

Relevant Extracts from the Impact Assessment Report

Farm Pond Initiative | The I Love Foundation

Prepared from the Collaborative Community Development Impact
Assessment Report (March 2024)

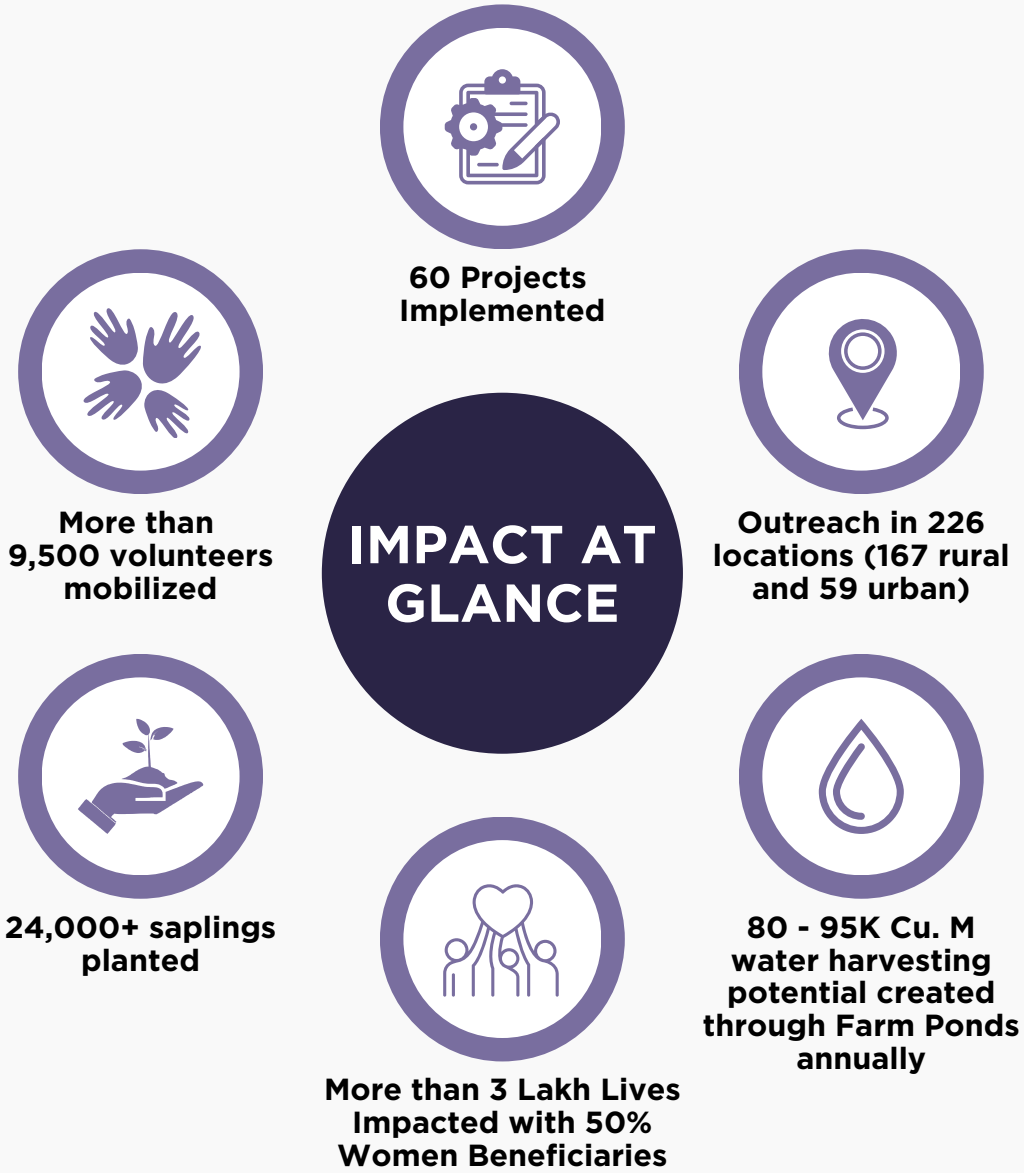
In February 2021, TILF conceptualized and launched India's first Citizen-Airline Partnership and brought together the citizens of Jaisalmer and the District Administration to help the airline with a plan to cover the viability gap on the Jaisalmer route and continue operations. This innovative collaboration between the local community and the District Administration aimed to support an airline facing viability gap on the Jaisalmer route. Through crowd-pooled resources and a signed Memorandum of Understanding (MoU), the initiative ensured sustained flight connectivity to Jaisalmer. Flight operations resumed with an impressive 80% load factor between February and March 2021.

