

# CSR Impact Assessment for Water Conservation Project

**Location: Uttar Kannada, Karnataka**  
**NGO Partner: Manuvikasa**

Prepared For



**HDB Financial Services**

Submitted By



**SOULACE CONSULTING PVT LTD**

**ISO 27001:2013 Certified**

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# Acknowledgement

SoulAce wishes to express its sincere thanks to HDB Financial Services and Manuvikasa NGO for providing its full support and cooperation towards conducting the Impact Assessment Study of the CSR Initiative. The study was undertaken in the selected villages in Uttar Kanada District in Karnataka.

The Research team is equally grateful to all the communities, farmers, elderly, sarpanch and other stakeholders for their kind cooperation in providing the required data and support for this study.

Last but not the least, the team would like to thank the team of HDB Financial Services for their faith in SoulAce to conduct the study.

# Chapter 1: Introduction

## Project Background

**Improve economic condition of the agrarian communities through sustainable use of water resources and adopt environment friendly agriculture in Uttara Kannada, Haveri and Shivamogga Districts of Karnataka State, India.**

MANUVIKASA has started a project with HDB Financial Services Limited on water conservation in Uttara Kannada District, covering Siddapur, Sirsi, Yellapur, and Haliyal Blocks and part of Mundgod Block.

They have successfully completed HDB Financial Services Limited supported CSR project and developed 311 farm ponds, 25 large water harvesting structures, and 2030 water harvesting pits on community forest land.

HDB Financial Services under its CSR initiative has committed to work on water conservation in Uttara Kannada District, Karnataka covering Siddapur, Sirsi, Yellapur, Haliyal and Mundgod block with an aim to provide for sustainable source of water by means of upgrading the natural landscape and transforming them into catchment area to hold water throughout the year which will become reliable source for irrigation purpose to the farmers.

HDBFS has onboarded Manuvikasa as their implementing partner for water conservation activities like Lake rejuvenation, Farm ponds, developing of feeder channels, silt traps and harvesting pits, strengthen and repair of check dams etc which will eventually develop the region, generate livelihood opportunities for the farmers & create a positive impact in the surrounding environment the interventions were developed with special focus on peoples participations from the community by means of creating lake committee, farmers groups & Women SHGs to ensure the sustainability of the project.

### Focus Areas of the Project

- Development of water-holding capacity in large water bodies
- Development of feeder channels, silt traps and harvesting pits
- Strengthening of bunds and repair of sluices and waste wear
- Develop water percolation in community forest land
- Develop livelihood of the small and marginal farmers

## Chapter 2: Research Methodology

Research can be defined as a logical and systematic search for new and useful information on a particular subject matter. Social Science Research refers to the systematic activity of gaining new knowledge by following scientific principles and methods in order to minimize bias and subjectivity. It is opposed to writing something based on assumptions or speculation. Though information about certain facts can also be gained through common sense and based on general observation and hearsay, those facts won't be considered valid until they have been obtained in a methodical manner, that can stand the test of time. The defining characteristics of scientific research are objectivity, ethical neutrality, reliability, testability, and transparency.

Identification of the research problem provides the starting point of research, which is then defined and redefined through a proper review of literature on the problem or deliberations with research guides and knowledgeable others in the area of interest. Each research problem has a multitude of perspectives and dimensions. Research cannot go on covering all those in one study.

Thus, we need to delimit the research problem into a measurable problem and formulate objectives, make decisions on the research design, sample design, type of research Instruments for collecting the data, and how these data can be edited, coded, classified, tabulated, and interpreted so that findings and conclusions can be reached.

Every research needs to have a proper methodology so as to foresee problems that could arise in the course of research and also to steer through the research process in the proper direction without losing focus.

### Use of Mixed Methodology for Maximum Insights

The research problem consisted of understanding the extent of impact created by HDBFS supported initiatives of **improving economic condition of the agrarian communities through sustainable use of water resources and adopt environment friendly agriculture in Uttara Kannada, Haveri and Shivamogga Districts of Karnataka State, India.** Implemented through Manuvikasa NGO. Towards this end, to gain maximal insight, both Quantitative and Qualitative techniques are used.





## Application of Quantitative Techniques

A quantitative study will be needed if the focus is on presenting the study problem in terms of numbers, frequencies, percentages, etc., A quantitative study always uses structured tools like questionnaires and interview schedules, in which questions are planned well in advance by the researcher before entering the field.

Though the information that is obtained is easily amenable to various statistical measures and tests, quantitative information has its own limitations. It can uncover only the surface phenomena. It is unable to penetrate beneath the surface and identify what is hidden deep beneath. In this study, to assess the impact of structured tools like the interview schedule administered was used. This helped in getting quantifiable information.

## Application of Qualitative Techniques

Qualitative Research can only unravel enriched and hidden information that may not be evident on the face of it. The qualitative approach is distinguished by deeper probing and flexibility, and it can yield massive amounts of data that were not

anticipated when the research was initiated. For better accuracy, ensuring anonymity and at the same time, to cover a larger sample population, quantitative techniques were used.

Qualitative techniques of interviews with key stakeholders and interviews with community people were adopted for a better understanding of the problem alongside Quantitative Research.

## Ensuring Triangulation

Triangulation is needed to increase the credibility and validity of the research findings. It is also a measure taken to ensure the trustworthiness of the research process. The findings of the quantitative research have been verified with the insights from qualitative research and the report has also been structured to reflect this point.





## Research Design

- **Name of the project** : Improving economic condition of the agrarian communities through sustainable use of water resources and adopt environment friendly agriculture in Uttara Kannada, Haveri and Shivamogga Districts of Karnataka State, India.
- **Project Partner** : Manuvikasa
- **Research Design used** : Descriptive Research Design
- **Sampling Technique** Purposive Sampling
- **Sample Size** : 200
- **Qualitative Methods used** : Focus Group Discussions, In depth Interview and Case Studies.

## List of the Lake and Farm Pond villages -Field Visits

Sl. No.	Name of the Village	Lake Name/Farm Ponds	Taluka	District
1	Gonagatta	Urabagila Kera	Sirsi	UK
2	Bankanala	Kariyammanakatte	Sirsi	UK
3	Malangi	Doddakere	Sirsi	UK
4	Hunagund	Kempkere	Mundgod	UK
5	Koppa	Hirekere	Mundgod	UK
6	Nysargi	Nysargi Kere	Mundgod	UK
7	Danaganahalli	Sanikatti Kere	Sirsi	UK
8	Sagaravalli	Basavanakatte	Hanagal	Haveri
9	Kamaruru	Hire Kere	Sorab	Shivamogga
10	Chikkakaiahgod	Dodda Kere	Sorab	Shivamogga
11	Mynalli	Dodda Kere	Mundgod	Uttara Kannada
12	Salagav	Jigali Katte	Mundgod	Uttara Kannada
13	Andagi	Karakatte		
14	Pala	Nulagatti	Mundgod	Uttara Kannada
15	Dantakal	Farm Ponds	Sirsi	Uttara Kannada
16	Arehalla	Farm Ponds	Sirsi	Uttara Kannada
17	Mundige Matti	Farm Ponds	Sirsi	Uttara Kannada
18	Maramakki	Farm Ponds	Yellapur	Uttara Kannada
19	Kundaragi	Farm Ponds	Yellapur	Uttara Kannada
20	Kotemane	Farm Ponds	Yellapur	Uttara Kannada
21	Chavatti	Farm Ponds	Yellapur	Uttara Kannada



