

Title

"Empowering the Katkari Tribe:
Exploring Livelihood Opportunities
and Enhancing Female Hygiene in Healthcare Facilities"

By

Ms. Criselle Quadros

A DISSERTATION

Submitted To

Department of PG Geography,
Nagindas Khandwala College of Commerce, Arts and Management Studies,
Mumbai- 400064

In partial fulfilment of the requirements for the degree of
Master of Arts- Geography
Academic Year – 2022-23



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MALAD KANDIVALI EDUCATION SOCIETY'S

**NAGINDAS KHANDWALA COLLEGE OF COMMERCE, ARTS & MANAGEMENT
STUDIES and**

SHANTABEN NAGINDAS KHANDWALA COLLEGE OF SCIENCE

AUTONOMOUS

DEPARTMENT OF PG GEOGRAPHY

Certificate

This is to certify that **Ms. Criselle Quadros** has successfully completed the Dissertation as a part of the MA-II- Semester IV titled "**Empowering the Katkari Tribe: Exploring Livelihood Opportunities and Enhancing Female Hygiene in Healthcare Facilities**" during the Academic Year 2022-23.

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Date: 20th April, 2023.

DECLARATION

I wish to state that the work embodied in this dissertation titled "**Empowering the Katkari Tribe: Exploring Livelihood Opportunities and Enhancing Female Hygiene in Healthcare Facilities**" is my own contribution. The dissertation is carried out in the academic year 2022-2023.

C. Quadros

SIGNATURE OF THE CANDIDATE

PLACE : MUMBAI

DATE : 21-04-2023

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Chapter 1- Introduction

1.1.0 Introduction to the study area-

The Katkari tribes are one of the 75 Particularly Vulnerable Tribal Groups (PVTGs). The Katkari tribe is a Scheduled Tribe community, indigenous to the western Indian state of Maharashtra. They are primarily concentrated in the districts of Raigad, Thane and Mumbai, but can also be found in smaller numbers in the neighboring states of Gujarat and Karnataka. The Katkari people have a long history of living in the region, but have faced many challenges, including poverty, landlessness, and social exclusion. Despite these challenges, the Katkari community has maintained its cultural heritage, including its traditional practices, beliefs, and rituals.

Traditionally, the Katkari people were hunters and gatherers, and their livelihood was based on the forests and other natural resources in the region. However, with the loss of forests and the increasing pressure on land, many Katkari families have been forced to take up agricultural labor or migrate to cities in search of work. This has led to a significant decline in their traditional way of life and a loss of cultural identity.

Despite these challenges, the Katkari community has been working to improve its economic and social status through education and political mobilization. Efforts are also being made to preserve their cultural heritage, including the promotion of traditional music, dance, and craftsmanship. Today, the Katkari community is recognized as an important part of the cultural and social fabric of western India, and is working to secure a brighter future for its members.

They are considered to be a part of the larger tribal community in India and have their own unique cultural practices and traditions. The Katkari people have a rich history and have lived in the region for generations. They are known for their rich oral tradition, music, and dance.

However, despite their rich cultural heritage, the Katkari tribe has faced many challenges, including poverty, marginalization, and discrimination. This is largely due to their status as a tribal community, which often puts them at a disadvantage in terms of access to resources, education, and economic opportunities.

Despite these challenges, the Katkari tribe has a strong sense of community and has been working to preserve their cultural heritage and improve their economic and social status. This has included initiatives to improve access to education and health services, as well as efforts to promote the use of their traditional skills, such as weaving and farming.

based on general information about the Katkari tribes in India, it is estimated that the population of the Katkari tribes is around 700,000, with a significant proportion residing in the state of Maharashtra.

In terms of demographics, the Katkari tribes are generally considered to be a socially and economically disadvantaged community, with high levels of poverty and low levels of education and health. They have traditionally been dependent on agriculture and forest-based livelihoods, but many have now diversified into other occupations such as manual labor and small-scale trade.

In recent years, there have been efforts to improve the socio-economic status of the Katkari tribes, including programs aimed at increasing access to education, healthcare, and employment opportunities. However, these efforts are ongoing and much more needs to be done to ensure that the Katkari tribes are able to improve their standard of living and achieve their full potential.

In conclusion, while demographic details about the Katkari tribes in Pen taluka are not readily available, it is generally recognized that the Katkari tribes are a socially and economically

disadvantaged community, facing significant challenges in terms of poverty, education, and health. Nevertheless, there have been efforts to improve their situation, and it is hoped that these will lead to positive changes in the future.

1.1.1 Katkari tribes in Pen Taluka

The Katkari tribe has a significant presence in the region, and they are one of the largest tribal communities in Maharashtra.

Pen taluka is located in the Raigad district of Maharashtra and is known for its diverse population and rich cultural heritage. The Katkari tribe is an important part of this cultural heritage and has played a significant role in shaping the region's history and traditions.

In terms of their living conditions, the Katkari tribe in Pen taluka is largely rural and depends on agriculture and other traditional livelihood activities for their survival. Despite their rich cultural heritage, the Katkari people in the region face many challenges, including poverty, limited access to education and healthcare, and marginalization.

Efforts are being made to improve the economic and social conditions of the Katkari tribe in Pen taluka, including initiatives to provide education and healthcare services, promote entrepreneurship and skill development, and improve access to resources and opportunities. These efforts are aimed at empowering the Katkari community and preserving their unique cultural heritage for future generations.

1.1.2 Livelihood development of the Katkari tribes.

The livelihood development of the Katkari tribe is a complex issue that has been shaped by a range of factors, including poverty, marginalization, and limited access to resources and opportunities. Despite their rich cultural heritage, the Katkari tribe has faced many challenges in terms of their economic and social development.

In recent years, there have been various initiatives aimed at improving the livelihoods of the Katkari tribe. Some of these include:

1. Skill development and entrepreneurship programs: These programs aim to provide the Katkari tribe with the skills and knowledge they need to start their own businesses and improve their economic status. This has included training in traditional skills such as weaving, farming, and other livelihood activities.

2. Access to education and healthcare: Improving access to education and healthcare is crucial for the development of the Katkari tribe. Efforts have been made to provide educational and healthcare facilities in the region, which has helped to improve the health and wellbeing of the community.

3. Community-based organizations: The formation of community-based organizations has been an important step in the development of the Katkari tribe. These organizations bring together members of the community to work together on common issues and to advocate for their rights and interests.

4. Resource mobilization: Efforts have been made to mobilize resources, including financial and technical assistance, to support the development of the Katkari tribe. This has included initiatives to promote sustainable livelihoods, such as forest conservation and wildlife management, and to improve access to credit and other financial services.

Overall, these efforts have helped to improve the livelihoods of the Katkari tribe, although there is still much work to be done to address the underlying issues that continue to affect their development. Nevertheless, the future is looking promising for the Katkari tribe, and there is a growing recognition of the important role that they play in preserving India's cultural heritage and promoting sustainable development.

1.1.3 Healthcare in Pen taluka.

Access to healthcare is an important issue for the Katkari tribes in Pen taluka and the availability of healthcare facilities in the region is a crucial factor in improving the health and wellbeing of the community. The situation regarding healthcare facilities for the Katkari tribes in Pen taluka is likely to vary, but it is known that many rural communities in India face significant challenges in accessing adequate healthcare services.

The government of India has made efforts to improve access to healthcare in rural areas, including the establishment of primary healthcare centers and mobile health clinics. However, the quality and availability of healthcare facilities for the Katkari tribes in Pen taluka may still be limited, and there may be a lack of trained healthcare workers and adequate facilities.

In recent years, there have been initiatives aimed at improving the healthcare of the Katkari tribes in Pen taluka, including the establishment of community health clinics and health awareness campaigns. These initiatives have been important in improving access to healthcare and raising awareness about health issues among the community.

However, more needs to be done to ensure that the Katkari tribes in Pen taluka have access to adequate healthcare facilities. This includes increasing investment in the healthcare sector, improving the quality of healthcare services, and ensuring that healthcare facilities are accessible and culturally appropriate for the Katkari tribes.

In conclusion, while efforts have been made to improve the healthcare of the Katkari tribes in Pen taluka, more needs to be done to ensure that the community has access to adequate healthcare facilities. This will require sustained investment in the healthcare sector and a commitment to improving the health and wellbeing of the community.

1.1.4. Provisions for female hygiene wrt the Katkari tribes in Pen taluka.

Sanitation and hygiene are critical issues for women and girls, and it is important to ensure that these needs are met in order to maintain good health and wellbeing. The situation regarding female sanitation and hygiene for the Katkari tribes in Pen taluka is likely to vary, but it is known that many rural communities in India face significant challenges in accessing adequate sanitation and hygiene facilities.

The government of India has made efforts to improve access to sanitation and hygiene facilities in rural areas, including the construction of toilets and the promotion of hygiene practices. However, the quality and availability of sanitation and hygiene facilities for the Katkari tribes in Pen taluka may still be limited, and there may be a lack of education and awareness about the importance of good hygiene practices.

In recent years, there have been initiatives aimed at improving the sanitation and hygiene of women and girls in the Katkari tribes in Pen taluka, including the construction of toilets and the implementation of hygiene awareness campaigns. These initiatives have been important in improving access to sanitation and hygiene facilities and raising awareness about the importance of good hygiene practices.

However, more needs to be done to ensure that women and girls in the Katkari tribes in Pen taluka have access to adequate sanitation and hygiene facilities. This includes increasing investment in the sanitation and hygiene sector, improving the quality of facilities, and ensuring that facilities are accessible and culturally appropriate for women and girls.

In conclusion, while efforts have been made to improve the sanitation and hygiene of women and girls in the Katkari tribes in Pen taluka, more needs to be done to ensure that the community has access to adequate facilities. This will require sustained investment in the sanitation and hygiene sector and a commitment to improving the health and wellbeing of the community.

1.1.5 History of the Katkari tribes in Pen Taluka.

The history of the Katkari tribes in Pen Taluka is likely to have deep roots and a rich cultural heritage. The Katkari tribes are one of the indigenous communities of India and have lived in the region for many centuries.

According to some sources, the Katkari tribes are believed to have migrated to the Western Ghats region of India from Central India in ancient times. They were originally a nomadic people and were skilled in hunting and gathering. Over time, they settled in the region and became agriculturists, cultivating crops such as rice, maize, and pulses.

The Katkari tribes in Pen Taluka have a rich cultural heritage and are known for their traditional dances and music. They have their own distinct customs and beliefs, and these are closely linked to the natural environment of the Western Ghats.

Throughout history, the Katkari tribes have faced significant challenges, including poverty, discrimination, and displacement from their traditional lands. Despite these challenges, the Katkari tribes have maintained their unique cultural heritage and traditions, and their contributions to the region's history and cultural heritage are significant.

In conclusion, the history of the Katkari tribes in Pen Taluka is rich and complex, reflecting their deep roots and cultural heritage in the region. Despite the challenges they have faced, the Katkari tribes have maintained their traditions and have made important contributions to the region's history and cultural heritage.