By focusing on environmental conservation, TILF has secured the support of the community through active participation in every initiative. The cleanliness and tree-plantation campaigns, in particular, have cultivated a collective sense of responsibility and community involvement, enhancing the quality of their communal spaces.

Under the farm pond initiative, the consultation with farmers revealed that 70% of farm ponds were filled with rainwater during the initial season's shower, affirming the success of the initiative in enabling rainwater collection for agricultural use. Notably, the improved irrigation potential resulting from this initiative empowers farmers to transition from solely rainfed crops to multi-cropping, including high-yield options like wheat and vegetables, promising a significant boost in agricultural income.

TILF is actively addressing the challenge of Total Dissolved Solids (TDS) and contaminants in groundwater, ensuring access to safe and clean drinking water for students in the government schools in rural Jaisalmer by providing RO water units and rainwater harvesting structures. Through TILF's support, 25 schools in rural Jaisalmer have been equipped with RO water units impacting more than 3000 students.

TILF's interventions have significantly impacted the educational landscape, with the majority of student participants expressing exposure to practical experiences through experiential workshops, volunteer engagement programs etc. for the first time. This marks a substantial stride in enhancing the learning environment and broadening students' horizons.



**Area of Intervention:
Rajasthan**



Environment and Ecology

- More than 65,000 lives touched
- **24,000+ saplings** planted
- 95,000 cubic meter water conserved
- **30 Farm ponds** created in 7 villages of Jaipur
- Increased irrigation capacity, impacting livelihood of 35 families
- 225+ livestock impacted

Heritage and Culture

- Digital Cultural Archive of **42,000 heritage objects** created to preserve cultural heritage
- Positively influenced **Fort Drainage Plan** impacting more than 5,000 people residing in the only living fort of India
- More than 30 families, 100 volunteers and 1,000 tourists engaged in cultural and culinary exchanges through **Dine with Jaisalmer** Initiative during Annual Desert Festival
- Livelihood opportunities generated for more than 50 folk musicians (Manganiyaars) from 8 villages during COVID 19

Health and Wellbeing

- Access to clean drinking water in 25 schools
- Improved access to Oxygen Concentrators and Cylinders during peak of COVID-19 - 103 oxygen concentrators to 43 remote locations in Jaisalmer and other parts of Rajasthan (Jaipur, Nagaur, Sikar) within 30 days
- Oxygen Plant with a capacity of 20-30 Nm³/H installed in Pokhran, impacting a population of 28,000
- Improved access to blood through collection of 145 Units
- Support to HPV vaccination programs, Jaisalmer's first institutional animal ambulance impacting 1251 cattles, rehabilitating rural health centre impacting population of 2250

Education and Empowerment	
IndiaBioscience Outreach Program	SDG 4 - Quality Education SDG 5 - Gender Equality
Scholarship Program	
Makerspace	
Women Employment	SDG 1 - No Poverty SDG 5 - Gender Equality SDG 8 - Decent Work and Economic Growth
Environment and Ecology	
Plantation	SDG 11 - Sustainable Cities and Communities SDG 12 - Responsible Production and Consumption SDG 13 - Climate Action SDG 15 - Life on Land
Cleanliness Drives	SDG 11 - Sustainable Cities and Communities SDG 13 - Climate Action SDG 15 - Life on Land
Waste Management	
Farm Ponds	SDG 1 - No Poverty SDG 2- Zero Hunger SDG 3 - Good Health and Well-Being SDG 8 - Decent Work and Economic Growth SDG 12 - Responsible Consumption and Production SDG 13 - Climate Action

During the challenging period of COVID-19, TILF promptly responded by meeting the varied requirements of the community. This included enhancing access to Oxygen Concentrators and Cylinders and installing an oxygen plant in community health center of Pokhran, for rural communities. The organization acted swiftly to provide ration and food kits to 630 marginalized and underprivileged families across 21 remote villages in the district of Jaisalmer.