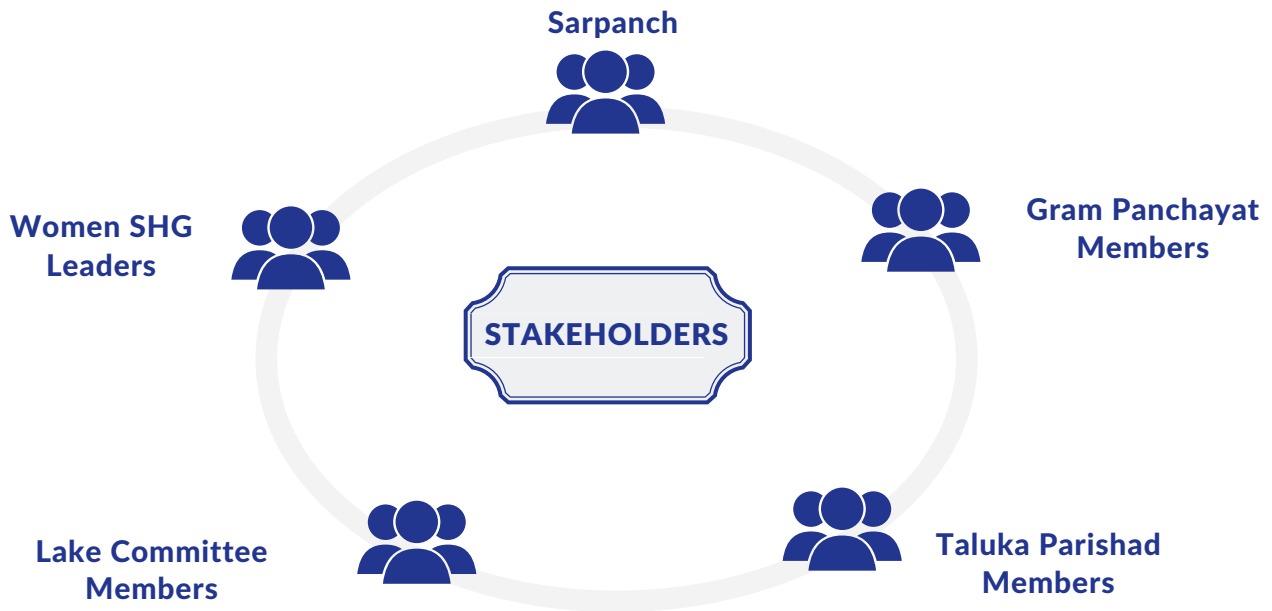


**Research Team with farmers standing in front of Nyasargi kere**



**SoulAce Research Team in front of Gonagatta Lake.**

## Stakeholders Covered



## Objectives of the Study

The study intends to find out the impact of the CSR Intervention of HDBFS 'Improving economic condition of the agrarian communities through sustainable use of water resources and adopt environment friendly agriculture in Uttara Kannada, Haveri and Shivamogga Districts of Karnataka State, India' implemented through the Project Partner Manuvikasa.

Project Partner	Specific Objective
Manuvikasa	To assess how far the construction of farm ponds has impacted the farming pattern of the beneficiaries in the project communities of Manuvikasa.
	To assess the extent to which the large water harvesting structures have benefitted farmers in the project communities.
	To assess the change in the productivity, and income levels of the beneficiaries in the project communities.



## Ensuring Commitment to Research Ethics

### 1. Anonymity

Anonymity refers to not revealing the identity of the respondents. This research study strictly sticks to not revealing the identity of respondents unless the same is warranted for illustration of success stories or case studies. After the research is completed, the research should not reveal which individual respondents answered which question in what manner. The results will be revealed only as an aggregate, so no one will not be able to single out the identity of a particular respondent. This is required for not breaking the trust of the respondent of not revealing the individual identity.

### 2. Confidentiality

Research subjects participate in the process only on the basis of the trust that confidentiality will be maintained. Hence, the research will not reveal any data regarding the respondents for purposes other than the research study.

### 3. Non Maleficence

Research should not lead to harm to the research subjects. This study ensures that the respondents are not harmed in any way.

### 4. Beneficence

Any research study should lead to some benefits for the respondent. This research study ensures that individuals, groups, and communities benefit and their well-being is enhanced.

### 5. Justice

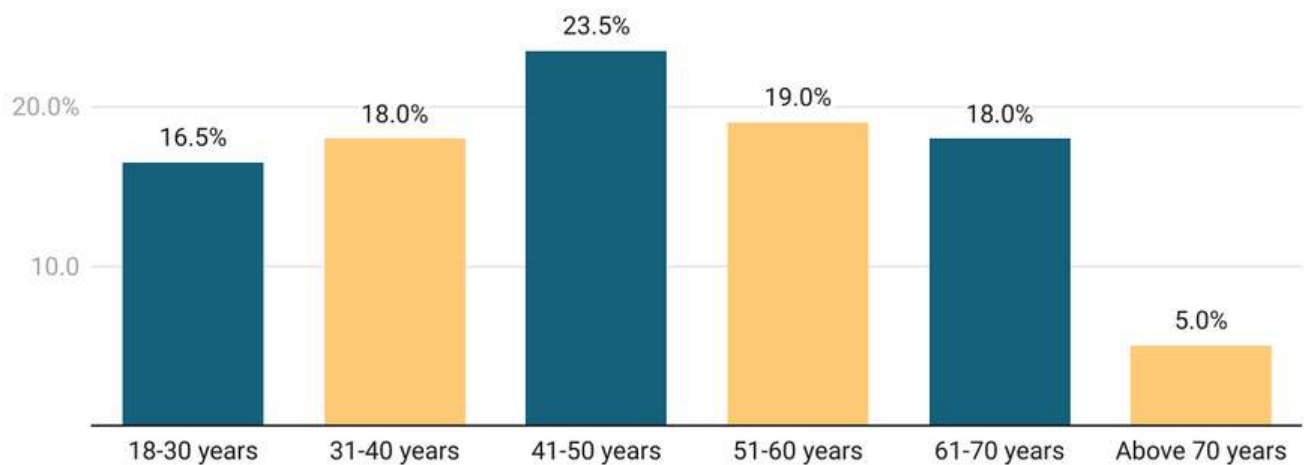
Justice refers to being fair to all. This research study ensures equal treatment of all its research subjects and no biases or prejudices towards any group based on social stereotypes or stigma associated with being a member of a certain group or class.

# Chapter 3: Major Findings of the Study

## Demographic Details

### Age Group of the Respondents.

Percentage Distribution of farmers by Age group



It is observed that respondents in the age group of 41 to 50 years occupy the largest proportion at 23.5 percent, followed by those in the age group of 51-60 years constituting 19 percent of the sample. Eighteen percent each in the age group of 61 to 70 years and 18 to 30 years. There were also 5 percent respondents in the age group of above 70 years.

Thus, it can be inferred that since the sample consists of respondents across all age groups, it is imperative that the research study has brought in and recorded the perspectives of farmer beneficiaries whose experiences vary starkly from one another.



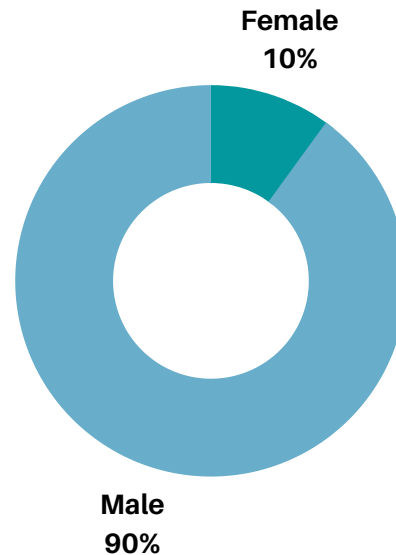
Water Catchment Storage



## Gender of the Respondents

### Percentage Distribution of farmers by Gender

Observing the data collected, based on gender distribution, 90 per cent of the respondents are male and 10 per cent are female respondents.



**Sri Manjunatha Naik, 46 years, Male, Kansur Gram Panchayath,** says “ I have 5 acres of agricultural farm land. Though I had 5 acres of land, I did not have sufficient water to cultivate all of my land. I used to grow paddy on about 2 ½ acres of land before. I had some arecanut trees too. When staff from Manuvikasa project approached me and told me about the farm pond, I was initially hesitant and not very hopeful about increased water availability nor the possibility of cultivating other crops.

The NGO people constantly motivated me about the farm pond, and I thought, let us give it a try and see what happens. Now I can see water available on my farm land even after 4-5 months since the last rain. I am able to cultivate sugarcane and banana now. I am getting more income because I am not dependent on paddy alone like before. I am able to take care of my family needs because of the increased income from the farm land. I am thankful to Manuvikasa and HDB Financial services for making the farm pond a reality.”