1.2.0 Literature Review

(Cathryn Turton, 2000) This paper evaluates the design and progress of two new DFID projects in India's Orissa and Andhra Pradesh. The projects aim to support the Government of India's mission to eliminate poverty through its watershed development program. The design of the projects was carried out alongside the development of the Sustainable Livelihoods (SL) approach and framework. The paper examines how the SL approach impacted the design process of the two projects. Section 2 provides an overview of DFID-India's history in rural development and how it arrived at supporting watershed development as a method for alleviating poverty. It also questions if watershed development is the best way to support the livelihoods of the rural poor. Section 3 and 4 describe the design process in Orissa and Andhra Pradesh respectively, exploring how the SL approach was integrated into the project design and activities. Section 5 highlights the common features of the projects and how the design responded to the different institutional context in each state. The conclusion of the paper (Section 6) discusses the challenges and lessons of adopting an SL approach, stressing the importance of balancing support for poor people's livelihood needs while promoting positive changes and developing sustainable partnerships

(Waghmore, 2014) This report delves into the ongoing issues of marginalization and disadvantage experienced by the Katkaris in the Raigad and Thane areas. It utilizes a combination of research techniques and a review of existing literature to highlight the severe challenges faced by the Katkaris today. The report recommends government strategies that are both culturally and economically appropriate for promoting the inclusion and development of the Katkari community

(Debasree De, 2014) This article examines the effects of development policies on the indigenous peoples of India, focusing on the impact of Nehru's policies of rapid industrialization and national development. Despite Nehru's belief that such policies would address poverty and hunger, they caused significant harm to the Adivasis who owned and used the land sacrificed for these projects. The article critically analyzes Nehru's Panchsheel development concept, arguing that it failed to benefit the Adivasis and undermined their own efforts to achieve sustainable development.

(Patnik & Prasad, 2015) This article examines the recent emphasis on enhancing rural livelihoods as a means of reducing poverty in public policy. It places current mission-based livelihood programs in India within the broader context of the livelihoods discourse in development studies over the past two decades. The article reviews the literature on livelihoods and the Sustainable Livelihood Approach (SLA), and while

acknowledging the focus on perspectives and institutions of the poor in public policies, highlights the challenges in implementing and evaluating SLAs. The article also reviews the implementation of livelihood schemes in India and suggests a dialogue between SLA frameworks and implementation studies literature in public policies. The author suggests that academics should shift the discourse from poverty and employment as key themes to an engagement on livelihoods as a frame, which has been largely practitioner-led in the past.

(Prabhakar, 2016) The poor socio-economic conditions of the tribal communities living in remote and hilly regions of Thane and Raigad districts in Maharashtra. These tribes rely heavily on forest produce and agriculture for their livelihood and are economically, socially, and educationally disadvantaged. Despite government efforts for their upliftment, many of these tribes are not aware of government programs and schemes available to them. The study uses both primary and secondary data, including qualitative and quantitative elements, to reach its conclusions. The results show that the socio-economic status of the tribal communities in Thane and Raigad is significantly lower compared to the general population. There is a pressing need to implement programs that generate income, improve education, and raise health awareness to help these tribes take advantage of opportunities offered by NGOs and the government.

(Das, 2016) This research paper evaluates the effectiveness of the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) in providing livelihood security to target households in India. The study utilizes nationally representative data from the national sample survey (NSS) and proposes an alternative methodology to identify target households in the baseline period. The research found that the program was not as effective in improving the spending capacity and livelihood security of beneficiary households compared to non-beneficiary households. Additionally, the overall growth trend in spending capacity over time had a greater impact on improving the livelihood security of target households compared to the effect of the program.

(B.Sinha, 2017) The purpose of this theoretical paper is to examine the concept of the Choice-Based Credit System (CBCS) as it emerges in India's higher education system. The paper discusses the evolution of higher education in India and its global challenges and concerns, highlighting the need for a paradigm shift in quality assurance to meet international standards. The paper also delves into the evolving national policy landscape and the role of statutory bodies in Indian higher education, as well as the conceptual, structural, and implementation challenges associated with implementing CBCS in more than 400 higher education institutions and numerous academic programs and courses. In conclusion, the paper identifies some of the challenges that arise in introducing CBCS as a reform in India's higher education system.

(Mutatkar, 2017) The article analyzes the differences between three ethnic groups within the Scheduled Tribes category in Jawhar and Mokhada talukas of Palghar district in Maharashtra. The aim is to understand the extent of these disparities.

(Rani. A & Agarwal. H , 2019) The indigenous tribal communities in India are considered as the protectors of nature, as they mostly inhabit dry, forested, or hilly areas and rely on agriculture and minor forest produce for their livelihood. The central part of India, the middle belt, and the north-eastern states are the main regions where these tribal communities reside. The traditional arts of these tribes have evolved with their own unique techniques and characteristics and are now recognized as distinct art forms with aesthetic beauty. This research paper focuses on the socio-economic development of tribes in India through their art. It emphasizes the need for a special approach by the Indian government to protect and integrate these tribes for their all-round development. The paper stresses the importance of considering factors such as composition, line, color, texture, and rhythm in developing art forms that provide a distinct identity to the artistic creations of these tribes.

(Sahu, 2019) This article explores the issue of undernutrition among the Katkari tribe in Maharashtra, India. The focus of the study is the nutritional status of various groups within the Katkari population, including children, adolescent girls, pregnant women, lactating mothers, pregnant and lactating women, and others up to 60 years of age. The incidence of child malnutrition was measured using a composite index of anthropometric failure (CIAF) and was analyzed in relation to factors such as gender, mother's nutrition and education status, migration, illness of the child, household consumption, and access to services through Anganwadi centers. Additionally, the article examines the prevalence of nutritional anemia among Katkari children and women. The findings show that 65.4% of Katkari children were undernourished, and all

pregnant women, 81% of lactating mothers, and all pregnant and nursing women were malnourished, indicating that child malnutrition in the Katkari tribe begins in the womb itself.

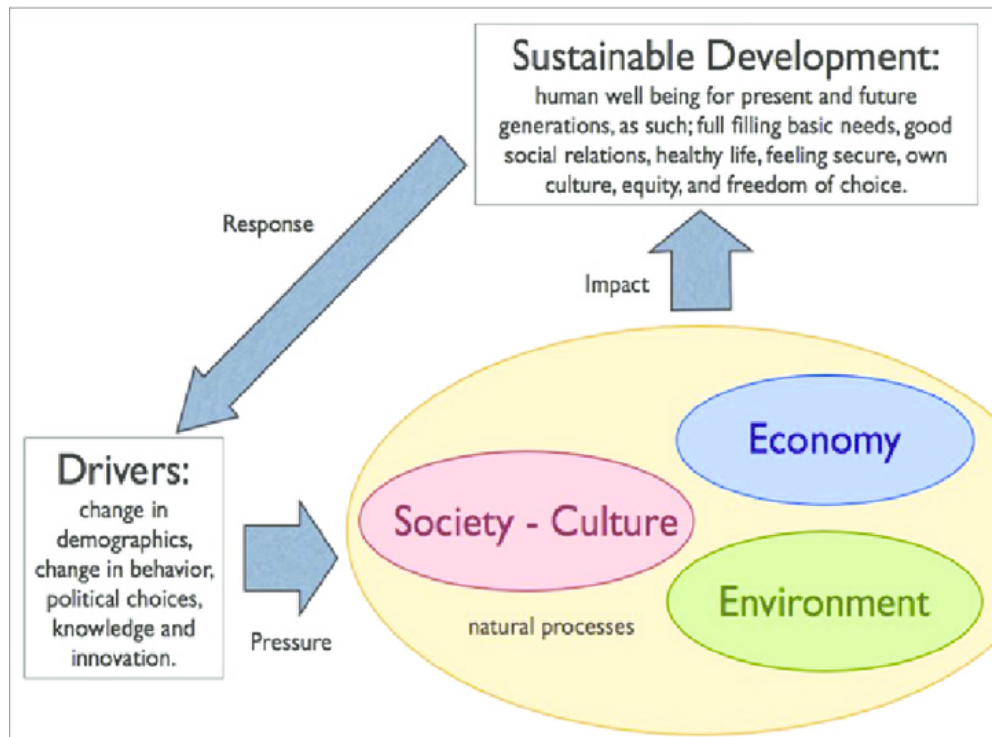
(Krishna, Paramesh, Arunachalam, ElAnsary, Shashidhar, Das, Parab, Sheikh, Mahmoud & Reddy, 2020) This paper highlights the importance of measuring sustainability in terms of social, economic, and ecological indicators for achieving sustainable development goals. To this end, a sustainable livelihood security index (SLSI) has been developed by selecting 20 indicators and placing them within the ecological, economic, and social dimensions of sustainable development for the Indian west coast. The indicators were normalized and assigned weights, and then indices were calculated. The study found that forest cover, net sown area, milk availability, groundwater availability, land productivity, food grain availability, rural road connectivity, villages electrified, and land degradation were important indicators. Kerala was found to be the most developed state followed by Gujarat, Karnataka, Maharashtra, and Goa in linear and non-linear weighted scoring. The study also identified the Jamnagar, Junagadh, Kachchh, Ratnagiri, and Sindhudurg districts as having the highest priority for development through investment and policy interventions. The paper concludes that the sustainable development of the west coast region can be improved significantly by focusing on low-SLSI districts and considering ecological, economic, and social dimensions in planning for technological development and dissemination.

(Datta, 2022) Pollution is increasing day by day and is leading to various problems which has made it important to study the levels of pollution Greater Mumbai. The various types of pollution are causing environmental issues and severe harm to the health of human beings, livestock and vegetation. There are many diseases which are caused by pollution which can be fatal. The most noteworthy cause of the increased or high levels of pollution is the increasing number of vehicular traffic and resultant congestion. However the congestion is more due to illegal and unorganized parking on the streets which make them narrower and cause disruption. Therefore, pollution is one of the major factors of hampering the growth, development and maintenance of one's health in an urban area like Greater Mumbai and even in the rural areas.

Keywords- Communities, Tribes, Development, Socio-Economic, Well-being, Impact, Hygiene, Women, Health, Commercialization, Preservation, Basic Needs, Consumption, Livelihoods, Poverty, Rural Sector, Sustainable Development.

1.3.0 Conceptual Framework

Based on the field work and literature reviews, the conceptual framework plays a significant role in defining the study of the livelihood development, socio-economic and healthcare facilities in the study area. The framework assesses the sustainable development in the economic, cultural and environmental parameters.



(Img 1.1 Prepared manually by the researcher)

The above figure represents the cycle of sustainable development in rural area, the driving forces behind the three natural processes- Cultural, Environmental and Economic processes. Changes in demographics, behaviour, political choices, knowledge and innovation pressurize the natural processes to eventually have an impact on the human well-being, full filling of basic needs, goods, social relationships, a healthy life, equity, security, etc. The flow here is a very co-dependent flow.

1.4.0 Problem statement

Pen Taluka is a taluka or administrative subdivision located in the Raigad district of the Indian state of Maharashtra. The region is known for its scenic beauty and is home to several tribal communities, including the Katkari, Mahadev Koli, and Thakur. The Katkari tribes in Pen taluka face a range of issues, including poverty, illiteracy, malnutrition, lack of access to healthcare, limited access to clean drinking water and sanitation facilities, and social discrimination. They also struggle with the loss of their traditional forest-based livelihoods due to deforestation, industrialization, and urbanization. In addition, they face challenges related to land rights and displacement, as well as exploitation by middlemen in the markets for forest produce. These issues have resulted in a cycle of poverty and marginalization for the Katkari community in Pen taluka. Hence this study focuses on understanding the economic struggles, healthcare facilities and livelihood development opportunities available in this region.

1.5.0 Research Objectives

- To provide better inputs of livelihood opportunities in the study area.
- To understand the socio-economic conditions of the study area.
- To identify the healthcare facilities, present in the study area.
- To determine the knowledge wrt female hygiene in the study area.

1.6.0 Research Hypothesis

(H₁) - There is a significant relationship between urban involvement and the standard of living for tribal communities.

(H₀) - There is no significant relationship between urban involvement and the standard of living for tribal communities.

The lifestyle of the Katkari tribes in the Pen Taluka is predominantly rural and revolves around their traditional occupation of collecting and selling forest products. They mostly live in small huts made of natural materials such as bamboo, wood, and leaves. The majority of Katkaris are Hindus and their language is known as Katkari. They have their own customs, traditions, and beliefs that are unique to their community.