TILF has been instrumental in its efforts to preserve Jaisalmer's unique cultural heritage and vernacular artistry. TILF has worked with various communities like Mangniyar, renowned folk musicians of the Thar desert and also known for mastery of traditional instruments. During COVID-19, the organization provided a platform to these artists to showcase their talent to the world, using a virtual outreach platform.

TILF has also extended its work in Jaipur and has been working closely with farmers, students and communities. 30 Farm ponds harvesting rainwater have been created jointly with the Deshpande Foundation to improve agricultural water availability and access to farmers with the objective of improving farm yield.

An Art & Design Digital Archive (ADDA) of 42,642 objects of historical and cultural importance has been created. An initiative brought to life by TILF in collaboration with Dhun Life and Asian Heritage Foundation, ADDA aims to showcases the rich and diverse heritage of South Asia through its extensive collection of artworks and crafts. This open access, interactive digital archive serves as a digital museum and a reference guide for students, designers, artisans and anyone interested.

Through its various education and empowerment initiatives, TILF has touched a lives of more than 3,700 students. Recently the organization has taken up an initiative to improve access to clean drinking water in government schools of rural Jaisalmer. RO drinking water plant has been installed in 22 schools with a capacity of 50 Liters Per Hour. In collaboration with Dhun, Jaipur and project DEFY, TILF initiated a "Makerspace program" with the core principle of promoting learning through making. 22 active learners including 23% females in the age group of 5-22 years from five villages around Dhun have been enrolled in the project.



IMPACT ANALYSIS

ENVIRONMENT AND ECOLOGY

Through its interventions in this thematic area, TILF has aligned with SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 8 (Decent Work and Economic Growth), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action) and SDG 15 (Life on Land).

Press Link



ENVIRONMENT AND ECOLOGY

KEY PROJECTS

CLEANLINESS DRIVES

TILF has been instrumental in mobilizing collective commitment from local communities, district administration and various other stakeholders to preserve Jaisalmer's cultural heritage and enhance the overall well-being of its residents.

Through its network of volunteers which includes youth, residents including women and men, TILF has successfully organized cleanliness drives from 2013, in areas which are of historical importance and tourism. Few of the common areas under focus were Gadisar Lake, Jaisalmer Fort, Heritage routes, Sand Dunes (Sam and Khuri), government hospitals and other tourist spots.

This initiative has helped reduce use of plastics, enhancing city's aesthetic appeal, and inviting atmosphere for tourists and encouraging responsible tourism practices.

I Love Jaisalmer, a unit of the TILF, mobilized a community of over 5000 locals, undertaking the cleaning of 450,000 sq. ft. of the fort's sloped area and 180,000 sq.ft. of debris-laden rampart. Restoration efforts encompassed 80% of the fort's streets and communal spaces, including the preservation of ancient rocks and structures dating back as far as 600 years. This drive gave rise to the "Sunday For Sonar" movement, attracting 60-300 participants on six consecutive Sundays dedicated to cleaning previously inaccessible fort areas. A total of 500 dustbins were strategically placed, and the Municipal Corporation of Jaisalmer assumed responsibility for door-to-door garbage collection within the Jaisalmer Fort, benefiting over 5000 fort residents. The collected waste was subsequently directed for composting.

PLANTATIONS

To ensure environmental sustainability, support biodiversity and create a more habitable environment, TILF has played a pivotal role in planting more than 24,000 saplings in Jaisalmer and peri-urban space of Jaipur through collective community participation. The initiative will help maintaining ecological balance in the semi-arid and desert geography of Jaisalmer in the years to come.



Tree plantations were carried out in various locations, including tourist spots, Jaisalmer airport, government schools and colleges, hospitals, roadsides, water bodies, pasture lands, and rural health centers. The District Administration, Jaisalmer recognized and rewarded the environmental conservation efforts initiated by TILF during 2019 and 2022.