**ಕೆರೆಗಳ ಪುನರುಜ್ಜೀವನ ಕಾರ್ಯ**  
**LAKE REJUVENATION PRO**

**ನೇತೃತ್ವ** An initiative of  
**ಮನು ವಿಚಾಸ MANUVIKASA**  
ಕೆರೆಯ ನೆಸರು: ಕಾನಕಟ್ಟೆ ಕೆರೆ. ಗ್ರಾಮ: ದೂಳಂಜಿ  
ತಾಲೂಕು: ಸಿರಸಿ, ಜಿಲ್ಲೆ: ಉತ್ತರ ಕನ್ನಡ.

Lake Name: Kanakatte lake. Village: M

Taluk: Sirsi, Dist: Uttarakanna

ನೀರು ಸಂಗ್ರಹಣಾ ಸಾಮರ್ಥ್ಯ: 80 ಲಕ್ಷ ಲೀ. Water storage Capacity

2019-20 ವೆರವು. Supported By

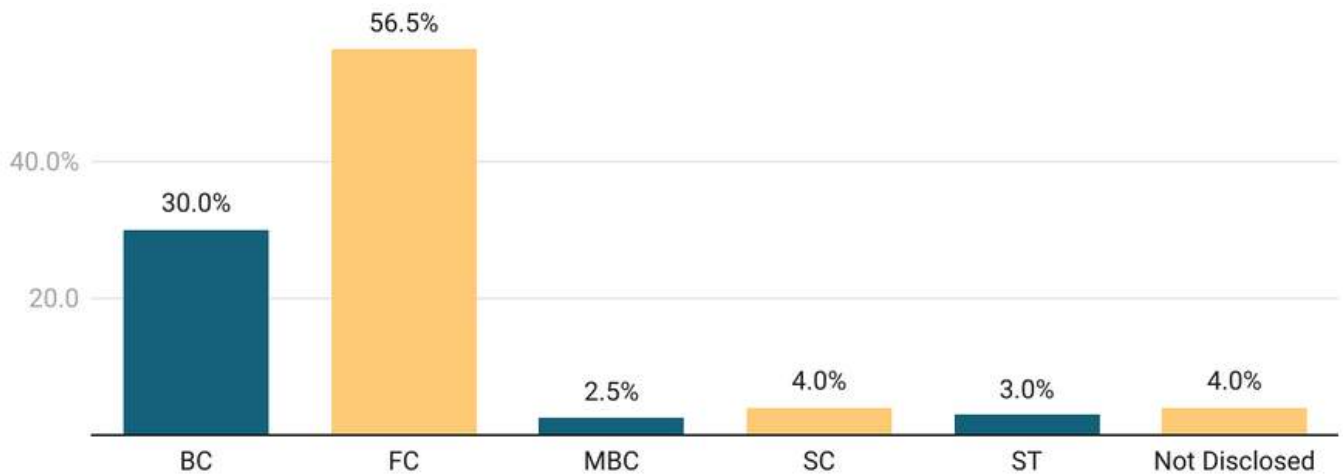


Kanakatte Lake



## Community of the Respondents

### Percentage Distribution of farmers by type of community



When the respondents were asked about their community, it was observed that the majority of the respondents, 59 percent belonged to the open category,

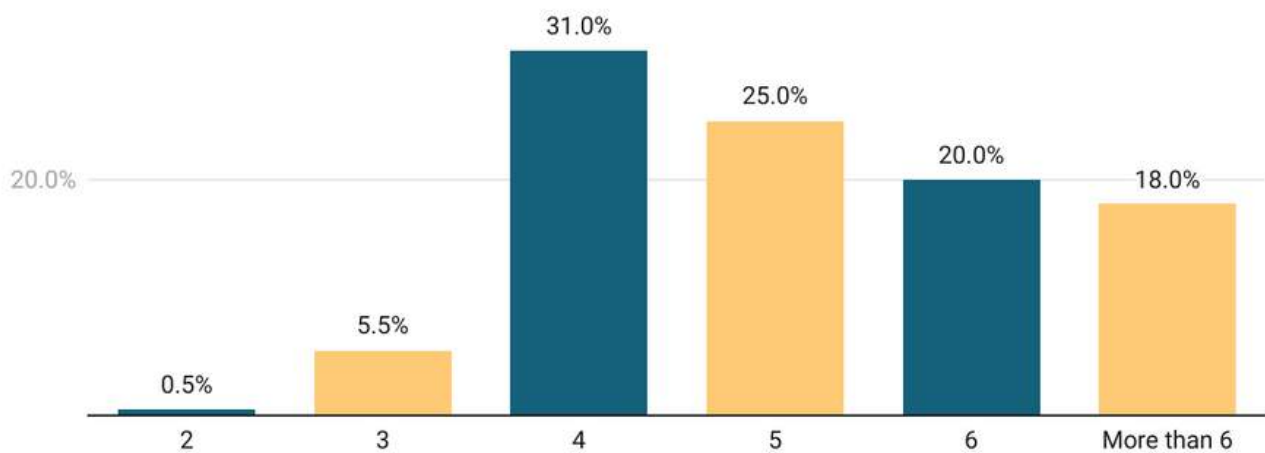
followed by 30 percent in the Backward community category. There are 6 percent Scheduled Castes and 5 percent Scheduled Tribes too.



**Ravi B Ramapur, Aged 50 years (Resident Danaganahalli village, Member of Farmers group)** - He mentioned that the farmers of our village were mostly depended on traditional crops like paddy & banana as our area had less availability of water which resulted in stagnancy in the income levels, but due to the support for water conservation provided by Manuvikasa over the last 4 to 5 years the farmers have started cultivating crops of high economic value such as Tomato, Ginger, Potato, Lady finger & Brinjals which has resulted in increase in income levels by approximately 10,000 to 20,000 or more annually due to which the farmers are highly motivated and feel rewarded as their hard work is well paid off.

## Family Size of the respondents

### Percentage Distribution of farmers by family size



It is observed that 31 percent respondents have 4 family members, followed by 25 percent respondents having 5 family members. Eighteen percent

respondents have more than 6 members, 5.5 percent respondents has 3 members and 0.5 per cent respondents has 2 members in the family.



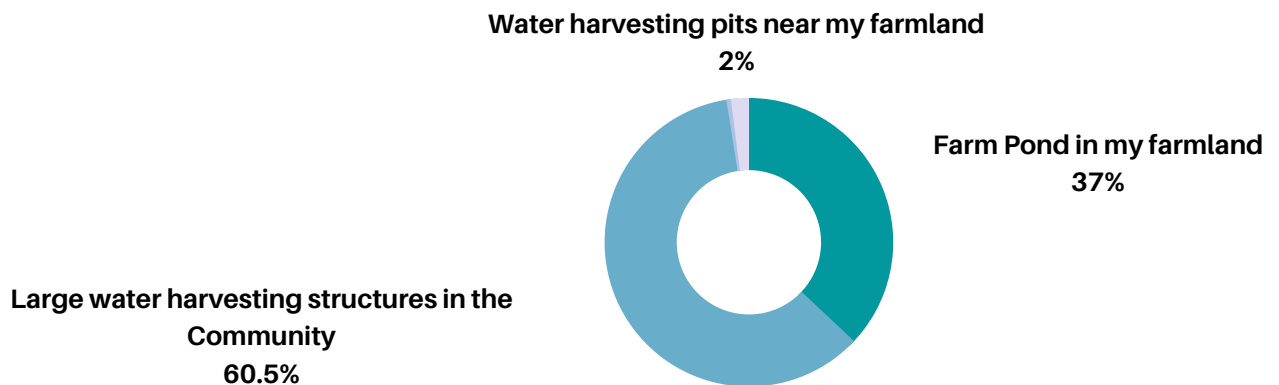
**Indira Naik, 50 years, Female, Arehalla village says** “ we have less than an acre of land. Due to a lack of proper irrigation facilities, we were only growing a single crop of paddy earlier.

