United Way Mumbai

IMPACT ASSESSMENT

SAMRUDDHA KISAN INITIATIVE

Impact Assessment
ASK Foundation

Prepared By
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EXECUTIVE SUMMARY

The impact assessment study conducted in Mokhada, Maharashtra, aimed to evaluate the effectiveness and sustainability of ASK Group's CSR interventions in addressing socio-economic challenges in the region. Findings reveal significant improvements across various domains, reflecting both positive outcomes and areas requiring continued attention and support.

The demographic profile of the surveyed population demonstrates gender parity, with a majority falling within the working-age bracket of 30-50 years. Despite economic constraints, a notable proportion (35%) of respondents report an improvement in their economic condition compared to five years ago. However, the majority of households report an annual income below 30,000, highlighting prevalent low-income levels and the need for sustained economic empowerment initiatives.

Water scarcity remains a significant challenge, with rainwater serving as the primary source of irrigation. Interventions such as solar-powered water pumps and agricultural projects like WADI and Jasmine cultivation show promise in enhancing water accessibility and diversifying agriculture. However, seasonal water scarcity underscores the importance of ongoing water management strategies and sustainable agricultural practices.

Health and education initiatives have positively influenced community health practices and school attendance. However, sustainability challenges, particularly in maintaining infrastructure and ongoing support for awareness programs, need to be addressed. Strengthening community involvement and capacity building is crucial for sustaining gains in these areas post-exit.

Community engagement and ownership of environmental preservation efforts are essential for sustaining gains in forest preservation initiatives and other environmental interventions. Collaborative efforts, including the establishment of water committees, indicate progress towards sustainability. However, continued support and strategic planning are necessary to ensure the long-term viability of these initiatives.

In conclusion, while ASK Group's interventions have yielded positive outcomes in Mokhada, sustaining these gains necessitates ongoing community engagement, institutional support, and strategic planning for post-exit sustainability. By addressing identified challenges and leveraging community strengths, ASK Group can further contribute to the socio-economic development and well-being of the region.

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GLOSSARY

Farmers Group - A "Farmers Group" refers to an organised association or collective of farmers who come together for various purposes, such as mutual support, knowledge sharing, advocacy, and economic collaboration.

Village Health and Sanitation Committee (VHSC) - (VHSC) is a community-based organisation established at the village level, at all the intervention villages, to address health and sanitation issues. The main objective of these committees is to improve the health and hygiene conditions within their local rural areas by implementing various programs. VHSCs consist of members from the local community, including representatives from local leaders like members of Gram Panchayat, and healthcare workers.

Mata Samiti – The "***Mata Samiti***" refer to a committee or group focused on women's welfare, addressing issues related to maternal health, child care, and women's empowerment. These groups might be involved in activities such as organising health camps, awareness programs, and support services for women.

Adolescent Girls Group - An "**Adolescent Girls Group**" typically refers to a group or community organisation focused on the well-being, empowerment, and development of adolescent girls. The primary goals of such groups often include promoting education, health, life skills, and empowerment among adolescent girls.

Sportz Village - Sports-related activities and initiatives can be a powerful means to foster positive social, economic, and personal growth within communities. It can serve as a powerful tool for achieving various developmental goals, impacting individuals and societies in multiple ways. Sportz Village is committed to transforming the lives of children from underprivileged communities through the magic of sports. In Karol village with the aid from ASK foundation, Sports Village has done a significant amount of transformative work.

STEAM Labs - STEM Labs are dedicated spaces established in schools to promote innovation and entrepreneurship among young students. These labs have been designed to foster a spirit of curiosity, creativity, and problem-solving skills by providing access to tools, equipment, and resources to children in the villages of Sayade. The intervention was initiated with a space for a computer lab at Sayade school. Eventually, the lab was converted into a STEAM lab encouraging a hands-on approach to learning, allowing students to work on projects, conduct experiments, and develop prototypes.

INTRODUCTION

District Palghar, situated in the Konkan Division of Maharashtra, is bordered by Thane and Nashik Districts in the east and northeast respectively. To the north, it is bounded by Valsad District in Gujarat and the Union Territory of Dadra and Nagar Haveli. The Arabian Sea forms its western boundary, and it is a part of the Mumbai Metropolitan Region along with Vasai-Virar. The district encompasses Palghar, Wada, Vikramgad, Jawhar, Mokhada, Dahanu, Talasari, and Vasai-Virar block. According to the 2011 Census, the district's population was 83,453.

Within Palghar, the Mokhada block stands out for its rural landscape, agriculture, and diverse communities. This tribal-dominant area comprises 59 revenue villages and 17,789 households. The region is characterised by two major rivers, Waal and Wagh, which flood during the monsoon but significantly recede in dry months. The inhabitants, primarily dependent on agriculture, traditionally migrate to nearby cities for employment during the non-agricultural seasons, facing various developmental challenges typical of rural India, such as infrastructure, healthcare, education, and economic development.

The majority of Mokhada's residents are Warli and Katkaris (Ghosh, et.al, 2019[1]), speaking different dialects of Marathi. They reside in semi-pucca and kutcha mud houses with thatched roofs. With the exception of a few, most families fall into the low-income group, relying on farming, agriculture, and seasonal migration to sustain themselves. The area struggles with developmental issues, including water scarcity, limited infrastructure, and high unemployment rates.

Educationally, Mokhada has one to two junior schools for classes up to 8, with limited facilities. Higher education requires children to travel to towns, posing challenges due to inadequate infrastructure and the need to traverse challenging terrain.

The basics of living, including food, water, health, housing, and education, are in a dire state, with water scarcity being a major hindrance. Fetching water becomes a time-consuming task, especially for women and young girls who have to walk for hours, often barefoot, through dense jungles to reach water sources. The reasons for water stress include a lack of adequate groundwater recharge because of hilly terrains with steep slopes and the presence of hard (basalt) rock formations (Bombade, A. & Gaikwad, G., 2023[2]).

[1] Ghosh S, Varerkar SA. Undernutrition among tribal children in Palghar district, Maharashtra, India. PLoS One. 2019 Feb 27;14(2):e0212560. doi: 10.1371/journal.pone.0212560. PMID: 30811462; PMCID: PMC6392283.
[2] https://t20ind.org/wp-content/uploads/2023/07/T20_PolicyBrief_TF6_WaterSecurity-TribalHabitations.pdf

In response to these challenges, the ASK Foundation has focused on empowering the community through initiatives like Samruddha Kisan, aimed at improving agricultural practices, healthcare systems, and education. Over the last five years, ASK Foundation's interventions have addressed critical community issues, such as water scarcity, alternative livelihoods, healthcare, and school infrastructure.

Mokhada's population, predominantly belonging to the Warli community, faces socio-economic challenges tied to forest resources and subsistence farming. Understanding this local context is crucial for interpreting the findings of the study.

The study highlights how Mokhada's socio-economic and environmental dynamics, emphasising the community's reliance on traditional livelihoods and the unique climatic challenges they confront.

Study Objectives

This assessment study objectives includes:

- Curating the change brought about by the multi-variety efforts of ASK Group's CSR Interventions in Mokhada.
- Examining the sustainability of the interventions and providing recommendations for a planned exit by the ASK group from the current project location.
- Facilitate information requirement to identify and disseminate the best possible practices for a comprehensive socio-economic village development plan and transition from the geography.

LITERATURE REVIEW

Rural development has been receiving increasing attention from the governments across the world. In the words of Robert Chambers (1987)[3] "Rural Development is a strategy to enable a specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need. It involves helping the poorest among those who seek a livelihood in the rural areas to demand and control more of the benefits of rural development.
In the Indian context, rural development assumes special significance for two important reasons. First about two thirds of the population still lives in villages and second, the backwardness of the rural sector would be a major impediment to the overall progress of the economy. Government agencies, NGOs, multilateral organisations, and local community-based organisations collaborate to implement rural development programs.

[3] Chambers, R. (1987). Sustainable livelihoods, environment and development: putting poor rural people first.

Successful rural development requires a comprehensive approach that considers the unique needs, challenges, and opportunities present in different rural contexts. The context of Mokhada is unique in itself. Historically, the block experiences acute water scarcity beginning in March of every year (Bombade, A. & Gaikwad, G., 2023[4]). This is ironic as the area receives very heavy rainfall, i.e. between 2500 and 3500 mm per annum (Dhak, S., 2021[5]) during monsoon. But due to the basalt formations in soil and the hilly terrain, the rainwater runs off quickly and very less amount of the rainfall is infiltrated to recharge the groundwater storage. This is the reason the community rely on rain and surface water for irrigation and drinking purposes. Therefore, rainfall is one of the most important natural resource for this agri-dependent tropical region and this fluctuation and scarcity affects all the human activities in the region.

The district Palghar's children mortality rate is higher than the national (50) and state average (28). According to Garje (2022)[6] the reason for such pitiful scenario is primarily the lack of employment opportunities in the region. As the lack of income along with the availability of water leads to less nutrition and thus contributes to mortality rate.

[4] https://t20ind.org/wp-content/uploads/2023/07/T20_PolicyBrief_TF6_WaterSecurity-TribalHabitations.pdf
[5] Dhak, Sumit M. 2021, "Statistical Analysis of Rainfall Variability for Tehsils of Palghar District, Maharashtra State, India.", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 9 Issue VII
[6] Garje, R. R., & Economics, H. O. D. (2022). REDUCING MALNOURISHMENT THROUGH INCOME FROM MGNREGS.

