Aadivasi Welfare Foundation

Annual Report

2023-24

Projects at Jharkhand, Odisha, Uttarakhand, West Bengal

Registered Address:
Plot Number-8185, Near Srinath University, Sri Kirshna Road, Dindli Basti, Manjhi Tola, Adityapur, Seraikelakharsawan-831013, Jharkhand, India

“Impact Highlights: 2023–24”

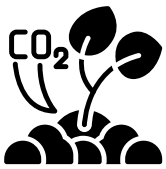
Total Trees Planted
1,324,000
Across 4 States

Total Water Bodies
1,113
restored

Total States benefited
6

Total Households benefited
6,953

Total No. of People benefited
34,707



Total Carbon Dioxide Sequestrated
33,100 Metric Tons

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01- About Us

1.1 About AWF

Aadivasi Welfare Foundation, a section 8 not-for-profit, was founded on November 26th, 2018, to promote environmental and social sustainability through social forestry and tribal development. Over the past five years, AWF has planted over 5.9 million trees in tribal-dominated states of India (Odisha, Jharkhand, Bihar, and West Bengal), providing livelihoods to rural tribal communities throughout the plantation process.

This year marked a strategic expansion from our established work in Jharkhand, Odisha and West Bengal's agricultural landscapes to a new venture in Uttarakhand's Himalayan ecosystem. Our four projects directly benefited 2,106 individuals, strengthening partnerships across 43 villages in four states.

At Aadivasi Welfare Foundation (AWF), we are committed to promoting the economic, social, and cultural empowerment of rural and tribal communities across India. We achieve this by diversifying livelihood opportunities, reducing dependence on single income sources, and promoting sustainable development practices. Our key focus areas include:

- Community-driven environmental conservation
- Education
- Healthcare
- Cultural revitalization of tribal arts and crafts

Our initiatives are designed to create sustainable livelihoods while integrating gender perspectives into all aspects of development. We are deeply committed to promoting women's empowerment, supporting eco-friendly practices and safeguarding indigenous cultural heritage. Using a participatory approach, we work closely with local communities to identify their unique needs and co-create tailored development projects. Our dedicated team provides end-to-end support — from project ideation to implementation and monitoring — ensuring that our interventions lead to tangible, lasting impact at the grassroots level.