The Katkari people rely on the forest for their livelihood, collecting and selling firewood, honey, and other non-timber forest products. In recent times, due to deforestation and land degradation, their traditional occupation is under threat. To supplement their income, many Katkaris work as daily wage laborers in nearby towns and cities.

Their diet is simple and consists mainly of rice, dal (lentils), and vegetables. Meat is rarely consumed and is usually reserved for special occasions. The Katkari people have their own unique style of cooking and their food is often spiced with locally grown herbs and spices.

The social structure of the Katkari tribes is patriarchal and joint families are common. The community has its own traditional system of governance and dispute resolution, headed by the village elders. Education levels in the community are low, and access to basic amenities such as healthcare and sanitation is limited.

Overall, the Katkari tribes of the Pen Taluka have a simple and traditional way of life that is closely tied to the forest and nature. However, they face various challenges related to their livelihood, health, and education, which need to be addressed for their overall development and well-being.

The impact of urban development on the Katkari tribes of the Pen Taluka is not entirely clear. On one hand, it could potentially provide new job opportunities and access to better education, healthcare, and other amenities. On the other hand, it could also lead to further deforestation, land degradation, and displacement of the community from their traditional way of life. The challenge is to find a balance between urban development and preserving the natural resources and traditional livelihoods of the Katkari people. Any development initiatives should involve the community in the planning process and take into account their unique needs, customs, and beliefs. Hence, it can be understood that there is no significant relationship between urban involvement and the standard of living for tribal communities. Thus, we can say that the alternate hypothesis here is rejected, while the null hypothesis can be accepted.

(H₁) - "Women who use hygiene products have access to better quality and more accessible healthcare facilities compared to women who do not use hygiene products."

(H₀) - "There is no significant difference in the quality and accessibility of healthcare facilities for women who use hygiene products compared to women who do not use hygiene products."

The Katkari tribe is a tribal community found in the Indian state of Maharashtra. Katkari women face a multitude of challenges in terms of hygiene and healthcare. Due to their socio-economic status and living conditions, they often have limited access to clean water, sanitation facilities, and healthcare facilities. This can have significant implications for their reproductive and overall health.

The alternate hypothesis states that women who use hygiene products have access to better quality and more accessible healthcare facilities compared to women who do not use hygiene products. In the context of Katkari tribal women, this hypothesis could be supported by the following points:

Improved Hygiene Practices: Women who use hygiene products such as sanitary pads, menstrual cups, or reusable cloth pads are more likely to maintain good hygiene practices during menstruation. Good hygiene practices can reduce the risk of infections and other reproductive health issues. Women who maintain good hygiene practices are less likely to require medical attention or hospitalization.

Increased Awareness: The use of hygiene products also increases awareness among women about menstrual health and hygiene. This can lead to an increase in knowledge and awareness about other reproductive health issues. Women who are aware of their reproductive health needs are more likely to seek medical attention when needed. This, in turn, can lead to better health outcomes.

Greater Access to Healthcare: Women who use hygiene products are more likely to seek out healthcare facilities when needed. They are also more likely to have access to healthcare facilities that provide reproductive health services. This can include services such as antenatal care, family planning, and maternal health services. Women who have access to these services are more likely to have better health outcomes.

Reduced Stigma: The use of hygiene products can also help to reduce the stigma associated with menstruation. This can lead to greater acceptance of menstrual health and hygiene practices, which can improve women's access to healthcare services. Women who do not use hygiene products may face greater social stigma and barriers to accessing healthcare services.

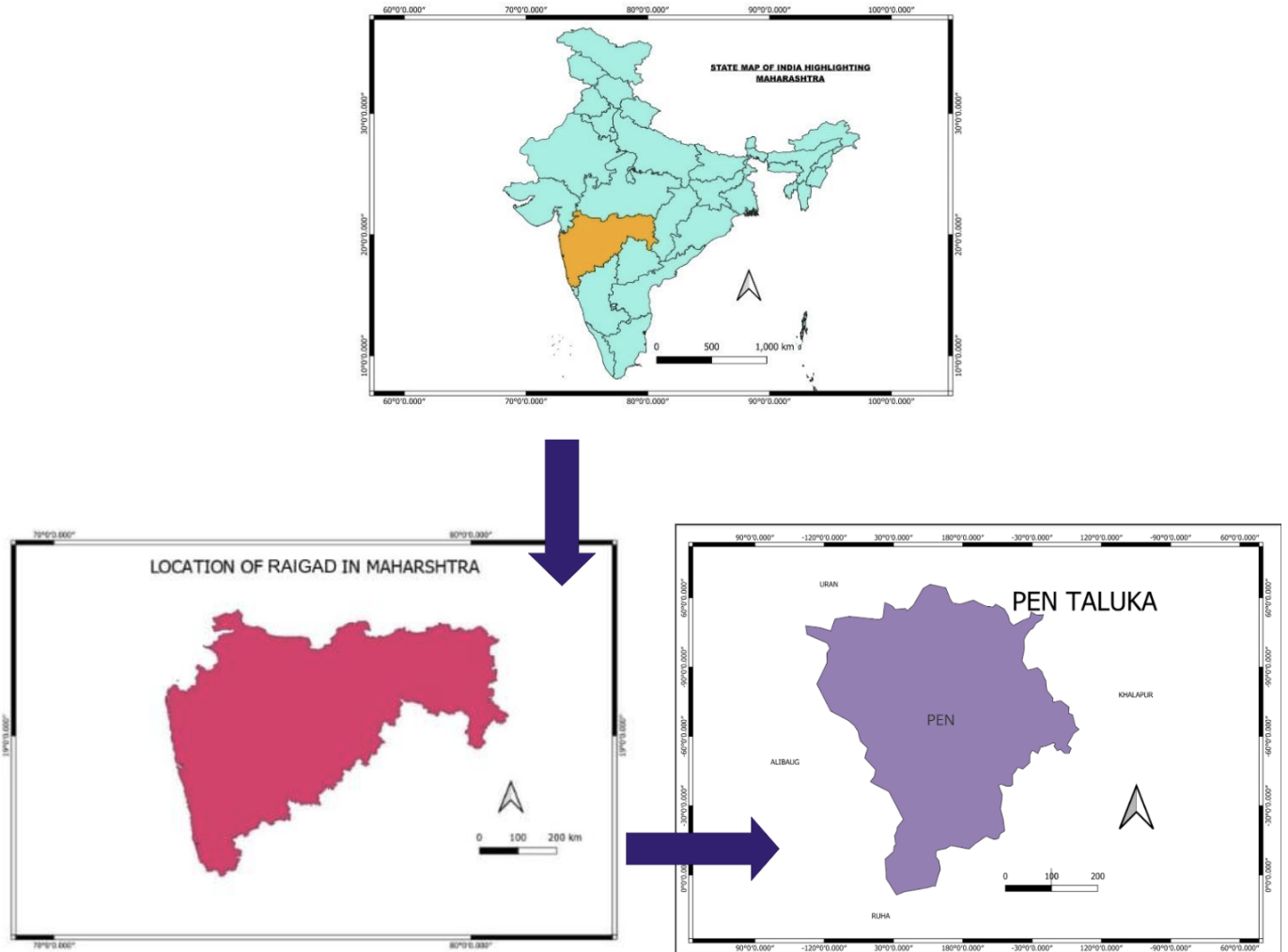
In summary, the alternate hypothesis stating that women who use hygiene products have access to better quality and more accessible healthcare facilities compared to women who do not use hygiene products could be supported in the context of Katkari tribal women. Improved hygiene practices, increased awareness, greater access to healthcare, and reduced stigma can all contribute to better health outcomes for women who use hygiene products.

Research Methodology

1.7.0 Coverage

Pen Taluka is located in the Raigad district of the state of Maharashtra, India. It lies approximately between 18.37°N latitude and 73.12°E longitude. As of the 2011 census, the total population of Pen Taluka was 224,585, with a literacy rate of 79.6%. The majority of the population is engaged in agriculture and related activities. The taluka has a mix of rural and urban settlements, with the town of Pen serving as the administrative center. The main languages spoken in the area are Marathi and Hindi, along with some Konkani and English. The population is predominantly rural, with agriculture and allied activities being the main source of livelihood. The major communities residing in Pen taluka are the Katkari, Thakur, Koli, and Kunbi. The taluka has a total area of 685 square kilometres and comprises 123 villages.

Location Map



(Img. 1.2 Map showing location of study area, prepared using QGIS software)

1.7.1 Data Collection

The study has been conducted in these three following ways-

Pre-field-

In this step the data was first collected about the study area through PDF's, forums, books, journals, articles, google scholar, etc. The research questionnaire was created using Google Forms to conduct interviews and facilitate the storage of data in a more organized manner.

On- field-

The primary survey method was used to analyse the livelihood development, healthcare facilities and socio-economic factors of the Katkari tribes in Pen taluka. The questionnaire was conducted through 2 types of age groups and equally within the male and female genders. The study also included understanding the lifestyle patterns of the tribe, visiting the workspaces, fields, homes, education institutes and hospital clinics.

Post-field-

The information gathered was subsequently saved, organized into tables, and examined individually.

1.7.2 Data Analysis

The data collected through the questionnaire survey was carefully arranged and analyzed with the help of graphs prepared on MS excel. The statistical analysis of the data was then processed through Jamovi for testing the hypothesis.

1.8.0 Limitations of the Study

Every study experiences a certain amount of limitations, similarly this study faced a couple of limitations as well.

- The Katkari's being a depleting tribe, the villagers were initially reluctant to share any information with regards to their livelihood styles and economic conditions. There was constant permission required from the panchayat to go ahead with the study.
- Due to the study area being remote tribal villages, the roads were poorly constructed. Hence, the commute to the village, in and around was time consuming.
- Lack of development caused phone network and internet connection challenges while conducting the survey, due to which a hand written questionnaire was being used to collect the data.
- Due to the lack of internet connection, the GPS camera application was unable to derive accurate location data and photographic data was collected via phone camera itself.
- The villagers being tribal were mainly illiterate and only spoke Marathi in majority, this caused hindrance in translation and understanding of the questionnaire.
- The issue of illiteracy causes many villagers to avoid contact and refuse to fulfill the purpose of the questionnaire.
- The older generation were uncomfortable and reluctant to share their information and photographs as they were suspecting government intervention- which was something the tribe was against as many government organizations misused the information and have now taken over most of their land and deprived them of access in certain areas of the Pen Taluka.
- Many Women especially of the older age group were shy and uncomfortable to share information about their menstrual hygiene and lifestyle.
- There target audience was mainly all the working crowd mainly from the age group 18-70, but due to weak language communication barrier, and being shy wrt the menstrual health related questions most of the older age group people of 50+yrs were hesitant and distracted and refused to complete the questionnaire after a point. Hence, majority of the study could be covered by the people from 18-50 yrs of age.

1.9.0 Policy Implication

The study on the livelihood of tribal populations can help provide important insights and recommendations for policy makers to improve the lives and livelihoods of these communities. By identifying the challenges and issues faced by the tribal population, this study suggests ways to address these challenges through policies and interventions. For example, this study identifies the need for better access to education and healthcare services, or the need to promote sustainable livelihood options that are in line with the cultural and traditional practices of these communities.

The findings of this study can be used to develop policies and programmes that are tailored to the specific needs of the tribal population. Such policies can help to improve the standard of living, reduce poverty, and promote sustainable development. Additionally, this study can also help to raise awareness among the broader public about the issues facing the tribal population, and the importance of taking action to address these issues.

Chapter 2 – Analysis of the background of the Katkari tribes in Pen taluka

2.1 Introduction-

The Katkari tribe is a marginalized community in India, known for their unique culture, traditions and livelihood practices. This study aims to understand the personal background, lifestyle and occupational structure of the Katkari tribal villagers. Through this research, we seek to gain insights into the challenges faced by the community in terms of livelihood opportunities and healthcare, particularly with respect to female hygiene. By examining these aspects of their lives, we hope to identify potential solutions and interventions that can help improve their overall well-being and promote sustainable development.