METHODOLOGY

The study conducted is an applied research method to trace the immediate and long term usefulness of the intervention. The methodology involved surveys, observations and qualitative data collection. The target population of the intervention was 1,069 Households (i.e, 4,793 beneficiaries). Thus, the sample collected was 385 households. These households for the survey were selected randomly from our universe of the village community. Survey was conducted using a structured questionnaire to understand the effect of healthcare facilities, clean water and livelihood interventions. Alongside, focus group discussion; using semi-structured questionnaires with Village Health Sanitation Committee (VHSC), Farmers group, Water User Group (WUG), ***Mata Samiti***, Adolescent girls group and Asha workers has been conducted. The qualitative discussions helped triangulate data collected through the survey. For the purpose of comparison, additional data has been collected from two of the non-intervention villages i.e. Fanasgaon and Vadapada from Ogada block.

Table 1: Research Framework

Themes	Key Indicators	Respondents	Method of data collection	Method of analysis
Drinking Water & Irrigation	1. Availability of drinking water. 2. Availability of water for irrigation 3. Change in Water table	340 household surveys (families) of village community members	Survey and observation	Comparative study and secondary data analysis
Agriculture, Livelihood	1. Change in personal income, monthly revenue 2. Change in Household income 3. Meaningful work engagement 4. Change in Skill/ Adaptation of new skill 5. Financial acumen - knowledge & practise 6. Usage of banking services - Savings &/or investments 7. Quality of life - type of house, WASH facility 8. Asset ownership - house, vehicle, farm equipment 9. Reduction in drudgery - time & hours of work, engagement of labours		5 to 10 In-depth interviews of selected respondents who are directly benefiting	Descriptive, Exploratory and Inferential study

Education	1. School dropout rate 2. Enrolment/re-enrolment 3. Change in student engagement / attendance 4. Change in student performance		4 to10 Interviews with teachers of the implementation schools	
Health	1. Malnutrition in women & children 2. Child's birth weight 3. Change in mothers engagement 4. Awareness of adolescent girls 5. Role of Village Health Sanitation Committees		4 FGD with ANC/PNC mothers and VHSC	Descriptive & Explanatory study
Environment	1. Use of renewable energy 2. Change in coverage of Sacred forest (Devrai) 3. Change in crop production		Observation, secondary data, & anecdotal evidence	

DATA COLLECTION

It was a mixed-method study with simultaneous qualitative and quantitative data collection. The quantitative data was collected using data collection software, and we could gather 385 valid responses. The data collection was done between 25th November 2023 to 4th December 2023. The survey findings were supplemented with secondary research in the target villages.

The qualitative methods included Transient walks, In-depth interviews, Focus Group Discussions and Non-participant Observations. In line with the proposed methodology, we visited all 4 villages and their 18 hamlets and conducted 7 Key informant interviews and 16 Focus Group Discussions. The study also provisioned for a control group. We collected 40 additional responses from two nearby villages from the Ogada block for comparison. However, they were comparable on a few parameters.

Respondents' Profile

These demographic characteristics provide valuable context for interpreting the survey findings, as they offer insights into the age and educational diversity of the respondent sample. These combined findings provide a comprehensive understanding of the demographic composition, educational background, livelihood sources, and income levels of the respondent sample, enhancing the context for interpreting survey results. Understanding the demographic composition is essential for generalising the survey results to the broader population and tailoring any recommendations or interventions accordingly.

GENDER

The gender distribution among the respondents is relatively balanced, with 50.4% females and 49.6% males. This suggests a representative sample with comparable participation from both genders.

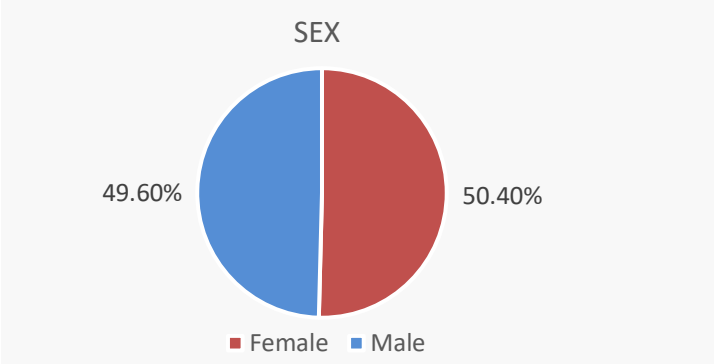


Figure 1: Respondents' profile-sex

AGE

The majority of respondents fall within the age range of 30-50 years, constituting 60% of the sample. This indicates that the survey has a substantial representation of the middle-aged demographic. There is also a notable percentage (23%) of respondents above the age of 50.

The 3% respondents between 14 to 18 years were part of the program with the adolescent girls. Thus, the data exhibit the representation of each of the beneficiary groups.

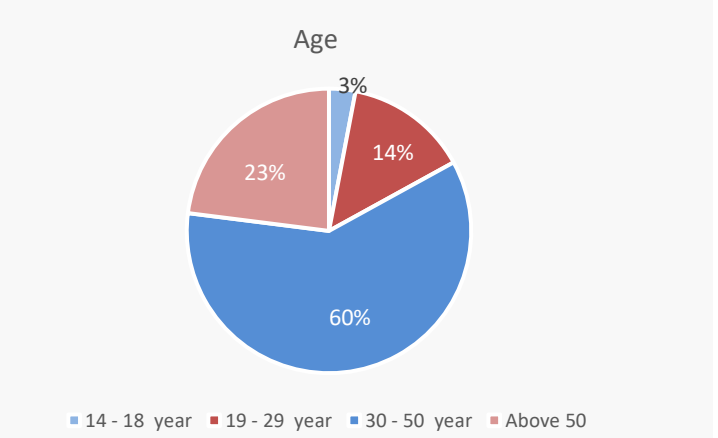


Figure 2: Respondents' profile-age

QUALIFICATION

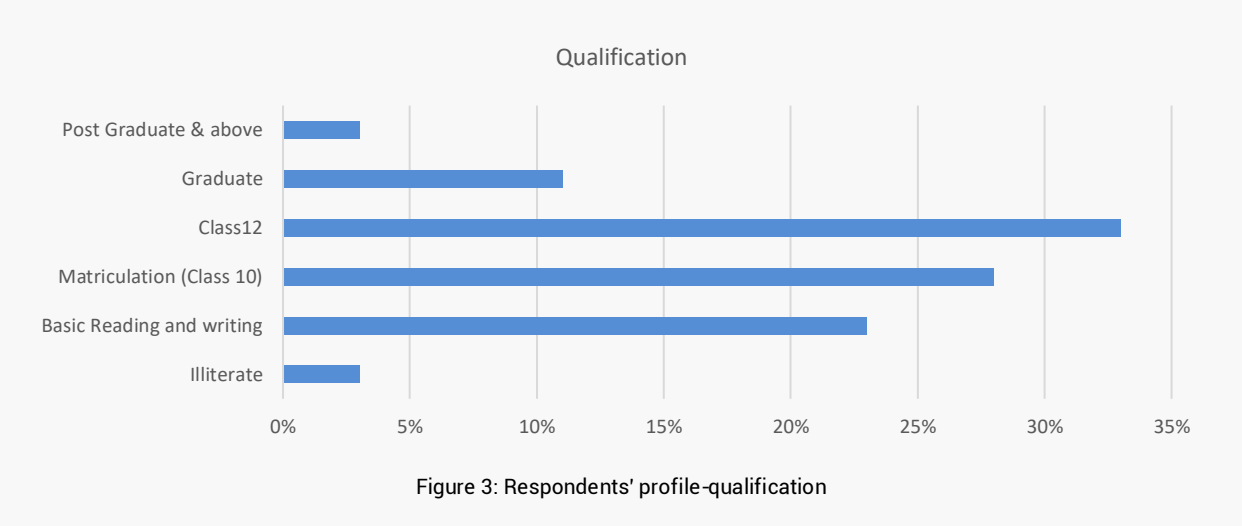


Figure 3: Respondents' profile-qualification

The majority have at least basic reading and writing skills (23%). A significant portion has completed matriculation (class 10) (28%) and class 12 (33%). A lower percentage holds graduate degrees (11%), and only a few have postgraduate qualifications and above (3%).

LIVELIHOOD

Farming is the dominant source of livelihood among respondents, indicating a significant reliance on agriculture as a means of income. The majority (79.2%) identify farming as their main source of livelihood. Followed by Daily wage labour reported by a significant 36.1% of respondents as their source of income.

