can benefit from reduced costs, enhancing water efficiency and sustainable farming practices.

2. Introduce subsidies for fertigation, incentivizing the integration of fertilization and irrigation techniques, thereby optimizing nutrient use, improving crop yield, and promoting efficient resource management in agriculture.



3. Modify subsidy criteria of solar pumps to make them more inclusive and responsive to the evolving needs of farmers, ensuring that financial support is directed toward initiatives that contribute effectively to agricultural sustainability and productivity.

4. Emphasizing restrictions on the use of untreated seepage and drainage water for vegetable cultivation in Nasirabad and Mumrabad regions in Khandesh is crucial to safeguard public health and



### 3.4 Credit facilities

1. Issue property cards linked to the Kisan Cash Credit Card under the Kisan Credit Card scheme, enabling farmers to access bank loans more efficiently, promoting financial inclusion, and providing a streamlined avenue for credit in agriculture.
2. Revise collateral rules for agricultural loans and establish mechanisms to ensure banks adhere to these regulations, promoting fair and accessible financial services for farmers and facilitating the adoption of modern agricultural practices.
3. Set Minimum Support Prices (MSP) for seasonal crops, taking into account the annual rise in the cost of production, thus safeguarding farmers' income, encouraging crop diversification, and ensuring economic sustainability in agriculture. Recommendation of swaminathan committee regarding MSP need to be implemented on priority basis.
4. Initiate the Bhavantar Bhuktan scheme to mitigate market price risks for farmers, providing a safety net that guarantees a fair return on their produce, promoting income security, and stabilizing the agricultural economy.
5. Implement Direct Benefit Transfer (DBT) for subsidy distributions in agriculture, ensuring efficient and transparent fund disbursement, reducing leakages, and promoting accountability in the subsidy delivery system.
6. Introduce provisions for crop insurance under the Pradhan Mantri Fasal Bima Yojana (PMFBY) that are tailored to local weather conditions, ensuring farmers receive adequate coverage and financial support in the face of climate-related risks, thereby promoting agricultural resilience.



### 3.5 Infrastructure facilities

1. Establish warehouses at the village level to enhance local storage capabilities, reducing post-harvest losses, and ensuring food security by creating a robust infrastructure for farmers to store their produce closer to their cultivation areas.
2. Develop cold storage facilities in Bhusaval and Chalisgaon with respective capacities of 50,000 MT and 300 MT, strategically positioned to address the storage needs of farmers, reducing post-harvest losses, and ensuring a steady and reliable supply of produce.

environmental integrity. Implementing this provision is vital to prevent potential contamination of crops with harmful substances, ensuring the production of safe and wholesome vegetables for consumption in these regions.

5. Promote water conservation methods to address the escalating challenge of water scarcity, emphasizing the importance of sustainable water management practices to secure the future of agriculture, protect ecosystems, and ensure food security. Involving gram panchayats in conservation efforts, such as constructing check dams, percolation tanks, and deepening canals, establishes a sense of accountability for both the execution and maintenance of these projects.

3. Regional crops such as Okra and Drumsticks should be encouraged through export facilities and incentives to boost their market presence.

4. Set up processing centers at the village level, providing farmers with facilities to add value to their produce locally, providing rural economic development, and encouraging agro-processing industries for sustainable agricultural practices.



7. The discontinuation of the lottery system for infrastructure subsidy allocation is crucial to ensure fair and transparent distribution of resources.

8. Establishing labs in every village for soil and water testing is vital to empower farmers with essential information for informed agricultural practices, contributing to overall productivity and sustainability.

9. Recognize the importance of establishing a Maize Research and Processing Centre to meet the growing demand for maize products, promoting agricultural research and value addition.

5. Provide subsidies for automatic weather stations for individual farmers, empowering them with real-time weather data, improving decision-making, and enhancing farm management practices to mitigate risks associated with weather fluctuations.

6. Implement electrification of farm roads to improve accessibility for farmers, facilitating transportation of goods, reducing post-harvest losses, and promoting efficient and cost-effective movement of agricultural produce to markets.



### **3.6 Allied sectors and Animal Husbandry**

1. Develop an export policy for bananas, establish facilities, and create the Hingane Research Station under a Public-Private Partnership (PPP) model, promoting international trade, research, and technological advancements to develop the banana industry. Andhra Pradesh model of Banana export can be replicated tailored with Khandesh specific needs.

2. Enhance policies and support for the citrus industry, promote growth, and ensure sustainable cultivation practices to meet consumer demand for fresh and processed citrus products, thereby contributing to the economic development of citrus-producing regions.



3. Ensure the availability of designated areas for cultivating and processing plantation crops. Establishing dedicated zones for plantation crops enhances agricultural efficiency and facilitates streamlined processing, contributing to economic growth and sustainable farming practices.

4. Expedited the processes under the Rashtriya Gokul Mission (RGP), reinforcing efforts to conserve and enhance indigenous cattle breeds, enabling genetic improvement and ensuring the economic well-being of farmers involved in cattle farming. Introduce a special scheme or project dedicated to indigenous cow breeds like Gir cow, preserving biodiversity, and promoting sustainable farming practices that align with the unique characteristics of these breeds, contributing to the well-being of rural communities.

5. Enhance the Department of Animal Husbandry and Dairy Development to help

livestock management, improve animal health services, and support the growth of the dairy industry, thereby contributing to increased productivity, income, and overall rural development.

6. Implement a subsidy program for fodder and promote effective fodder management strategies, ensuring a consistent and affordable feed supply for livestock, thereby supporting animal husbandry and improving the overall productivity of the agricultural sector. Several measures should be taken for effective fodder management, including cultivating fodder on government reserved land, promoting the use of corn silage, and encouraging the cultivation of low-water-required varieties like Dashrath. Ensuring the availability of seeds to farmers is crucial in implementing these provisions.

7. Promote sericulture to boost the silk industry, generating income for farmers, promoting rural employment, and contributing to the overall growth of the textile and silk sectors. Sericulture is vital in the biomedical sector, as silk proteins have potential applications in drug delivery and tissue engineering. Additionally, silk by-products contribute to animal feed, biofuel production, and fertilizer, enhancing sustainability and resource utilization in these sectors. The nutritional sector benefits from silkworm pupae as a protein-rich food source.

8. Support apiculture for honey production, providing economic opportunities for beekeepers, enhancing pollination services for agriculture, and contributing to biodiversity conservation.

9. Facilitate the cultivation and awareness of medicinal plants, promoting sustainable practices, promoting biodiversity, and meeting the growing demand for medicinal herbs, thereby contributing to both health and economic well-being.

10. Encourage bamboo cultivation to diversify income sources for farmers, promote sustainable agroforestry practices, and support industries that rely on bamboo, contributing to rural development and environmental conservation.



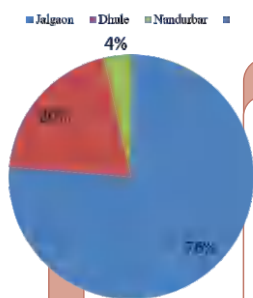
Graph 3.6.1. Number of cattle in '00 (2021-22)



### 3.7 Post harvest management

1. Establish low-cost ginning and pressing units for cotton to reduce processing expenses for farmers, enhancing the competitiveness of the cotton industry and ensuring cost-effective production.

2. Boost subsidies for pulses and oil mills to encourage their production, supporting farmers engaged in these sectors, and promoting self-sufficiency in edible oil and protein-rich pulses.



Graph 3.7.1. Dairy cooperatives (2021-22)



3. Prioritize milk processing initiatives to add value to dairy products, ensuring minimal wastage of milk and creating opportunities for farmers to increase their income through the dairy value chain. A cooperative framework must be developed to facilitate the establishment of regional-level milk collection and processing units. Examining models like Amul and Mother Dairy can provide insights, and adjustments tailored to specific regions should be made before replicating these models.

4. Increase subsidies for the food processing of bananas, encouraging value addition, reducing post-harvest losses, and enabling the growth of the banana industry with economic benefits for farmers.

5. Strengthen Agriculture Market Committees to enhance the efficiency and transparency of agricultural markets, ensuring fair pricing, reducing middlemen interference, and promoting a more equitable trading environment for farmers.

6. Implement E-Marketing to modernize agricultural marketing practices, providing farmers with online platforms to directly connect with buyers, thereby reducing dependency on traditional market channels and enhancing market accessibility.

7. Reduce restrictions on the marketing of agricultural produce to empower farmers with more market options, facilitating better price realization and ensuring a more competitive and open market for agricultural goods.

8. Dilute criteria for biogas and solar plant installations to promote wider adoption, facilitating sustainable energy practices in agriculture, reducing dependency on conventional energy sources, and contributing to environmental conservation.



### 3.8 Human resource management

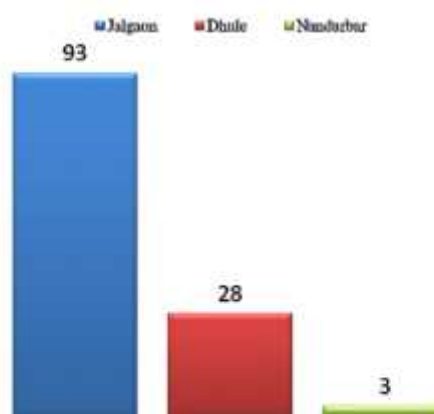
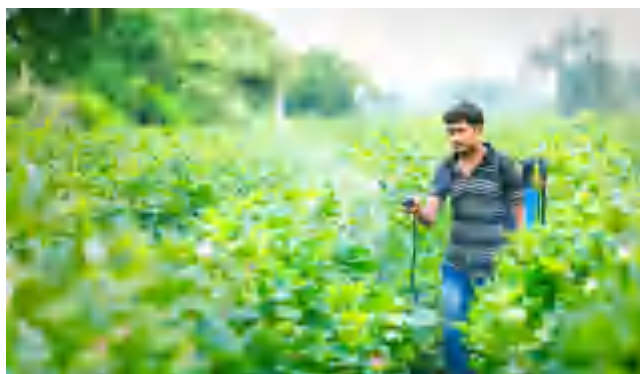
1. Provide comprehensive training in integrated pest management to equip farmers with effective strategies for pest control, promoting sustainable agricultural practices, reducing dependence on chemical pesticides, and ensuring long-term crop health.

2. Encourage collaborative efforts between ZP agriculture officers and the agriculture department to enhance efficiency and minimize duplications, given substantial vacancies. Urgent measures are necessary to promptly fill these vacancies. This will add synergy between departments, mitigating redundancy amid significant staff shortages, and ultimately benefiting agricultural initiatives and administration.

3. Conduct regular training sessions for officers, focusing on post-harvest technologies and marketing strategies. Implement programs to educate farmers on these aspects. Ongoing training equips officers with the latest agricultural practices, empowering them to guide farmers effectively in post-harvest processes and marketing, fostering a more resilient and informed farming community.

4. Address the needs of Farmer Producer Organizations (FPOs) by simplifying rules to ensure accessible working capital, providing transport facilities, and revising storage norms. Streamlining FPO support mechanisms by easing financial access, enhancing transportation infrastructure, and adapting storage regulations fosters a conducive environment for sustainable growth, empowering farmers and strengthening the agricultural ecosystem.

5. Collaborating with NGOs for training programs and counseling is crucial to address the alarming rise in farmer suicides in the Khandesh region. NGOs often possess grassroots insights and can offer targeted support. Additionally, partnering with educational organizations is equally vital, as it not only strengthens the knowledge base but also provides access to valuable data. This collaborative approach ensures a holistic strategy, combining on-the-ground assistance with data-driven insights, to effectively tackle the pressing issues of farmers in the region.



Graph 3.8.1. Number of farmers suicide (2022)

### 3.9 Use of Technology in Agriculture



1. Promote mechanization in cotton farming to enhance efficiency and productivity, emphasizing the need for advanced agricultural machinery to streamline cultivation processes, reduce labour dependency, and ensure optimal yield for cotton farmers.

2. Expand the availability of Custom Hiring Centers in every village to facilitate easier access to shared agricultural machinery, promoting resource-sharing among farmers, reducing financial burdens, and fostering a collaborative approach towards mechanized farming.