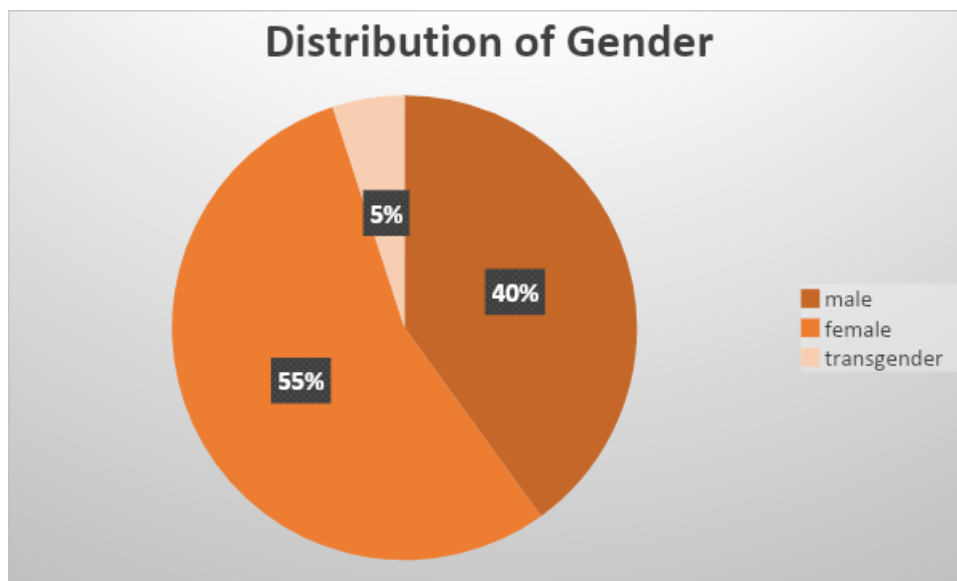
2.2 Background of the respondents

1. Gender लिंग

The questionnaire required a fair number of all genders to respond as it focuses on the understanding of female hygiene and healthcare.

Sr.no	Gender	Frequency	Percentage
1	Male	24	40%
2	Female	33	55%
3	Transgender	3	5%
	Total	60	100.00%

(Table 2.1 Gender)



(Fig. 2.1 Distribution of Gender)

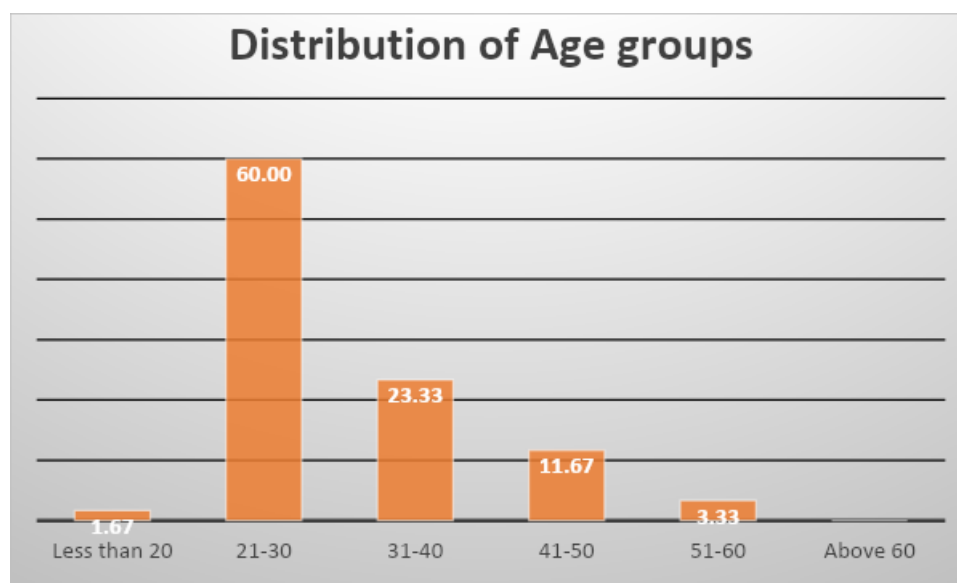
The above Table 2.1 and Figure 2.1 show the gender wise data of the respondents. A total of 60 responses were collected through the survey. Out of the 60 participants 33 (55%) were females, 24 (40%) were males and 3 (5%) were transgender. This data also represents the very limited number of transgenders in this tribal community.

2. Age वय

The questions asked in the survey required working class individuals to respond, mainly because it focused on the Healthcare facilities, livelihood opportunities and female menstrual hygiene.

Sr.no	Age	Frequency	Percentage %
1	Less than 20	1	1.67
2	21-30	36	60.00
3	31-40	14	23.33
4	41-50	7	11.67
5	51-60	2	3.33
6	Above 60	0	0.00
	Total	60	100.00%

(Table 2.2 Age)



(Fig 2.2 Age)

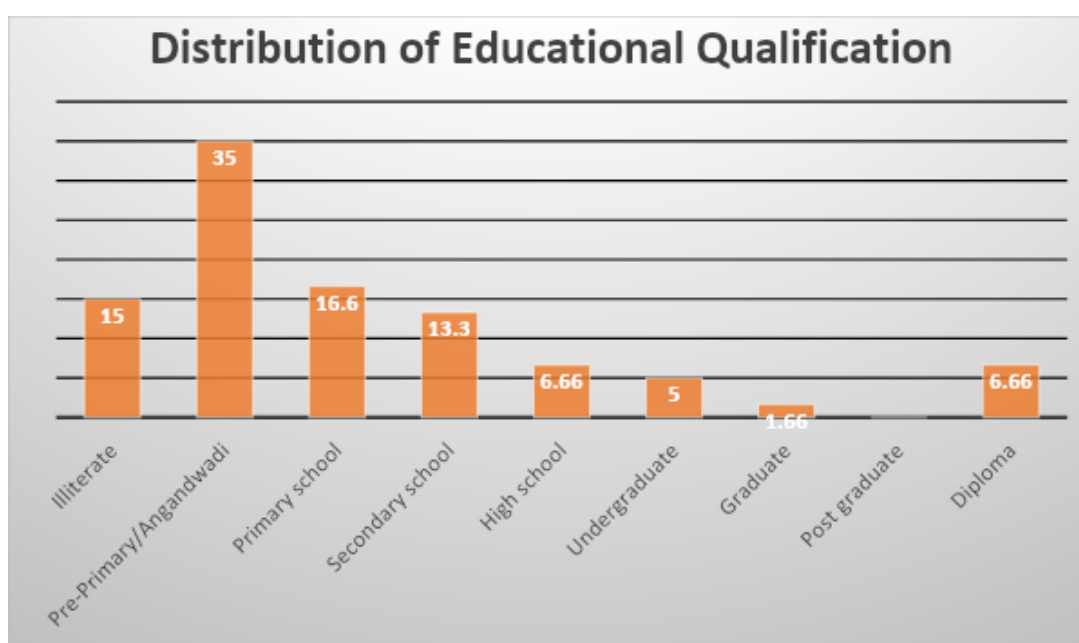
In the above Table 2.2 and Figure 2.2 show the age wise data of the respondents. As the main focus of the questionnaire is to understand the socio-economic conditions, livelihood opportunities, female menstrual hygiene and healthcare facilities in Pen, hence out of the 60 respondents there was only 1 who was below 20yrs of age, 36 (60%) participants were between 21-30yrs, 14(23.33) respondents were between the age group 31-40, from the age group of 41-50 there were 7 (11.67%) respondents, between the age group 51-60 there were only 2 (3.33%) respondents and 0 respondents above 60yrs of age. The data was mainly focused on the age group which contained maximum working class individuals to achieve the main target of the study.

3. Educational Qualification शैक्षणिक पात्रता

Sr.no	Educational Qualification	Frequency	Percentage %
1	Illiterate	9	15
2	Pre-Primary/Angandwadi	21	35

3	Primary school	10	16.6
4	Secondary school	8	13.3
5	High school	4	6.66
6	Undergraduate	3	5
7	Graduate	1	1.66
8	Post graduate	0	0.00
9	Diploma	4	6.66
	Total	60	100%

(Table 2.3 Educational Qualification)



(Fig 2.3 Distribution of Educational Qualification)

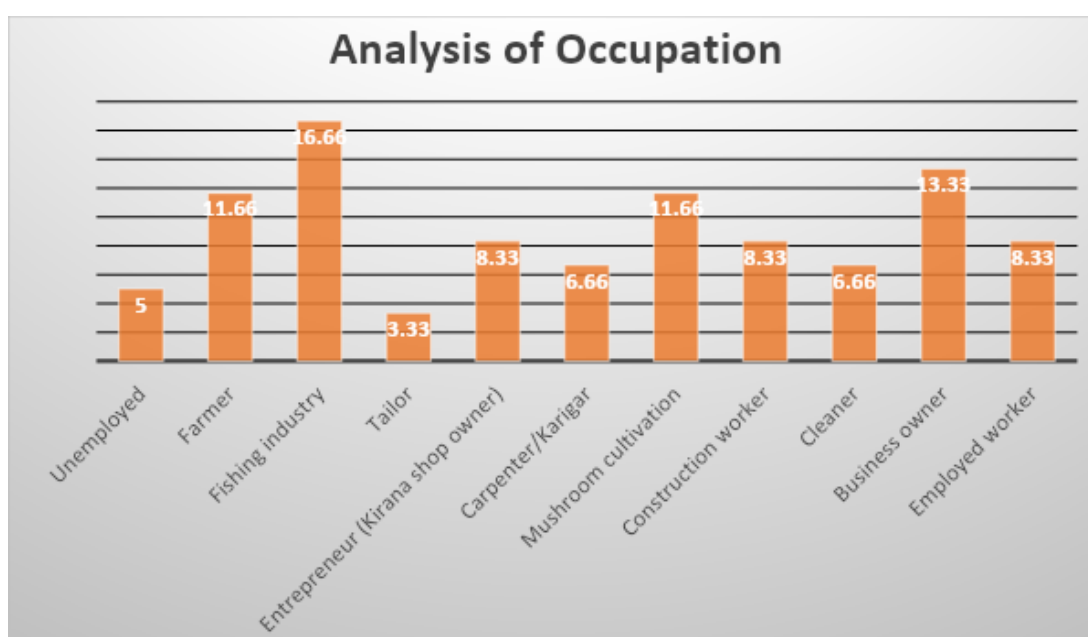
The above table 2.3 and fig. 2.3 shows the educational qualification of the people that participated in answering the questionnaire. Out of the 60 respondents The maximum level of education received is at the pre-primary stage also known as anganwadi in the villages with 21 (35%) respondents, 10 (16.6%) respondents received educational till primary level, followed by 8 (13%) respondents having completed up to secondary school education, 4 (6.6%) respondents completed high school education, 3(5%) respondents were undergraduates, none of the respondents had completed graduation, there were 4 (6.66%) respondents that had diploma's in certain professional courses. Although there are a couple of educational institutes in Pen it is observed that there are many villagers who are still illiterate, amongst the 60 interviewed respondents 9 were found to be completely illiterate which amounted to 15% of the total participants.

4. Occupation व्यवसाय

Understanding the Occupation of the villagers was one of the major requirements for this study.