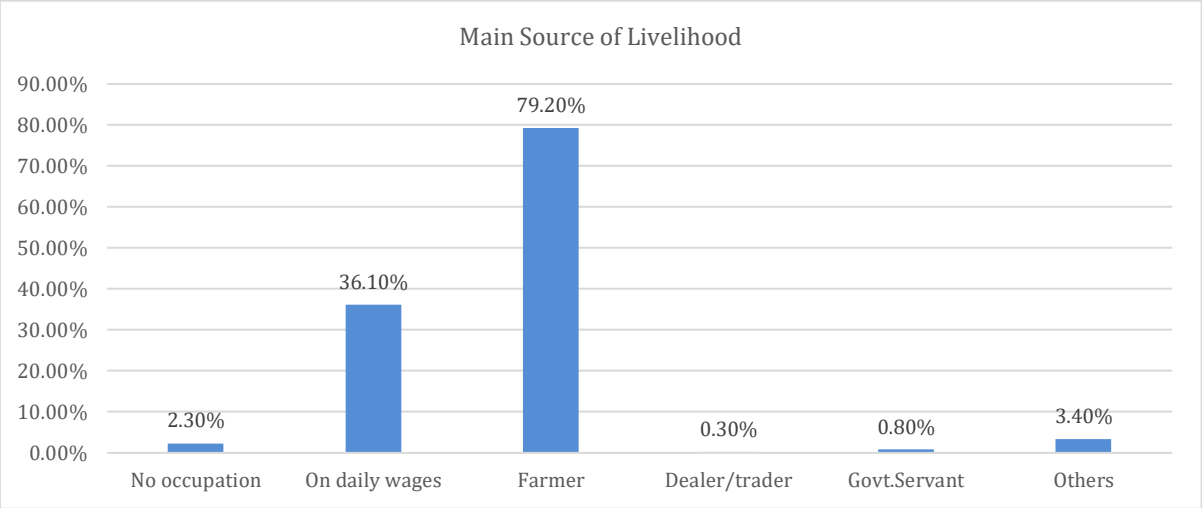


Figure 4: Respondents' profile-Source of livelihood

Other sources, including dealer/trader, government servant, and others, contribute to a smaller percentage (approximately 5.8%).

FAMILY ANNUAL INCOME

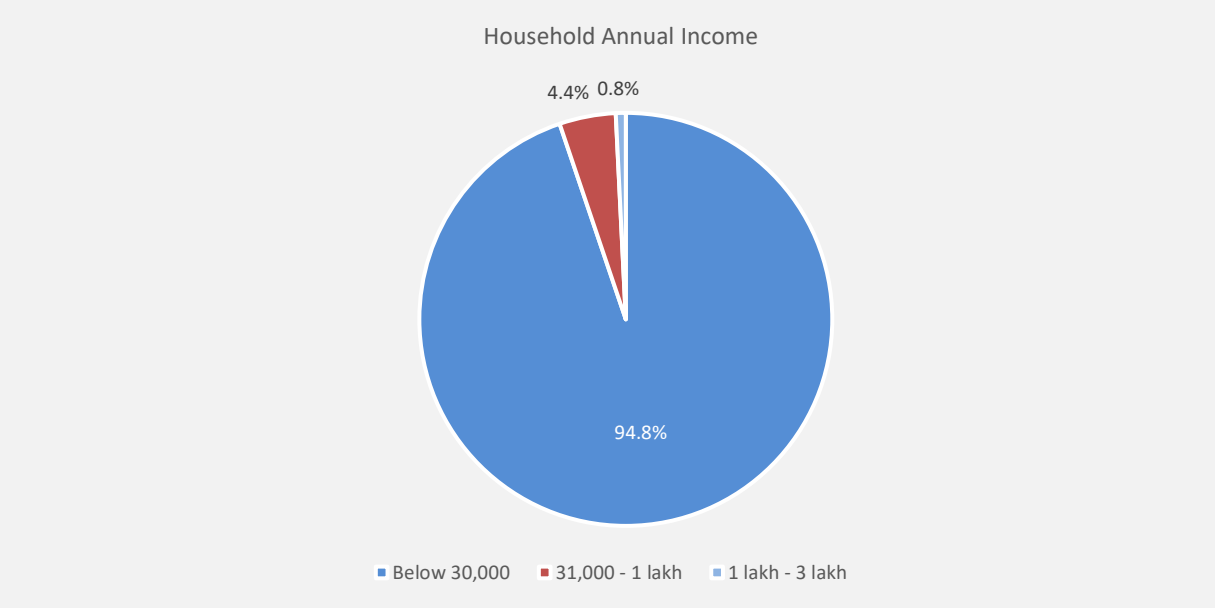


Figure 5: Respondents' Profile-Household Annual Income

The distribution of household annual income is concentrated in the lower income brackets with the majority of respondents (94.8%) report an annual income below 30,000. A smaller percentage falls in the income range of 31,000 - 1 lakh (4.4%) and even smaller percentage (0.8%) reports higher income ranges, such as 1 lakh - 3 lakh.

MAJOR FINDINGS

The findings have been drawn based on the qualitative and quantitative data collected through FGDs and Interviews with key stakeholders along with a detailed survey.

The Mokhada block of Maharashtra experiences heavy rainfall during the monsoon months. However due to its terrain by December the land becomes dry. The availability of water and the terrain have noticeable influence on the target community and the opportunities available to them. As a result, the interventions and the assessment were also in alignment with this influence. The segments below describe the findings on the five aspects mentioned in the research design i.e. Drinking water & Irrigation, Agriculture & Livelihood, Health & Nutrition, Education and Awareness, and Environment.

Drinking Water & Irrigation

Source of Water

The available information about the main sources of water for irrigation purposes indicates that the majority of water for irrigation comes from rainwater, accounting for 72% of the total. Due to this, the farmers in the region rely heavily on natural precipitation for agricultural irrigation. The water scarcity is also evidenced by the low dependence on groundwater for irrigation, and the minuscule use of tube wells or bore wells in the area. These underground water sources constitute only 1% of the total irrigation sources.

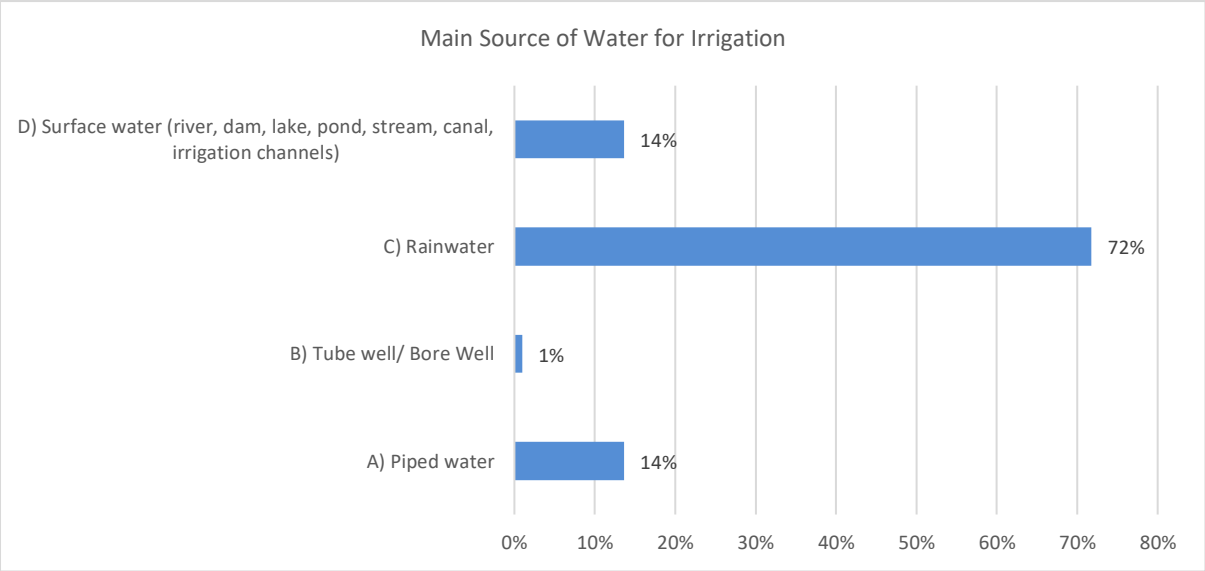


Figure 6: Drinking water & irrigation-Source for irrigation

Surface water (rivers, dams, lakes, ponds, streams, canals, irrigation channels) and piped water together contribute to 28% of the total. While not the dominant sources, they still play a significant role in providing water for irrigation.

Availability of water

The data indicates a reliance on seasonal water availability for irrigation, with a substantial percentage (97%) reporting water availability for only 1-6 months. This indicates that agriculture in the region is likely constrained to specific months with higher water availability, potentially corresponding to the rainy season.

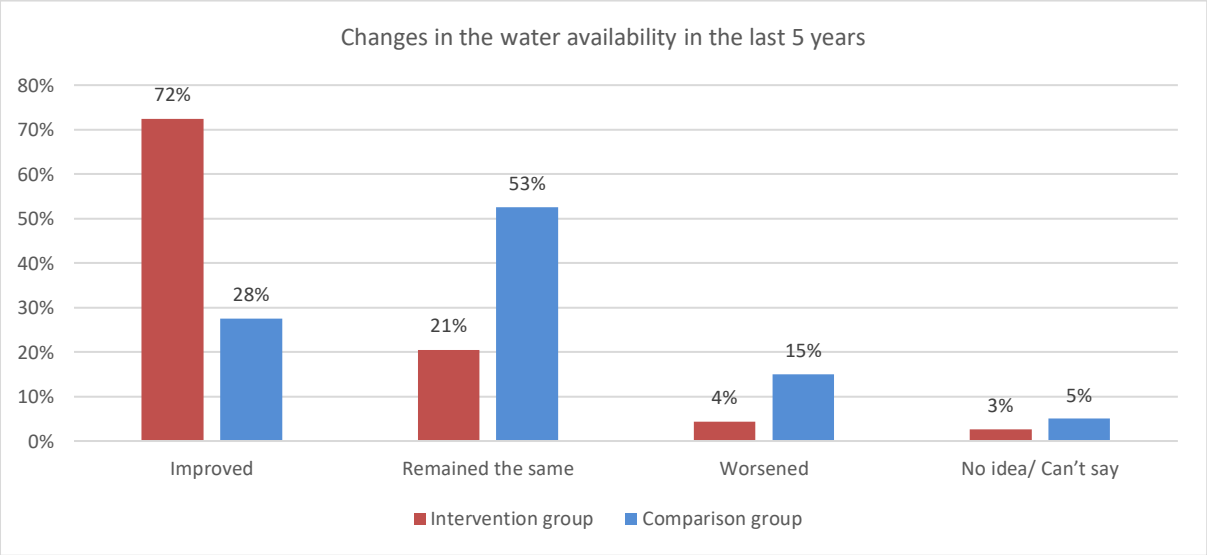


Figure 7: Drinking water & irrigation-Change in water availability in last 5 years

A significant portion of respondents (45%) reported having water available for irrigation only for 1-3 months. This suggests a strong seasonal dependence on water availability, indicating that agricultural activities may be constrained to a specific time frame, prompting seasonal migration. Through the diversification of the income sources and risk reduction, people in the area reported less migration.