AWARENESS CAMPAIGNS

To address the growing environmental concerns and promote sustainable habits among local populace, TILF conducted waste management workshops and awareness programs in the city of Jaisalmer. TILF also organized anti single - use plastic campaign to sensitize local stakeholders such as locals, hotels/restaurants, shopkeepers, vendors, and residents of fort etc.



Like many cities around the world, Jaisalmer faces a widespread reliance on single-use plastic, posing a substantial threat to the city's drainage system, public health, and sanitation. The **film-based** awareness and community participation initiative led by I Love Jaisalmer motivated local shopkeepers to discontinue the use of plastic cups. Consequently, a government-supported anti single use plastic campaign was launched.

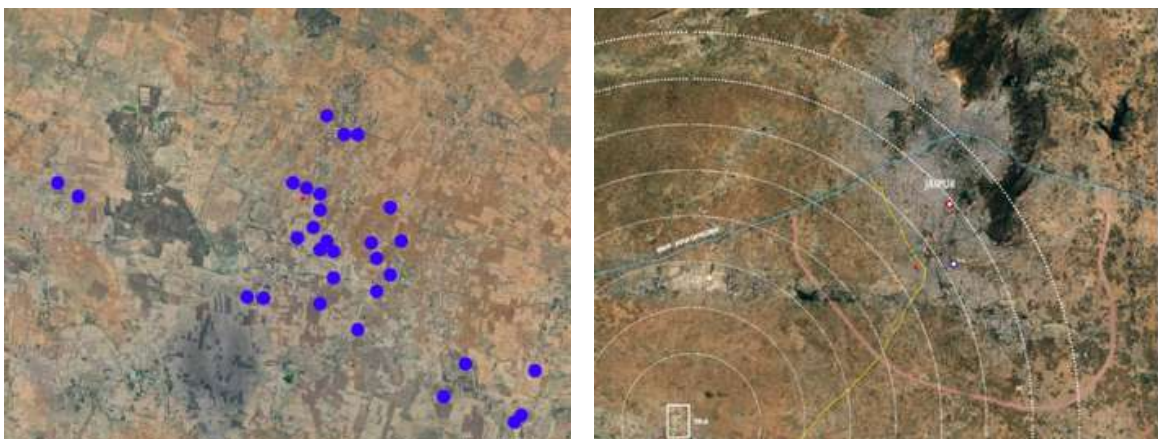
FARM PONDS

Rajasthan faces a pressing challenge of scarce rainfall owing to its arid and semi-arid conditions. To mitigate water stress and provide a reliable source of irrigation water to marginalized farmers, TILF jointly with Deshpande Foundation has built 30 Farm Ponds for farmers who are marginalized with respect to land holding size, however, has minimum of 8 Bighas land to accommodate farm ponds.



To ensure sustainability of this intervention, local support in terms of manpower and finance was mobilized by the organization. The ponds were created with specification of 100*100*12 fts to irrigate at least 6 bighas of land for minimum of 6-8 months. Each pond can harvest 2.8 million litres of rainwater annually. The intervention has been implemented in Heerapura, Jankinathpura, Kishanpura, Raipura, Raithal, Khejra ka bas, and Harsuliya villages around the regenerative neighborhood of Dhun located in peri-urban Jaipur District. The climatic zone is semi-arid with an annual average rainfall of 650 mm and the temperature varies from 4-47 °C in a year.

Having become India's first real estate B-Corp in March 2024, Dhun supports this as a natural extension of its ecosystem restoration efforts for underserved communities. In fact, Dhun restored a Galania community pond in Raithal village first before restoring the 500-acre barren land into a thriving biosphere that in 2016 had no water and less than 30 trees. It now has close to 300,000 trees including multiple food forests and water bodies with a harvesting capacity of 400 million liters of rainwater annually.



Geo-Tagged Locations of Farm Ponds

With this initiative, TILF has been instrumental in creating a water harvesting potential of 80 - 95K cubic meters collectively to agricultural yield². Creating farm ponds for irrigation purposes will significantly impact 30 farmers and their families. Since the project was completed in April/ May 2023, the impact of the intervention will be visible in the next monsoon season and subsequent cropping season. The projected impact due to this intervention will be observed on soil moisture retention capacity, improved soil quality, reduced soil erosion and ground water recharge.