Sr.no.	Occupation	Frequency	Percentage
1	Unemployed	3	5
2	Farmer	7	11.66
3	Fishing industry	10	16.66
4	Tailor	2	3.33
5	Entrepreneur (Kirana shop owner)	5	8.33
6	Carpenter/Karigar	4	6.66
7	Mushroom cultivation	7	11.66
8	Construction worker	5	8.33
9	Cleaner	4	6.66
10	Business owner	8	13.33
11	Employed worker	5	8.33
	Total	60	100.00%

(Table 2.4 Occupation)



(Table 2.4 Analysis of Occupation)

The above table 2.4 and fig.2.4 show the distribution of occupational data of the respondents. It was observed that the villagers were very sustained by their livelihood mechanism and were satisfied by the occupations they engaged themselves in, although scope for better livelihood opportunities is well available. Out of the 60 respondents 3 (5%) were seen to be unemployed due to various reasons such as desire to receive higher education, pursuing professional skill training in labor, healthcare challenges, 7 (11.66%) respondents were farmers, 10 (16.66%) respondents engaged in the fishing industry which included buying and selling of fishes and marine finds to fisheries, a group of 3 individuals built a man-made pond with the help of an NGO and have been successfully cultivating pearl producing sea shells-oysters and guppy fish, 2 (3.33) respondents had their own tailoring units, 5 (8.33%) respondents owned kirana shops within the villages. 4 (6.66%) were carpenters and karigars who engaged in making furniture, wall hangings, storage equipment, home décor articles, etc. Mushroom cultivation was one more business skill that was introduced to the villagers by an NGO and was further taken up by a group of 7 women (11.66%) respondents that engaged in this business in sheds built up in their backyards. 5 (8.33%) respondents were construction/laborers that would travel to smaller cities around Pen for work. 4 (6.66%) respondents were cleaners (peons/maushi) in schools, hospitals and government offices. There were 8 (13.33%) respondents

who owned small businesses like shoe manufacturing and sales, rubber product manufacturing, soap industries,etc, 5 (8.33%) respondents were employees in factories, shops,etc.

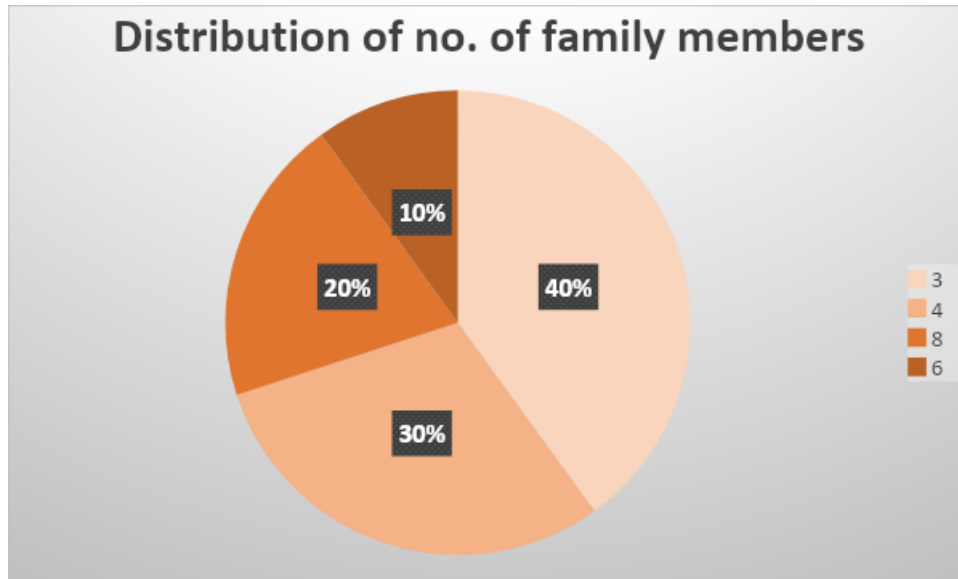
5. How many members in your family?

तुमच्या कुटुंबात किती सदस्य आहेत?

The number of family members were recorded to understand the financial conditions of the family.

Sr.no	No. of members	Frequency	Percentage%
1	3	24	40
2	4	18	30
3	8	12	20
4	6	6	10
		60	100%

(Table 2.5 Number of family members)



(Table 2.5 Distribution of no. of family members)

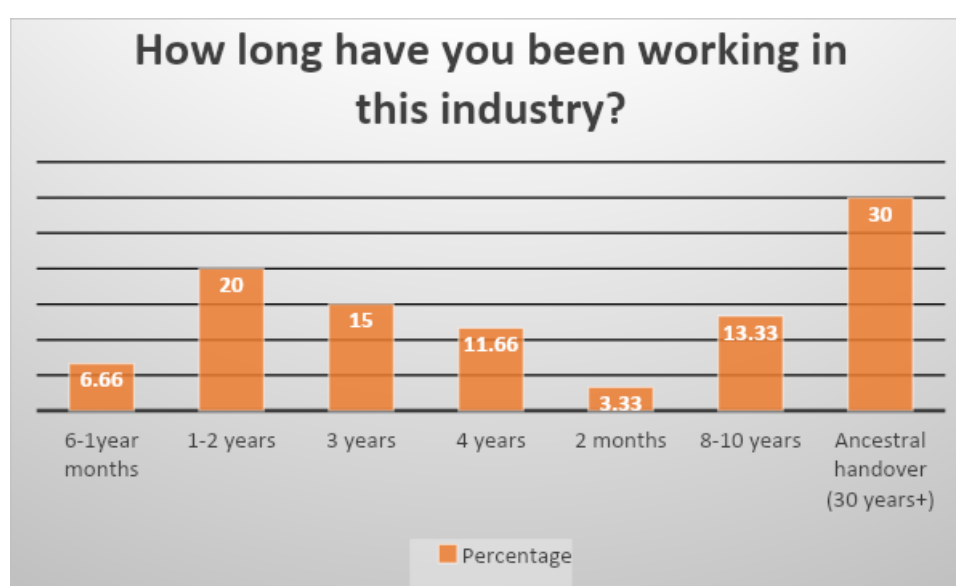
In the above table 2.5 and fig.2.5 the number of family members in each respondent's home was surveyed. This data was collected to understand the financial condition of the respondents. 24 (40%) of the respondents had 3 members in their family living together, 18 (30%) of the respondents were in a family of 4, 12 (20%) respondents were living in joint family/tribes of 8 and 6 (10%) respondents had a family of 6 living together. Although there were many people living together as a family, all the respondents had 1 thing in common being that they weren't the sole earning members and maximum of the family members were engaged in some form of occupation which contributed to the family income. This created a sense of fulfillment and economical balance among the villagers.

6. How long have you been working in this industry?

तुम्ही या उद्योगात किती काळ काम करत आहात?

Sr.no	No.of years	Frequency	Percentage
1	6months -1year months	4	6.66
2	1-2 years	12	20
3	3 years	9	15
4	4 years	7	11.66
5	2 months	2	3.33
6	8-10 years	8	13.33
7	Ancestral handover (30 years+)	18	30
	Total	60	100%

(Table 2.6 Analysis of employment tenure)



(Fig 2.6 Analysis of employment tenure)

In the above table 2.6 and fig.2.6 the distribution of tenure of working is analysed. This question helped the study in understanding the work ethic and experience the individuals had in the field that they were working. It was observed that 18 (30%) respondents were in the same occupation that was passed down to them through their ancestors these people were mainly farmers and fisherfolk, the next category of highest respondents were 12 (20%) individuals between the 1-2 years tenure which mainly included laborers and employed workers that have been in the same/similar line of work but have either been young adults between the age groups of 18-30 or have been shifting from different employers, 9 (15%) respondents were in the same occupation for around 3 years, 2 (3.33%) respondents were employed only since 2 months, 7 (11.66%) respondents were working in the same industry for around 4 years, 4 (6.66%) were working in between 6 months-1 year in the same field, 8 (13.33%) respondents were working in the same occupation for 8-10 years.

2.3 Conclusion

On observing these introductory questions of the questionnaire we can come to a conclusive understanding that the village of the Katkari's although primitive are well sustained by the occupation and lifestyle they follow. Opportunities for livelihood development were further studied and surveyed by many questions. The village was carefully observed wrt their healthcare and hygiene facilities. A very sustainable and healthy lifestyle is one thing that the villagers invariably followed. The village was not very economically rich, but

the villagers did not have any sort of higher demands in their lifestyle, a healthy and soulful life is what was observed to be the reason of their contentment. Although a clear scope for developmental support was visible in the remote villages mainly.

Chapter 3 – Exploring Livelihood development opportunities for the Katkari Tribes of Pen.

3.1 Introduction –

The Katkari tribe, one of the indigenous communities in India, has faced years of social and economic marginalization. The community resides in Pen, Maharashtra, and is known for their unique culture and traditions. The lack of access to basic resources and education has resulted in limited livelihood opportunities for the community, leading to widespread vulnerability. This study aims to explore potential livelihood development opportunities for the Katkari tribes of Pen. Through a comprehensive analysis of the existing socio-economic conditions, we aim to identify potential interventions and solutions that can help promote sustainable livelihoods for the community. The study's focus is to bridge the gap between the community and the mainstream economy, while preserving their cultural identity and traditions. By providing access to education, resources, and infrastructure, the study aims to empower the community and improve their overall well-being.

3.2 Results and Discussion

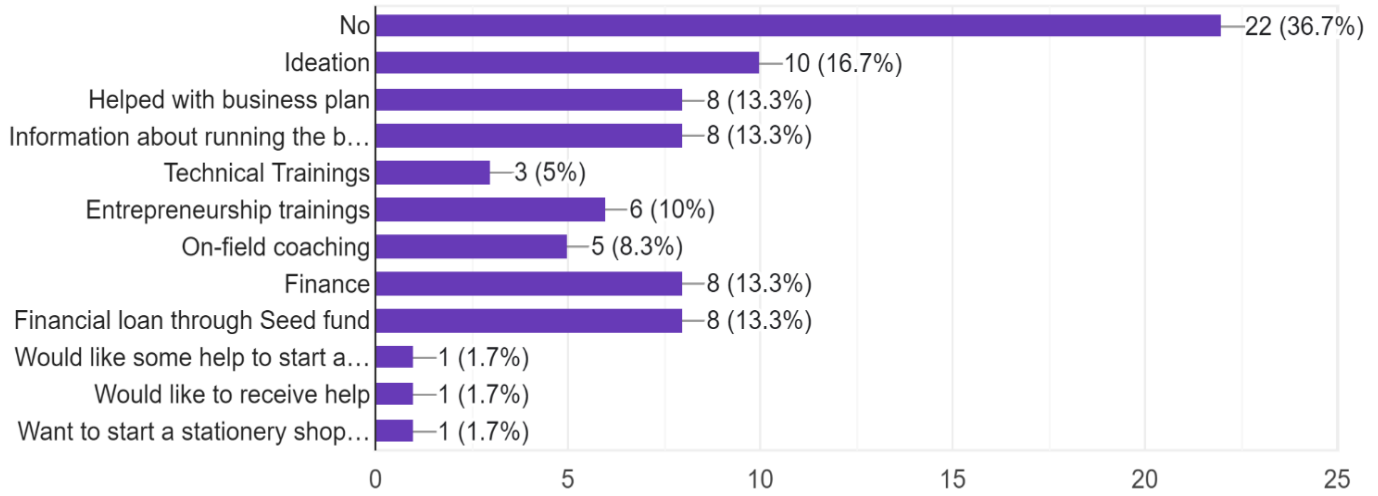
7. Have you received any help by an NGO/Government for the work you are doing?

तुम्ही करत असलेल्या कामासाठी तुम्हाला एनजीओ/सरकारकडून काही मदत मिळाली आहे का?

This question was asked to understand the prospective support the villagers could get through the NGO's or the Government schemes available in the village.