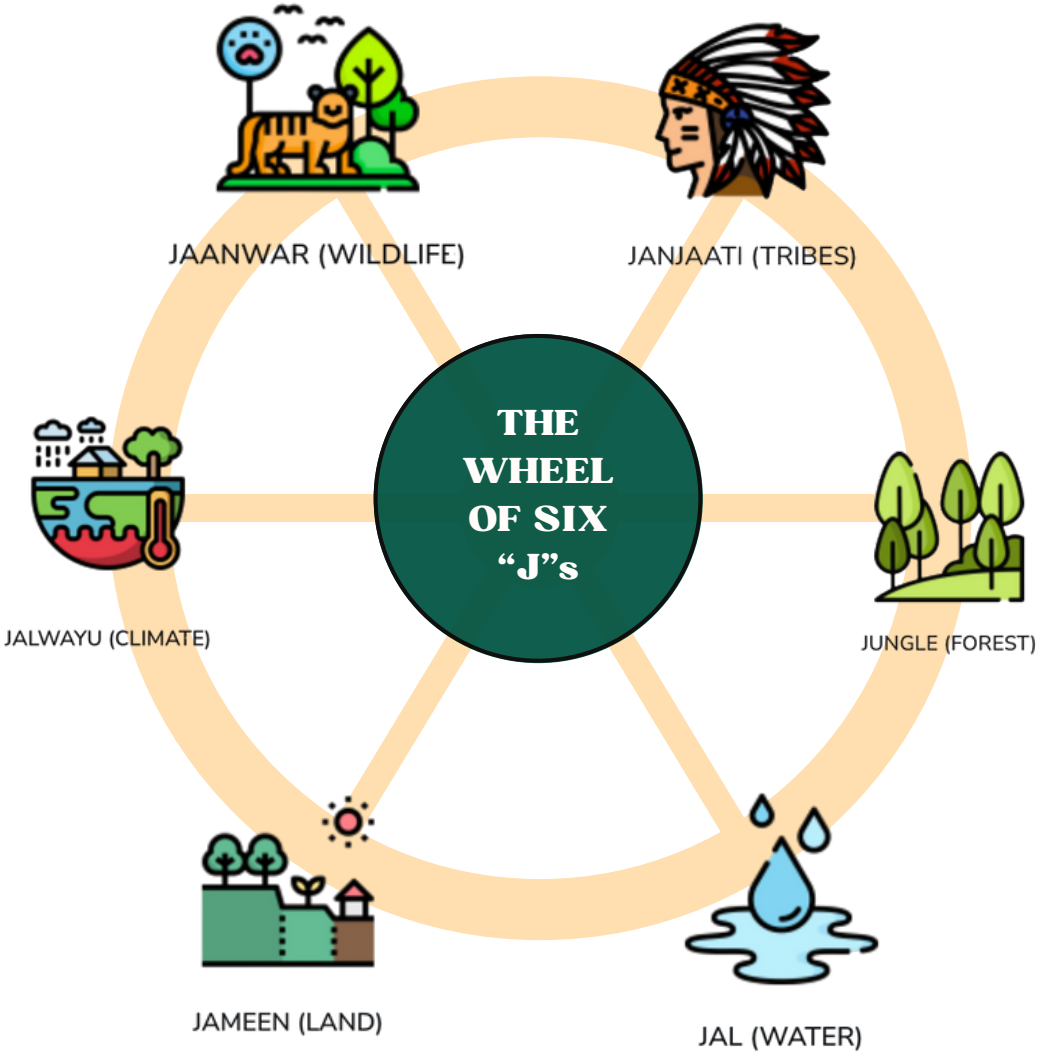
1.2 Vision, Mission & Values

Vision- To create a world where biodiversity is valued & protected and rural tribal communities can thrive sustainably within their environment.

Mission- To empower indigenous communities through sustainable development initiatives that promote inclusive growth, environmental sustainability and cultural preservation.

Values- Our Core Pillars are: **The Wheel of Six "J"s** of Conservation and Community Empowerment

At Aadivasi Welfare Foundation, our work is deeply rooted in six interconnected pillars — what we call the **Wheel of Six J's** — representing our commitment to ecological restoration, climate resilience, and cultural preservation. Each "J" is a vital thread in the fabric of sustainable living and community empowerment.



02- SDG Alignment

SDG 1: No Poverty

AWF aims to eradicate poverty among the indegenious communities by implementing various socio-economic development programs. We focus on providing income-generating opportunities, vocational training, and entrepreneurship support to empower indigenous communities economically.

SDG 5: Gender Equality

AWF strives to ensure gender equality within rural tribal communities. We work towards empowering tribal women by providing employment, and vocational training, and promoting women's rights.

SDG 13: Climate Action

The foundation actively addresses climate change issues and promotes sustainable practices. We focus on aforestation, conservation of biodiversity, and promoting renewable energy sources. We also educate communities about the impacts of climate change and implement measures to mitigate these effects.

SDG 2: Zero Hunger

Through plantation and pond rejuvenation projects, AWF provides employment opportunities to indigenous communities, fostering sustainable livelihoods. We also offer training in allied activities such as beekeeping and fisheries, enhancing their livelihood opportunities and contributing to the goal of zero hunger.

SDG 6: Clean Water and Sanitation

By restoring springs and constructing recharge structures, AWF ensures improved water availability and quality.

SDG 14: Life Below Water

AWF is dedicated to protecting aquatic ecosystems and promoting sustainable practices related to water bodies. We engage in initiatives such as pond rejuvenation, fishing practices, and raising awareness about the importance of freshwater conservation.

SDG 15: Life on Land

The foundation focuses on preserving and restoring land ecosystems. We work towards conserving forests, protecting wildlife habitats, and promoting sustainable land management practices. Our initiatives also include creating awareness about the importance of biodiversity and supporting reforestation efforts

03- Project Overview & Methodology

3.1 Summary

In 2023–24, AWF expanded its footprint across Jharkhand, Odisha, West Bengal, and Uttarakhand, continuing its commitment to sustainable afforestation, wildlife protection, waterbody revival, and community empowerment. With over 1.3 million trees planted, AWF has worked directly with local communities to create lasting environmental and socio-economic benefits.