As the farmers consulted for this initiative opined, 70% of the farm ponds were filled with rainwater during the season's first shower. It was affirmed unanimously that the initiative has enabled the collection and storage of rainwater, that can be used during periods of no or low rainfall. This ensures a continuous water supply for crops that require irrigation on a set frequency.

Few of the farmers were completely relying only on rainfed crops. Improved irrigation potential will enable farmers to employ multi-cropping including wheat, vegetables and other cash crops which can yield higher agricultural income. One of the farmer respondents stated that the current water harvesting potential has enabled them to irrigate at least 4 bighas of agricultural land. The current potential will yield a minimum of 40 quintals of wheat production per year, resulting in increased agricultural income.

It was also observed that many of the farmers in the region has started growing a traditional variety of wheat which is more resilient to climatic condition, requires less water and agricultural inputs such as fertilizers and pesticides. This will further reduce the water stress in the area as the variety requires 4 times less water than the hybrid varieties of wheat.

A village named "Gohandi", where farmers largely grow vegetables for self - consumption and trade. One of the farmers has already created a space in bordering areas of pond to grow vegetables. Earlier dependency on well water had limited farmers in growing other food and cash crops. With the improved irrigation facility, farmers will be able to grow minimum of 2 crops a year.

2

For calculation of water harvesting potential, the volume has been considered and calculated using the formula (Volume = Length * Breadth * Height), in cubic feet. Each cubic feet can conserve 28.32 liters of water.

With a farm pond dimension of 100*100*12 feet, the effective surface area which can conserve water is 85*85*12 feet. This results into an effective volume of approximately 1,00,000 cubic feet.

Water harvesting potential created by each farm pond = 1,00,000 cubic feet (Volume) * 28.32 Liter = 28.32 Lakh Liter (2800 Cubic Meter)

PASTURE LAND DEVELOPMENT

Community pasture lands serve as shared resources offering grazing areas for livestock. The preservation of these lands is vital for both environmental health and the welfare of communities relying on them. Rajasthan, akin to several other states in India, confronts the challenge of diminishing pastureland. This issue raises significant concerns with broad-reaching implications for communities that depend on livestock for their sustenance.

Just a couple of years ago, the 3,000 bigha pastureland in Chandan village was an unproductive area overwhelmed by Juliflora, an invasive plant species. Initially, the village community replaced more than 300 bigha of land by sowing seeds from 15 local desert grasses, including Sewan, Dhaman, Murath, Lump, etc., to rehabilitate the area, requiring 11,623 man-days under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Building upon this local initiative, TILF under its environment regeneration program planted 10,000 trees, representing 11 native species, using traditional plantation techniques. These carefully chosen species are well-suited to the geographical and climatic conditions of the area and will play a vital role in restoring the ecosystem of the region.

The initiative seeks to enhance biodiversity conservation in the region while concurrently reducing the carbon footprint through the implementation of energy-efficient methods like solar energy and traditional watering systems. This strategy is in harmony with the national initiatives for carbon mitigation.



¹ MNREGA is the world's largest social security program. It provides all rural households in India with 100 days of unskilled physical labour. The MGNREG Act grants rural residents the right to work. It makes it mandatory for the government to provide them with jobs on demand.

The initiative also significantly contributes to SDG 7 (Affordable and Clean Energy) as solar-based water pumping solution has been provided to upkeep the plantation at pastureland. The community pasture land is collectively used by five villages, comprising a population of approximately 7,500-8,000 individuals. Among them, over 2,000 families rely on animal husbandry as their primary source of livelihood.

This intervention is geared towards advocating for sustainable and eco-friendly methods in land management. The influence of this initiative extends significantly, contributing to enhanced soil health, biodiversity, and improved livelihoods. In economic terms, the development of pastureland will result in savings of INR 3,600/- per family as they have to be dependent on various markets to fulfill fodder needs.