Sr.no	Forms of help	Frequency	Percentage%
1	No	22	36.7%
2	Ideation	10	16.7%
3	Help with business plan	8	13.3%
4	Information about running the business	8	13.3%
5	Technical training	3	5%
6	Entrepreneurship training	6	10%
7	On-field coaching	5	8.3%
8	Finance	8	13.3%
9	Financial loan through Seed fund	8	13.3%
10	Other- would like to receive help	1	1.7%
11	Other- want help to start a stationary shop	1	1.7%
12	Other- Would like help to start a business	1	1.7%
	Total	60	100%

(Table 2.7 Analysis of help received by NGO's/ Government)



(Table 2.7 Analysis of help received by NGO's/ Government)

The above data helped the study in understanding the different types of assistance provided by the NGOs/regional government bodies. Over a third of the total responses recorded claimed to be unaware of the help and assistance available at their reach. 22 (36.7%) respondents did not receive any help from the government or NGO's either because they were unaware of the schemes available or were not interested in starting a new business, 10 (16.7%) respondents took help with formation of ideas and concepts to start a side business or improve their current occupation, 8 (13.3%) individuals received help with a business plan, 8(13.3%) respondents gained information about running the business, 3 (5%) respondents received technical training, while 6 (10%) respondents received entrepreneurship trainings, 5 (8.3%) individuals received On-field coaching, Financial help was given to 8 (13.3%) respondents, 8 (13.3%) respondents took financial loan through a seed fund by the organisation, 1 (1.7%) individual was interested in knowing about the different schemes available, 1 (1.7%) respondent would like to receive help with their business and 1 (1.7%) respondent wants to start a stationery shop.

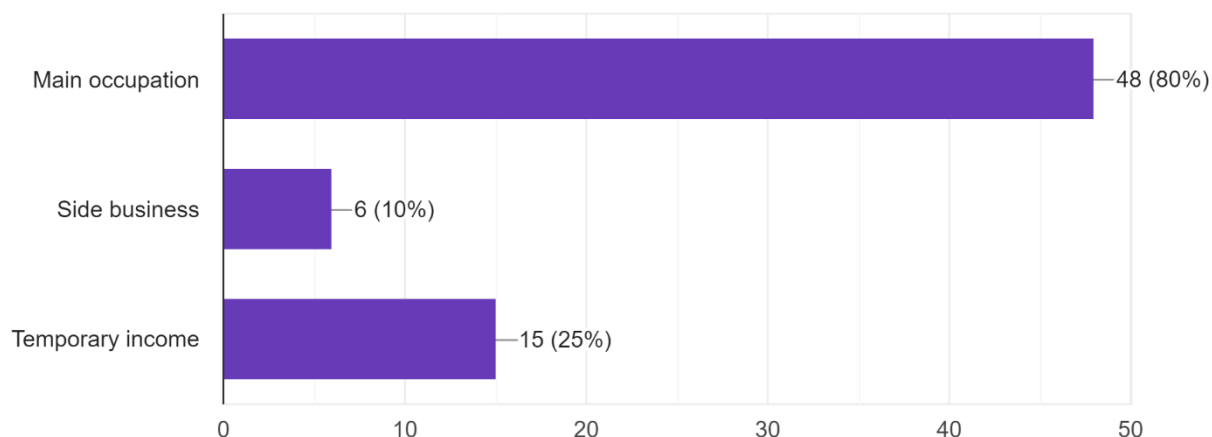
8. What are the sources of your capital?

तुमच्या भांडवलाचे स्रोत कोणते आहेत?

This question helped the study understand the income source of the respondents family.

Sr. no	Source	Frequency	Percentage%
1	Main occupation	48	80
2	Side Business	6	10
3	Temporary income	15	25
	Total	60	100%

(Table 2.8 Sources of capital)



(Fig 2.8 Sources of capital)

The above data shows the source of income in the respondent's family. The majority of the respondents i.e. 48 (80%) received their income from their main occupation, while the majority received income from the main occupation 15 (25%) of them also had temporary income sources to add to their economic conditions and 6 (10%) receive financial inputs from their side businesses as well. Since, the majority of the villagers were into farming, fishing, etc their main source of income is what provided for their families. Due to a lack of awareness amongst the tribals with regard to business opportunities and business development ideas, they were unable to access the schemes available by the government and NGOs.

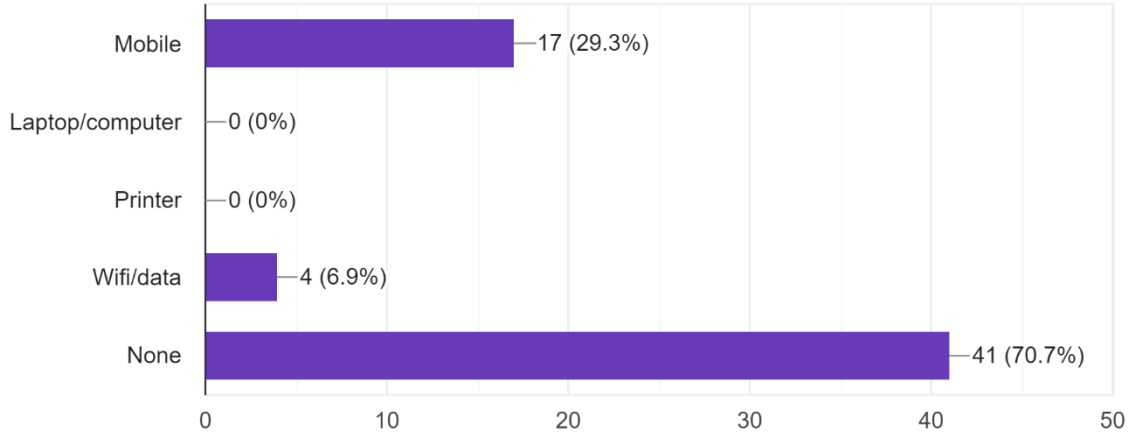
9. What kind of technology do you use in your line of work?

तुम्ही तुमच्या कामात कोणत्या प्रकारचे तंत्रज्ञान वापरता?

Although the remote villages in Pen lacked mobile network coverage, certain areas were able to provide good network range. This question helped the study in understanding technological awareness and usage amongst the tribals.

<i>Sr. no</i>	<i>Technology</i>	<i>Frequency</i>	<i>Percentage%</i>
1	Mobile	17	29.3
2	Laptop/Computer	0	0
3	Printer	0	0
4	Wifi/Data	4	6.9
5	None	41	70.7
	Total	60	100

(Table 2.9 Use of technology)



(Fig 2.9 Use of technology)

The data analyzed above shows the technological usage amongst the villagers. A maximum number of 41(70.7%) tribals responded saying that they did not own any sort of technology and some were even unaware of its existence and operation and/or because of being in extremely remote areas due to the unavailability of network coverage could not own any device, while most did not own any technical gadgets 17 (29.3%) tribals owned a mobile phone, it was observed that Katkari's living nearer to the more developed areas of Pen were the ones who owned a mobile phone and were aware of the use of technology some of them were even keen on owning a computer but were held back due to financial inabilities, None of the respondents owned a Laptop/Computer or Printer and only 4 (6.9%) of the respondents that owned a phone had smartphones that required internet connection. All in all, it can be understood that if technical assistance and training is provided more tribals will learn about the benefits of technology in improving their lifestyle.

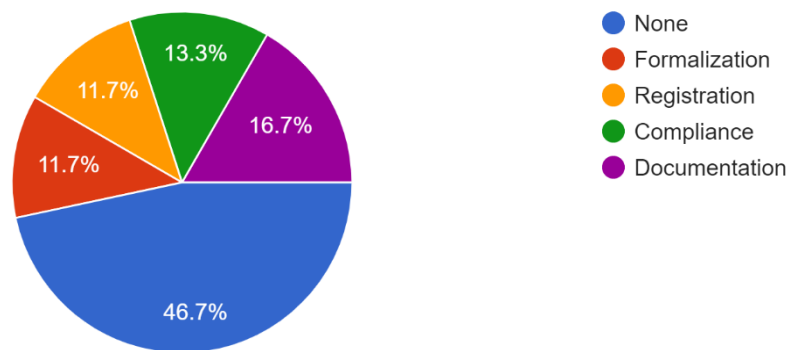
10. What challenges do you face while receiving help from the NGO/Government?

एनजीओ/सरकारकडून मदत मिळवताना तुम्हाला कोणत्या आव्हानांचा सामना करावा लागतो?

On understanding about the guidance and help the tribals could receive from the NGO's and the government, it was observed that there were a couple of challenges that the tribals faced.

Sr.no	Challenges	Frequency	Percentage%
1	None	28	46.7
2	Formalization	7	11.7
3	Registration	7	11.7
4	Compliance	8	13.3
5	Documentation	10	16.7
	Total	60	100

(Table 2.10 Challenges faced while receiving help from the NGO/Government)



(Fig 2.10 Challenges faced while receiving help from the NGO/Government)

The data above shows the different challenges that the tribals possibly faced while exploring the opportunities provided to them by the NGO's and the government schemes. Since most of them were unaware of the opportunities available they had not received any help hence they also did not face any challenges. 28 (46.7%) respondents did not experience any challenges, 10 (16.7%) respondents had issues with the documentation processes for schemes by the government as they lacked documents of nationality proof, aadhar card, etc, 8 (13.3%) of them faced challenges with compliance by the officials, 7 (11.7%) respondents had problems with formalization and another 7 (11.7%) had problems with the registration processes for varied schemes available for their welfare. It was observed that although the government and organisations are working towards the welfare of scheduled tribes they are still unable to provide the facilities to maximum citizens mainly because of lack of awareness and legal documents.

3.3 Conclusion

The observations in this study mainly focused on the socio economic facilities and conditions of the Katkari tribes. The tribals lack awareness with regards to government schemes and guidance facilities by NGO's that are based within the villages, this is mainly because of the high illiteracy rate that makes it difficult to teach and make aware the tribals of the livelihood opportunities they can acquire to better their lifestyle. Although there is great scope for development and improved lifestyle, the one peculiar trait observed amongst the tribe was that they are content even though their economic conditions range from below poverty line to mid poverty, there is no grave sense of greed amongst them for any sort of a fancier lifestyle. With stronger community interventions and exposure to varied opportunities there is great scope of development within this tribe.

Chapter 4- Major findings on healthcare facilities and female hygiene amongst the Katkari tribes.

4.1- Introduction

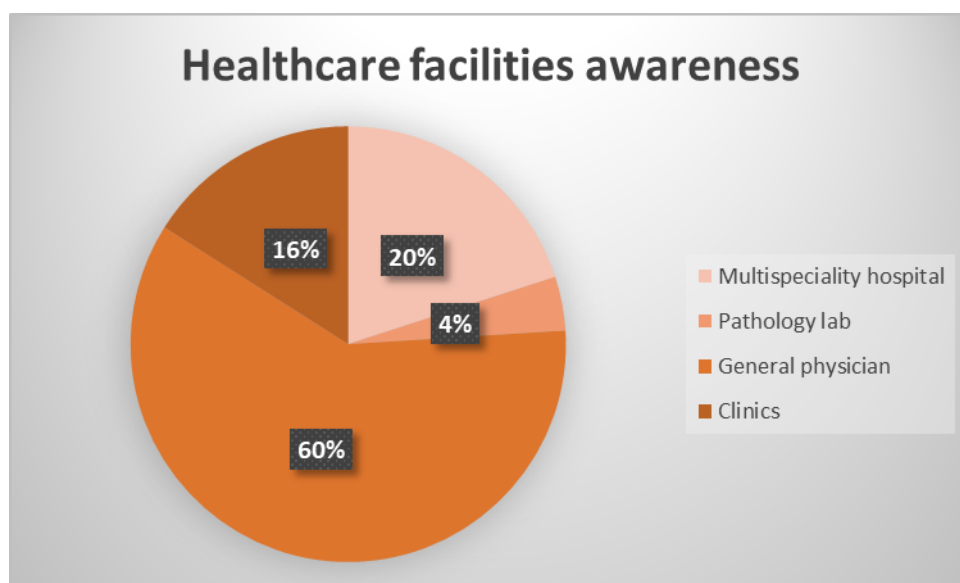
The Katkari tribe is a marginalized and economically disadvantaged community living in the state of Maharashtra, India. They face numerous challenges in terms of healthcare, including limited access to healthcare facilities and poor hygiene practices. In particular, women in the Katkari tribe face unique challenges related to menstrual hygiene and reproductive health. In this context, understanding the relationship between healthcare facilities and female hygiene practices is critical to improving the overall health and well-being of Katkari women. This paper aims to explore the challenges faced by Katkari women with regard to healthcare facilities and female hygiene and propose potential solutions to improve their health outcomes. Through a comprehensive review of existing literature, this paper will shed light on the current state of healthcare facilities and female hygiene practices among the Katkari tribe and highlight the need for increased awareness and support for women's reproductive health needs. Ultimately, this paper seeks to contribute to the ongoing efforts to improve healthcare access and outcomes for marginalized communities like the Katkari tribe.