Table 2: Availability of water

Current availability of water for irrigation in months?	
A) 1-3 months	45%
B) 4 - 6 months	17%
C) 7-9 months	24%
D) 10 months & above	14%

The findings emphasize the interconnectedness of water table dynamics and irrigation water availability, highlighting the importance of water management and conservation efforts in addressing seasonal constraints and ensuring sustainable agricultural practices.

The availability of water for drinking has improved with a significant number (46%) of individuals receiving water for household usage within 10 minutes. Another 21% receive it in 10 to 20 minutes. Only 14% reported longer timeframes of more than 20 min.

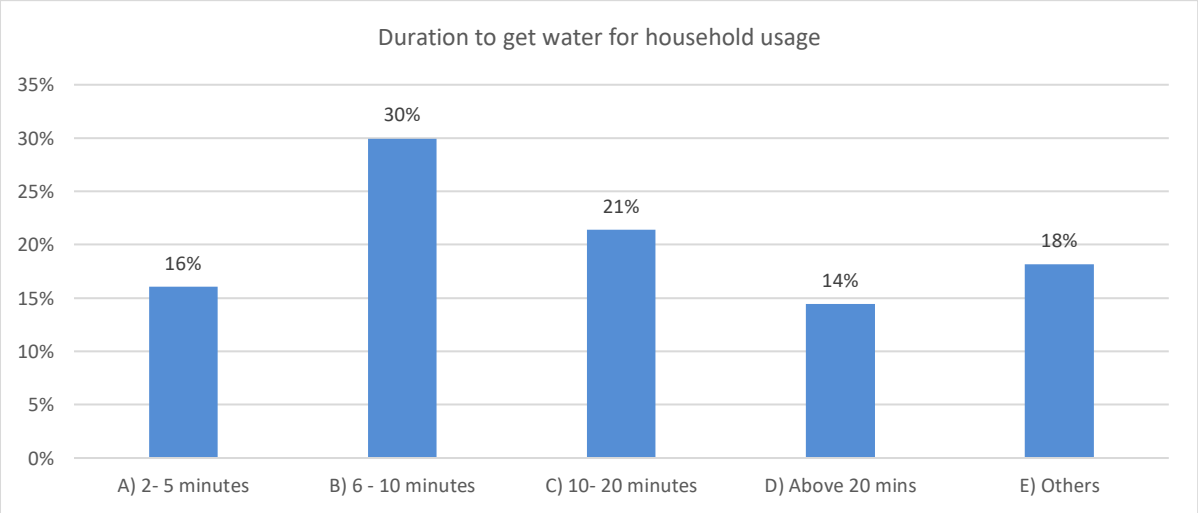


Figure 8: Drinking water & irrigation-Duration to fetch water for home

The community, especially women and girls, Have reaped significant benefits from solar lifts and tap-water facility mainly due to the time-taken in fetching water and terrain of the villages and hamlets. Though, health benefits were not explicitly mentioned by beneficiaries, the staff at different locations highlighted it in the qualitative interactions.

> *Drinking water usage has become more as we get clean fresh water all throughout the year. Diseases has also become less in our village as we get clean water all the time.*
>
> - Water user group member, Jogalwadi

Agriculture & Livelihood

Cattle Rearing

Cattle rearing is closely associated with availability of water. This was visible at the target area. Though the trend of people starting to own cattle was only slightly higher between the control group (non-intervention villages described in methodology) and treatment group, there is sufficient evidence to establish a statistically significant increase in the number of existing cattle in the intervention area.

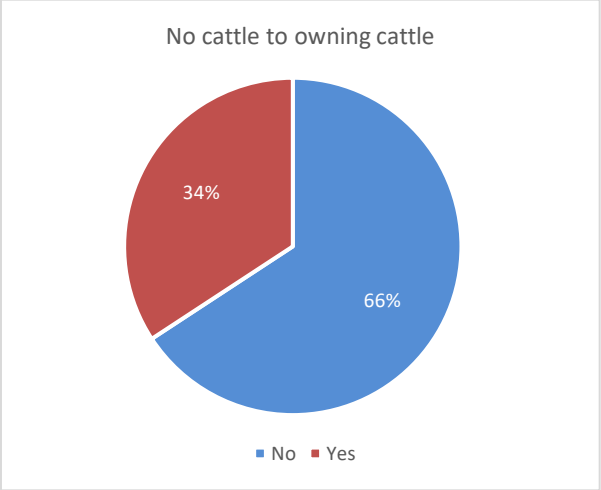


Figure 9: Agriculture & Livelihood-Cattle ownership - 1

This data indicates that 53% of the surveyed population has experienced an increase in the number of cattle owned. From an impact perspective, the increase in the livestock owned by the families could have several implications, including improved livelihoods, economic stability, potentially enhanced food security, and better nutritional profile of the families involved.

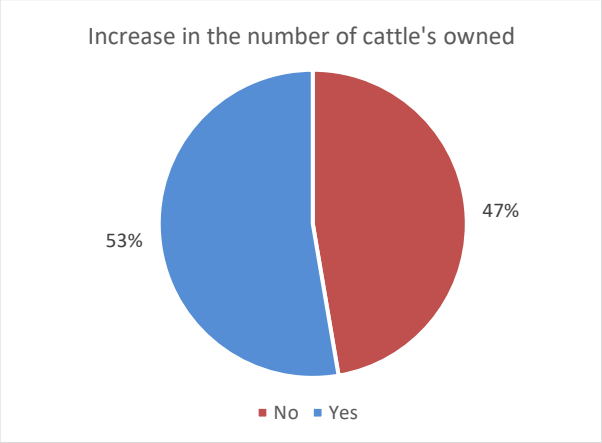


Figure 10: Agriculture & Livelihood-Cattle ownership - 2

The data on the transition from having no cattle to owning cattle shows **that 34% of the surveyed population has acquired cattle.** This could signify positive changes such as economic empowerment, diversification of income sources, or adoption of livestock-related livelihood strategies.

Economic situation

Most of the farmers here have been traditionally cultivating single crops and mostly for domestic uses, and only a handful of them could sell their produce. This situation has not changed in the region much even after the interventions.

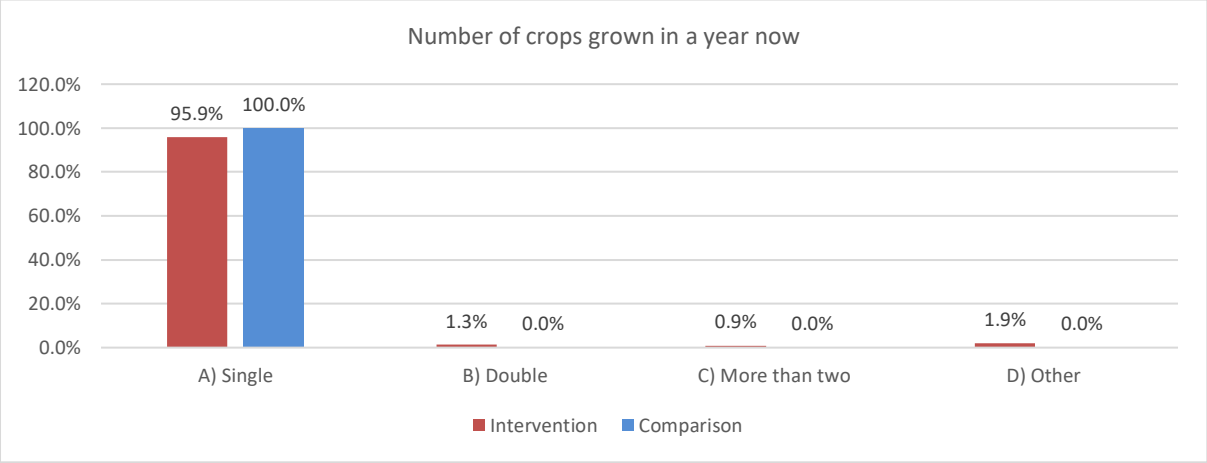


Figure 11: Agriculture & Livelihood-Number of crops grown

Both in the intervention and comparison groups, a predominant percentage of respondents (95.9% in the intervention group and 100% in the comparison group) report growing a single crop in a year. This suggests that single-crop farming is prevalent in the surveyed population. This consistency suggests that the intervention may not have significantly influenced the number of crops grown.