Geo-Tagged Locations of Chandan Plantation

SUCCESS STORY - FARM POND INITIATIVE

In the rural village of Gohandi, Mannalal toils the land as a farmer, with 6 bighas of farmland supporting his family's livelihood. As the sole breadwinner, Mannalal relies solely on agriculture, facing the persistent challenge of water scarcity in his region. With agriculture dependent largely on erratic rainfall, Mannalal was limited to cultivating rain-fed crops like bajra. However, a turning point came with the support of TILF and the Deshpande Foundation. Mannalal took the bold step of creating a farm pond on his land last year.



In his opinion, the pond was filled in the first rainy season last year. By November 2023, post the rainy season, the pond was filled with water up to 9 feet. Inspired by this newfound water source, Mannalal seized the opportunity to cultivate vegetables on a small patch of his land.

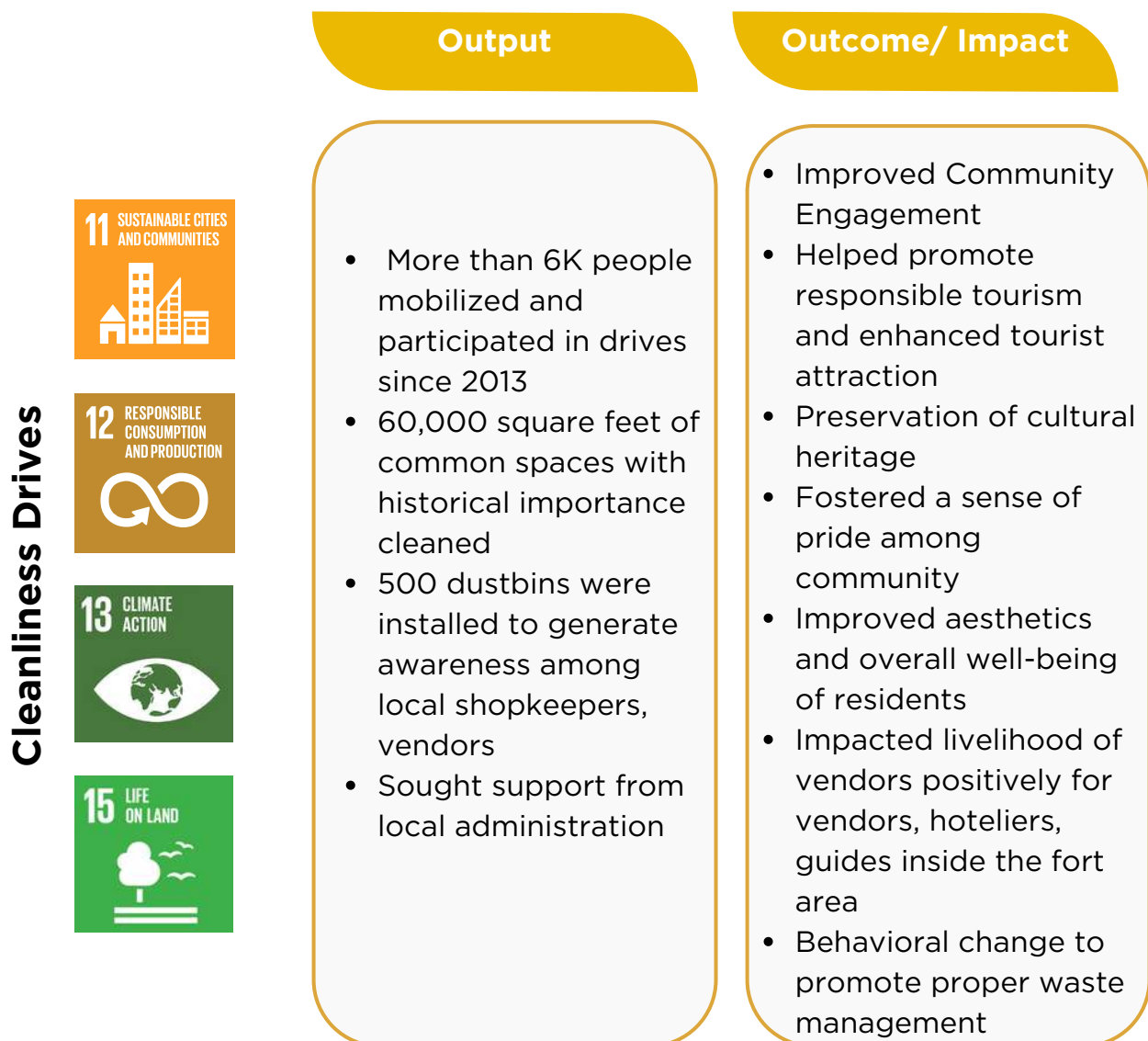
For Mannalal, this initiative signifies more than just growing crops—it's about ensuring food security for his family. No longer reliant solely on market produce, Mannalal is determined to grow wheat with the additional water conserved on his field. Previously dependent on well water, which limited him to growing just one crop, Mannalal now sees a promising future ahead.