*A lake nearby our land was desilted and deepened by the NGO. Because of increased retention of water in our land, we are now also growing banana in addition to paddy.”*



## Type of water conservation activities

### Percentage Distribution of farmers by type of water conservation activities done in village by Manuvikasa



When the respondents were asked about the type of water conservation activity done in their village by Manuvikasa, the largest proportion of respondents, that is, 60.5 percent stated that they had large water harvesting structures in the community, followed by 37

percent respondents who stated that they had farm ponds on their farm lands. Two percent respondents stated that they had water harvesting pits near their farm land and 0.5 percent (1 respondent) stated that he had a water harvesting pit on his farm land.

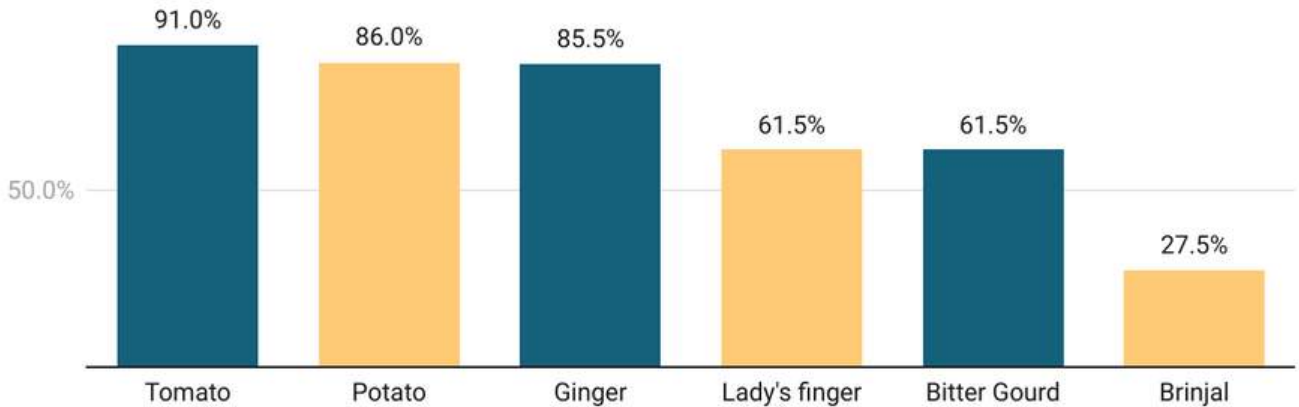
“

**Ganapathy Durgappa Naik, 51, Male, Kandraji Village, says,** " I belong to the Boya Tribe and I used to grow paddy in my field. Because of the Manuvikasa Project on my farm land. Earlier, we used to be dependent only on rainwater for cultivation. due to limited availability of water , I was able to raise only a single crop in a year. After the construction of the farm pond, rainwater is retained for 4-5 months after the last rain and hence, I am able to raise a second crop of paddy. My farm income has gone up from somewhere around Rs.50,000 to Rs.90,000 now."

”

## Crops grown by farmers after the advent of water harvesting structures

### Percentage Distribution of farmers by types of vegetables grown after the construction of farm ponds



It is observed that after the availability of water harvesting structures and training and motivation of farmers through the Manuvikasa Project, farmers started growing vegetables apart from their usual crops of paddy, areca, and banana either simultaneously or during the period of interregnum between one harvest and the next of the major crop. Thus, it can be seen that 91 percent respondents started growing tomato, 86 percent respondents started cultivating potatoes.

Ginger constitutes the next highly cultivated crop, almost equal to potatoes at 85.5 percent. Ladies finger and bitter ground were cultivated by 61.5 percent respondents in each of the categories. Brinjal is grown by 27.5 percent of the respondents. Thus, we can infer that the availability of more water due to the construction of the various water harvesting structures has enabled the farmers to grow a variety of vegetable crops apart from the major crops of paddy, areca, and banana, which has helped them earn an additional income.

### Drinking Water source for Livestock



**Gajanan, 56, Male,**

**Chavatti Village of Yellapur Panchayat, Uttarakanada**



***Gajanan, 56, Male, belongs to Marata caste, Scheduled Castes in Chavatti Village of Yellapur Panchayat in Uttarakanada. He said he had been doing only single cropping for the past 35 -40 years and had also seen his father cultivating only single crop due of lack of irrigation facility in the village. The community and its surroundings used to be rainfed, and they had never thought of cultivating multiple crops.***

*He said, "When Manuvikasa NGO asked me for constructing the farm pond, I was not very enthusiastic and did not believe that the structure would be helpful in holding rainwater for a long-time. But they convinced me to construct the structure. Now I have witnessed the result, i.e, increase in the availability of water till April or May.*

*Earlier, I was growing only Areca. Now I have started growing pepper too. My farm income has increased by over 30-40%. The NGO people also motivated me to grow vegetables on the farmland and I am also cultivating brinjal, tomatoes, ladies finger, and ginger on the land. The quantity of vegetables is sufficient only to be consumed at our home at the moment. But because of this my family is consuming more nutritious food. I thank Manuvikasa for helping me to increase my income level and use my farmland more efficiently."*





**Dried Coconut**

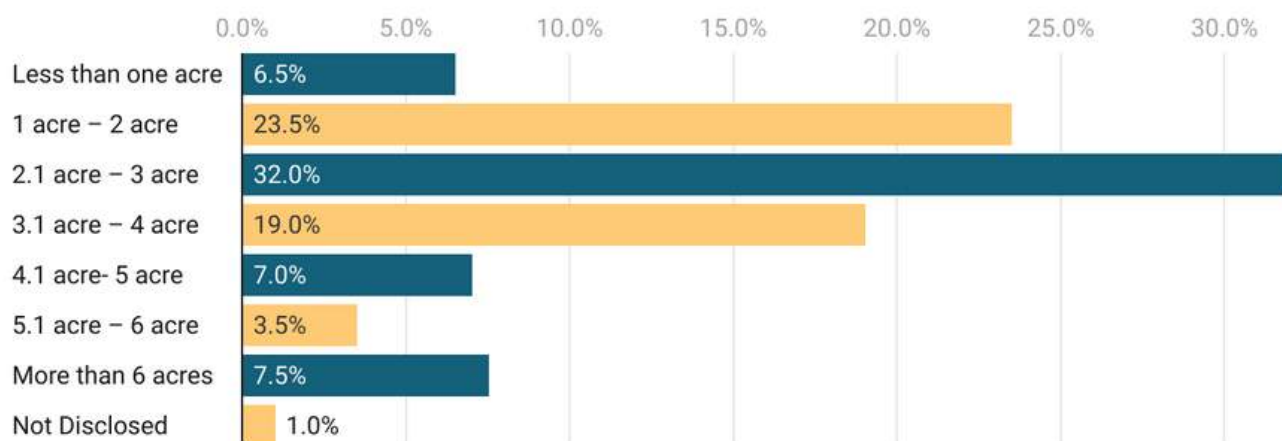


**Cashew Nuts**



## The water harvesting structures has largely benefitted farmers with small and small- medium sized land holdings

### Percentage Distribution of farmers by size of land owned



It is observed that 7.5 percent of respondents and 3.5 percent of respondents have farm holdings of more than 6 acres and 5.1 to 6 acres respectively. These two categories of farmers can be classified as Small-medium farmers. The rest of the

farmers constituting about 89 per cent of the respondents fall in the category of small farmers, with 32 per cent with in this category holding a land size of 2.1 acre to 3 acres and 23.5 percent of respondents holding a land size of 1. 1 acre to 2 acres.



— “ —

**Rajender G Naik, 48 years, Male, Malangi Village, says** “ I have 6 acres of agricultural farm land and I was growing only Paddy on small portion of my land. A large part of my land was left unused due to a lack of irrigation facilities. Through the Manuvikasa program, we got a lake reconstructed and restored in our village, and now I am able to grow Areca Nut, Banana and Coconuts also. The yield of crops has increased now and my farm income has also increased by somewhere around 40%.”

— ” —

## Highlights of the findings through Observation, Interviews and FGDs.

The following are the major findings from the study.