However, to defray the risk on the account of single crop dependency, allied initiatives introduced for farmers through the CSR interventions have evidently brought positive returns. Wadi cultivation project was observed in all villages with farmers growing Mango and Cashew trees on the waste or high elevation land. This Wadi cultivation is a specific type of agriculture apt for such rocky terrain. These trees require maintenance in initial years and then they can survive with minimum care. To ensure the availability of water for a longer duration, trench irrigation was also introduced. **The farmers were trained and they received 20 mango and 40 cashew plants each.**

> *Most of us in the village got trees. We also got training on how to keep these trees. For this cultivation, we keep at least 10 metres in between two trees. Baif also has given us training on how to protect the plants from animal and pest attacks*
>
> - Farmers group member, Hattipada, Sayade

The farmers also encouraged to adopt Jasmine cultivation. They were given 300 Jasmine plants each, drip irrigation connected through 'Jal Kund' and 'community ponds'. The '***Jal Kund***' was for individual farmers and 'Community ponds' were for a group of 5-6 farmers together. These farmers were also supported in establishing market linkages. In some villages like Swarpara of Sayade, facility of refrigeration has been made available through E-Mitra. Quite a few Jasmine farmers to increase the self-life of their flowers have used this refrigeration facility. Their entrepreneurial mind-set was visible. Many farmers have started to sell flower garlands from the Jasmine they produce. The women in Karol also shared that during festival season they go up to Dadar flower market in Mumbai to sell their flowers.

> *Earlier we only used to sell jasmine, now we make gajras from the extra mogra that is left after sell. Our income has increased as a result. We sell them at the Igatpuri market now. We earn 150 -250 Rs per day more. Specifically during the festive seasons we can sell gajras at a significantly higher price.*
>
> - Jasmine Cultivator, Karol

Vegetable farming with protective irrigation has been observed among a few farmers as a source for consumption and livelihood. Thus, increasing overall availability of nutritious vegetables within the village. The effect has also been seen in the increased consumption of the green leafy vegetables.

Additionally, other initiatives including training and support to grow remunerative crops like Mushroom, Strawberries were provided to a small group of farmers. The group involved in mushroom farming did only one crop and have not taken up again as on date of data collection. The strawberry farms were recent created and were yet to have the produce. Some of the farmers were also provided training for honeybee keeping, and making foxtail millet snacks. The honeybee keeping or apiculture has limited potential in the area, as during monsoon and summer the availability of the flower becomes an issue. Thus, affecting the survival of the bees. One of the farmers interviewed uses sugar syrup to keep their bees alive. On the other hand, foxtail millet snacks have the potential as a product but it is yet find a steady supply chain or market.

All this was done with the intent to establish the proof of concept for others to follow. However, the pilots are yet to establish the supply chain for the sustainability of the initiatives and become a model to follow.

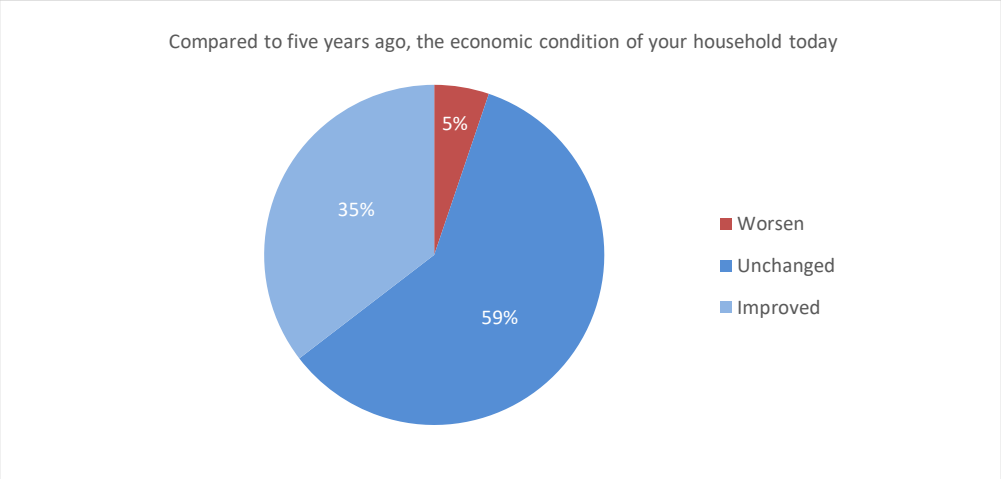


Figure 12: Agriculture & Livelihood-Economic condition

Despite the challenges posed by the COVID-19 situation, a significant portion (59%) of the surveyed population reports that their economic condition has remained unchanged compared to five years ago. This could indicate a level of resilience within the community and may have attribution to the interventions going on for last four years.

A significant portion of respondents (35%) reported an improvement in their economic situation, suggesting overall positive trends, especially in the context of economic challenges experienced all over the country.

> *After being a part of this committee - water user group (All by women), I feel my decisions are being respected more than before. My village members listen to me more carefully.*
>
> - Water user group member, Jogalwadi

Though the team has been working for last four years, the adoption of the cultivation practices and patterns have been found to be slow. A significant majority of respondents (66%) indicated that there have been no major changes in cultivation practices and patterns in their village over the last two years. While the majority favours continuity, a notable proportion (31%) shows openness to adopting new methods and exploring innovative approaches to agriculture, exhibit some adoption.

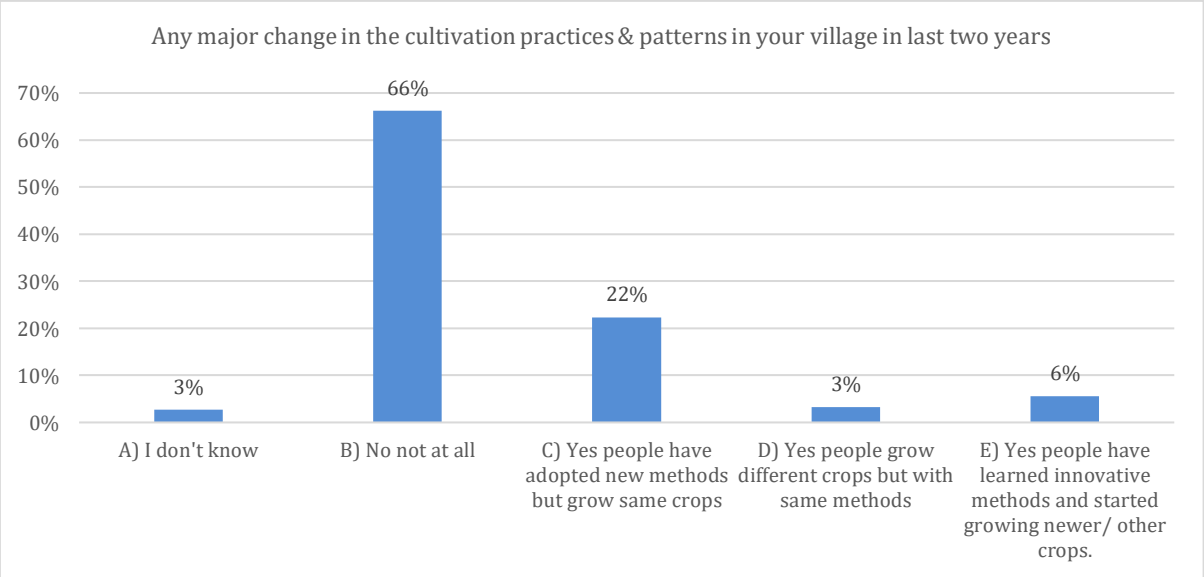


Figure 13: Agriculture & Livelihood-Change in cultivation practices & patterns

The data suggests a gradual adoption of new methods and crops, indicating a cautious approach towards agricultural innovation. The reason could be the small landholding and low annual household income reduces their risk appetite. The farmers who have not adopted shared that they would like to see how others who have adopted are doing then probably decide about the adoption. Also, the farmers are known to differ greatly in their propensity to adopt new technologies [Sissoko, et.al, 2023[7]] usual slow rate of adoption.

CASE STORY 1

A seed bank and information centre at Sayade was created to ensure the sustainability of the new cultivation techniques and yields. For the smooth functioning of these centres and adoption by the locals, they have trained and recruited staff from the community itself.

Ms **Parvati Ganpat Jugare,** Hattipada Sayade has been trained by BIAF to be the seed bank curator for their village. She has been given regular training and active hand holding by Biaf staff. The local farmers at Sayade comes to her to get the seeds. She had many hard to find original seeds.

As a seed bank curator, she is responsible for managing and preserving the genetic diversity of plant seeds in a seed bank. Seed banks play a crucial role in conservation efforts, as they store and safeguard seeds from a wide variety of plant species. With the new found role, Parvati not only manages her livelihood but has also become a motivation for many women in her village.

[7] Sissoko P, Guindo SS, Togola S, Dembélé BD, Grimsby LK, Aune JB. Effect of Adoption of Climate-Smart-Agriculture Technologies on Cereal Production, Food Security and Food Diversity in Central Mali. *Agriculture*. 2023; 13(6):1196. https://doi.org/10.3390/agriculture13061196

Health & Nutrition

The Village Health & Sanitation Committee plays a crucial role in improving the overall health and well-being of their local rural communities by addressing issues related to hygiene, sanitation, and basic healthcare. This committee serves as a bridge between the community and healthcare providers, advocating for better access to health services and practices at the grassroots level.