With water accessible for nearly 9 months of the year, Mannalal is optimistic about diversifying his crops and increasing his yield. The prospect of harvesting 2-3 crops annually fills him with hope, paving the way for a brighter, more prosperous future for him and his family.

IMPACT MAP - ENVIRONMENT AND ECOLOGY

To understand the impact of various interventions in this thematic area, SGS team interacted with both internal and external stakeholders to understand their views, perception and feedback. A total of 28 stakeholders were consulted. 13, 9 and 6 KIIs were conducted for Cleanliness Drives, Plantation and Farm Pond interventions, respectively. The impact of each of the intervention has been outlined in the table below. 2 community consultations were also organized with volunteers and students.

The opinions of stakeholders are analyzed and aggregated into outputs and outcomes/impact.



Plantation



Output

- 24K+ saplings of native species planted
- More than 2K volunteers across schools, colleges, common areas mobilized

Outcome/ Impact

- Improved Community Engagement through volunteers and local participation
- Climate change adaptation through native and resilient species
- Increased green cover
- Improved aesthetics
- This initiative will potentially help combating desertification
- Support flora and fauna and biodiversity of arid region

Waste Management



- 750 dustbins installed to promote effective waste collection
- 50 people trained through awareness workshops

- Improved Community Engagement
- Improved tourism aesthetics
- Overall positive impact on public health
- Mitigation of stray animal issues, specifically in fort area
- Instilled a sense of ownership among local residents

Farm Ponds



Output

- 30 Farmers were supported with financial support to create farm ponds
- Outreach in 7 villages

Outcome/ Impact

- Improved access to irrigation water
- 84,000 cubic meter of water harvesting potential created
- 240 Bighas of land converted to irrigated land as against the rainfed earlier
- Promote multi-cropping - farmers will be able to grow wheat (Rabi crop)
- Improved income for 30 families with more than 200 population
- Promoted traditional variety of wheat which requires less water and results into high price
- Higher Income through improved yield - Additional income of INR 1 - 1.5 Lakh depending on land holding size

OECD CRITERIA ASSESSMENT - ENVIRONMENT AND ECOLOGY

Criteria	Assessment
Relevance	<p>Native species plantations in arid region like Jaisalmer hold significant relevance due to various environmental, social, and economic reasons. Plantations play a crucial role in water conservation by recharging groundwater, preventing water runoff, and improving water retention in the soil.</p> <p>Considering Jaisalmer’s rich art and heritage, initiatives linked with cleanliness drives are of much relevance in the current context.</p> <p>Major portion of Rajasthan’s economy relies on agriculture, much of which is rainfed. In the absence of regular and sufficient rainfall, water conservation becomes imperative to sustain agricultural activities. Efficient water management practices, such as rainwater harvesting which helps optimize water use in agriculture is of much relevance in the current context.</p>
Effectiveness	<p>In every instance of its involvement, TILF has effectively garnered backing from the local community and encouraged active participation. By engaging in initiatives focused on this particular theme, TILF has effectively raised awareness about the significance of cleanliness, environmental preservation, and responsible waste handling. This increased awareness has resulted in noticeable shifts in behavior. The water conservation initiative has played a pivotal role in diversifying and enhancing cropping patterns for farmers.</p>