In F.Y. 2023-24, Aadivasi Welfare Foundation undertook four projects, the specifics of which are mentioned in the table below:

Project Name	Project Location	Domain	No. of trees planted/ water bodies created
Impact for Wildlife Habitat	Jharkhand	Tree Plantation	**10,50,000**
Impact for Tribals	Odisha	Tree Plantation	**1,50,000**
Impact for Farmers	West Bengal	Tree Plantation	**1,24,000**
Impact for Himalayan Conservation	Uttrakhand	Water Conservation	**1100**

03- Project Overview & Methodology

3.2 Methodology

- **Step 1: Identification of Suitable Land**

AWF begins by identifying barren/wasteland within the target villages for plantation. This is done in consultation with local authorities, including Gram Panchayats and Community Institutions, ensuring that the land is suitable for planting and does not interfere with existing agricultural practices.

- **Step 2: Engaging the Community**

One of the core principles of AWF's work is community engagement. Before starting any plantation work, AWF conducts community consultations to:

(a) Identify the most appropriate plantation sites.

(b) Gather feedback from local community members, ensuring their active involvement in decision-making.

(c) Discuss tree species selection, as well as related activities like nursery raising and soil moisture conservation.

- **Step 3: Building Local Capacity**

AWF establishes village-level collectives comprising local community members. These collectives are trained to:

(a) Protect the saplings during the early stages of growth.

(b) Ensure proper care such as watering, weeding, and protecting the saplings from pests and disease.

(c) Monitor the progress of the plantation and report on sapling survival rates.

(d) This approach empowers local communities to take ownership of the project and guarantees that the trees planted are maintained and nurtured.

- **Step 4: Selecting Appropriate Tree Species**

In consultation with environmental experts and local communities, AWF selects native tree species that best suit the local ecosystem.
The selection process takes into account:

(a) The soil type and climatic conditions of the plantation site.

(b) The needs of local wildlife and the long-term environmental benefits, such as carbon sequestration and soil conservation.

(c) Common species include Teak, Acacia, Karanj, Mahua, and Neem, all of which are chosen for their ecological suitability and economic potential for the community.

03- Project Overview & Methodology

3.2 Methodology

- **Step 5: Planting and Site Preparation**

Once suitable land is identified and communities are engaged, AWF proceeds with:
(a) Pit digging (preparing the ground for planting).
(b) Transporting saplings to the site.
(c) Methodically plant trees to ensure optimal growth conditions.
(d) This process is carefully supervised by trained local teams to ensure each sapling is planted at the right depth and spacing for future growth.

- **Step 6: Maintenance and Monitoring**

Post-plantation, AWF ensures the continued growth of the saplings by:
(a) Regular watering and fertilizing as needed.
(b) Mortality checks to assess the health of the saplings and replace any that do not survive.
(c) Monitoring the growth rates and survival rates over time to ensure the plantation remains healthy.
(d) Local caretakers are employed and trained to carry out these maintenance activities, providing them with sustainable livelihood opportunities.

- **Step 7: Third-Party Verification and Impact Assessment**

AWF works with third-party experts to assess the impact of its plantation projects. This includes:
(a) Carbon sequestration measurement, to calculate how much carbon is being absorbed by the trees.
(b) Survival rate assessments, to determine the success of the plantation and suggest improvements.
(c) These assessments ensure transparency and allow AWF to measure and report the long-term environmental impact of its projects.