3. Raise subsidies for agricultural machines to make them more accessible for farmers, encouraging the adoption of modern technology, improving overall farm productivity, and contributing to sustainable and efficient agricultural practices.
4. In the tribal areas of Khandesh there is a need to rejuvenate traditional agricultural knowledge with the help of technology.

### **3.10 Agriculture Education**

1. Incorporate small skill-based courses, such as vermicomposting and fertilizer production, into agricultural education to equip students with practical skills, fostering a more holistic and hands-on approach to learning. These courses enhance the students' ability to implement sustainable agricultural practices, contributing to the overall resilience and productivity of the agriculture sector.
2. Provide training on the proper handling of pesticides to farmers, ensuring safe and responsible pesticide use, minimizing environmental impact, and safeguarding the health of farmers and consumers.



### **3.11 Awareness**

1. Actively promote Geographical Indication (GI) tagged products like bananas to enhance market value, protect local agricultural heritage, and create economic opportunities for farmers through the recognition of unique regional products. Promoting banana consumption in the Khandesh region for school mid-day meals, hospital patient diets, and baby food manufacturing is a nutritious initiative. Conducting an awareness campaign on social media can effectively communicate the health benefits and availability, encouraging widespread adoption.
2. Mandate agricultural officers to participate in tri-monthly gram sabha meetings for the dissemination of information about agricultural schemes, enhancing transparency, and fostering direct communication between officials and farmers.
3. Raise awareness and promote natural farming practices to encourage environmentally friendly and sustainable agriculture, minimizing the use of synthetic inputs, and contributing to soil health and biodiversity conservation.
4. Initiate an annual "Khandesh Krushi Mahotsav" to showcase agricultural achievements, promote best practices, and provide a platform for farmers to share knowledge and experiences, thereby stimulating agricultural innovation and community engagement.



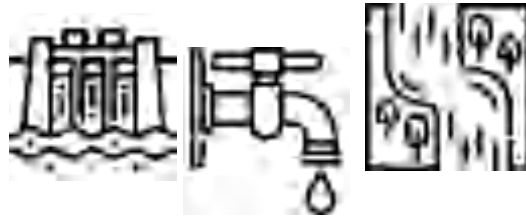
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# Water Management

## 1. Introduction

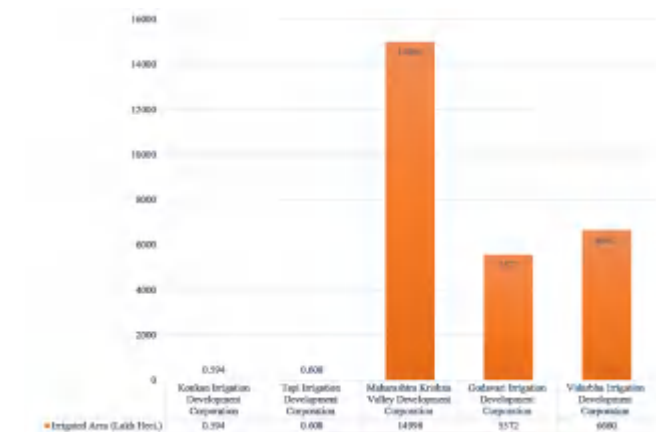
Water management in the Khandesh region of Maharashtra stands at the intersection of necessity and opportunity, with its significance extending far beyond the confines of its geography. This introduction sets the stage for an insightful exploration of water management in Khandesh, with a primary objective of discerning the myriad opportunities and challenges that define the region's hydrological landscape. The purpose of this report is to unravel the complexities of water resource utilization, conservation, and distribution, shedding light on the critical need for informed policies and targeted interventions. In a region where agriculture, industry, and urbanization coexist amidst fluctuations in rainfall patterns and a growing demand for water, understanding the dynamic equilibrium of water management becomes paramount for sustainable development and resilience in the face of an ever-changing environment.



## 2. Interventions

1. Water budgeting: Implementing rain gauges in each village by Gram Panchayat is crucial for accurate measurement of rainfall at the local level. This data enables the creation of localized agriculture calendars, aiding farmers in optimal crop planning based on seasonal precipitation patterns. Improved understanding of local rainfall contributes to more efficient water management and resilient cropping patterns, enhancing overall agricultural productivity.

2. Initiating water management and planning during the winter is crucial as it allows for strategic foresight and comprehensive execution. By addressing potential scarcity



proactively, authorities can implement efficient distribution strategies, optimize resource allocation, and enhance the region's resilience to water challenges before the summer.

3. The 'Gaalumukta Dharan, Gaalyukta Shivar Yojana' by the Maharashtra government aims to address water conservation comprehensively. In the Khandesh region, the Desilting Policy Committee's recommendation to desilt numerous dams and water tanks aligns with this initiative. To expedite the process, using machinery for desilting is suggested, ensuring a faster and more cost-effective approach than traditional methods. Securing funds at the project's outset is essential for seamless execution.

4. Implementing a community-based solar power grid project involves providing solar pumps to farmers in targeted villages under the PM KUSUM Scheme. To maximize the benefits, infrastructure should be established for collecting and distributing excess solar power generated during off season. There are approximately 40 days when the pumps are actively used for agricultural purposes only. This surplus energy can be sold, creating an additional income stream for farmers. By integrating a sustainable energy model like the Baripada model, this initiative not only addresses the agricultural energy needs efficiently but also contributes to income generation and solves the energy challenges in the community.



5. Strengthening Water Use Associations (WUA) in the Khandesh region is pivotal for efficient water governance. These associations play a crucial role in equitable water distribution, conflict resolution, and sustainable water management practices. By enhancing their capacity, local communities can collaboratively address water challenges, ensure responsible water use, and promote resilience in the face of changing conditions.

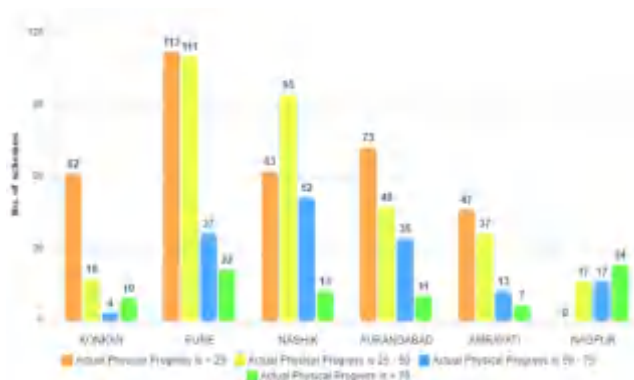
6. Amendments to the Maharashtra Irrigation Management Act of 2005 are essential to address evolving water management challenges. Updating the legislation can enhance governance, streamline decision-making processes, and incorporate modern technologies for efficient water resource utilization. By adapting the Act to current needs, Maharashtra can ensure more effective regulation, sustainable practices, and equitable distribution of water resources, contributing to the overall resilience and development of the region.

In addition to addressing technical aspects, there is a pressing need for non-technical detailing in the Maharashtra Irrigation Management Act of 2005. This includes incorporating provisions for community participation, transparent communication, and stakeholder engagement. By emphasizing these non-technical elements, the Act can foster a more inclusive and accountable water management framework, ensuring that the interests and concerns of diverse stakeholders are adequately considered in the decision-making process.

### 3. Strategies to Bridge Implementation Gaps

#### 3.1 Water Distribution

1. Enhancing the role of Maharashtra Jeevan Pradhikaran (MJP) in the execution of the 'Har Ghar Nal Se Jal' Jal Jeevan Mission is vital for its success nationwide. Despite the mission's ongoing implementation through Zilla Parishad and MJP together in Maharashtra, there are existing challenges that necessitate a more prominent involvement of Maharashtra Jeevan Pradhikaran. By doing so, we can improve the overall efficiency of the mission and address the current hurdles faced during its implementation. This strategic enhancement aims to streamline processes and overcome obstacles, ultimately contributing to the successful realization of the Jal Jeevan Mission's objectives in Khandesh and beyond.



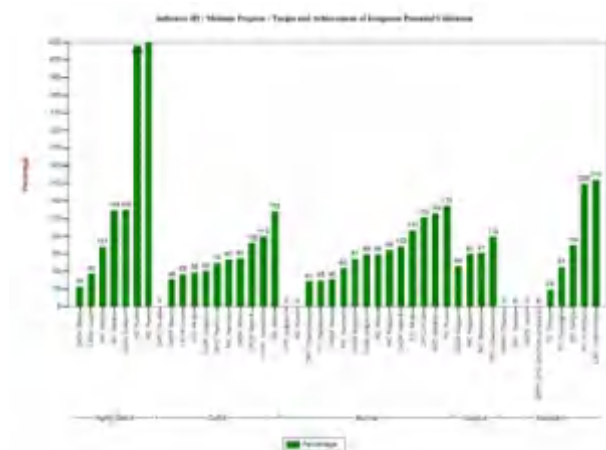
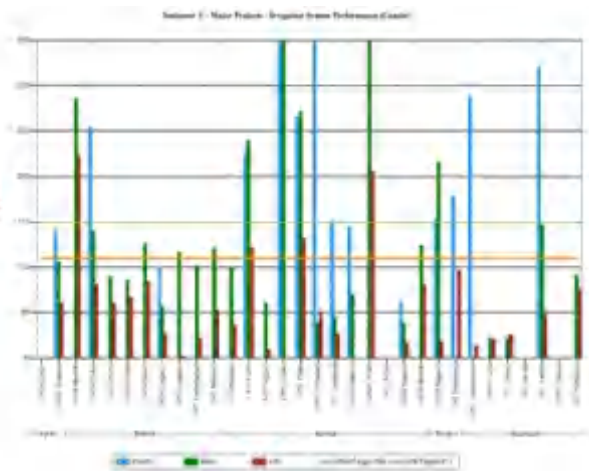
2. Proposing a distinct policy to establish a permanent mechanism for the repair and maintenance of water supply infrastructure, including taps and pipeline connections, underlines the need for sustained functionality. Assigning the responsibility of maintenance to Maharashtra Jeevan Pradhikaran is recommended, coupled with financial support from the government. Past experiences have demonstrated that the absence of financial backing adversely impacts the implementation of schemes, leading to eventual cessation. This policy for repair and maintenance is crucial to prevent such disruptions and ensure the continuity of water supply initiatives.



### 3.2 Water Conservation

1. Proactive government efforts in completing major irrigation projects in Khandesh, such as the Prakasha-Burai Irrigation Project, Irrigation Nimnatapi (Paldalsare) Barrage and Shelgaon Barrage are paramount for regional development. These initiatives enhance agricultural productivity, provide water security to farmers, mitigate drought risks, and stimulate economic growth. By ensuring the timely completion of these projects, the government contributes to the overall well-being of the community, promoting sustainable agriculture and the region's resilience against water-related challenges.

Several factors contribute to the incompleteness of irrigation projects in the Khandesh region. Funding constraints often hinder project



execution, leading to delays or halts. Unavailability of skilled labour, land acquisition challenges, environmental concerns, and bureaucratic red tape further impede progress. Additionally, changing political priorities and inadequate planning may result in insufficient allocation of resources. These

combined factors create obstacles, leaving many irrigation projects in the Khandesh region incomplete. challenges, environmental concerns, and bureaucratic red tape further impede progress. Additionally, changing political priorities and inadequate planning may result in insufficient allocation of resources. These combined factors create obstacles, leaving many irrigation projects in the Khandesh region incomplete.

2. Unlocking the full capacity of the Shrikhedra project and Vikrant Talav in the Khandesh region through the implementation of the action plan will significantly enhance regional water management. This optimized utilization will ensure agricultural productivity, ensure a more reliable water supply, mitigate the impact of water scarcity, and contribute to overall socio-economic development in the area.

3. Encouraging the utilization of silt from dams in road construction and agriculture is essential to enhance dam capacity. This sustainable approach not only optimizes the use of available resources but also addresses infrastructure and agricultural needs concurrently, promoting efficient water management.

4. By interlinking water bodies as prototypes, the government can assess the feasibility, environmental impact, and effectiveness of such projects. This cautious approach ensures that large-scale river-linking initiatives are informed by practical insights gained from smaller-scale implementations.

5. Implementing the Jal Yukt Shivar Yojana, it is essential that site selection should be done through surveys, ensuring the regular impact assessment of undertaken initiatives. By



incorporating these practices, the JalYukt Shivar Yojana can achieve greater success in sustainable water resource management and contribute to the overall agricultural and environmental well-being of the region.