The VHNC member of Sayade while stating the reason for less attendance at the meetings shared that "Sayade is so big, we are forced to walk miles to attend any meeting or events. This reduces the attendance and motivation of the members. Could you request them to have two VHNC in Sayade?" A pertinent question for consideration.

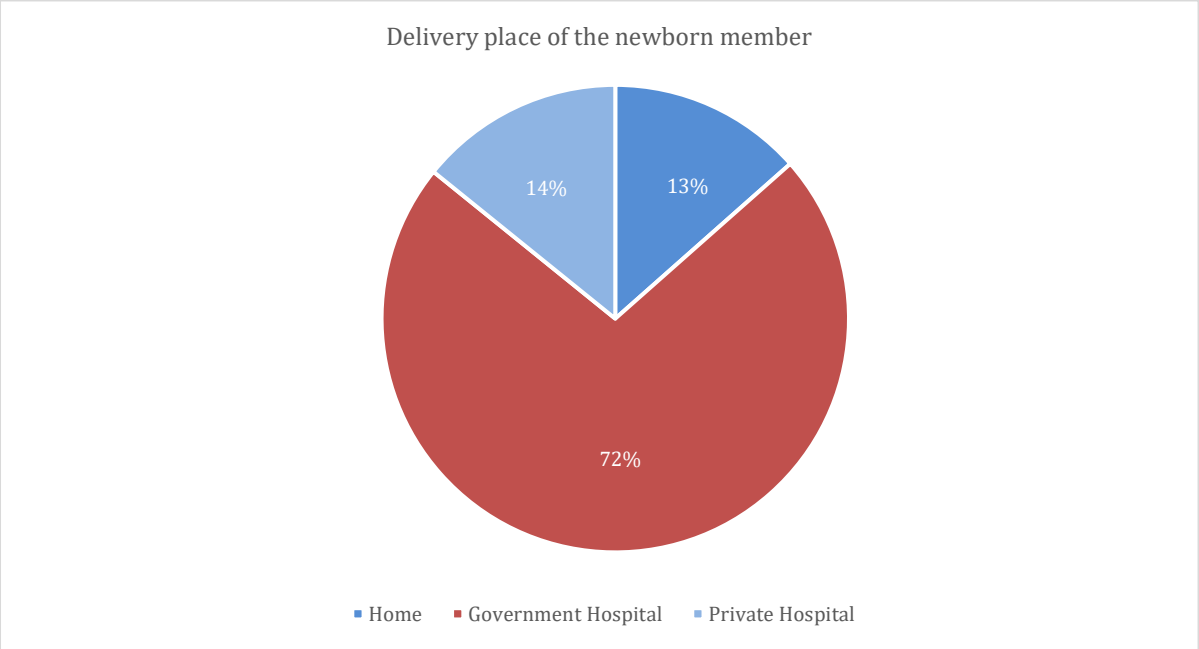


Figure 14: Health & Nutrition-Institutional delivery

Their efforts have also ensured that the majority of the deliveries (86%) have been institutional. The community has become more aware of health and nutrition practices. However, in the difficult-to-reach parts, people still find access to health services lacking, accounting for 13% of deliveries at home.

> *We are here to help the village members for any of their health needs. They can call us at any time for any emergency service. We arrange transportation for them to visit the doctor even at odd hours at night*
>
> - VHNC member, Panchaghar proudly shares

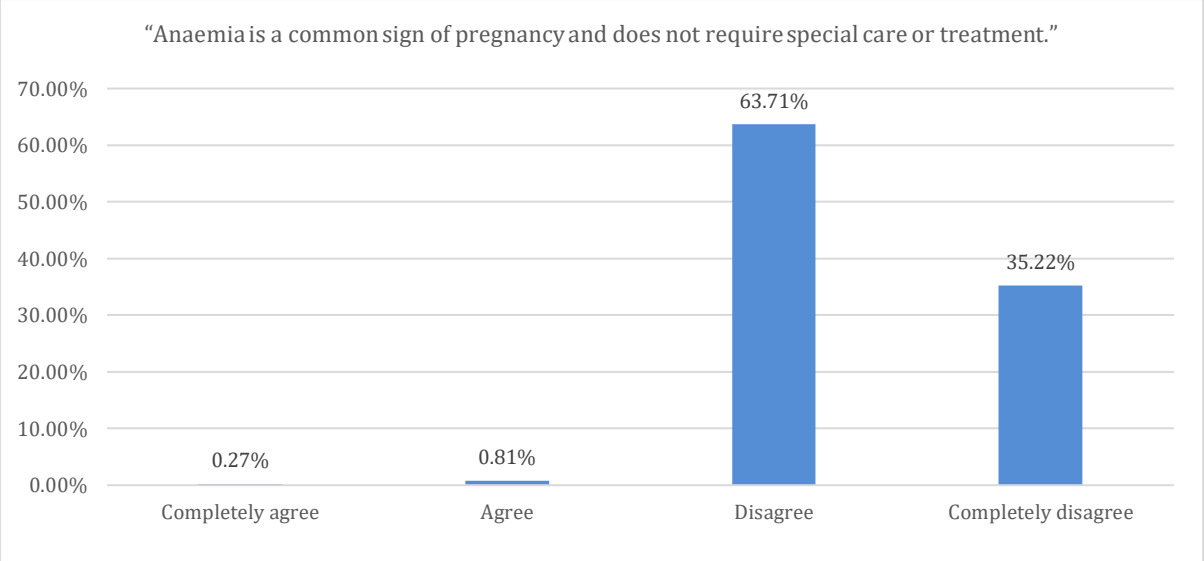


Figure 15: Health & Nutrition-Anaemia awareness

According to the graph, 19% of the participants stated that they never consume fruits. This may raise concerns about their nutritional diversity. As a result, efforts such as distributing Mango trees may be beneficial in the future.

On the other hand, 48% of the respondents consume fresh green leafy vegetables on a daily basis. This is in line with the initiative of promoting vegetable cultivation. This indicates a relatively high level of awareness or adherence to a healthy dietary practice, as green leafy vegetables are often considered nutritious.

However, a significant percentage of the participants (45%) mentioned that they never consume milk and milk products. This could be related to the tribal belief that it belongs to the animal's young ones so should not be consumed by them, as confirmed by the community members. This belief could also have been propelled by the low count of livestock, poverty, and low availability of milk. Mata Samitis were observed to be action in villages like Jogalwadi and Pachghar but in other villages like Sayade and Karol, they were mostly a group of beneficiaries supporting Anganwadis, but not much engaged in the advocacy part.

> *Earlier water-related diseases were very common for our village like dengue, and malaria. Mainly due to water scarcity, people used to store a lot of water for emergencies. Now, we visit house to house to check for stored water and sensitize community about the related issues. We actively work during monsoon to reduce the prevalence of such water-borne diseases in our villages.* - VHNC member, Hattipada

Education and Awareness

This section includes the community's feedback on the conditions of schools and the effect of awareness programs on attitudinal change in the community. It is found that the infrastructure support to the school has contributed to increasing attendance. The community has been perceiving it positively.

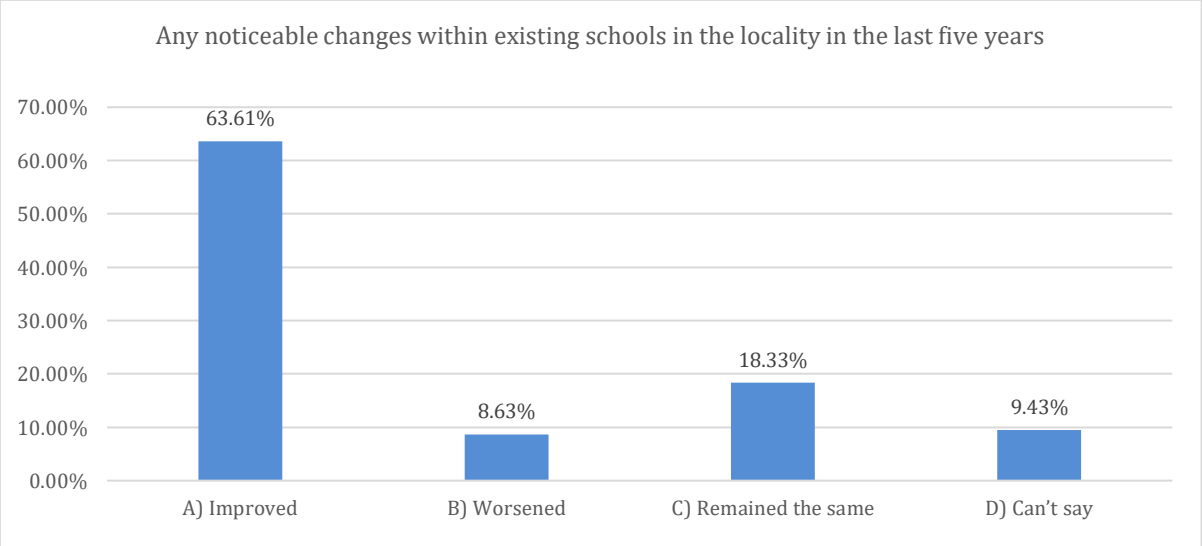


Figure 16: Education & Awareness-Change in condition of schools

A significant majority of respondents, almost two-thirds, report noticeable improvements in existing schools. This suggests positive changes, potentially in infrastructure, educational quality, or overall school environment.