- **Step 8: Continuous Community Engagement and Training**

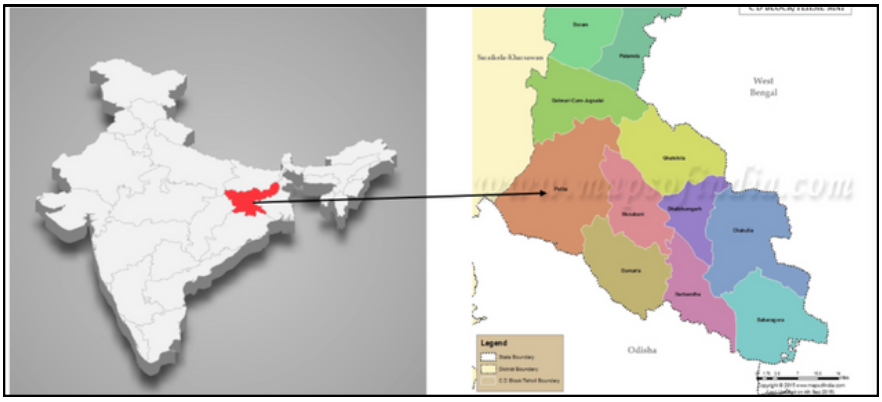
Throughout the entire project, AWF emphasizes continuous training and capacity building for local communities. By focusing on vocational training and sustainable livelihood generation, AWF helps ensure that communities can continue benefiting from the project in the long term, not just in terms of environmental benefits but also in creating new economic opportunities for local people.

04- Project Descriptions

4.1 Impact for Wildlife Habitat

4.1.1 Project Overview

- **Location:** Patamda Block, East Singhbhum District, Jharkhand
- **Project Type:** Tree Plantation for Wildlife Habitat Restoration
- **Total Saplings Planted:** 1,050,000 trees
- **Primary Objective:** The project aims to restore and enhance wildlife habitats, especially for elephants, and reduce human-elephant conflict by strengthening the elephant migration corridors in the region.



Location: State Jharkhand; Villages of East Singhbhum district

4.1.2 Climatic and Ecological Profile

- **Climate:** The region experiences a tropical climate, which requires special attention to soil health and moisture retention. The project aims to enhance soil quality and water retention, thereby creating a suitable microclimate for saplings.
- **Soil and Moisture Conservation:** To combat soil erosion and ensure tree growth, AWF incorporates practices like contour trenching and, if required, farm ponds alongside the tree planting.

4.1.3 Beneficiary and Community Details

- **Number of Villages Covered:** 25 villages across Patamda Block in East Singhbhum District
- **Total Households:** 5,878 households (Census 2011)
- **Total Population:** 29,482 individuals
- **Female Population:** 14,029 (48% of total population)

4.1.4 Employment Generation:

- **Total Labourers Engaged:** 1,634 individuals (with 924 female laborers, making up 57% of the workforce)
- **Primary Beneficiaries:** The Santhal and Munda tribal communities, who were actively involved in sapling raising, site clearance, pit digging, planting, and irrigation activities.

4.1.5 Sapling Distribution

This section provides a detailed breakdown of the sapling distribution across various villages within the Patamda Block, East Singhbhum District, Jharkhand. Our plantation efforts were meticulously planned and executed, ensuring a diverse range of native species were planted to support local biodiversity and environmental restoration.

The data below highlights the geographical reach of our initiative, the number of saplings planted per village and the specific species distributed.

Village Name	Total Saplings Planted	Species Distribution
Bankuchia (Bankuchia-1)	84,000	**Teak:** 29,050 **Acacia:** 27,540 **Seesham:** 1,635 **Mango:** 8,040
Barudih/Rapatcha1	42,000	**Teak:** 18,500 **Acacia:** 13,800 **Seesham:** 2,500 **Mango:** 3,500
Bhula (Bhula-2)	8,000	**Teak:** 3,750 **Acacia:** 2,310 **Seesham:** 450 **Mango:** 715
Bhula (Damodarpur-1)	116,000	**Teak:** 41,000 **Acacia:** 42,500 **Seesham:** 7,500 **Mango:** 8,400
Birra	20,000	**Teak:** 16,000 **Acacia:** 4,000
Chaura-3	163,000	**Teak:** 60,070 **Acacia:** 64,200 **Seesham:** 11,040 **Simal:** 14,700