6. Efforts for watershed development, spanning from head to toe, are imperative for holistic water resource management. Initiatives at the watershed's head involve protecting and restoring upper catchment areas, ensuring a sustained and clean water source. Moving downstream, soil and water conservation measures mitigate erosion, safeguarding fertile lands and preserving water quality. Integrating the entire watershed ensures comprehensive management, helping biodiversity, supporting agriculture, and enhancing resilience against natural disasters. This holistic approach is vital for sustainable water use and environmental health.

7. Groundwater recharge is vital to counter the depletion of aquifers and ensure water availability for future generations. Structures like Vindhan Vihir, designed for rainwater harvesting, and percolation tanks play a pivotal role. Vindhan Vihir allows for efficient storage and controlled release of rainwater, while percolation tanks facilitate water infiltration into the soil, replenishing underground aquifers. These methods not only address immediate water needs but also contribute to sustainable water resource management, promoting environmental resilience.

8. Community based Solution for water scarcity: Addressing the critical case in Akrani tehsil of Nandurbar, where migration is spurred by water scarcity, requires urgent intervention. Implementing water conservation measures through Corporate Social Responsibility (CSR) projects can play a pivotal role in rehabilitating the affected population could be a probable solution. By executing targeted initiatives such as rainwater harvesting, building check dams, and promoting sustainable irrigation practices, the region can become more resilient to water scarcity. Encouraging community participation not only facilitates a sense of ownership but also contributes to the sustained maintenance of these rejuvenated water reservoirs, ensuring a collaborative approach to water resource conservation and management.

### **3.3 Water Management Framework**

1. The current fragmentation of water conservation responsibilities among various authorities and departments, including ZP, Irrigation, Agriculture, and Environment, creates coordination challenges. To address this, centralizing all irrigation-related tasks under a dedicated Water Conservation Authority

is essential. This streamlined approach ensures efficient coordination, allowing for a more cohesive and synchronized strategy in planning and executing water conservation projects. Consolidating responsibilities eliminates bureaucratic hurdles, improves resource allocation, and fosters a unified vision for effective water management, ultimately enhancing the overall impact of conservation efforts in the region.

### 3.4 Water Quality



1. Ensuring proper disposal of contaminated water in industrial areas of the Khandesh region is imperative for environmental preservation and public health. Implementing robust disposal mechanisms prevents the contamination of water sources, safeguarding both surface and groundwater quality. This measure is essential to mitigate adverse effects on ecosystems, agricultural lands, and local communities, promoting sustainable industrial practices and promoting a healthier environment for the region.

2. Conducting a comprehensive water quality survey for each village in the Khandesh region is imperative. This survey should analyze various parameters to identify contaminants and assess the overall water quality. Based on the findings, tailored water treatment plans can be devised to address specific issues in each village. Establishing Reverse Osmosis (RO) plants becomes essential to provide clean and safe drinking water, tailored to the unique requirements of each community. Distribution of required material should be done by Gram Panchayat. This approach ensures a targeted and effective strategy for improving water quality and promoting public health in the region.



# Khandesh Vikas Manthan

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A document on Khandesh Development

*Policy Interventions and Implementation*

*An initiative by PARC*



# Environment



## 1.0 Overview



The Khandesh region in Maharashtra, unfolds as a captivating mosaic of nature and human influence. This effort intricately examines the environmental nuances of Khandesh, shedding light on the challenges, conservation endeavours, and sustainable practices that shape its ecological landscape. From the rugged Western Ghats to the agricultural expanses along the Tapi River, our exploration navigates through the diverse factors influencing the region's environmental narrative.

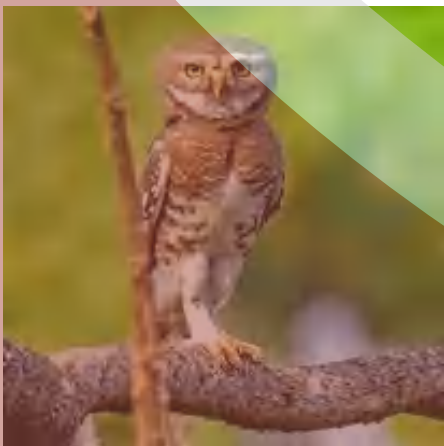
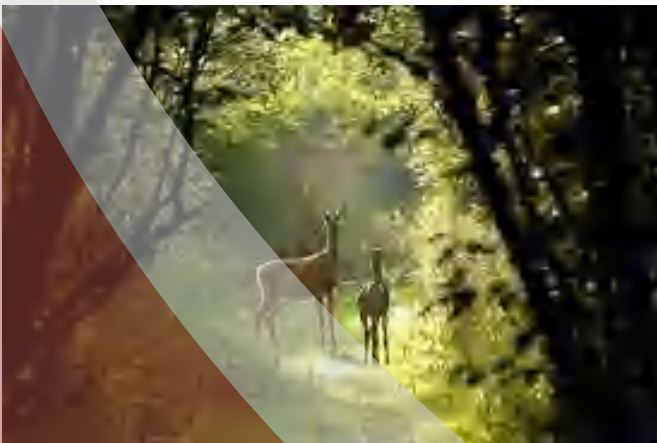
Through a thorough analysis of key indicators, ecological trends, and socio-economic considerations, it offers valuable insights into the intricate interplay between human activities and the fragile ecosystems that define Khandesh.

The distinctive ecosystem of the Khandesh region harbours a variety of plant and animal species, showcasing a rich biodiversity. This serves as a testament to the significance of conserving and safeguarding natural habitats in the area.

**Flora:** Teak, Indian suill, Indian coral tree, Medicinal plants like Gunj, Aghada, Maharuk, aloe vera, etc.,

**Fauna:** Main animals found in this region are Panther wagh, Bibala, Wild cat, Jackal, Taras, Barking deer, Nilgai, Samber, etc., and birds like forest owl, painted partridge, vulture, shrike, sparrow hawk

**Protected area:** Toranmal wildlife sanctuary, Yawal wildlife sanctuary, Aner dam wildlife sanctuary, Purna wildlife sanctuary, Nakane Bird sanctuary, Landor- Khoripark,



## 2.0 Interventions

1. To implement a region-specific agroforestry scheme under the Sub-Mission on Agroforestry (SMAF) within the National Mission for Sustainable Agriculture (NMSA), focus on regional assessments, farmer training, and seed distribution. Provide financial incentives, technical support, and collaborate with agricultural universities. Establish a robust monitoring system, encourage community participation, and facilitate market linkages. Regularly review and adapt policies, promote sustainable practices, and conduct public awareness campaigns to highlight the environmental and economic benefits. This holistic approach ensures the success of the "Har Med Par Ped" motto, promoting tree plantation on farmland alongside crops.



2. Seed banks: Establishing local seed banks in each Gram Panchayat of the Khandesh region is crucial for promoting tree plantation and maintenance. These banks provide easy access to indigenous seeds, supporting sustainable planting initiatives and enhancing biodiversity. By cultivating region-specific plant species, communities contribute to environmental conservation and ensure the long-term health of the local ecosystem.

3. Constructing a biodiversity park on non-agricultural lands or vacant lands in the village can serve a greater purpose in the Khandesh region. Not only does it enhance tourism by offering a unique and natural attraction, but it also plays a crucial role in preserving green spaces. The biodiversity park can showcase the rich flora and fauna of the region, providing educational opportunities and raising awareness about environmental conservation. This initiative not only contributes to the economic development of the area through increased tourism but also ensures the protection and appreciation of local biodiversity, fostering a sense of environmental responsibility within the community.



4. The JFM committee of Dhule Circle was awarded First Prize at State level under Sant Tukaram Yojana. JFM Committee of Rajwad (Jalgaon Division) was awarded State level First Prize and another JFM Committee of Nandale (Dhule Division) was awarded Third Prize at State Level under Sant Tukaram Yojana for the year 2009-2010. Nandurbar and Dhule region has always been contributing



significantly for preservation of green cover.

5. Effective implementation of a carbon credit policy in the industrial sector is essential for mitigating climate change. This could be in line with the implementation of Energy Conservation (Amendment) Bill 2022 which covers the Carbon Credit Trading Scheme. It encourages industries to reduce their carbon footprint by adopting sustainable practices. By assigning a financial value to carbon reduction efforts, businesses are incentivized to invest in cleaner technologies and practices.

## 2.1 Implementation Gaps

### 1. Mazi Vasundhara Abhiyan

a. The 'Mazi Vasundhara Abhiyan,' implemented by the Environment Department, faces challenges due to its current annual online activity structure. To address this, the introduction of a Management Information System (MIS) is proposed, enabling year-round online engagement in activities. This adjustment aims to overcome the limitations posed by the current once-a-year online approach.

b. Given the diverse implementation mechanisms across districts, the scheme encounters hurdles in its execution. Recognizing this, a district-specific approach is recommended during result announcements. A marking system tailored to each district rather than a uniform state-wide assessment should be adopted. District-centric evaluation aims to motivate Gram Panchayats within each district to actively participate in and contribute to the 'Mazi Vasundhara Abhiyan.'

c. Furthermore, to amplify motivation at the grassroots level, it is recommended to shift from a state-level award system to district-wise recognition. This approach ensures that awards are tailored to the efforts and achievements of each district, promoting healthy competition among Gram Panchayats. By recognizing and rewarding initiatives at the district level, a more localized and impactful engagement can be achieved, promoting sustained environmental conservation efforts.

d. In order to enhance the involvement of school students in the 'Mazi Vasundhara Abhiyan,' a dedicated outreach program should be implemented. Specialized activities and awareness campaigns within schools can be organized to encourage students to actively participate in the environmental initiatives promoted by the scheme.



## 2.2 Legal Framework

### 1. Forest Rights Act, 2006

#### 1. Forest Rights Act, 2006

##### I. Community Forests Right:

The proposal suggests a dynamic approach to Community Forests Rights.

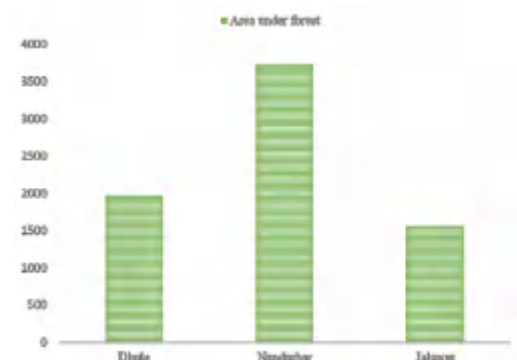
a. Revising these rights after every five years allows for adaptability to changing circumstances could be the initial step.

b. There could be linking of forest rights reclamation to the conservation and growth of forest cover ensuring responsible management.

c. Appointing a village council member with biodiversity expertise and from a different village promotes impartial decision-making and a broader perspective.

##### II. Individual forest rights:

The recommendation proposes a criterion for land allocation, stating that individuals should be granted land only if the soil cover has a minimum depth of 3 metres. If the depth falls below this threshold, the land is deemed barren and is suggested to be transferred to government control, emphasizing sustainable land use and optimal soil conditions for individual allocation.



Graph 2.2.1. Area under forest (2021-22)



## 2. Kruti Arakhada (Action Plan)

The Kruti Arakhada, currently allows for the creation of a strategic plan involving public participation in the village's forest area. The proposal suggests extending this provision to encompass the strategic planning of all natural resources in the village. Additionally, it highlights the necessity to restore the funding for the strategic action plan, which has been reduced from 1 lakh to 12 thousand, to ensure adequate resources for effective planning and implementation.

## 3. Tribal development programme



Creating a structured framework or strategy is essential for the holistic development of tribal areas, and this can be achieved through close coordination between Micro, Small, and Medium Enterprises (MSME) and the Environment Department. By aligning these sectors, a comprehensive approach to tribal development can be established. MSME involvement can drive economic growth by supporting local entrepreneurship and skill development, while collaboration with the Environment Department

ensures sustainable practices that preserve the unique ecological balance of tribal regions. This coordinated effort aims to uplift tribal communities by providing economic opportunities, preserving their cultural and environmental heritage, and establishing a balanced and sustainable development model.