1. All the lakes were found to hold sufficient water even after the 5-6 months after the last rainfall. As commonly stated by the direct beneficiaries, it came to be noticed that earlier they were all dependent only on rainwater for irrigation out irrigation even in the non-rainy seasons. purposes and as the lakes are rejuvenated, they are all able to carry.

2. The majority of the people in the various communities could sense a change in the ground water levels of their communities evidenced by the increased height of water in their wells and the increased moisture holding capacity of their farm lands better now in comparison with the situation that existed before the rejuvenation of lakes in these villages.



3. The farm ponds are found to be very much effective and enable the irrigation of the Farm Lands. The majority of the direct beneficiaries - farmers stated that they were able to do cropping two times in a year, as compared to single cropping done earlier.



— “ —————  
*Farm pond was constructed in my farmland. Before the construction of the farm ponds, my yield of crops per year was 20 quintal which has increased to 40 quintal after construction of the farm pond. My Annual income from farming activity before the construction of farm pond was approximately Rs. 2 lakhs which has increased to Rs.3 lakhs after construction of farm pond*

————— ” —

**Vinayak Naik, Chavatti Village**



4. The majority of the farmers were cultivating a single crop earlier, for instance, those who had paddy alone as their major crop of cultivation are now found growing Areca, Banana and Sugarcane. Or those who were growing Areca alone as the major crop earlier had been found to raise paddy along with Banana & Sugar cane etc., A definitive change from relying on a single crop to moving to mixed farming is noticed across all the communities surveyed.

5. Manuvikasa has undertaken the appropriate mapping of the water bodies of the villages in various blocks of Uttara Kannada, and the people do acknowledge this fact. The selection of the sites was well aligned for the storage of run-off surface water during rains.

6. The community members appreciated the fact that the excavation of the lakes and the construction of embankments of the lakes were done in a proper, well thought out manner. The lakes had been given a saucer shaped structure that can hold an optimum quantity of water for a longer period of time.

7. The fact that diverse Stakeholders of the community were properly engaged was acknowledged by almost all people who interacted during the survey. Their opinions,

perspectives, ideas, suggestions and concerns were elicited and taken into consideration before the work was started. This gave a sense of confidence and trust to the community members. This resulted in their willing participation in Manual Labour for the lake reconstruction work.

8. People in the Project communities stated that the silt from the lakes served as a source of enriched manure for their Agricultural land. As Community people showed interest in transporting the silt soil to their lands, even the process of clearance of debris was made easy and efficient. Farmers felt that the rich source of manure in the form of silt soil led to increase in their Agricultural productivity without having to spend on inorganic fertilizers.

9. Farmers have started growing vegetables on their farmland like Brinjal, Tomatoes, Ladies Finger etc., But this is sufficient for their kitchen use only. The availability of vegetables from their farm lands meant that this has improved the families nutrition content. The change of diet with balanced nutrition has led to the children and women becoming healthier now as compared to the situation existing before the construction of the lakes or the farm ponds. The families financial burden on the diet has eased to an extent now.

10. The Research Team can sense a feeling of ownership of the lake among the people in the different project communities. This has happened mainly because of people's involvement in the planning stage itself. People in the project communities expressed that there is a visible difference in the yield and the cropping pattern which they mainly attributed to the Lakes and Farm ponds.

11. Stakeholders confirmed that the agricultural yield now went up by at least 30%. This can be mainly attributed to the raising of a second crop and resorting to Mixed farming and Commercial farming.

12. The Community members in most project communities stated that the water retention of the lakes has visibly improved, and this has instilled in the hope of trying different cropping patterns.

13. For the construction of the farm ponds, the individual beneficiaries contributed 50 percent of Rs.5,000/ and Manuvikasa NGO contributed the rest 50 percent.

14. As stated by the community members more land in each village has been brought into cultivation for horticultural purposes.



**Mr. Dharma Raju (Secretary Pala Village Gram Panchayat)** informed the SoulAce research team that the construction work done by Manuvikasa has helped them in multiple ways like these structures have catered as a long term water catchment areas which hold water for 5-6 months post monsoon the desilting work has provided for good quality organic manure which has made the farm lands fertile and the farmers have saved upto 10 thousand rupees yearly which they used to spend on fertilizers or to buy red mud as soil.

Mr. Dharma also mentioned that over the years he has also observed one more vital benefit that if any farmers wished to dig borewell in his farms they are able to get water at a very less distance of 30 ft approx. below ground level which was once noticed at 70 fts

When questioned if is he aware of the organization which is financially supporting Manuvikasa he notably mentioned the name of HDBFS.



## Pavan Bhat, 25, Male, Kundargi village



— “ —

**Pavan Bhat, 25, Male, Kundargi village says,** " I had 1 ½ acre of land. But I was able to cultivate only one part of it due to limited water availability and a large part of my land was left unused. I used to cultivate bananas before the construction of a farm pond on my land. Now I'm growing Areca in about ¼ acre of my land due to increased water availability. The water from the rainwater used to be there till Nov- Dec earlier. Now I can see water till the month of March".

— ” —

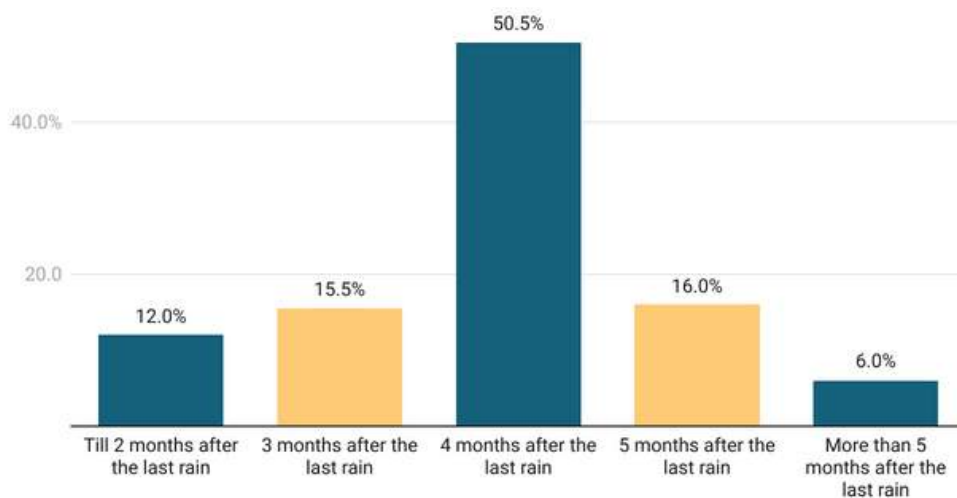


# Chapter 4: Impact of the CSR Intervention

## Impact 1

The various water harvesting structures have increased capacity to retain water after the rainy season

Percentage of farmers responded about no.of months, the water harvesting structures able to retain water after the rainy season



When the respondents were asked about the number of months the various water harvesting structures are able to retain water after the last rain, it was found that the majority of the respondents, that is, 50.5 percent of the respondents, stated that the various water harvesting structures are able to hold water for more than 4 months after the last rain, while 6 percent of the respondents stated that the water harvesting structures are able to retain water at least for 5 months after the last rain. Water retention for 2 months after the last rain was reported by 12 percent of the respondents, and 3 months after the

last rain was reported by 15.5 percent of the respondents. Six percent of the respondents also stated that they had water retention for more than 5 months after the last rain. Thus, it can be inferred that a vast majority, that is, 72.5 percent of the respondents have stated the various water harvesting structures are able to retain water for more than 4 months after the last rain, and as these farmers are solely dependent on rain water for cultivation of crops, they are now able to carry out their cultivation of crops for more months as compared to the earlier scenario.