Village Name	Total Saplings Planted	Species Distribution
Chidadhi-2	8,000	**Teak:** 4,000 **Acacia:** 4,000
Gobarghusi (Appo-2)	16,000	**Teak:** 4,570 **Acacia:** 3,050 **Seesham:** 1,250
Gobarghusi (Kukdru-1)	15,375	**Teak:** 5,838 **Acacia:** 5,187 **Seesham:** 2,800
Indatanr-3	82,200	**Teak:** 35,900 **Acacia:** 24,000 **Seesham:** 1,050 **Mango:** 950
Kanduru Jona 4	8,000	**Teak:** 2,000 **Acacia:** 6,000
Kantagora-1	81,000	**Teak:** 40,500 **Acacia:** 31,080 **Seesham:** 1,250 **Mango:** 2,500
Kunir-2	40,040	**Teak:** 21,500 **Acacia:** 11,000 **Seesham:** 1,520 **Mango:** 1,500
Lava (Garigram-2)	2,000	**Teak:** 950 **Acacia:** 600 **Seesham:** 90 **Simal:** 100
Lava (Sisda-1)	40,750	**Teak:** 13,375 **Acacia:** 8,455 **Karanj:** 2,330
Mahulbana (Loadih-1)	67,375	**Teak:** 19,075 **Acacia:** 4,000 **Karanj:** 8,000 **Seesham:** 12,000 **Simal:** 12,000
Mahulbana (Mahulbana-2)	61,500	**Teak:** 19,800 **Acacia:** 19,350 **Karanj:** 4,000 **Seesham:** 8,000
Majhidih (Rahardhi)-2	12,000	**Teak:** 4,000 **Acacia:** 6,500
Makula-1	56,800	**Teak:** 28,500 **Acacia:** 17,500 **Seesham:** 750 **Mango:** 1,500

Village Name	Total Saplings Planted	Species Distribution
Mohanpur-3	12,000	**Teak:** 5,000 **Acacia:** 6,500
Natchibera	4,000	**Teak:** 2,000 **Acacia:** 2,000
Navadi (Diggi) 2	4,000	**Teak:** 2,000 **Acacia:** 2,000
Patamda-1	89,960	**Teak:** 52,380 **Acacia:** 36,080 **Seesham:** 250 **Mango:** 600
Pawanpur-1	8,000	**Teak:** 3,500 **Acacia:** 4,500
Tunguburu-1	8,000	**Teak:** 3,100 **Acacia:** 2,470 **Seesham:** 550 **Mango:** 750

4.1.6 Species Variety and Benefits

The species planted in this project were carefully selected based on ecological suitability and community benefits. Key species include:

1. **Teak (Tectona Grandis)** - **41.6%** of total saplings planted
   High economic value; helps with soil conservation.

2. **Ear Leaf Acacia (Acacia Auriculiformis) - 33.2%** of total saplings planted
   Nitrogen-fixing species help improve soil fertility.

3. **Karanj (Pongamia Pinnata) - 4.2%** of total saplings planted
   Provides fodder for livestock and biofuel potential.

4. **Seesham (Dalbergia Sissoo) - 6.3%** of total saplings planted
   A hardwood species used for furniture; it helps with erosion control.

5. **Simal (Bombax ceiba) - 8.7%** of total saplings planted
   A fast-growing tree that helps prevent soil erosion.

6. **Mango (Mangifera indica) - 1.6%** of total saplings planted
   Fruit-bearing species provide economic benefits to communities.

Other species like **Neem**, **Mahua**, and **Jamun** were included to increase biodiversity and contribute to wildlife habitats.

4.1.7 Methodology and Impact

1. **Species Selection:** AWF consulted with local communities and environmental experts to choose species that are both ecologically beneficial and economically valuable.
2. **Plantation:** Saplings were planted across strategically selected areas, focusing on elephant migration corridors to provide shelter and food sources for wildlife.
3. **Community Engagement:** Local communities were engaged at every stage of the project. From site selection to sapling care, the project promoted active participation, with a particular focus on empowering women laborers.
4. **Wildlife Impact:** The restoration of habitats and wildlife corridors significantly contributes to reducing human-elephant conflicts and supports other species such as tigers and deer.
5. **Soil and Water Conservation:** The tree plantation also plays a vital role in combating soil erosion and enhancing groundwater retention, benefiting both wildlife and local agriculture..

4.1.8 Projected Outcomes (2024-2026)

- **Reduction in Human-Elephant Conflicts:** Strengthening the elephant corridor and providing adequate food sources for elephants is expected to reduce human-wildlife conflict by 20–30% over the next few years.