### 2.3 Stakeholder engagement

1. Granting special rights to Gram Sabha for local natural resource management ensures community involvement. Meanwhile, at the district level, appointing All India Services officers is recommended, signifying the necessity for higher administrative expertise in overseeing regional resource management.

2. Sewage and solid waste management:

- a. Effective sewage and solid waste management at the village level requires ensuring the adequacy of facilities.
- b. A key aspect is the involvement of a technical expert to guarantee the sustainability of the implemented solutions.
- c. Conducting a social audit becomes crucial to assess the specific needs of each village, ensuring that the chosen scheme is necessary and relevant.
- d. Opting for a personal scheme over a public one can enhance sustainability and infrastructure maintenance by establishing a local authority responsible for the system,

### 2.4 Best Practices

1. Given the substantial scale of banana production in the Jalgaon district, utilizing banana leaves can be a meaningful contribution to environmental sustainability.

a. Banana leaves, being biodegradable, can serve as an eco-friendly alternative to single-use plastics in various applications.



b. Embracing banana leaves for packaging, serving, or other disposable purposes can help reduce plastic waste and its environmental impact.

c. This initiative aligns with the region's agricultural strengths, promoting a more sustainable and environmentally friendly approach to everyday practices.

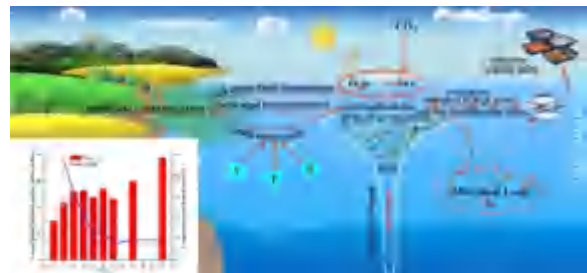
d. German Company Leaf Republic and Leaf was marketing the biodegradable leaf tableware made of palm leaves. Its cost was close to INR 800/- in Europe, similar models could be developed with the tribals in these areas.



2. The increasing use of plastic plates for communal meals during ceremonies like marriages and deaths raises environmental concerns. To address this issue, the establishment of 'Utensil Banks' in each village, facilitated by Self-Help Groups (SHGs), becomes imperative. These banks would provide a sustainable alternative by offering reusable utensils for such occasions. Collaborating with SHGs not only promotes community involvement but also supports local empowerment. The Bartan Banks initiative encourages a shift away from disposable plastics, contributing to environmental conservation while fostering a sense of responsibility and community engagement in sustainable practices.

## 2.5 Technological Integration

1. The excessive use of herbicides, driven by a shortage of labor, poses a significant threat to soil health, necessitating measures to curb this practice and control soil pollution. Over reliance on herbicides can lead to the depletion of beneficial soil microorganisms and compromise long-term fertility. Implementing strategies to reduce herbicide usage, such as promoting alternative weed management



practices or adopting mechanized solutions, becomes crucial. This approach not only addresses the labor shortage issue but also mitigates the adverse environmental impact associated with excessive herbicide use, safeguarding the overall health and productivity of the soil.



2. The Solar Feeder Project involves the implementation of solar-powered feeders in the agricultural sector. These feeders, equipped with solar panels, harness solar energy to provide a continuous and sustainable power source for irrigation pumps or other essential agricultural machinery. This initiative aims to address energy challenges in rural areas, promoting eco-friendly practices and reducing dependence on conventional power sources. By utilizing solar energy, the Solar Feeder Project contributes to sustainable agricultural practices, fostering rural development and

resilience in areas where access to electricity may be limited or unreliable.

3. Unlocking Khandesh's Renewable energy potential: Khandesh exhibits significant potential for harnessing renewable energy, particularly through wind and solar power. The ongoing Sakari solar power plant and Dhule wind energy projects serve as noteworthy examples, highlighting the region's

capacity for sustainable energy initiatives. To fully capitalize on this potential, it is imperative for the government to conduct comprehensive surveys aimed at identifying optimal sites for further expansion. By facilitating the establishment of new projects, authorities can not only flourish the region's energy infrastructure but also contribute to the broader goal of sustainable and eco-friendly power generation.



## 2.6 Monitoring and Evaluation

1. The monitoring of tree plantations can be significantly enhanced through the adoption of new technologies, enabling efficient conservation and growth tracking. Utilizing tools such as satellite imagery, remote sensing, and geographic information systems (GIS) allows for real-time assessment of tree health, identifying areas that require attention and ensuring the overall success of afforestation initiatives.



2. Implementing strict regulations and an effective strategy for the treatment and disposal of industrial wastewater is essential, especially considering the alarming use of contaminated water for irrigating vegetables in nearby villages. A robust regulatory framework should be implemented as per the designated rules of MPCB, CPCB & MoEF&CC accompanied by rigorous penalties for non-compliance.

3. Simultaneously, awareness campaigns are crucial to educate industries and communities about the potential health and environmental risks. This initiative aims to ensure the proper treatment of industrial wastewater, safeguarding public health, protecting the environment, and promoting responsible industrial practices.

## 2.7 Community involvement and Public awareness



1. Proposing bamboo farming in the vicinity of the Tapi River involves cultivating bamboo plants along the riverbanks and nearby areas. This initiative serves multiple purposes, including soil conservation, water quality improvement, and sustainable resource utilization.

2. Bamboo's extensive root system helps prevent soil erosion along the riverbanks, contributing to overall watershed management. Additionally, bamboo cultivation can enhance biodiversity, provide a renewable source of raw material for various industries, and offer economic opportunities for local communities. The Tapi River bamboo farming initiative thus

aligns with ecological conservation, sustainable resource management, and community development objectives in the region.

3. For Khandesh, initiate a targeted awareness campaign on rainwater harvesting through community workshops and local media. Enforce compulsory rainwater harvesting provisions in building codes and municipal bylaws, incentivizing compliance with tax benefits or subsidies. This focused approach ensures swift and effective adoption of rainwater harvesting practices in the Khandesh region.

# Khandesh Vikas Manthan

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# Industry

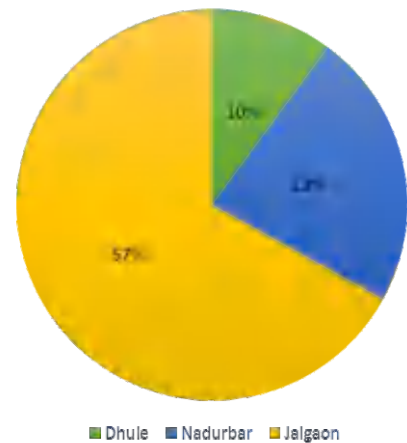
# I. Industry and Employment

## 1. Overview

The Khandesh region, encompassing Dhule, Jalgaon, and Nandurbar districts, blends modern industry with indigenous heritage. The region boasts a diversified industrial portfolio, encompassing sectors such as agro-processing, textiles, and small-scale manufacturing synergized with local traditions, preserving culture while optimising expertise. This integration creates ample employment opportunities, particularly in the industrial sector. Skill development initiatives cater to diverse needs, empowering individuals, including tribal youth, for economic growth. This strategy reflects the government's commitment to inclusive and sustainable progress.

## 2.0 Policy Interventions

1. Maharashtra Private Industrial Park Policy: Propose the drafting of a new policy specifically for private industrial parks in Maharashtra.
2. Khandesh Vikas Corporation: Propose the establishment of Khandesh Vikas Corporation with comprehensive responsibilities and authority for the overall development of the Khandesh region.
3. Expansion of DMIC Corridor: Inclusion of Jalgaon and Nandurbar within the 150 km shadow zone of the existing Delhi-Mumbai Industrial Corridor (DMIC) to stimulate industrial modernization, generate employment, and boost economic growth in the Khandesh region.
4. Amnesty Scheme for MIDC Clearance: Introduce an amnesty scheme to regularise any deficiencies in the clearance process for Maharashtra Industrial Development Corporation (MIDC)
5. SME Management Courses: Propose the introduction of degree and diploma courses on SME Management after the 10th grade.



**Graph 2.1** MSME in the Khandesh region, 2022-22



**Aerial view of Jain Irrigation Plastic Park Jalgaon, it has facilities across five continents and exports its products to almost 100 countries.**

6. Industrial Land Bank Portal: Propose the establishment of an Industrial Land Bank Portal at the Maharashtra/India level for streamlining land acquisition and permissions. Currently these provisions are only for the MIDC, similar could also be developed for ease of doing processes for industries.
7. Establishment of MSME Ministry: A dedicated Ministry for Micro, Small, and Medium Enterprises (MSME) in Maharashtra could enhance support and focus on the sector's growth. Considering the thriving PVC multipurpose pipe manufacturing industry in Jalgaon district, it is crucial for the local government to support and enhance this sector.

Establishing a dedicated industrial zone or park for these manufacturers could foster collaboration and attract further investment. As for training, initiating specialized programs in collaboration with technical institutes or vocational training centers would empower local talent, address skill gaps, and encourage innovation in PVC pipe production technologies.



## Infrastructure Development and Transport

1. Proposal for Well-Planned Ring Roads: Towns and cities in Khandesh with populations exceeding 50,000 should be equipped with a 30-metre wide ring road, facilitating hassle-free land development around it. Proposed regulations include a minimum plot width of 9 meters and a proportional plot size of 1.8, encouraging vertical development.



2. Town Development Plan should include infrastructure development for industry like road connectivity, railway connectivity and air connectivity. There should be proper earmarked industrial areas for small industry as well as heavy industry. It should envisage overall development for the next 30 to 50 years. Ease of living and doing business should be the priority. It should be suitable for the younger generation.

3. Paldhi-Deepnagar Industrial Corridor: Paldhi-Deepnagar should be developed as an Industrial Corridor for rapid industrial development.

4. Nandurbar Development: MIDC Nandurbar has challenges including land acquisition issues; there are also development related challenges regarding the private as well as Tribal owned land, it stresses the need for effective solutions to promote district improvement.

5. Airport Development: Jalgaon Airport progress needs to be accelerated as it is a centre connecting both Vidarbha by Nagpur alongwith Pune and Mumbai. Development of Dhule Airport is also very crucial which can be covered under the UDAN Scheme.

6. Tapi River Transportation: Explore Tapi River transportation for goods and passengers to enable rapid and cost-effective transportation.

## Agro- Industry

1. Certification in Agro-based Industries: Address the need for certification of raw materials in agro-based industries, correcting the current anomaly where only finished goods require certification.

2. Banana and Cotton Export Infrastructure: Advocate for the development of export infrastructure and facilities for bananas and cotton in the Khandesh region.

3. Support for Agro-based Industries: Encourage agro-based industries through fiscal support, monetary support, electricity subsidy, and land allotment subsidy.

4. Abolishment of Market Committee Cess: Suggest the abolition of Market Committee Cess charged on the sale of agricultural produce outside Market Committees Act.



## Implementation and Other Interventions

1. Monthly Meetings for Udyog Mitra: Advocate for periodic meetings involving Udyog Mitra and government authorities, ensuring attendance and prompt escalation of raised concerns to higher authorities.
2. Green Energy Initiative: Propose a minimum 10% green energy initiative in thermal power plants and all industrial units.
3. Advantage Khandesh Program: Propose a biennial Advantage Khandesh Program to showcase products, attract industries, and promote the region's opportunities. Advantage Khandesh could be organised under the 'Khandesh Vikas Corporation'.
4. Full-time General Managers for DICs: Advocate for the appointment of full-time General Managers at all District Industry Centers of MIDC, with specific targets for industry development and employment generation.
5. Abolishment of Old Taxes and Laws: Suggest the abolishment of old taxes and laws such as Profession Tax, VAT on specified items, and the Labour Welfare Fund for small industries.
6. Maitri Portal Renewal: Address the need for a renewal process for the Maitri portal.
7. Exit Policy for Unproductive Assets: Advocate for an exit policy for unproductive assets (NPA).
8. Industrial Solar Promotion Policy: Suggest the implementation of an Industrial Solar Promotion Policy to address power supply issues and promote solar energy investment.



9. Promotion of Cooperatives: Emphasise the priority and assistance for industries under cooperatives.
10. Promotion of Maharashtra as an Industrial Hub: Call for state government promotion of Maharashtra as a favorable destination for industries through online portals, roadshows, and streamlined operations.
11. Speedy Disbursement of Industrial Subsidies: Advocate for the prompt and hassle-free disbursement of industrial subsidies through an online portal.