Areca Plantation



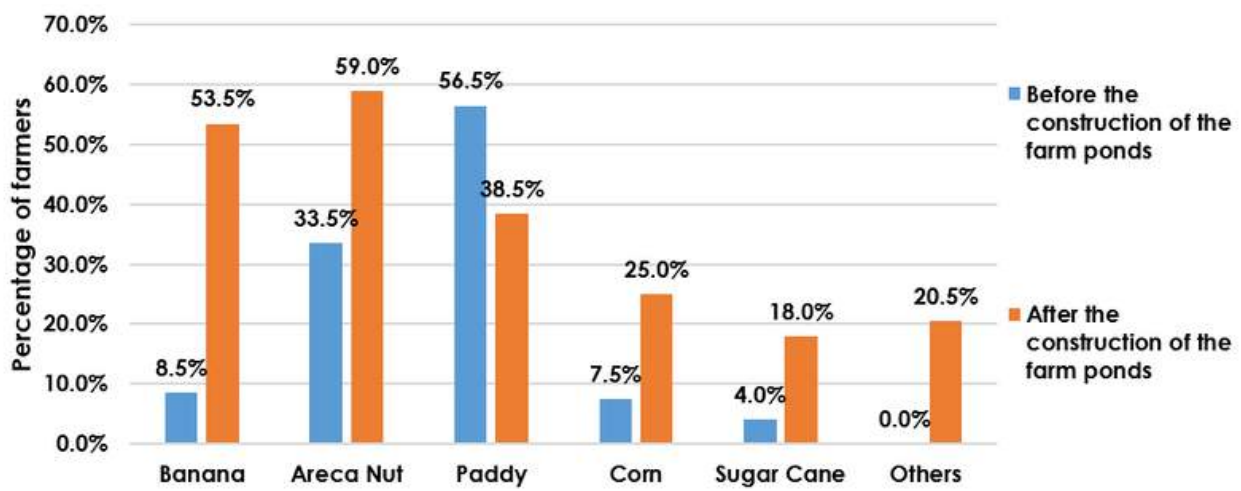
Farm Pond,



## Impact 2

### Availability of water harvesting structures has enabled farmers to diversify their cropping pattern

#### Crops grown by farmers before and after the Intervention



It is observed that there is crop diversification as farmers have started growing multiple crops (2 or 3) instead of only 1 earlier. Paddy was the major crop grown earlier, but with additional cropping, farmers are focussing on Banana, Areca, Corn, Sugar Cane amongst others.



“  
**Mrs. Jaya Naik aged 39** (Member, Sri Laxmi Mahavikas SHG) Resident of Chavatti village said “ I have observed many changes in the area due to availability of water like the farms have become lush green, there is water available throughout the year and the cattle’s have got easy access to water from the farm ponds.  
”





*Banana Plantation*



*Banana for sale*



**Sujay, 34 years, Male,**

**Andgi village of Sirsi Panchayat of Uttarakanda**



**Sujay, 34 years, Male, Andgi village of Sirsi Panchayat of Uttarakanda** said that there used to be less retention of rainwater prior to the renovation of the lake in the community. He said, "Though the community was having a lake it was largely defunct I was holding water only for about 15 days after the last rain. None of us realised that if it is renovated, we can store more water. Now even after three

*months since the last rain, I can see water retained in the lake. Because of the water retention in the lake, there is improvement in water table in the community land and other water bodies of the community."*

*Earlier, he was doing only Areca cultivation, but now he is also growing banana along with areca. He says, his farm income has increased by about 20-30% because of having banana now. He is appreciative of the fact that there was more people's involvement and participation in the renovation work of the lake. He says, 'Community people used to bring trucks of dug-out silt from the lakes during the renovation work and put it on their farmlands. It is good manure with lots of nutrients for plants. People tell that there is more yield now than before because of the improved soil quality. 'He thanked Manuvikasa and HDBFS for the Project.*





**Farm Pond - Mynalli Village**



**Jigali Katte Lake in Salagav Village**



## Sri Tuakaram Thimma Naik, Farmer, Arehalla village



**Sri Tuakaram Thimma Naik, 48, Male, Arehalla village, says** “ I am having 4.5 acres of land and was growing paddy and Sugarcane before. Through the NGO, I got the farm pond on my land, and now I am able to cultivate Areca, and Banana in addition to paddy, the main crop grown before. I can see the yield of crops is good. My income has increased to the extent of 20-25 %. There is water on my farm pond till the months of March -April, which was not the case before.”



## Impact 3

### Farmers have reported multiple benefits due to the availability of the various water harvesting structures

Percentage of farmers responded about benefits experienced because of various water harvesting structures



When the respondents were asked about the benefits they experienced because of the availability of the water harvesting structures, 82 percent of the respondents stated that they have increased water availability for irrigation for many months in a year, followed by 76 percent of the respondents who stated that they were able to grow more crops than before.

Sixty-Six percent of the respondents reported that ground water levels of their farmlands have improved now with 45 percent of the respondents reporting that water is available for domestic purposes. Twenty percent of the respondents have also stated that soil erosion is also controlled now, due to the presence of the various water harvesting structures.



**Shantappa Gouda, 76 years, Male, Chikkalgudu village says,** "I have been a resident of this village since the last 62 years and own about 2.5 acres of agricultural land which is my hereditary asset. I can say that during my childhood days I remember there was very less availability of water hence we used to pour water from pots to the crops but over the past 4 to 5 years there has been a very good change in the region like there is availability of water through out the year to the farmers and overall vegetation has improved." When research team asked him that are you aware who has supported the development work he notably mentioned to the names of HDBFS & Manuvikasa.



## Value added products due to increased water availability



**Sri Venkaataramana Naik, 51 years, Arehalla village, says** “ I am having 2 acres of land, on which I was growing paddy before. I got a farm pond constructed on my farm land through the Manuvikasa project. Now I am able to grow Sugarcane along with Arecanut and Banana on my land. I thought of too make better income through the sugarcane that is grown on my field and decided to put up a Jaggery making unit in the farm land itself. Due to the farm pond, there is water even in non-rainy seasons. The yield of crops is also good compared to before 3-4 years. My farm income has increased by around 30%.”



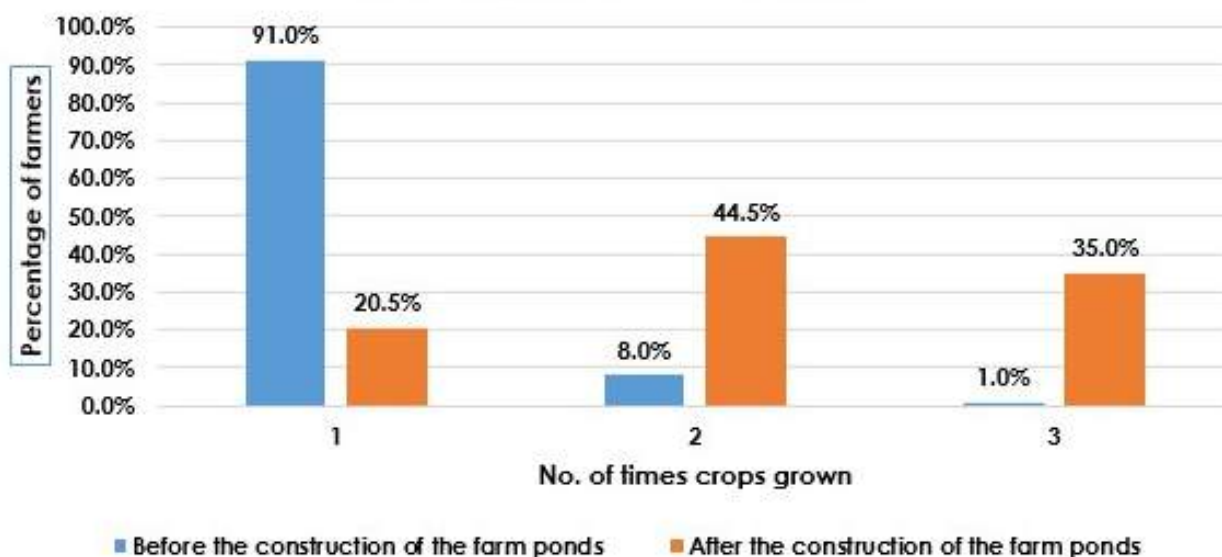
Drying case of jaggery making process



## Impact 4

Farmers are able to undertake more number of cropping due to the availability of water harvesting structures

### Impact on cropping due to the water harvesting structures



When the respondents were asked about the number of times they were able to do cropping in a year, almost all the respondents that is 91 percent of the respondents stated that they were able to do only a single crop in a year, followed by a negligible percentage of respondents i.e., 8 percent who stated that they were able to do 2 cropping in a year and 1 percent who stated that they were able to raise 3 crops in a year. This scenario of cropping changed drastically after the construction of the various harvesting structures, with only 20.5% of the respondents doing single cropping in today's scenario.