- **Biodiversity Support:** The project is expected to increase biodiversity in the region by improving vegetative cover and providing food and shelter for various wildlife species.

- **Long-Term Impact:** With sustained maintenance, this project will contribute significantly to the environmental sustainability of the region, promoting ecosystem restoration.

4.1.9 Project Pictures

4.1.9 Challenges and AWF's Response in Jharkhand

Challenges in Jharkhand (2023)

- **Human-Elephant Conflict:** The Dalma Elephant Corridor continued to experience human-elephant conflicts, with elephants straying into agricultural fields and villages in East Singhbhum. This led to crop damage and occasional human injuries, as reported by the Forest Department.

- **Tiger Sighting and Habitat Fragmentation:** A tiger sighting near Dalma in late 2023 marked a positive step for wildlife, but habitat fragmentation along the Dalma-Chandil corridor posed ongoing threats to wildlife movement. Infrastructure development, such as roads and mining, continued to fragment key wildlife habitats.

- **Soil Erosion and Water Scarcity:** Soil erosion and water scarcity were prevalent in the region, particularly in Patamda Block, affecting both agriculture and local livelihoods. Unsustainable farming and deforestation were key contributors to these issues.

AWF's Solutions and Impact

1. **Reducing Human-Elephant Conflict:** AWF's afforestation project planted 1,050,000 saplings across 25 villages in Patamda Block, helping to strengthen the Dalma Elephant Corridor. The improved vegetative cover has enhanced wildlife migration routes, leading to reduced elephant incursions into human settlements. This has mitigated human-elephant conflicts by providing elephants with better food sources and more space to roam without entering agricultural areas.
2. **Enhancing Habitat Connectivity and Supporting Tiger Dispersal:** Through strategic tree planting, AWF has reconnected fragmented habitats, strengthening wildlife corridors, particularly in the Dalma-Chandil region. The project has improved canopy density in key elephant-use areas, contributing to safer wildlife movement and supporting biodiversity. The tiger sighting near Dalma further demonstrates that AWF's efforts in corridor restoration are aiding the dispersal of tigers and other large mammals.
3. **Soil and Water Conservation:** AWF's focus on soil conservation and water retention through its afforestation efforts has been a direct response to soil erosion and water scarcity. By planting native species like Teak and Acacia, AWF has enhanced soil fertility and water retention, which in turn supports local agriculture and reduces the risk of soil degradation. These efforts have helped restore the region's soil health and improve water availability for both agriculture and community use.

Conclusion:

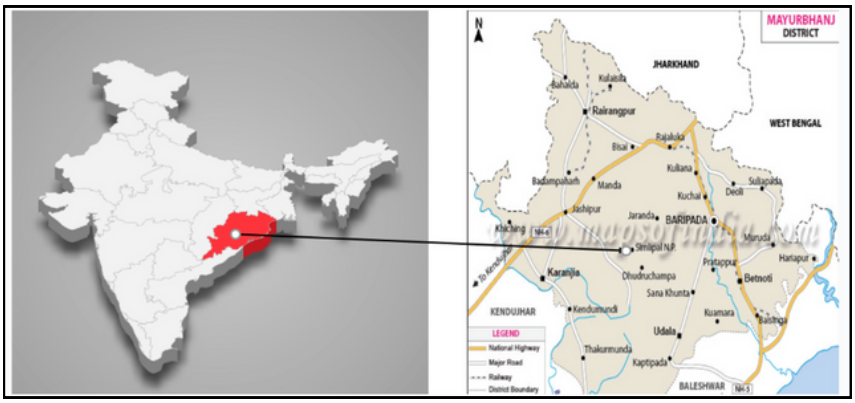
In 2023–2024, AWF's initiatives in Jharkhand have provided tangible solutions to critical challenges such as human-elephant conflict, habitat fragmentation, soil erosion, and water scarcity. By focusing on afforestation, wildlife corridor restoration, and community empowerment, AWF has significantly contributed to the sustainability of both the environment and the local communities.

04- Project Descriptions

4.2 Impact for Tribals

4.2.1 Project Overview

- **Location:** Mayurbhanj District, Odisha
- **Project Type:** Tree Plantation for the Tribal community development
- **Total Saplings Planted:** 150,000 saplings
- **Primary Objective:** To empower tribal communities by involving them in large-scale tree plantation, enhancing biodiversity, and improving soil health and water conservation.