12. Electricity Subsidy in Khandesh: According to the PSI 2019, it provides electricity subsidy to the underdeveloped talukas especially in D/D+. They should get these subsidies under this provision for the Khandesh Region.

13. Retail Policy: Need for the implementation of the retail policy in Maharashtra, considering fiscal incentives.

14. MIDC should provide land at reasonable rates and allow existing industries of 25-30 years to develop commercial businesses without

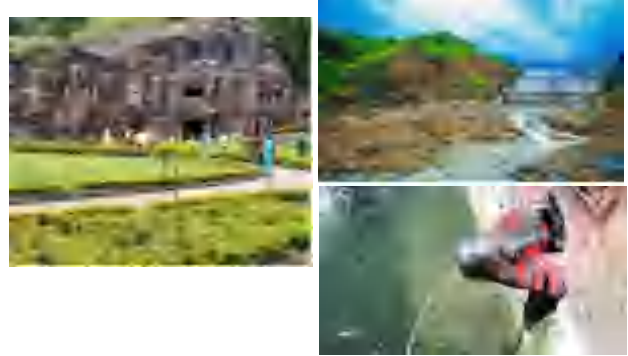
15. Many industrial areas covered under local bodies have to pay double taxation. To avoid this, these local bodies such as Gram Panchayat, Municipal Council and Municipal Corporation of B, C and D classes should not be made liable for these double taxation as these authorities do not provide any facilities for industrial areas covered under them.

16. Allow transfer of sick cooperative industrial units to the private sector on easy terms to keep the employment continued. There must be required amendments to be made in the Maharashtra Cooperative Act.



### 3.0 Tourism

Khandesh, situated in Western India and part of Maharashtra, shares the region of Burhanpur with Madhya Pradesh. The area features diverse topography, including the Tapti River valley, Satpura Ranges, Berar region, Ajanta Hills, and the westernmost ranges of the Western Ghats. It shares a border with Madhya Pradesh as well as Tourism-centric Gujarat. With ancient roots mentioned in the Markandeya Purana and Jain literature, Khandesh has a rich history spanning from early times through medieval eras to the present. Exploring historical sites in the city reveals fascinating landmarks, such as Songir in the Dhule district,



**Fig. 3.1. Toranmal Prakasha of Nandurbar, and Unapdev of Jalgaon.**

### Policy Intervention

1. Tourism Promotion: Encourage the development of tourist spots in Khandesh, focusing on infrastructure improvement and renovation of temples to establish a Khandesh Tourism Circuit.
2. Industrial Infrastructure Development: Prioritise the construction and completion of the Indore-Manmad Railway, and propose the provision of night trains from Mumbai and Pune to Dhule. Highlight the potential of Toranmal and Pal for tourism.
3. Jalgaon's tourist attractions primarily revolve around temples and religious places, but they face challenges such as limited awareness and inadequate infrastructure. To address this, the PRASAD Scheme (Pilgrimage Rejuvenation And Spiritual Augmentation Drive) by the central government offers support, yet its criteria may not fully accommodate smaller destinations. A potential solution involves implementing a tailored state-level scheme for Maharashtra, encompassing the lesser-known religious sites and fostering comprehensive development efforts.
4. Lack of transportation and connectivity: Investment for the development of new airports, railway lines, highways and public transport systems. The development of new airports and new highways would open up previously remote destinations making them more accessible.
5. Cultural Tourism: Recognizing the distinctive aspects of the Khandesh region's rich culture and tradition, with its significant tribal population, it will be identified and promoted as an integral component of the region's tourism. This entails promoting the region's rich tribal culture through organised cultural festivals, highlighting agro-tourism by showcasing traditional farming practices, and fostering economic opportunities through the promotion of local arts and crafts.
6. Capturing adventure seekers by showcasing the trekking opportunities and the breathtaking panoramic views of the Akrani fort in Nandurbar district.
7. Promote eco-tourism around Tapi river and Songir dam in Dhule district and also emphasise the employment potential in hospitality, guiding and adventure sports.
8. Drafting Destination Master Plan which would involve a meticulous process of comparative analysis and conducting a comprehensive gap assessment. The plan will comprise suggested hard



and soft interventions, presenting a well-defined framework of projects with associated block costs. The hard interventions focus on infrastructure, including tourism core products, activities, health, safety, sanitation, site infrastructure, and circulation/traffic. Meanwhile, soft interventions cover tourist services, marketing, promotion, capacity building, and digitization/GIS mapping. This strategic approach ensures a holistic and systematic development blueprint for the destination.

## **4.0 Employment**

Khandesh region has diverse employment, encompassing agriculture, trade, and small-scale industries. Currently, the region relies heavily on traditional occupations, with agriculture playing a significant role in livelihoods.

The current state of employment in the region reflects a dependency on seasonal agricultural activities, leading to fluctuations in income and job stability. The region with its rich agricultural landscape, presents a unique opportunity for sustainable economic development. However, realising this potential requires a targeted approach that integrates technological advancements, entrepreneurial ventures, and skill development to create a robust employment ecosystem.

### **Addressing Challenges and Opportunities**

#### **Agri-Tech Adoption and Encouraging Agribusiness Ventures**

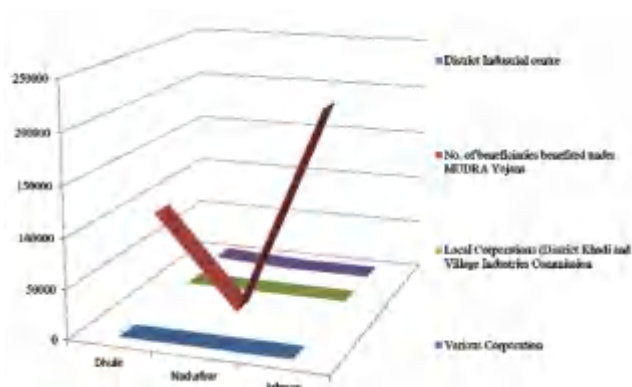
Implementing training programs aimed at educating farmers on modern agricultural practices and technology, empowering them with the knowledge to enhance productivity. To ensure practical application, we propose facilitating affordable access to precision farming tools through strategic collaborations with agricultural tech firms. Additionally, we plan to conduct workshops focused on efficient water management techniques, promoting sustainable practices and optimising resource utilisation. Through initiatives like the Sub-Mission on Agricultural Mechanisation (SMAM) scheme under NMAET (National Mission on Agriculture Extension Technology) aiming to equip farmers with the skills and tools necessary for modern, sustainable agriculture, fostering increased efficiency and resilience in the farming community.

The establishment of agricultural cooperatives as a collaborative platform for marketing and processing farm produce, fostering collective growth within the farming community. To incentivize further development, providing financial support for the creation of food processing units, enhancing the value chain of agricultural products. Additionally, supporting the formation of local cooperatives specifically dedicated to organic farming, processing, and marketing.

#### **Skill Development for Diversification**

Strategic investment in vocational training centers that offer courses tailored to the needs of the evolving job market. These courses will encompass areas critical to the agricultural sector, including food processing, agribusiness management, and technology. Furthermore, to develop targeted training programs specifically designed for youth entering emerging industries, with a focus on skill development in areas such as food packaging and quality control. These initiatives aim to equip the workforce with the expertise required for the modern agricultural landscape, ensuring a skilled and adaptable workforce for sustained economic development.

## Micro-Enterprise Support



Graph 4.1. Number of beneficiaries given benefits under self-employment schemes available with various systems in the district

Simplifying access to credit to create a revolving fund designed to offer low-interest loans through schemes like PMMY (Pradhan Mantri Mudra Yojana), Stand Up India Scheme etc. for small-scale entrepreneurs providing crucial financial support for the initiation and development of small businesses. Additionally, by establishing a dedicated support system including mentorship programs to provide guidance and enhance their sustainability would seek to empower and fortify entrepreneurship enabling small-scale ventures.

## Education for Agri-Entrepreneurship

The strategy involves seamlessly integrating agribusiness and entrepreneurship courses into the local educational curricula. Through collaborations with educational institutions, establishment of incubation centers that would offer students practical experiences and mentorship in agribusiness development. Likewise, to form partnerships with local universities to launch agribusiness incubators, cultivating environments where innovative ideas can flourish into successful ventures. This approach not only enhances the educational experience but also nurtures a conducive ecosystem for the growth of agribusiness enterprises

## Promoting Tourism-Linked Employment

Generating employment prospects in the hospitality and related services sectors. This would not only serve as an economic driver for the community but also provide visitors with an authentic and enriching exploration of the region's agricultural landscape and cultural richness. It is recommended to collaborate with key stakeholders, including government bodies, private enterprises, and educational institutions, to implement and sustain these initiatives effectively. Regular monitoring and evaluation will be crucial to ensure the long-term success of the proposed



# Khandesh Vikas Manthan

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A document on Khandesh Development

*Policy Interventions and Implementation*

*An initiative by PARC*



## Health

## 1.0 Introduction

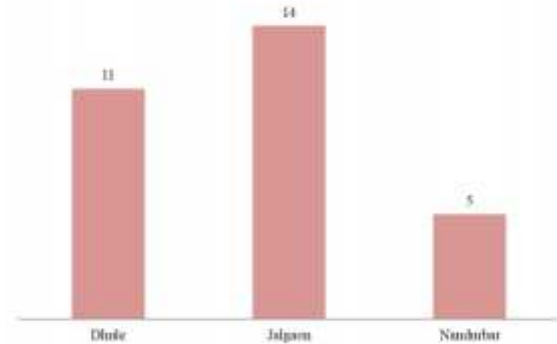
Bharat is one of the fastest developing countries in the world. It is important to provide quality healthcare services to all by upgrading health infrastructure, creating a skilled cadre of healthcare human resources, and promoting medical research for developing cutting-edge medical technologies.

## 2.0 Interventions

### 2.1 AYUSH & Integration of Medical Services

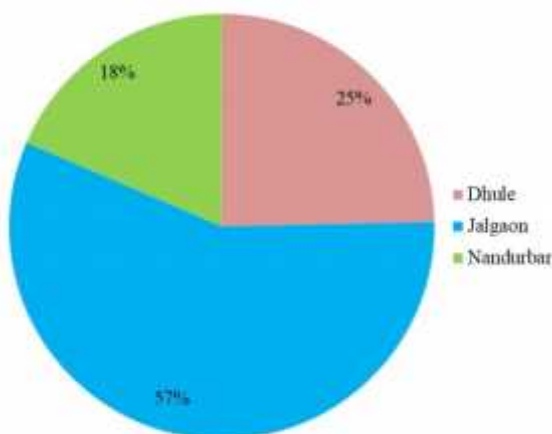
1. The ayurvedic doctors representatives should be included in the FDA so that ayurvedic medicine manufacturing would be technically easier.
2. There should be a provision of a counseling board or a body for the propagation of ayurvedic disease prevention and health, diet and yoga.
3. Availability of exclusive Ayurvedic hospitals at Dhule, Nandurbar and Jalgaon. Accelerating & developing the AYUSH facilities at the PHC's & CHC's are also crucial which will be ancillary to these facilities. AYUSH is also one of the essential components under the National Rural Health Mission (NRHM).

4. Provision of a land for ayurvedic plantations for the benefit of ayurvedic doctors and patients. This will integrate the tribals of Dhule & Nandurbar which is a rich flora region of Satpura ranges. These tribals use traditional medicinal plants for the snake bites as well as other ailments.
5. Regulations should be made where Ayurvedic medicines should not be sold without prescriptions.
6. The ayurvedic panchkarma clinics and hospitals in Maharashtra should operate based on the Kerala pattern.
7. Research units for conducting clinical trials in homeopathy and ayurved should be established in each district of Khandesh. Government aid should be given to these research units.



Graph 2.1.1: AYUSH HWCs in Khandesh

8. There is a need to increase homeopathy medical colleges in Maharashtra.
9. The bed capacity at the Government Homeopathy College, Jalgaon should be increased from 50 to 100. Also, adequate healthcare human resources should be recruited at this medical college.
10. A homeopathy doctor should be appointed at each rural PHC of Khandesh. This will ensure the provision of homeopathy treatment in the rural areas.
11. An integrated medical research facility should be established in Khandesh which has an integrated medical approach including all the pathies. Government aid should be given to this research facility.
12. A treatment center having an integrated medical approach including homeopathy, ayurved and allopathy should be established for treating chronic diseases like cancer, liver cirrhosis, psoriasis, etc. Timely settlement of cashless mediclaims should be ensured in ayurvedic hospitals.