Nearly 80% of the respondents are doing two or three crops in a year. Nearly 80% of the respondents (100%) are either able to undertake cropping for two times in a year (44.5%) and three times in a year (35%) of the respondents able to raise 3 crops in a year. Raising more crops results in increased earnings of the beneficiaries. Thus, it can be inferred that various water harvesting structures have enabled more number of crops per year that has the potential of leading to more revenue for the farmers.

## KT. Chowdappa Thippa Gowda President of Kamarur Grama



**KT. Chowdappa Thippa Gowda, President of Kamarur Grama** says "This region is generally dry and when the rain is over, you don't have a drop of water for cultivation. Through the Manuvikasa Project, supported by HDBFS, there was a lake that was constructed and it helps in cultivating about 110 acres of agricultural land. Now you can see more people doing the second cropping, adopting mixed farming like planting of bananas, sugarcane, vegetables etc.,

*The cattle get water to drink and also get green fodder which will become scarce during the hot months earlier. You can see the yield of all crops increasing and farmers are also able to get better income than before. Now you can see more greenery in this region, all after the construction of the lake. They involved the community people in lake desilting, building the bund, transporting the dug- out soil etc., I would say such efforts at conserving water are very essential and should be promoted in all villages of Karnataka."*





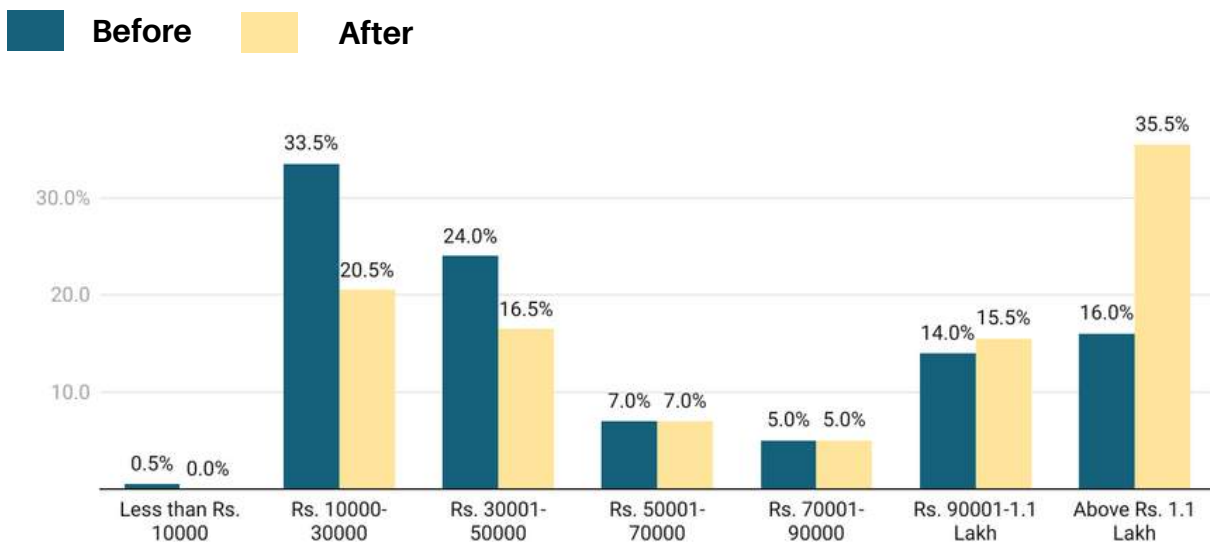
Farm Well



## Impact 5

### Significant increase in the income of the beneficiaries is observed

Percentage of farmers reported about Annual Income from farming activity before and after the construction of farmlands



## T-Test

When an unpaired t-test was made. The mean income levels before the intervention of water harvesting structures were made, before intervention the income level per farmer per year was found to be Rs.87,445 and after the intervention the income level per farmer per year was found to be Rs.1,36,080.

The mean of intervention equals Rs.48,635.40 and at 95 percent confidence levels, the difference would vary between Rs.25,660.57 to Rs.71,610.23. By conventional criteria, this difference is considered to be extremely statistically significant.



## Ganeswar Gudiyala

### Ex Taluka Panchayath Member and LSMP Society Director in Nysaargi Village



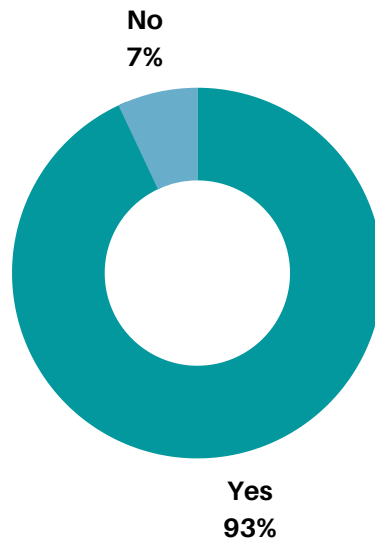
**Ganeswar Gudiyala, Ex Taluka Panchayath Member and LSMP Society Director in Nysaargi Village says** “ Manuvikasa project supported by HDB Financial services undertook the construction of Lake in Nysaargi, which is helping the irrigation of 120 acres of Agriculture farmland in the village. Earlier, the villages were dependent on rainwater alone. Earlier, we used to have paddy cultivated as the major crop and people used to have arecanut cultivation too. Sugarcane, Banana, and coconut trees were grown only by some farmers in the village.

People generally do cultivation based on rainy season. Now there is increase in ground water table because of the presence of water in the lake. I can see many farmers growing Banana and Sugarcane compared with the situation before the construction of the lake. Now almost all farmers are able to raise at least 2 crops in a year which is resulting in additional income for people. We have increased coverage of green fodder and livestock are getting sufficient green fodder and water to drink too. Earlier, it used to be very hard maintaining the livestock during summer season. Now there is better availability of water for the cattle to drink. From what I hear from people is that the yield of crops for most of the farmers had increased by about 30-40%. This has been made possible only after the reconstruction of the lake.”

## Impact 6

### Farmers have started receiving more loans for investing in Agricultural activities

Percentage of farmers reported about receiving loans for supporting farming activities



When the farmers were asked whether they are now receiving loans for supporting farming activities, 93 percent of the farmers stated that they had started receiving loans as compared to their earlier scenario. With increased availability of water and increased avenues for additional cropping and diversifying their

agriculture, more investments in the form of purchase of seeds, use of pesticides, manures, purchase/hiring of agricultural implements would be required. Thus, it can be inferred that more farmers are now procuring loans to make increased investments in agriculture.



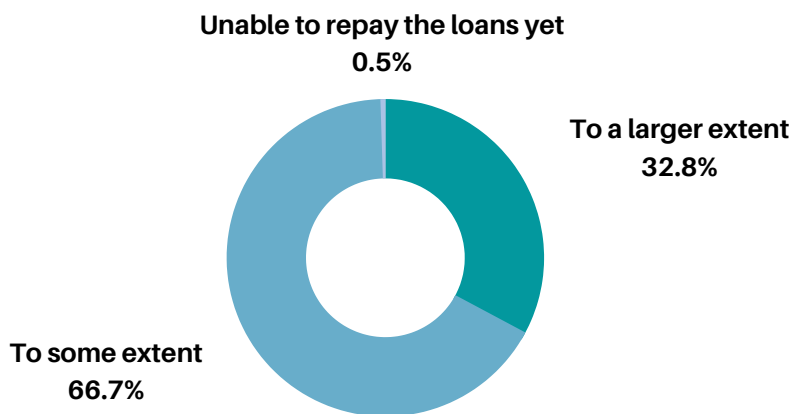
Focus Group Discussion with the Farmers of Nyasargi Village



## Impact 7

### Increase in income has led to increased capacity for repayment of farm loans obtained

Percentage of farmers reported about the extent of repayment of farm loans because of improved earning



When the respondents were asked to what extent they were able to repay the loans, due to improved agricultural productivity, 66.7 percent of the respondents stated that they were able to repay the loans to some

extent, while 32.8 percent of the respondents stated that they were able to repay their loans to a larger extent, while 0.5 percent of the respondents stated that they were unable to repay the loans yet.