Location: State Odisha; fringes of Similipal Tiger Reserve

4.2.2 Climatic and Ecological Profile

- **Climate:** Mayurbhanj experiences a tropical climate with a monsoon season (June to September) bringing moderate to heavy rainfall. The dry season (October to May) sees high temperatures and reduced rainfall, which impacts soil moisture and agriculture.
- **Soil:** The region's soil is mainly loamy in plains and lateritic in hilly areas. These soils have low water retention capacity, making them prone to erosion during the monsoon and requiring effective soil conservation methods.
- **Ecological Challenges:**
  1. **Soil Erosion:** Due to deforestation and unsustainable farming, the soil is increasingly vulnerable to erosion, especially during the monsoon season.
  2. **Water Scarcity:** The dry season exacerbates water scarcity, limiting access to water for both agriculture and daily needs.
  3. **Degraded Soil:** Loss of vegetative cover and unsustainable agricultural practices have led to soil degradation, reducing agricultural productivity and threatening local livelihoods.

4.2.3 Beneficiary and Community Details

- **Villages covered:** 2 villages in Karanjaia Block, Dari Gram Panchayat, Mayurbhanj district
- **Total Households:** 231 households (Census 2011)
- **Total Population:** 1,031 individuals
- **Female Population:** 231 (22.4% of total population)

4.2.4 Employment Generation

The project creates direct employment opportunities through the plantation process, including raising saplings, transportation, site clearance, pit-digging, plantation, and field watering. The involvement of women and local laborers provides a consistent income and supports the community's economic stability.

- **Total Labourers:** 206 individuals engaged across various stages of the plantation project
- **Women Participation:** Women contributed significantly, with 66% of the workforce from female laborers

4.2.5 Sapling Distribution

The data below highlights the geographical reach of our initiative, the number of saplings planted per village and the specific species distributed.

Village Name	Total Saplings Planted	Species Distribution
Nuadeogaon-1	95,000	**Teak:** 51,400 **Acacia:** 18,500 **Karanj:** 7,500 **Seesham:** 4,000 **Simal:** 3,500 **Mango:** 1,250 **Jamun:** 750 **Nimbu:** 1,200 **Kaju:** 3,500 **Neem:** 3,000 **Mahua:** 250 **Sarifa:** 150
Puruna Deogaon-2	55,000	**Teak:** 38,600 **Acacia:** 1,200 **Kaju:** 4,000 **Seesham:** 3,000 **Simal:** 3,500 **Mango:** 150 **Nimbu:** 130 **Neem:** 4,000 **Mahua:** 250 **Jamun:** 170

4.2.6 Species Variety and Benefits

1. **Teak (Tectona grandis): 60%** of the total saplings planted. Valuable timber species that helps conserve soil.
2. **Acacia (Acacia auriculiformis): 12%** of the total saplings Nitrogen-fixing species that improve soil fertility.
3. **Karanj (Pongamia pinnata): 5%** of the total saplings. Provides fodder and biofuel potential.
4. **Seesham (Dalbergia sissoo): 4.7%** of the total saplings. Used in furniture making and erosion control.
5. **Simal (Bombax ceiba): 4.7%** of the total saplings. Used for its medicinal properties, contributes to biodiversity and supports local livelihoods.
6. **Neem (Azadirachta indica): 4.7%** of the total saplings. Used for its pest-repellent properties, medicinal uses, and improvement of soil quality.
7. **Kaju (Cashew): 5% and Mango, Jamun, Nimbu, Mahua, Sarifa: 2%** of the total saplings; Fruit-bearing species contributing to the local economy.

4.2.7 Methodology and Impact

1. **Species Selection:** AWF consulted with local communities and environmental experts to select species that are both ecologically beneficial and economically valuable.
2. **Plantation:** Saplings were planted in areas suitable for the local ecosystem, focusing on enhancing biodiversity and providing sustainable income sources.
3. **Community Engagement:** Active involvement of local communities, especially tribal women, was ensured throughout the plantation process. The communities took part in decision-making, sapling care, and overall project management.
4. **Soil and Water Conservation:** The project integrated soil conservation techniques (e.g., contour trenching) and water harvesting to improve soil fertility and increase agricultural yields by 15-20%.