Graph 2.1.2 :  
ABHAs created in Khandesh

## 2.2 Healthcare Schemes & Insurance

1. Hospitals face a lot of problems in verification of documents of patients referred from neighboring states like Madhya Pradesh and Gujarat for the Ayushman Bharat scheme. provision could be made to resolve this issue.

2. There are a lot of misunderstandings about empanelled hospitals, various treatment facilities amongst patients and doctors also. A system should be developed for smooth running of these schemes. Empanelment process should be transparent and simple.

3. The health schemes should be opened for all the hospitals (also for the hospitals which are not empaneled) with a single window patient registration at district and taluka level so that the patient would receive treatment at the hospital of his or her choice.

4. Health treatment packages are very old and need to be revised and updated. A lot of diseases are not covered in the health schemes. New diseases should be added in the health scheme packages.

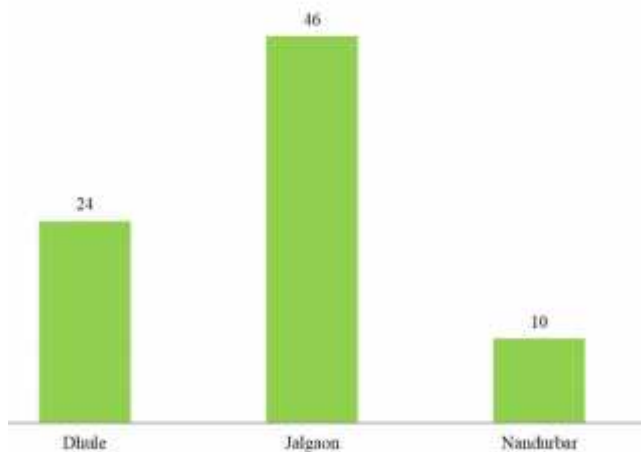
5. Private hospital doctors should be included in the health scheme committees.

6. Grievance redressal system for hospitals should be created similar to patient grievance redressal so that hospitals facing problems related to the schemes could be solved easily.

7. There is no working office of Ayushman Bharat in Maharashtra, these facilities should be made available.

8. Cashless claim settlement should be prompt and without any exploitation by insurance or the TPA company. The whole system needs to be redeveloped. The doctors should be included in this insurance process.

9. Private ayurvedic doctors and hospitals should be facilitated with availability of clinical trials and the subsidy.



**Graph 2.2.1:**  
PMJAY empanelled hospitals in Khandesh

## 2.3 Healthcare Infrastructure & Development

1. Well-equipped cardiac ambulances should be available at all government medical colleges.

2. The healthcare human resources such as doctors, nurses and other paramedical staff should be increased in the government medical colleges.

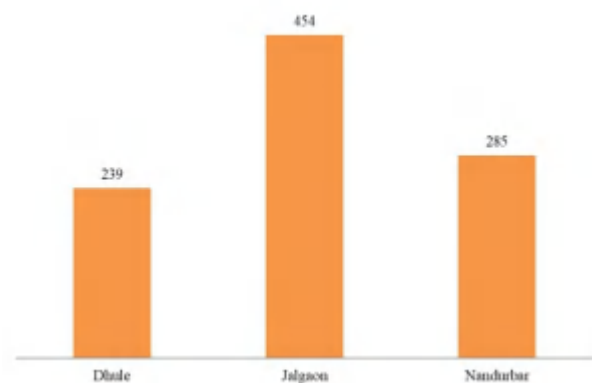
3. The medical infrastructure and facilities should be improved in all government medical colleges. Timely payments should be given to the hospitals and doctors.

4. All necessary medicines should be made available at affordable rates or voluntarily by government medical colleges.

5. Screening tests of premature babies for mental retardation & cardiac diseases, blindness, sickle cell anemia and thyroid diseases should be conducted in the government medical colleges.

6. Cleaning and laundry contracts for all government medical colleges should be given to some renowned agency or company.

7. The CT scan & MRI machines in the government hospitals are old and this medical infrastructure should be upgraded. The GMCs can tie up with the private medical companies for providing CT scan,



**Graph 2.3.1:** Functional HWCs in Khandesh



MRI and Pathology services at reasonable rates. Brain dead organ retrieval centers should also be built in all government medical colleges.

8. A separate PWD sub-division should be there and the government medical colleges to avoid delay in various works related to PWD.

9. School students' ophthalmic screening for refractive errors and timely correction should be conducted in the government medical colleges.

10. All PHCs, rural and cottage hospitals should be upgraded as per the need assessment of that particular centres.

11. The facilities for the treatment of snake bites, poisoning and postpartum hemorrhage should be available so that the golden period for the treatment should not be wasted in shifting the patient to the tertiary center. Specially trained doctors should be posted (on-call basis) at the rural and cottage hospitals. Salaries and incentives should be increased for such doctors providing medical services in rural areas.

## 2.4 Healthcare Act related Interventions

1. Biomedical waste contracts should be given to various agencies one for each Taluka.

2. Removing bank guarantee and asset verification.

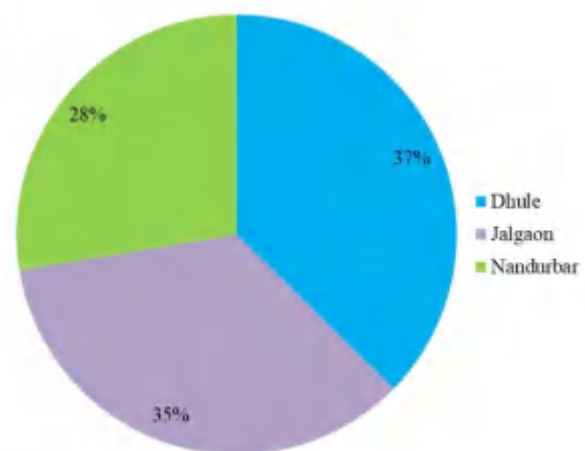
3. CEA 2010 is completely unacceptable.

4. Or hospitals with less than 50 beds should be exempted from CEA.

5. State Bombay Nursing Home Registration Act should stay without amendment 2021.

6. Day Care hospitals like Ophthalmic Hospital should be exempted from Nursing Home registration.

7. Violence against the doctors: The Act should be amended for seven or more years of non-bailable imprisonment for the culprit.



Graph 2.4.1:  
Registered Health Facilities in Khandesh

## 2.5 Sickle cell disease Interventions

1. The carrier patient's family should be compulsorily screened for the sickle cell disease.

2. Prenatal screening of unborn children of carrier patients should be conducted for sickle cell disease.

3. There should be a provision of various tests for diagnosis of sickle cell disease and Thalassemia at government medical colleges in Khandesh.

4. Medical history pertaining to sickle cell anemia should be mandatorily noted in the pediatric departments of all the hospitals.

## 2.6 Miscellaneous Interventions

1. Interstate smuggling of medical abortifacient tablets should be strictly controlled. Many patients manage to get these tablets illegally and land up into severe obstetric complications.

2. State Government Health and Medical Education policies and implementations committee should be formed with the inclusion of representatives from medical organisation and association.

3. The Chief Medical Officer's post at the Jalgaon Municipal Corporation hospital has been vacant for years. Specialists in preventive and social medicine should be appointed immediately.

4. Nursing colleges with adequate facilities should be established in all districts of Khandesh region.

5. Consanguineous marriages of 1st degree and 2nd degree should be prohibited as it gives rise to a variety of diseases.

6. Vaccines such as BCG, Polio and other vaccines should be mandatorily given to the children.

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## Education

## I. School Education

### 1.0 Overview

The education in Khandesh, encompassing districts like Jalgaon, Dhule, and Nandurbar, reflects diverse challenges and opportunities. This overview considers aspects such as literacy rates, student enrollment, and infrastructural disparities. Challenges include resource limitations and varying teacher-student ratios, while opportunities lie in targeted investments for improved infrastructure, teacher training, and curriculum development. The prospects for the region depend on strategic interventions to elevate the overall quality of education and address the unique needs of each district.



### 2.0 Policy Intervention

#### 2.1 National Education Policy

The imperative for every nation is a forward-looking education policy, given that education serves as the primary catalyst for both economic and social advancement. Diverse educational systems are evident globally, shaped by unique cultural and traditional considerations. India recently marked a significant milestone with the introduction of its National Education Policy 2020 (NEP 2020), A substantial update after a lapse of nearly three decades since the last major revision in 1986. While the policy's objectives are commendable, the true measure of success depends on the effective translation of these principles into action. The ability of the government, universities and schools to navigate and overcome practical challenges will determine the NEP 2020's impact and the speed of its implementation. Certain recommendations are given below for the implementation regarding the NEP 2020 policy.

1. It is recommended that the State Government should publish and guide all the features of National Education Policy (NEP) to all its stakeholders i.e. students, parents, teachers as well as Non-teaching human resource for its effective implementation.
2. Principals should be given training according to the NEP oriented goals.
3. Schools at the state level should be motivated to come as model schools of NEP so that more schools will be motivated to do so and overall the structure of NEP will move in the direction of achieving the goal and improve the overall condition and status of the Education System in India.

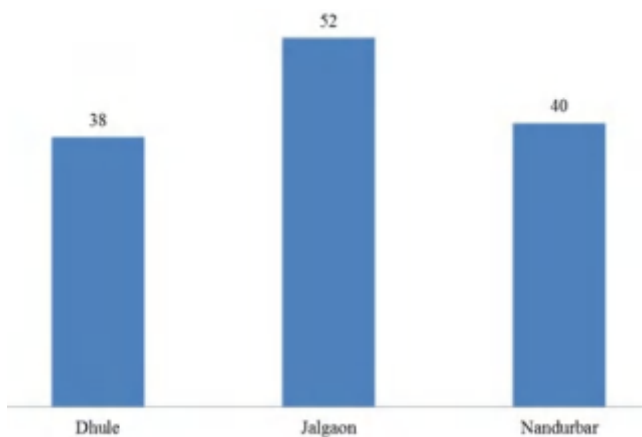
#### 2.2 Skill Development

The elementary stage of education, encompassing classes I to VIII, corresponds to the formative years of a student's life, typically spanning ages 6 to 14. This phase is marked by rapid individual development, wherein various abilities become prominent. Mental growth accelerates as children interact with diverse environmental stimuli, fostering capacities and aptitudes. Exposure to home, school, and society influences the child's



cognitive development, prompting the manifestation of inherited and acquired qualities. The Ministry of Human Resource Development emphasizes the significance of qualitative education in this stage, asserting a focus on cognitive characteristics to ensure success rather than mere access to education.

1. Schools should plan the areas of teaching based on the future demands, that generally happens after enrolling to higher education. It includes areas like technological advancement, and job-entrepreneur oriented skills. Initially, there could be a headstart with programs like the AI Public Awareness program of the Ministry of Education, which will help students to get familiar with the changing and market driven skill required at world level. They adapt with the changing nature of the world and be ahead of time and also develop a scientific temper and cognitive skills.



**Graph: Performance of schools in digital learning (in %)**

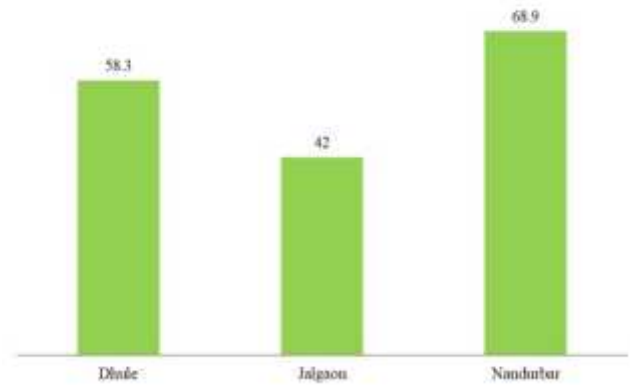
### 2.3 Infrastructural Development

1. Since Schools are unable to pay the electricity bills; renewable energy could be an alternative to reduce the financial burden on the School Management of paying the Electricity bill. They could be installed on non-productive places or terraces or unutilized land to produce electricity by using Solar Energy and generate income by selling the extra units to the grid .