4.2 Observations and Results

11. What are the healthcare facilities in the village that you are aware of?

तुम्हाला माहिती असलेल्या गावात कोणत्या आरोग्य सुविधा आहेत?

This question was a multiple choice question, for which research was done to first identify the different hospitals and Healthcare facilities in the region and then understand the awareness amongst the tribals about the existence of these facilities. The identified facilities in the study area were 3 Multispeciality hospitals, 1 pathology lab which was not exactly in the study area but could be accessed through the hospitals, and 5 general physician clinics, there were small orthopedic, gynecology, and endocrinology clinics. These medical institutions had very limited qualified staff, there were cleaning and assistant staff but they were not well qualified for the job. Once this data was collected the survey questioned the respondents to understand their knowledge about these medical facilities.



(Fig 2.11 Healthcare facilities Awareness)

The above fig. gives a prima facie understanding of the medical facilities in the study area. Since it was a multiple-choice question it was observed that (60%) the maximum number of the respondents were aware and would make use of the general physician clinics available in their vicinity, (20%) of the tribals were aware of the multispeciality hospitals, (16%) of the respondents would utilize the facilities of general physician clinics and only (4%) of the respondents were aware of the pathology lab and its functions.

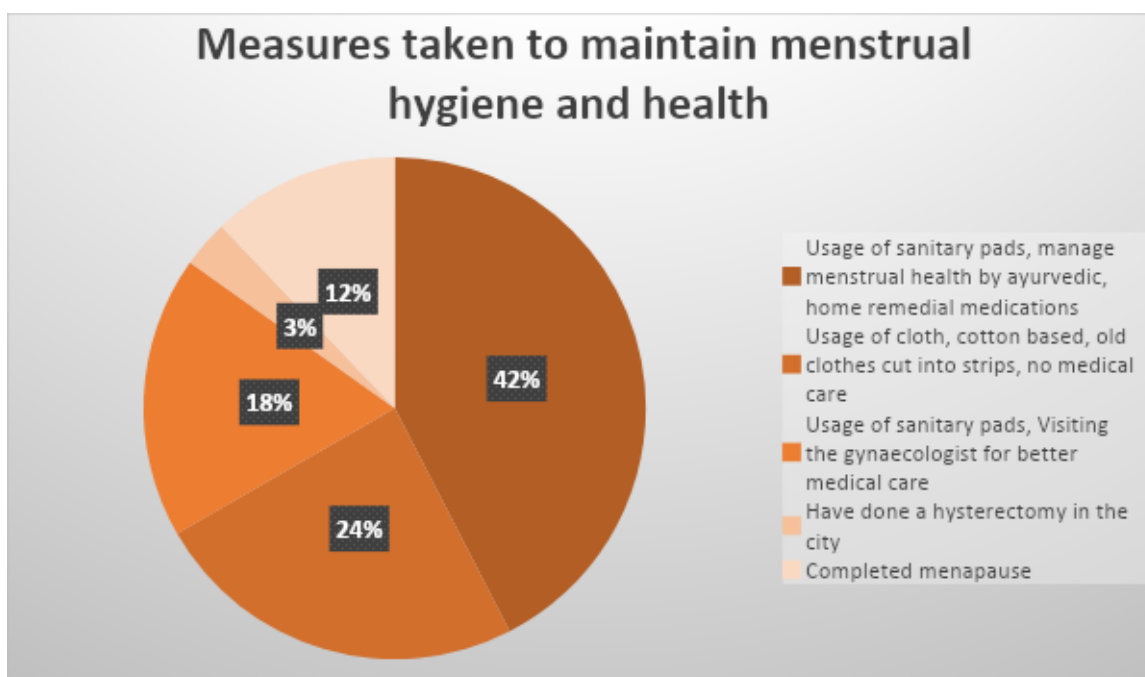
12. What measures do you take to maintain menstrual hygiene and health?

मासिक पाळीची स्वच्छता आणि आरोग्य राखण्यासाठी तुम्ही कोणते उपाय करता?

This question was addressed only to the female respondents as it was a gender specific question. The question aims to analyse the understanding, precautions, care and medical treatments with respect to female menstrual hygiene and health.

Sr.no	Measures taken	Frequency	Percentage%
1	Usage of sanitary pads, manage menstrual health by ayurvedic, home remedial medications	14	42.42
2	Usage of cloth, cotton based, old clothes cut into strips, no medical care	8	24.24
3	Usage of sanitary pads, Visiting the gynaecologist for better medical care	6	18.18
4	Have done a hysterectomy in the city	1	3.03
5	Completed menopause	4	12.12
	Total	33	100.00%

(Table 2.12 Maintenance of menstrual hygiene)



(Fig 2.12 Maintenance of menstrual hygiene)

To understand the level of understanding and compliance among the tribal women about menstrual health, hygiene, the use of sanitary pads, etc. It was observed that the women were rather shy and very conservative in their thinking about their menstruation cycles and how they care for themselves and their health mainly during the days when they are menstruating. It was surprisingly satisfying that most of them were aware and using sanitary pads. A couple of NGO's have conducted campaigns and healthcare awareness drives to give

these women a complete understanding of the importance of maintaining hygiene and curb the unnecessary taboo of periods being an untouchable/dirty time of the month. Although there is a visible need for more educational drives and medical facilities for women's menstrual healthcare.

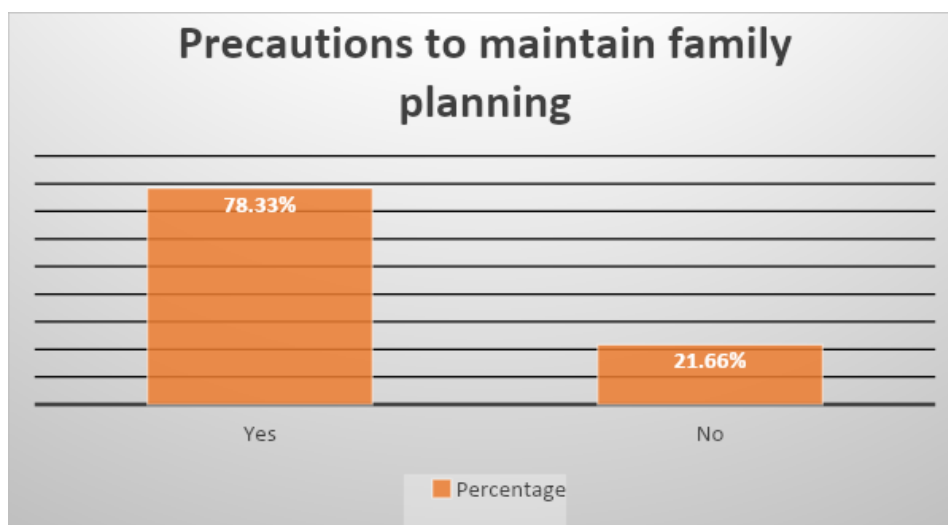
13. Do you accept the use of contraceptives- condoms, copper T, birthcontrol pills, etc., as a part of family planning?

कुटुंब नियोजनाचा भाग म्हणून गर्भनिरोधकांचा वापर- कंडोम, कॉपर टी, गर्भनिरोधक गोळ्या इत्यादींचा तुम्ही स्वीकार करता का?

This question aimed to understand the need for educating the villagers and helping them understand the need to mention sexual health and hygiene as well as curb poverty by teaching them the benefits of family planning. Although, It was quite impressive to discover that most of the tribals were very well aware about the concept of family planning and maintaining sexual health and hygiene.

Sr.no	Responses	Frequency	Percentage%
1	Yes	47	78.33%
2	No	13	21.66%
	Total	60	100%

(Table 2.13 Use of contraceptives)



(Fig 2.13 Use of contraceptives)

As the table and figure show that 47 respondents, which made up to 78.33% of the total tribals, answered with a yes to knowing and accepting the use of contraceptives and valuing the need for family planning. While there was still a sizable number of respondents around 13 (21.66%) that were unaware and rather against the need for contraceptives and refused to discuss the topic of sexual health. It is understandable that in such remote rural villages it is still a taboo to discuss intercourse or anything related to the act. The understanding of family planning is so crucial among the Katkari tribes mainly because of the poverty level in the villages, and practicing healthy sexual lifestyles.

4.3 Conclusion

The observations from this study reveals the understanding and acceptance of the sexual health and hygiene facilities among the tribals. The data also shows that most of the tribals are aware but still consider it to be a taboo to openly discuss sexual health, menstrual health and hygiene. It can also be seen that the majority of

the tribal women maintain their hygiene and use sanitary pads during their periods but there is a constant shy feeling of embarrassment and are partly treated alike during that time of the month. During this study it was revealed that some women are treated with extreme care by their parents or husbands and are made to rest well, while on the other hand there are some families that exclude and treat their women with a lot of disgust. Sexual health and well-being meet the needs of the village population. The tribals have been made well aware of the need for family planning due to the poverty level of the village, by the NGO campaigns and drives.

Chapter 5- Major findings, Recommendations and Conclusion

5.1 Introduction:

The empowerment of marginalized communities is a vital step towards achieving inclusive and sustainable development. In this study, it explored the livelihood development opportunities for the Katkari tribe of Pen and also paid deeper attention to enhancing female hygiene in healthcare facilities. The Katkari tribe has been facing socio-economic challenges for a long time, and empowering them through sustainable livelihoods is crucial for their upliftment. The study aimed to identify the challenges faced by the tribe and provide feasible solutions through collaboration with the community, NGOs, and government agencies. Additionally, the study also focused on enhancing female hygiene in healthcare facilities, recognizing the crucial role it plays in promoting the health and wellbeing of women. The concluding chapter summarizes the findings of the study, the challenges faced, the solutions identified, and provides recommendations for future initiatives to empower the Katkari tribe and promote female hygiene in healthcare facilities.