However, maintenance of the infrastructure is an issue. The school authorities' needs to pay more attention towards the maintenance of the infrastructure support provided. The school management committee can probably could intervene in this issue on behalf of the community.

> *Girls who used to be very quiet earlier, have now shown active participation in kabaddi. Our girls go for a run and exercise every morning. Now they are physically fit and are motivating other small girls in the community as well*
>
> - was the response of teachers

Attitudes change

The awareness of the target group has an effect on their perception. Such perceptions are crucial from interventions and awareness programs related to water usage and nutritional practices.

The awareness programs have some effect visible on Gender Disparity in Nutrient Requirements. A significant portion (78%) responded with "No," suggesting that they do not perceive boys/men to require more nutrients than girls/women.

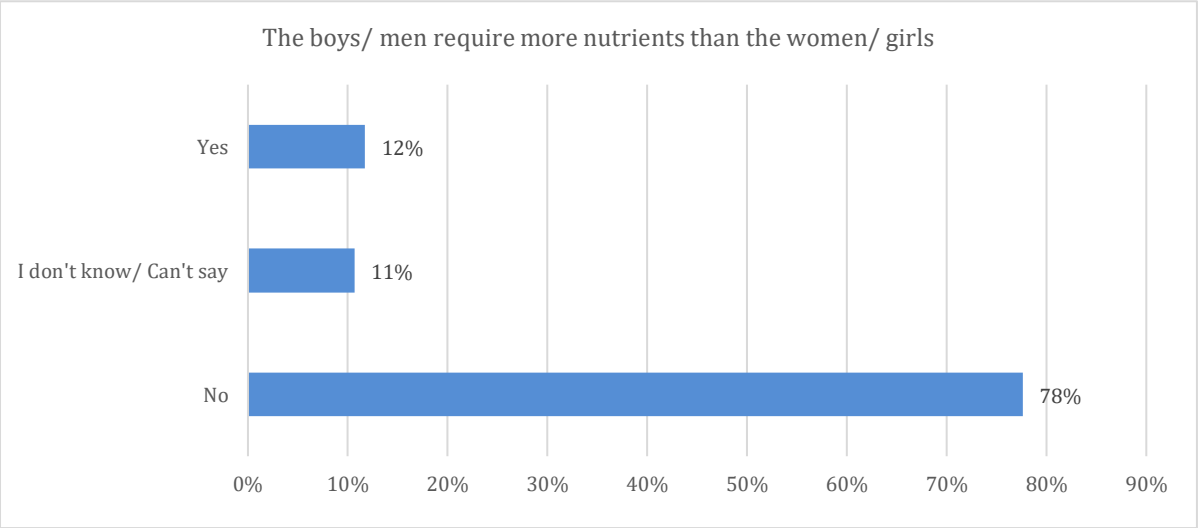


Figure 17: Education & Awareness-Gender related myth

A smaller percentage (12%) responded with "Yes," indicating a belief that boys/men do require more nutrients, followed by 11% responding with "I don't know/Can't say," suggesting some uncertainty or lack of awareness about the nutritional requirements based on gender.

> One of the adolescent girls shared "*I am not allowed to leave my home without necessity. My parents however allow me to come for the nutrition classes by Aaroehan. Hence these classes are liberating for me. We learnt that girls and boys should not be discriminated against. In our homes, this happens but we know now that this is not correct. When I become a mother I will not repeat the same.*"

The majority of respondents (94%) reported that females usually go to fetch water for their households. This suggests a gendered division of labour in water-related activities, with females predominantly responsible for this task even though the difficult terrain makes it more challenging and time consuming. The people also reported children, especially girl children, to be involved in fetching water. That is the reason in the intervention area where the availability of water has improved, mothers mentioned more time for children to play and women to take up other activities.

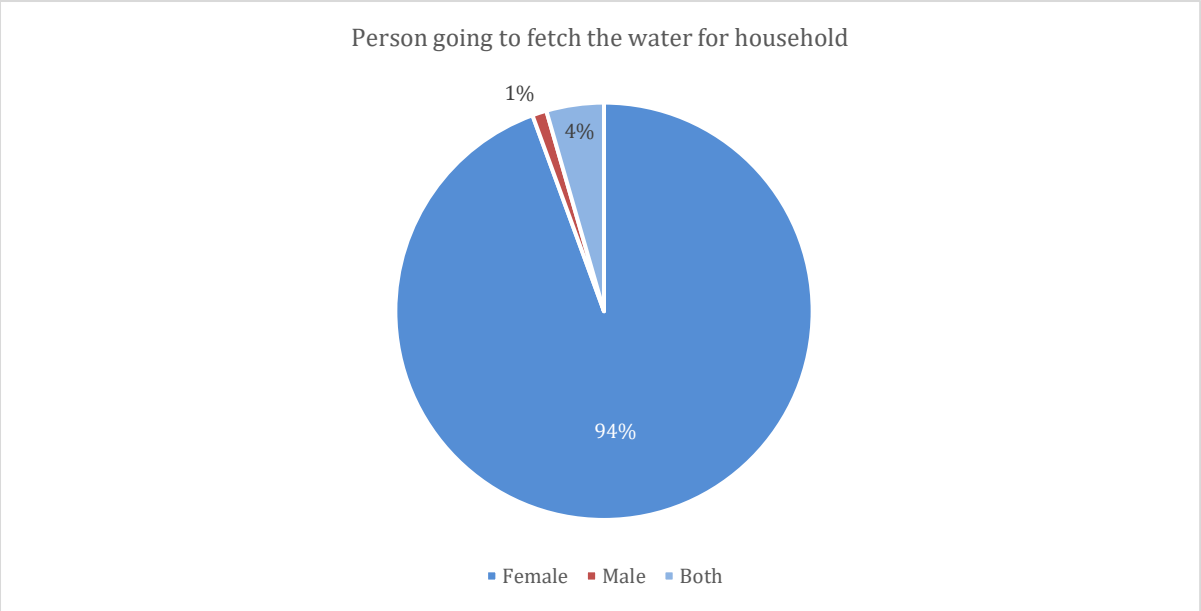
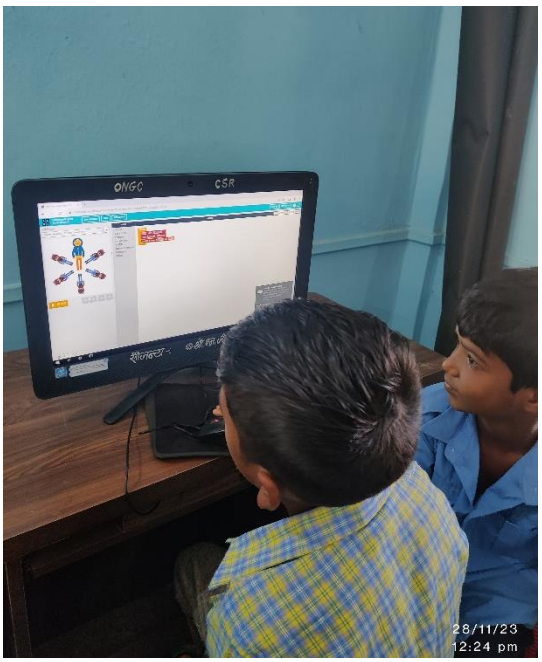


Figure 18: Education & Awareness-Gender roles pertaining to water

There is a clear gendered pattern in water-fetching responsibilities, with females being the primary individuals responsible for this task in the households surveyed. The situation is similar in the entire region. However, the participation of men in the process could have some attribution to the gender sensitization program in the target group.

Also, the villages with the intervention pertaining to water have water available to them nearby so reducing the need to fetching it up from long distance.



Convergence with the Government Schemes

The convergence with the Government schemes seem to have less effect on the awareness and adoption of such services. 94% of the respondents have not heard about the minimum support price provided by the Government. The case is similar for the Kisan credit card (KCC) with 84% being not aware of KCC.

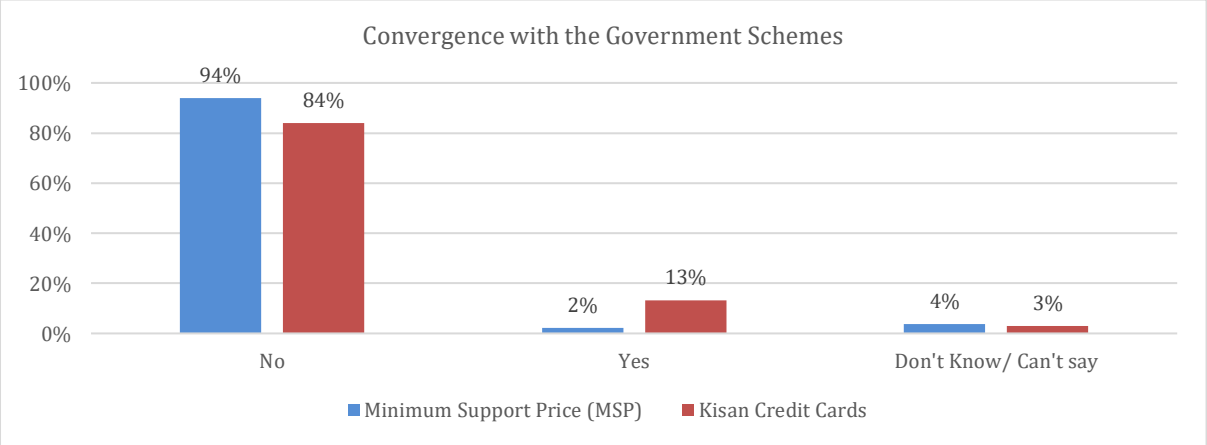


Figure 19: Education & Awareness-Awareness of Government schemes

The results indicate potential limitations in the adoption or accessibility of these financial instruments and support schemes. For improving community engagement and understanding of developmental avenues, improved communication channels or community outreach initiatives can be taken up.