2. If the Teacher's transfer system is transparent and a mandatory provision for all the teachers to work in the tribal area for 3 years it will ensure the best quality of Education is provided to tribal students as best of the teachers have to go there for at least 3 years which will improve the quality of education received by the tribal students. It can be seen as a very progressive step towards the inclusion of the tribal students with the mainstream.

### 2.4 Curriculum Development

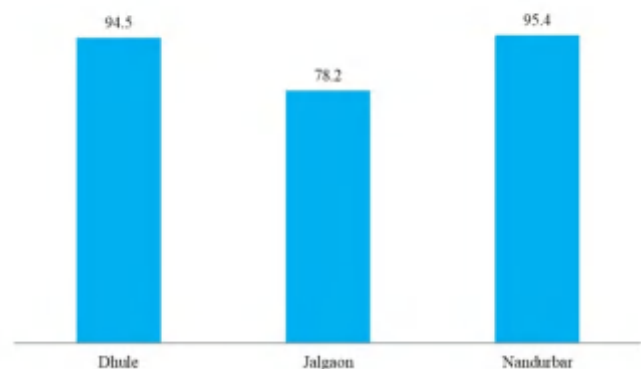
1. Vedic Maths should be introduced as a subject at a lower level as the amalgamation of the rich Indian Culture and also the modern methodology will help the overall development of the Student.



**Graph: Schools having Computers (in %)**

2. Schools should carry on crash courses for unskilled citizens. For example, a certificate course in welding, and a certificate course in AutoCAD. This will benefit the local community if certification courses are provided to them and they might get a chance to work and be part of the world's largest Demographic Dividend group.

3. Students can be given the opportunity to learn skill-based subjects at noted firms with simulation methods. For example, 3 to 4 hours practical experience at an electrical or electronics firm will enhance their Practical knowledge from theoretical knowledge which need to be applied at their workplace.



**Graph: Schools having Electricity (in %)**

2. Many university players can be appointed as coaches to the schools on an honorary basis. It can be seen as a platform for university players to get recognised and gain appreciation. Sports are not set on priority at the school level, thus causing negligence in the higher studies. They can also be appointed under the Volunteer Program of NEP 2020.



3. Local History, geography, politics, etc. are to be introduced at the school level for tailor made development of the region according to their need and requirement without wastage of resource and time.

4. Taluka and Village Levels should also be able to participate in Khelo India .

## 2.5 Other Recommendations

1. Detailed survey for identification of reason for increasing dropouts in this region is essential to address it more specifically (Data of percentage of students enrolling from primary to HS).

2. Highly alert system of file tracking should be initiated with specific tenure as it will create accountability and will improve the Grievance Redressal Mechanism. Schemes such as PRAGATI will ensure the monitoring of the project and time bound work will ensure there is no delay in completion due to lack of Administrative will.

3. As Zilla Parishad Schools are not allowed to take part in the Taluka Science Exhibition it can be seen as excluding the large chunk of students at Zilla Parishad School. Students don't get equal opportunity to participate and showcase their talent . More bright minds and innovation will come forward.

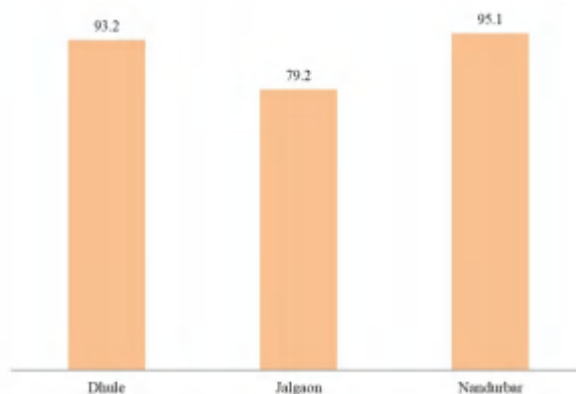
4. All the secondary schools up to std. 10th are allowed to continue with 11th and 12th std. Secondary school education will continue with std. 12th with RTE act extension.

5. The Zilla Parishad schools should get data-based computer operators for a cluster of schools.

6. Sports facilities should be provided in all government schools. Sports should be promoted and encouraged among the children.

7. Scholarships should be provided to meritorious boys and girls based on the financial condition of their parents.

8. A preparation system should be established in the schools and colleges for providing systematic guidance to the students for the various competitive exams.



**Graph: Schools having Playground (in %)**

The Ashram Shalas, overseen by the Tribal Department of the Government of Maharashtra, serve as residential tribal schools dedicated to providing quality education and accommodations, particularly in regions with a substantial tribal population. Their primary aim is to foster the comprehensive development of children, with a specific focus on those in remote and underprivileged areas. In addition to education, these institutions play a crucial role in ensuring the overall well-being of students by offering essential

nutrition and health facilities. A noteworthy initiative within this framework is the Centralized Kitchen, a collaborative effort involving the Tribal Development Department, Government of Maharashtra, District administration, and Stri Shakti. This initiative seeks to provide wholesome and nutritious meals to students in government Ashram Shalas, addressing both educational and health needs. Proposing an extension



**Graph: Schools having Kitchen Sheds (in %)**

of this initiative, integrating it into the Mid-Day Meal Programme is recommended. This integration addresses challenges associated with changing human resources in the Mid-Day Meal Programme under different governments and introduces benefits such as transparency, monitoring, and accountability. Additionally, the proposal suggests adapting meal options in locations where hot meals may not be feasible, emphasizing the importance of involving the local community and Self-Help Groups for sustainable support and community engagement.

## II. Higher Education

### 1.0 Overview

The Khandesh region consists of a vibrant higher education landscape with various notable institutions shaping its educational background. North Maharashtra University in Jalgaon, a distinguished institution known for its diverse academic offerings. Moolji Jaitha College in Chalisgaon and SSVPS's Arts, Science, and Commerce College in Dhule play pivotal roles in delivering both undergraduate and postgraduate education. Specialised institutions, including the Government Medical College in Dhule and numerous engineering colleges, further enriching education of the region.

The higher education purview in the region presents a harmonious blend of traditional and modern institutions, catering to a diverse student demography. Renowned universities and colleges offer a spectrum of programs encompassing arts, sciences, commerce, and professional courses. There is a growing emphasis on skill-based education and research, with institutions actively fostering collaborations with industries. While strides have been made in improving access to higher education, persistent challenges such as infrastructure development and faculty shortages emphasizes the need for continuous efforts. Enhancing the overall quality of education remains a priority



## 2.0 Policy Intervention

### 2.1 National Education Policy (NEP) 2020 requirements and implementation

GER in Higher Education including vocational education is to increase from 26.3% (2018) to 50% by 2035 as per NEP 2020.

To address challenges such as segmentation and the dire state of teacher education, two critical elements are considered for successful policy implementation that are teacher preparation and partnerships. Conducting an awareness and training program is crucial for all stakeholders, including teachers, parents, and students, to familiarise them with the National



Education Policy (NEP) introduced in 2020. Overseen by the National Council of Educational Research and Training (NCERT), the NEP teacher training program acts as a catalyst for continuous development in the teaching profession. NEP 2020 emphasises specific sections dedicated to annual continuous professional development (CPD), underscoring the commitment to ongoing teacher growth and improvement.

### 2.2 Infrastructure and Resource Constraints

1. There is uneven distribution of educational infrastructure, in the region especially in Dhule and Nandurbar districts with inadequate facilities and resources. Many higher education institutions including KBCNMU and some colleges under Khandesh College Education Society in the region struggle with inadequate infrastructure which hampers the quality of education.

2. Infrastructure Development: Comprehensive infrastructure development, including modern classrooms, well-equipped laboratories, and updated libraries, should be prioritized to provide students with a contemporary learning environment.

a. Concurrently, initiatives for faculty development and recruitment must be undertaken to address potential shortages and elevate teaching standards.

b. Strengthening ties between academia and industry through collaborative programs, internships, and workshops can bridge the gap between theoretical knowledge and practical application, bolstering students' employability

c. Integrating technology into the curriculum and teaching methodologies will prepare students for the evolving demands of various industries. Moreover, government support in the form of research grants and scholarships is crucial to incentivize research activities and foster a culture of academic excellence.

d. By implementing these interventions, colleges and other institutions in the region can collectively advance higher education, nurturing a skilled and competitive workforce.

3. Integral to teacher career and professionalism, the National Professional Standards for Teachers (NPST) influences aspects like career management, professional development, salary increments, appraisals, and teaching audit reports.

4. Promotion for NAAC Accreditation for Qualitative Development: As only 97 colleges are NAAC accredited out of 183 in the jurisdictions of the University.



## 2.3 Regulatory and Accreditation Challenges

1. Ensuring that institutions adhere to quality standards and are accredited can be challenging. Some institutions may lack the necessary resources or mechanisms to comply with accreditation requirements. Moolji Jaitha College in Chalisgaon stands as a significant higher education institution. To fortify the educational landscape, targeted interventions are imperative. Infrastructure



development should prioritize the construction and renovation of classrooms, laboratories, and libraries, ensuring that students have access to modern facilities conducive to learning.

2. Limited Access to Quality Institutions: Khandesh has a limited number of quality higher education institutions, especially when compared to more developed regions in the country. This results in a shortage of quality educational opportunities for the local population.

3. The lack of high quality education: While classrooms are evolving, several challenges impede

effective teaching, such as insufficient education and training, recruitment issues, varying teaching quality, motivation disparities, service condition concerns, and the need for systemic reforms. Strategic faculty development programs should be implemented to address potential shortages and enhance the teaching quality. Collaborative initiatives, such as industry-academia partnerships, internships, and guest lectures, can bridge the gap between theoretical knowledge and practical application, thus promoting students' employability. Similarly, the Molgi college in Dhadgaon Taluka, Nandurbar district is facing a lot of challenges related to land building and staff.

4. Shortage of teachers can also result in a lack of support for extracurricular activities and a well-rounded education. One specific scheme that can be considered for the enhancement of higher education in the Khandesh region, necessary interventions should be made at regional level for the development of higher education.

## 2.4 Curriculum Development

1. To promote higher education in the aspirational districts of Jalgaon and Nandurbar, a strategic approach involves tapping into existing schemes. By aligning with relevant programs, colleges in these districts can secure financial aid for infrastructure, faculty development, and curriculum modernization. Additionally, creating special scholarships in collaboration with the National Scholarship Portal can alleviate financial barriers for economically disadvantaged students. Integration of the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) into higher education institutions ensures practical skills alignment with industry needs, boosting students' employability. These efforts, alongside awareness campaigns, can significantly encourage students to pursue advanced education.

2. Encourage entrepreneurship: In 2016, the Khandesh College Education Society in Jalgaon, Maharashtra, drew inspiration from the visionary VISION 2020 of Late President Dr. A.P.J. Abdul



Kalam. Committed to fostering entrepreneurship and bolstering economic growth, the society established the Skill Development Initiative (SDI). This initiative strategically addresses the escalating demand for skilled human resources across priority sectors, both locally and globally. By establishing skill development centers tailored to the specific needs of the region, the society aims to not only meet the demands of local industries but also to significantly enhance employability.



3. Introducing specialised courses related to agriculture: A heavy dependence on agriculture may restrict awareness and exploration of educational options beyond traditional sectors. It is imperative to align courses with the region's economic foundation, focusing on agribusiness and sustainable farming practices. Collaborating with Agricultural Institutes can establish partnerships with research institutions, injecting expertise, resources, and modern practices into the local educational landscape.

4. Harnessing technology for remote learning and digital education is crucial to overcoming geographical barriers and reaching students in remote areas. Modifying education initiatives to the unique cultural and economic aspects of the region is essential for community relevance. The National Mission on Education through Information and Communication Technology (NMEICT) emerged as a pertinent scheme for advancing higher education in the region. This initiative focuses on leveraging technology to enhance educational quality. Institutions and colleges would benefit from schemes like NMEICT by integrating digital tools, establishing e-learning resources, and providing faculty training for effective technology utilisation in education. The scheme also supports the creation of virtual classrooms, fostering remote learning opportunities and expanding education access. Aligning with NMEICT allows these institutions to modernise educational practices, creating a more engaging and accessible learning environment for students of the region. Also, by introducing technology into the curriculum prepares students for the demands of the contemporary workforce. Moreover, government support, in the form of research grants and scholarships, serves as a valuable incentive for both faculty and students to actively participate in meaningful research activities.