**Ravi Perogi Gavani, 50 years, Male, Nyasargi village says,** "I have about 4.5 acres of agricultural land. I used to grow Areca and paddy earlier on one portion of the land. I would do one crop only before 4 years, as the water would be limited only for the months of rainfall usually between June and December. Through the Manuvikasa Project, we got a lake constructed in our community. Because of the presence of water in it even in the dry season, the water table in our community has gone up and there is better water availability even when the last rain has stopped. Now we are hopeful of making a second crop of paddy too."





Members of Women group , Mynalli Village



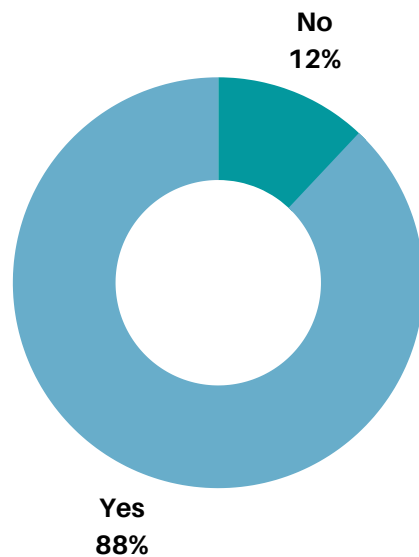
Fodder Cutter



## Impact 8

### Soil fertility has highly improved

Percentage of farmers reported about the usage of the dug out soil from the farm pond for manure making



When the respondents were asked whether they would use the dug-out soil from the farm pond and the other water harvesting structures for manure making, 88 percent of the respondents stated in the affirmative. Twelve percent of the respondents stated it in

the negative. From this, we can infer that most farmers make use of the dug-out soil from the farm pond for manure making and their expenses on using inorganic fertilizers are reduced to a large extent, resulting in a saving of money for the farmers.



Focus group discussion with stakeholders

# Chapter 5 : OECD Framework

Criteria	Justification/ Arguments supporting or against the Criteria	Ratings
<p><b>Relevance</b></p> <p>Has the program met its objectives? Is the CSR Project meeting the needs of the beneficiaries?</p>	<p>The Project beneficiaries in Uttara Kanada district were dependent on rainwater alone for cultivation. The tanks which were there earlier from historic times, were not properly maintained leading to their reduced functional use. HDBFS &amp; Manuvikasa revived and rejuvenated the large water bodies, apart from creating farm ponds in the farm lands of the community members. It was a felt need by the community members to have water harvesting structures at the community level and the individual farm holdings for doing the second cropping, improving the ground water table and improvement of productivity. This project has addressed the felt needs of the community. Hence the Project is highly relevant.</p>	<p>● ● ● ● ●</p>
<p><b>Coherence</b></p> <p>Is the CSR intervention in line with other similar Interventions of the State or the Central Government?</p>	<p>The Project is well aligned with multiple SDG Goals:</p> <p>Goal 1: No Poverty Goal 8: Decent Work &amp; Economic Growth Goal 13: Climate Action</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1 NO POVERTY</p> </div> <div style="text-align: center;">  <p>8 DECENT WORK AND ECONOMIC GROWTH</p> </div> <div style="text-align: center;">  <p>13 CLIMATE ACTION</p> </div> </div>	<p>● ● ● ● ●</p>
<p><b>Effectiveness</b></p> <p>Has the Program met its objectives? To What extent the expected results have been achieved? Has it reached the Right Target Groups?</p>	<p>The program has improved the water retention capacity of almost all of the large water harvesting structures in the project communities. These in turn has improved the water table of the community lands. The farm ponds of the individual farmers are reported to have more water retained in them even after 5-6 months of the last rain. The improved rain water storage through various structures had led the farmers to go for second cropping and also adopt mixed farming.</p> <p>The project is highly effective as it has largely met its objectives, achieved results expected and also reached out to the right target groups.</p> <p>Hence, the project can be stated to be highly effective.</p>	<p>● ● ● ● ●</p>

**Index:** 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low



## OECD Framework

Criteria	Justification/ Arguments supporting or against the Criteria	Ratings
<p><b>Efficiency</b></p> <p>The extent to which the CSR Project delivers, or is likely to deliver, results in an economic and timely way.</p>	<p>Considering the investments made on large water harvesting structures and those of farm ponds and the benefits obtained by the farmers in terms of increased yield, diversity of crops and increased income levels as reported by the farmers, it can be state that the project is highly efficient in nature.</p>	
<p><b>Impact</b></p> <p>The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.</p>	<p>The Program has improved the economic levels of the agrarian community to a large extent. The Project has resulted in diversifying the crops, improving yield and Productivity which has in turn improved the standards of living of the beneficiaries in the project villages. Hence the project can be stated to be highly impactful.</p>	
<p><b>Sustainability</b></p> <p>The extent to which the net benefits of the intervention continue or are likely to continue.</p>	<p>As the community's participation was ensured during the planning and implementation stages of the project, there is more acceptance, enthusiasm, and ownership towards the various water harvesting structures. The beneficiaries also stated that they would maintain these structures in the future too. Hence, the project can be stated to be highly sustainable in nature.</p>	

**Index:** 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

## Chapter 6 : Recommendations

### **1. Involvement of village water committees in Lake Maintenance:**

Village water committees should be formed and their members sensitized about the need for proper and periodical maintenance of the village lake. Guidelines on monitoring the maintenance and proper upkeep of the lake should be framed, and periodic meetings of the Gram Panchayat should be held, and awareness should be created among community members to not pollute the water body.

### **2. Maintaining the Lakes under MGNREGA Scheme:**

Since lake maintenance work comes under the MGNREGA Scheme, the budget for labour costs can be utilised for the payment of community people involved in the lake maintenance work. The payment of a monetary incentive will be motivating for the community people, and at the same time, lake maintenance will also be achieved.

### **3. Plantation of Trees in the Embankment of the lakes**

The embankment of lakes can be further strengthened through the plantation of trees on the walls of the bund around the water body.

Soil erosion can be prevented to a large extent through the presence of trees. Loss of water through evaporation can be prevented to a certain extent by this.

### **4. Fencing of the Lake Embankment should be made**

The research team observed that the lakes were also used by Dhobis for washing clothes. The chemicals found in soaps and detergents pollute the water and decrease the quality of the water and the water, in due course, will become unfit for drinking purposes or even for agricultural purposes. Hence, resolutions at the Gram Sabha should be passed to regulate the use and maintenance of lake water and strict penalties should be imposed on violators.

### **5. Use of Motor Pumps to divert water from Lake to Agricultural Fields must be curbed**

Some of the farmers are found using motors to divert water from the lake to their agricultural fields using heavy motors. This should be banned as it could empty a huge amount of water in a short period of time. Water is a common community resource and if water gets depleted from the lake,



then the water table will also diminish and this will have a deleterious impact on all agricultural lands and farming activity. Hence, sufficient sensitization should be created against the use of motor pumps to divert water from the lakes to farmlands.

## **6. Boosting of Horticultural Production**

The vegetables currently cultivated are on a small scale, and most of the vegetables are used for domestic purposes only. Though it is an appreciable fact that the families get nutritious food, impetus should be given to taking up horticultural cultivation on a large scale so that the farmers get commercial benefit out of it.

## **7. Commercialising the plantation of Coconut Trees**

It was observed by the research team that the coconuts grown on the farmland are mainly used for domestic purposes. There is good potential for commercial production of coconut by taking up the plantation on a large scale. Hence, impetus should be given to this.

## **8. Market Linkages should be created**

According to the research teams' interaction with the community members, lack of knowledge about potential markets and accessibility in reaching them seems to be one of the main hindrances for farmers not making commercial gains from their agricultural produce to a large extent. Hence, market linkages should be created and handholding should be done during the initial phases, after which the farmers would themselves become confident in taking up these activities.