CASE STORY 2

The ASK Foundation established a STEAM Lab at the Zilla School in Sayade. The school was supported by a STEAM teacher, projectors, books and furniture. The recruitment of the science teacher at school catalysed the usage of STEAM lab, projectors, 3D pen by the students at Sayade.

Sachin has been the STEAM Teacher at Sayade school for a year now. He has been trained and recruited at the school by Tinkerhat Innovation Foundation. He has been training 145 children till class 8th. He motivates the students to use the lab and equipment with ownership. Alongside, he has also taken the students for multiple exposure visits and science exhibitions.

Due to his active mentoring, the students have shown significant improvement in their class participation, attendance, and academic performance. Due to this intervention, students can surf online, do online assignments, code and even build robots. Sachin feels extremely proud of his students and wishes the initiative to continue.

CASE STORY 3

Sportz Village Foundation with the support from ASK Foundation, initiated the opportunity to participate in Sports and consider it as a career option for all students, at the Government School, Karol, Mokhada. This is especially a bright spot for girls, who otherwise would not have received a chance like this. As a flag-bearer of change, 7 year old girl Kimaya has excelled in huddled races. She has won several school and village level competitions.

Additionally, Kimaya, a usually shy girl, has become the best runner in her school and also in her village. She has great enthusiasm for hurdles races and has been trained since last one year to be able to compete with most other students around her, including some of her seniors. Active participation in these games and competitions has elevated her level of confidence. Kimaya mentioned "When I grow up, I want to be a runner and win good prizes."

Through this intervention many such girls like Kimaya who had potential and knack for sports could be guided and directed towards their strength. These motivated other girls and Kimaya to practise and play sports daily.

Environment

The installation of solar-powered water pumps has played a pivotal role in diversifying access to essential resources, notably ensuring safe drinking water and, to some extent, facilitating irrigation. This renewable energy-driven water transportation system has markedly diminished dependence on conventional water sourcing methods, consequently mitigating non-renewable energy consumption.

Moreover, community members have reported a noticeable decline in encroachment and deforestation within Devrai in recent years, attributed to increased awareness initiatives. Collaborative efforts from the local community have been instrumental in safeguarding and nurturing Devrai, including the cultivation of diverse medicinal plant species alongside preservation efforts.

CONCLUSION

- **Diversification in Agriculture:** Despite a prevalent practice of single-crop farming, interventions have led to diversification in agricultural outputs, reducing risks for the farming community.
- **Livestock Adoption:** The increase in the number of cattle owned suggests a positive impact on the economic well-being of the surveyed population. Owning cattle can contribute to income generation, asset building, and overall economic stability. Additionally, transitioning from having no cattle to owning cattle indicates a noteworthy adoption of livestock-related practices. This could have implications for traditional livelihood strategies and may contribute to a more diversified and resilient livelihood portfolio.
- **Long-Term Resilience**: The fact that a majority reports unchanged or improved economic conditions despite the challenges of the last five years, including the COVID-19 pandemic, suggests a degree of resilience within the community. This positive trend in economic improvement, combined with the increase in cattle ownership, could indicate that livelihood interventions, potentially related to livestock, agriculture, or other economic activities, have had a positive impact on the surveyed population, potentially influenced by ongoing interventions.
- **Low Awareness of Agricultural Support Program:** The data collectively suggests a notable lack of awareness about key agricultural support programs such as MSP and Kisan Credit Cards within the surveyed population. This highlights the potential for improved educational outreach programs to inform and engage the community for improving knowledge and accessibility to these crucial agricultural resources.
- **NGO Coordination Impact:** ASK's intervention successfully connected separate NGOs, fostering a more coordinated and holistic approach to address the identified problems in Mokhada villages. This resulted in identification of interconnected issues and their solution.
- **Emergence of Community Bodies or Social Institutions:** The presence of community-led groups proves vital for community behavioural change and sustainability, fostering community inclusion and ownership in overcoming obstacles to growth and change.

RECOMMENDATIONS

The recommendations have been arranged in the form of a Sustainability Matrix. This matrix provides insights into key interventions, observations, and potential for sustainability across various thematic areas within the surveyed villages.

Drinking Water & Irrigation:

In the domain of drinking water and irrigation, **the introduction of a solar lift and water filter system has proven to be a significant improvement.** Particularly beneficial for women and girls who previously spent considerable time fetching water, this intervention is perceived to have reduced water-borne diseases. The establishment of water committees in all villages ensures the ongoing maintenance of the water systems, indicating a positive step towards sustainability.

Agriculture & Livelihood:

Under agriculture and livelihood, **the WADI Project, while still in its early stages with young plants, has shown potential to reduce risks for farmers, raising prospects for post-exit sustainability.** Additionally, the intervention in Jasmine Cultivation has been embraced by small farmers, demonstrating market linkages and potential for sustainability, especially through collective sales in villages. The Allied Livelihood Support intervention, though small-scale and individual, holds fair chances of sustainability based on the knowledge and skills acquired through training.

Education & Awareness:

In the realm of education and awareness, **the construction of school toilets (WaSH) has positively impacted school attendance and enrollment.** However, concerns arise regarding long-term sustainability due to observed maintenance issues. The **Shikshan Mitra intervention, resulting in significant improvements, may face sustainability challenges** as Panchayats might be reluctant to bear the salaries of Shikshan Mitras[8]. Surprisingly, the Password intervention wasn't observed, leaving its sustainability status unclear.

Health & Nutrition:

Health and nutrition interventions include well-received awareness sessions, appreciated by women and adolescent girls. However, sustainability of these awareness sessions may be challenging post-exit due to the nature of the intervention. On the other hand, VHNC's collaborations with Anganwadi for emergencies, with active involvement and coordination with the Panchayat, show promise for sustainability. Mata Samitis may have to rely on VHNC for their sustainability as mostly they work as a group of beneficiaries.

[8] According to recently received information the panchayat of Karol village has agreed to bear the cost of sports instructor at the school. This ensures sustainability for the time-being.

Environment:

The intervention related to the Devarai Forest involves community efforts towards preserving and planting medicinal plants. The efforts for the Devarai forest have been going on with much handholding for two years. However, the sustainability status of this initiative has to be seen in the long term in the context of growth and development trade-off.

Table 3: Sustainability Matrix

Themes	Intervention	Observation	Sustainability Potential
 Drinking Water & Irrigation	Solar lift and water filter system	This has been a boon, especially for women and girls who had to spend a lot of time fetching water. It is perceived that safe drinking water has also reduced water-borne diseases. The water committee formed in all villages takes care of the maintenance.	The water committee has been active in all villages which ensures the maintenance of the water system.
	Irrigation facility Farm pond Community pond	People reported having access to these water sources. Farm ponds are taken care of by individuals and community pond is managed by the water committee.	The water committee has been active in all villages which ensures the sustainability
 Agriculture, Livelihood	WADI Project	The plants given under this intervention are still young and in many cases have not started yielding income. However, the intervention has the potential and can reduce the risk for the farmers.	High chances of survival post exit
	Jasmine Cultivation	This intervention has been adopted by many small farmers. It has shown potential for growth as it has market linkages. In most villages, collective sale of Jasmine by the cultivators have been found. Even women farmers shared going to Dadar flower market for selling their Jasmine.	Market linkages and farmers groups may ensure sustainability
	Allied Livelihood Support Livestock Equipment Bank E-Dost Enterprise support	The scale of the intervention is small and individual dependent.	Highly dependent on individual knowledge (acquired through training) and skills. There are fair chances of sustainability

Education & Awareness	School Toilet construction (WaSH)	School infrastructure has been appreciated by the school authority. This has positively increased attendance and enrolment of students.	In some cases, lack of maintenance was evident which may hinder long-term sustainability of the intervention.
	Shikshan Mitra	The schools with the Shikshan Mitra have shown significant improvement.	Sustainability could be a challenge as Panchayat may not take the burden of the salaries of the Shikshan Mitras.
	Password	This wasn't observed anywhere	
Health & Nutrition	Awareness sessions	Awareness sessions were appreciated by the women and adolescent girls.	The session may stop after the exit.
	Collaborating with Anganwadi for emergencies	VHNC collaborated with the Anganwadi for improved nutrition for pregnant and lactating women. They also supported people in health emergency situation.	VHNC has been active and working in coordination with the Panchayat so it may sustain.
Environment	Devarai Forest	People spoke about preserving and protecting the forest. Also, about planting medicinal plants	This has been taken up by the local community which ensures sustainability.

In summary, the Sustainability Matrix presents an assessment of the success and potential for sustainability of interventions. Key factors influencing sustainability include active community involvement, market linkages, and effective coordination with local authorities. Challenges, such as maintenance issues and dependence on individual efforts, highlight areas for improvement and ongoing support to enhance the long-term impact of the interventions.

Impact Assessment

ASK Foundation

Prepared By

United Way Mumbai