5. In Nandurbar, Government College, affiliated with North Maharashtra University, plays a crucial role in higher education. To leverage schemes like PMKVY for its development, the college can integrate skill development programs aligned with local industry needs. Through targeted interventions, Government College in Nandurbar can effectively utilize schemes like PMKVY to foster a more dynamic and skill-oriented higher education environment. Availability of internship/ on job training is a key challenge, needing to implement the MP model, in which the independent committee under the chairmanship of the district collector is working and exploring the possibilities of internship and on job training.

6. Economic constraints and social factors may deter students, especially from marginalized communities, from pursuing higher education. For colleges with a focus on tribal communities, the Ministry of Tribal Affairs' Eklavya Model Residential Schools (EMRS) scheme could be highly relevant. While EMRS primarily focuses on schools, its provisions extend to higher education institutions. By establishing partnerships between colleges in tribal regions, such as those in Nandurbar, and the EMRS scheme, specific initiatives can be implemented to support tribal students in their educational journey. By tailoring interventions to the unique needs of tribal communities, colleges in Nandurbar can ensure inclusive and equitable higher education for tribal students, contributing to their overall empowerment and development.

7. Designing a comprehensive sports curriculum integrated with higher education in the region involves considering the local culture, resources, and educational needs. By identifying popular sports in the region, such as cricket, kabaddi, and athletics, and incorporate them into the curriculum. Establish partnerships with local sports clubs or organisations to provide practical training and opportunities for students. Integrate theoretical aspects of sports science, nutrition, and sports management into academic courses to offer a well-rounded education. Also by ensuring the curriculum aligns with national standards while being adaptable to the unique characteristics of Khandesh.

8. Additionally, create facilities and infrastructure that support both academic and sports activities, fostering a holistic development approach for students. Encourage community involvement through sports events and outreach programs to promote a healthy lifestyle and community engagement. This approach will not only enhance physical well-being but also contribute to the overall development of students.

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## Social Welfare

## 1. Overview

Social welfare and development is a broad field encompassing various fields such as education, health & nutrition, housing, employment, poverty, social justice, women and child welfare, water supply & sanitation and environment conservation. Looking at the scope of this sector, it becomes important to ensure sustainable economic development of these fields which would touch millions of lives across the country.

## 2.0 Interventions

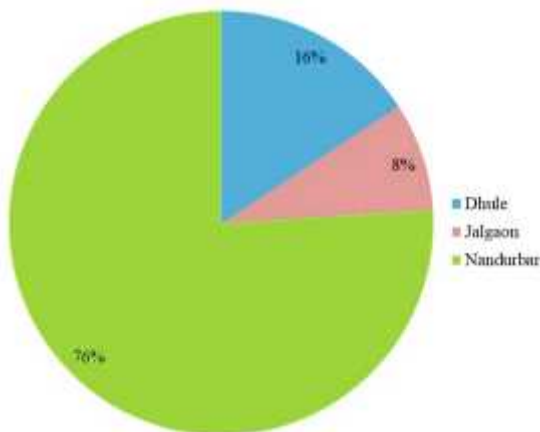
### 2.1 Nutrition & Food Security

1. The quality of food provided at the ashram schools is poor. There is degradation of the quality of Ashram School Diet which needs to be elevated.
2. A consistent food supply is essential in the Schools Nutrition Scheme. Pradhan Mantri Poshan Shakti Nirman scheme should be effectively implemented.
3. Food allowance for construction workers should be given through DBT

### 2.2 Social Welfare Schemes

1. Yashwant Gharkul Yojana proposals should be accepted in Khandesh.
2. Sanman Dhan Yojana for domestic workers should be started again.
3. The fishermen should receive the benefits of Gharkul Yojana.
4. Some farmers have not received crop insurance under the Pradhan Mantri Fasal Bima Yojana. The government should ensure that the affected farmers receive the insurance benefits on time.
5. Vishwakarma yojana should be implemented in the Khandesh region.

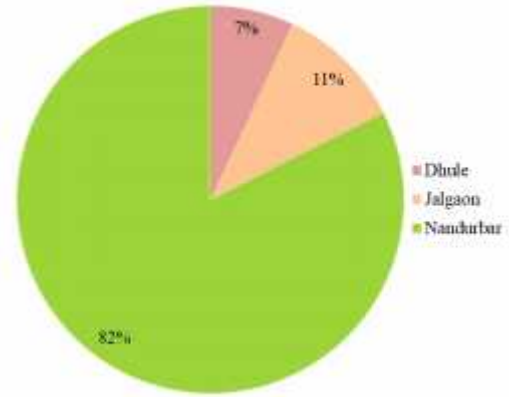
### 2.3 Sanitation & Hygiene



Graph 2.3.1: ST villages (Population > 25%) without Drainage Availability

### 2.4 Interventions

1. A committee for Toranmal should be constituted immediately.
2. The vacant posts of labor officers in Nandurbar, Dhule and Jalgaon should be filled immediately.
3. Registrations of unorganized workers should be started.
4. Construction of illegal religious structures on government land should be stopped and removed immediately. Timely intervention should be taken by the government on this matter.



Graph 2.1.1 : SAM cases among children (aged 0-5) in Khandesh

As per the Ministry of Tribal Development, Government of India, it was found that 554 ST villages in the Khandesh region having ST population >25% did not have drainage availability. Out of these, 421 villages (76%) are there in the Nandurbar district which has a significant tribal population. It is necessary that all these villages should be connected to the drainage lines. Also, equally important is ensuring equitable sanitation infrastructure and services in all these villages.

5. There is a need to conserve domestic cows. The government should provide a subsidy for this.

6. Aadhar cards should be issued to the migrant tribals from Madhya Pradesh and Gujarat.

7. The Labour list should be prepared at the Gram Panchayat.

8. There is a need to increase bank branches in Nandurbar. This will also increase financial literacy among the tribal people.

9. Service Centers for providing necessary licenses for businesses should be established.

10. One Village One Godown : A godown should be established in each village for ensuring adequate storage of goods.

11. A Local Weather Study Centre for 3-4 Gram Panchayats can be established for providing training to the villagers on weather.

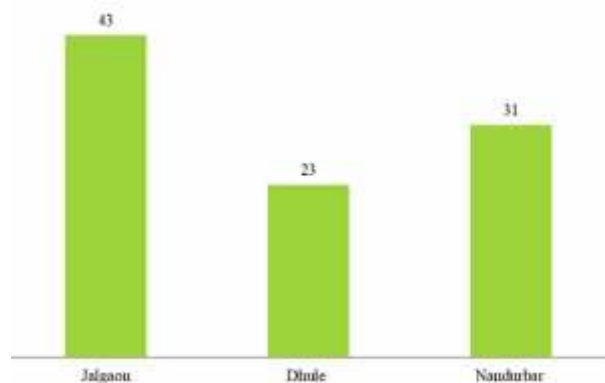
12. The factory inspector should investigate the accidents that take place in the MIDC area.

13. Reforms should be made to maintain the Law & Order in Dhule district.

14. JanJatiya Gaurav Divas should be celebrated by the government across Maharashtra to remember the contributions of the tribal communities.

15. A counseling center for women should be established in each taluka of the Khandesh region.

16. It is found that the officers and workers in the Women & Child Development department are not present.



Graph 2.4.1 : Godowns in Khandesh region

## 2.5 Healthcare

1. The work of Nandurbar Medical College should be completed

2. Adequate healthcare human resources like doctors, lab technicians and other paramedical staff should be recruited at the rural hospitals and PHCs in all the districts of Khandesh region.

3. Land should be allotted to the Sevalay Hospital in the Jalgaon Region.

4. The diagnostic & treatment centers for sickle cell anemia and protein energy malnutrition should be increased in the Khandesh region along with the strengthening of the existing centers.

## 2.6 Water Conservation

1. Proper implementation of 12 micro irrigation projects in Nandurbar which can bring 11000 hectares of land under irrigation. Example: Nesu River Project

2. Jal Kund project can be replicated in all the 3 districts of Khandesh. The government can provide necessary materials to the farmers for creating Jal Kund.

3. Due to frequent electricity cuts and electricity problems, water cannot be used for irrigation purposes.

4. The nullahs and small rivers arising from the ranges of Satpuda can be included in the Jal Yukt Shivar project.

## 2.7 Agriculture & allied sectors

1 A cluster of FPOs should be created. An apex body of FPOs & SHGs should be created at the taluka level. There is a need to increase cluster-based FPOs.

2. There is a need for a policy on Amchur .

3. Food processing units should be established in tribal areas. This will promote fruit plantations and fruit processing among the tribal people.

4. There is a need to boost laghu udyog such as Pashu Dhan Udyog, Agri-Business, Agri-Processing in Nandurbar.

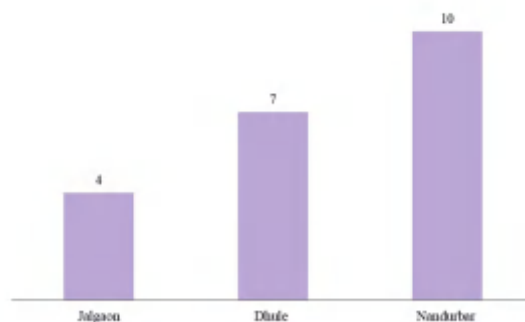
5. A cluster of Krushi Prakriya Sankul (Agri-produce Processing Units) should be established for 7-8 villages. Training and marketing can also be provided through this initiative.

6. Chilli Park as the ODOP should be established in Nandurbar.

7. The government should release the funds for Van Dhan Vikas Kendra (VDVKs) as early as possible. The first VDVK registered has not received the approval till date.

8. Food packaging training should be provided to the youth in the tribal areas.

9. The establishment of Banana park and Textile park in Dhule and Jalgaon can give impetus to improve the financial conditions of farmers along with local employment generation.



Graph 2.7.1 : Van Dhan Vikas Kendras in Khandesh

## 2.8 Education, Skill Development & Entrepreneurship

1. Skill development and entrepreneurship centers should be established in the tribal areas for training the youth on agriculture and allied sectors.

2. Zilla Parishad schools in the areas of Charmali, Amabapady, and Yawal are fortified to accommodate students for learning but are not operational. These schools should be started immediately.

3. Biodiversity subjects should be mandatorily taught to the students in the tribal areas.

4. Fishing net stitching training should be given to the youth in the Khandesh region.

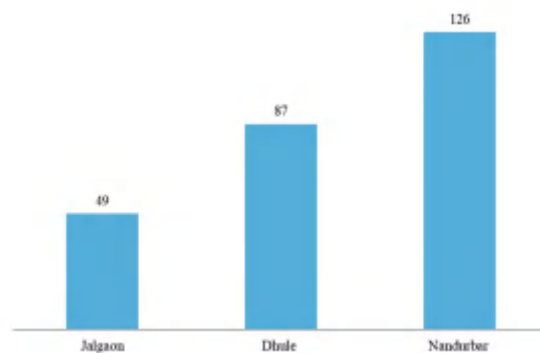
5. The honorarium funds for the reputed english medium schools of the year 2020-21 should be distributed immediately.

6. There is a need to provide skill development training for repairing the food processing machines.

7. Effective implementation of MGNREGA.

8. Van Vidnyan Kendra should be established to provide technical training to the youths and villagers for the management of the forests. This is essential as they have got the forest rights but don't know how to manage forests.

9. Sales & Marketing training centers should be established in Nandurbar.



Graph: Adivasi Ashram Schools in Khandesh

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"We have to focus on balanced development of regional aspirations. If any part of nation remains underdeveloped, we will remain weak...And that is why we need to address regional aspirations and we want to move forward in the direction of all-round development of the society, all-round development of every region, and ensure all regions get an opportunity to blossom in their own strength,"

Shri. Narendra Modi, Hon. Prime Minister of Bharat

---Addressing the nation from the ramparts of Red Fort on the 77<sup>th</sup> Independence Day

## **Khandesh Vikas Manthan**

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