5.2 Major Findings:

The study on livelihood development opportunities and healthcare for the Katkari tribe identified several significant findings, including:

- a) Lack of formal education and skill development opportunities: The majority of the Katkari tribe members lack access to formal education and skill development opportunities, which is a significant obstacle to sustainable livelihood development.
- b) Limited access to capital: The tribe members have limited access to capital, and most of their income is from their primary occupation, which is agriculture.
- c) Traditional livelihoods: The tribe members have been dependent on traditional livelihoods such as agriculture, forest produce, and labor, which are not sustainable in the long run.
- d) Improved earning of people in existing job work
- e) Improve livelihoods through increased availability of water
- f) Improvement of milk production through improved practices of fodder management
- g) Poor health and hygiene: The study found that the healthcare facilities in the region are inadequate and do not meet the needs of the tribal population. Additionally, there is a lack of awareness about female hygiene and reproductive health, leading to health issues among women.
- h) Limited government intervention: Despite several government schemes and initiatives, the Katkari tribe has not received adequate support for livelihood development and healthcare.
- i) Community-led solutions: The study identified the importance of community-led solutions for sustainable livelihood development and healthcare. The involvement of the community in identifying their needs, designing interventions, and implementing solutions is crucial for the success of any initiative.
- j) Strengthening of Women Federations through economic activity
- k) Incubation of micro Enterprises
- l) Diversification of livelihoods: Agriculture has been the primary source of livelihood for the Katkari tribes. Diversification of livelihoods, such as promoting small-scale enterprises, handicrafts, and tourism, can provide alternative income sources.
- m) Skill development and vocational training: Providing skill development and vocational training programs can help the Katkari tribe members acquire new skills and enhance their employability.
- n) Microfinance and credit facilities: Access to microfinance and credit facilities can help the Katkari tribe members start their own businesses and improve their livelihoods.
- o) Strengthening healthcare facilities: There is a need to strengthen healthcare facilities in the region and increase awareness about female hygiene and reproductive health.
- p) Education and awareness: The provision of education and awareness programs can help the Katkari tribes to break the cycle of poverty and improve their socio-economic status.

- q) Government intervention: The government can play a significant role in the development of the Katkari tribe by implementing schemes and initiatives that cater to their needs, such as providing subsidies and grants for entrepreneurship development and healthcare facilities.

Based on these findings, the study recommended the need for a multi-stakeholder approach involving the government, NGOs, and the community to address the challenges faced by the Katkari tribe. It suggested the need for skill development and vocational training programs, microfinance and credit facilities, diversification of livelihoods, and strengthening of healthcare facilities, with a specific focus on female hygiene and reproductive health. It is possible to improve the quality of life for the Katkari tribes in Pen and help them to achieve sustainable development.

5.3 Major problems

1. Poor sanitation and hygiene.
2. Lack of access to education and skill development opportunities: The majority of the Katkari tribe members lack access to formal education and skill development opportunities, making it difficult for them to access better job opportunities and develop sustainable livelihoods.
3. Absence or Incomplete documentation: The lack of knowledge and access to identification proof, bank accounts and other legal documents leads to being unable to access government, organizational schemes, loans, etc.
4. Less capital: The Katkari tribe members have limited access to capital, and most of their income is from their primary occupation, which is agriculture and fishing. They do not have access to credit and microfinance facilities, which makes it difficult for them to start their own businesses and improve their livelihoods.
5. Traditional livelihoods: The Katkari tribes have been dependent on traditional livelihoods such as agriculture, forest produce, and labor, which are not sustainable in the long run.
6. Poor health and hygiene: The study found that the healthcare facilities in the region are inadequate and do not meet the needs of the tribal population. Additionally, there is a lack of awareness about female hygiene and reproductive health, leading to health issues among women.
7. Limited government intervention: Despite several government schemes and initiatives, the Katkari tribe has not received adequate support for livelihood development and healthcare.
8. Discrimination and social exclusion: The Katkari tribes face discrimination and social exclusion, which limits their opportunities for growth and development.

5.4 Recommendation:

SHG federation: the federation itself is the key support, with its members, the social capital, the regular meetings, the savings, and the corpus fund. Further with having a cooperative registration, Samarthan Federation is ideally positioned for the lending of productive loans. NGO: the team will play a critical role in assisting the federations in calling for applications, reviewing the applications, guidance in selection of the loan applicants, follow up for the repayments. Micro lending organizations SEWA, would be of immense assistance in training of the finance committee of the federations and the NGO Team.

1. Unit Costs for livelihood development

For NGO's to implement livelihood opportunities, the following is the unit costs for each proposed model

- For Goat rearing: Rs. 30,000/-

- For Dairy: Rs. 1,80,000/-
- For NTFP: Rs. 10,000/-
- For Vegetable Gardening: Rs. 25,000/-

If an NGO decides to independently set up the livelihood, this is the cost for developing a livelihood opportunity per household. However, if the NGO decides on a 'Convergence approach' a substantial amount of the unit cost could be accessed from the government schemes.

2. Strategy for launch of livelihoods

The following process should be followed for the launch of the livelihoods.

- Identify a pilot cluster for the development of each livelihood, this could comprise of 10-20 households, this is done by mapping out the villagers willing to implement a livelihood, and availability of resources.
- Use the unit cost template to set up a 'prototype' of the livelihood
- Use the learning from the prototype to draft a big proposal for livelihood

3. Adopt a Convergence Approach for development, especially for livelihoods

The government has several schemes, and are in need of help in propagation of the schemes and mobilization of applications. Through convergence, the number of beneficiaries of the project can increase and it is in sync with the new funding philosophy (of funders).

4. Development of a specialized livelihood team

Livelihood development needs constant focus and attention. It is recommended to develop a team to solely focus on the development and implementation of livelihoods. This will ensure effective implementation of the project.

5. Understanding the Return on Investment

The return on investment for each livelihood opportunity. This highlights the incremental change a livelihood bring about in monetary value, this is over a period of 3 years.

(The below table is an example of a few livelihood opportunities that were observed to be possible in the study area and is a tentative ROI calculation. *It is only for understanding purposes the given values are not for accurate implementation.)

	Overall ROI	Annualized
Goat Rearing	1.6x	0.53 x
Dairy	1.19 X	0.39X
Vegetable Cultivation	2.65X	0.88x
NTFP	10.4 x	3.4 x

If Rs. 100 were to be placed into a fixed deposit for 1 year, a person would get 0.06 x Return on investment in 1 year.

Micro Enterprise incubation Process

NGO Level

- Development of Incubation Systems
- Development of Team for incubation program
- Development of Resource Center

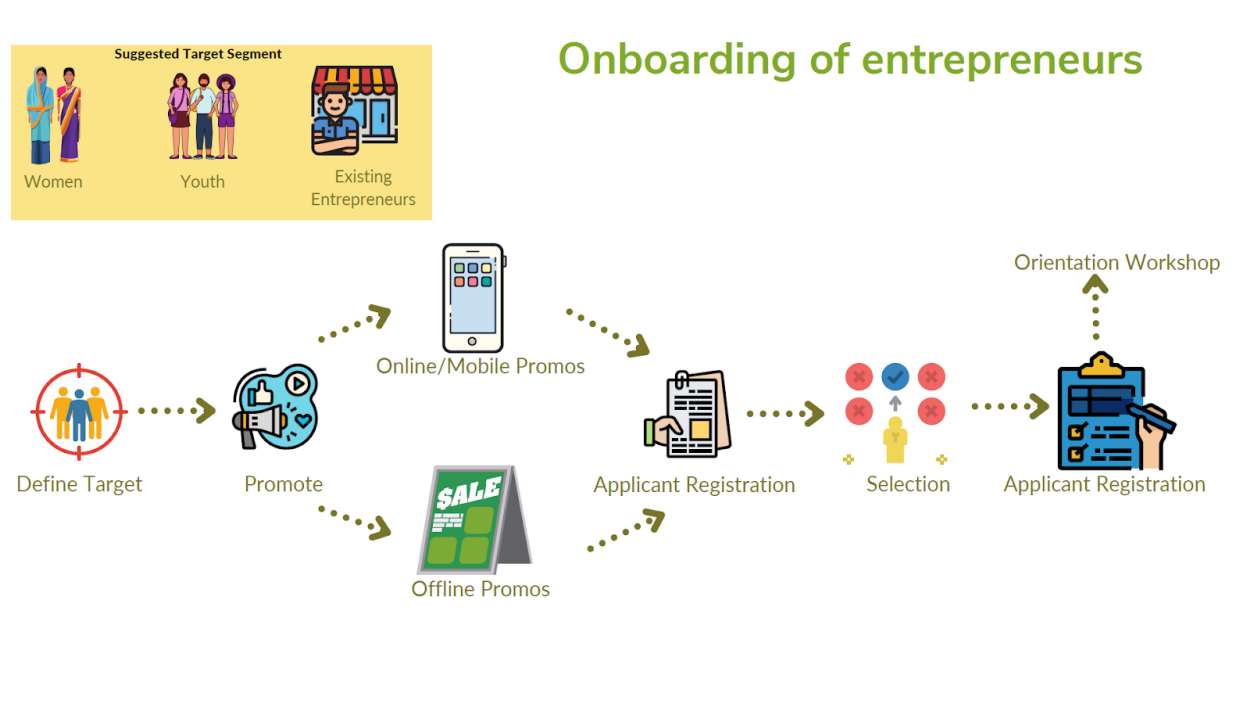
Incubation team Level

- Awareness of Incubation Program
- On Boarding of Micro Entrepreneurs
- Training Support
- Documentation Support
- Market Linkage Support
- Government Schemes Support
- Financial Linkage support

The incubation program can be run in cohorts / batches of 30 entrepreneurs in each cohort.

Each cohort gets intensive support for a duration of 3 months (on field coaches meet the entrepreneurs once a week), post which the entrepreneurs will be able to access the incubation support offered by the program (on field coaches meet with the entrepreneurs once every 3 weeks)

The process of the incubation team level can be understood by the flowchart below



(Fig 2.14 Onboarding of entrepreneurs- Diagram prepared by researcher)

Conclusion

The study of the Katkari Tribe on their livelihood, healthcare and hygiene has brought light on a big chunk of opportunities not only in the fields of infrastructural development but a couple of livelihood opportunities, healthcare and hygiene facilities. A couple of livelihood opportunities identified were goat rearing, mushroom cultivation, Non Timber Forest Production (NTFP), dairy, fisheries, kirana marts. With the aid of the government, NGOs, self help groups there are various funded training programs, schemes, loans, etc available.

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Appendix

The below images were captured during the village visit for conducting the survey. The attempt of using the GPS Camera was made, but unfortunately due to poor signal accurate details of the location are unavailable.



(Image 5.1 shows the entrance of the study area, village Pimpalgaon, Pen Rural)



(Image 5.2 and 5.3 showing the hospitality of a respondent in the study area)

(Image and 5.4 shows the interaction among the village community and surroundings for better understanding of their lifestyle)



(Image 5.5 shows the NGO staff helping around with translation of the survey to the villagers in the study area)

Questionnaire

1. Gender लिंग

2. Age वय

3. Educational Qualification शैक्षणिक पात्रता

4. Occupation व्यवसाय

5. How many members in your family?

तुमच्या कुटुंबात किती सदस्य आहेत?

6. How long have you been working in this industry?

तुम्ही या उद्योगात किती काळ काम करत आहात?

7. Have you received any help by an NGO/Government for the work you are doing?

तुम्ही करत असलेल्या कामासाठी तुम्हाला एनजीओ/सरकारकडून काही मदत मिळाली आहे का?

8. What are the sources of your capital?

तुमच्या भांडवलाचे स्रोत कोणते आहेत?

9. What kind of technology do you use in your line of work?

तुम्ही तुमच्या कामात कोणत्या प्रकारचे तंत्रज्ञान वापरता?

10. What challenges do you face while receiving help from the NGO/Government?

एनजीओ/सरकारकडून मदत मिळवताना तुम्हाला कोणत्या आव्हानांचा सामना करावा लागतो?

11. What are the healthcare facilities in the village that you are aware of?

तुम्हाला माहिती असलेल्या गावात कोणत्या आरोग्य सुविधा आहेत?

12. What measures do you take to maintain menstrual hygiene and health? _____

मासिक पाळीची स्वच्छता आणि आरोग्य राखण्यासाठी तुम्ही कोणते उपाय करता?

13. Do you accept the use of contraceptives- condoms, copper T, birthcontrol pills,

etc., as a part of family planning?

कुटुंब नियोजनाचा भाग म्हणून गर्भनिरोधकांचा वापर- कंडोम, कॉपर टी, गर्भनिरोधक गोळ्या इत्यादींचा तुम्ही स्वीकार करता का?