4.2.8 Project Pictures

4.2.9 Impact Summary

1.5 lakh saplings planted across 2 villages on the periphery of Similipal Tiger Reserve.

Contextual Observations (2022–24):

- No major wildlife losses were reported in the buffer areas of Similipal during the reporting period.
- The 2021 wildfire caused significant ecological damage, but the area has shown strong signs of recovery, with increased vegetative density contributing to the restoration of critical forest corridors. These corridors support not only elephants but also rare species like the melanistic tiger (source: Odisha Forest Department, 2023).

AWF's Solutions & Impact:

- **Support for Degraded Patch Recovery:** AWF's plantations have significantly contributed to the recovery of degraded patches of the landscape, fostering the creation of alternative food sources and shade zones near human settlements. This approach helps in mitigating crop raiding, particularly by elephants.

Projected Outcomes :

- **Reduction in Human-Wildlife Conflict:** The landscape restoration efforts are expected to reduce human-wildlife interactions, particularly elephant crop-raiding, by approximately 25% over the next 2-3 years.
- **Improved Habitat Connectivity:** The plantation zones will help in improving the continuity of forest corridors, supporting the movement of elephants and other threatened species like the melanistic tiger, thus enhancing biodiversity in the region.

Conclusion

In 2023-24, AWF's efforts in tribal empowerment and ecosystem restoration have made significant strides in the Simlipal Tiger Reserve and surrounding areas. By planting **1.5 lakh saplings**, we have not only contributed to forest regeneration but also created sustainable livelihoods for tribal communities, particularly through women's empowerment, vocational training, and employment generation. Our focus on biodiversity restoration—supporting species like the melanistic tiger and elephants—is pivotal in maintaining the ecological balance while promoting human-wildlife coexistence.

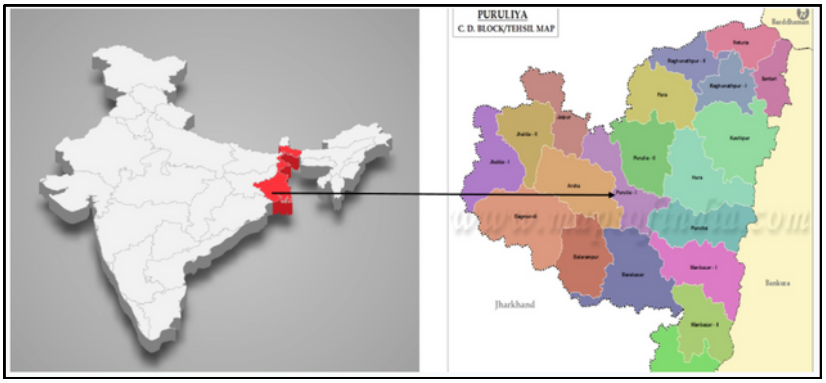
As we move forward, AWF remains committed to its mission of sustainable development, community well-being, and wildlife conservation, with a focus on scaling and expanding these initiatives for a greener, more resilient future.

04- Project Descriptions

4.3 Impact for Farmers

4.3.1 Project Overview

- **Location:** Manbazar Block, Purulia district, West Bengal
- **Project Type:** Tree Plantation and Community Empowerment for Farmers
- **Total Saplings Planted:** 124,000 saplings
- **Primary Objective:** To revitalize barren landscapes, empower tribal communities through tree plantation, water body rejuvenation, and artisanal training programs to enhance agricultural resilience and livelihood sustainability.



Location: State West Bengal; Villages of District Purulia

4.3.2 Climatic Profile

- **Climate:** Purulia experiences a semi-arid climate with hot, dry weather and low rainfall, especially during the monsoon season. This results in diminishing groundwater levels, limiting farmers to single-crop cultivation each year.
- **Soil:** The soil is mainly lateritic and loamy, with low moisture retention and nutrient depletion, making it prone to erosion and reducing its agricultural productivity.
- **Ecological Challenges:**
  1. **Land Degradation:** Deforestation and unsustainable farming practices have led to soil erosion and loss of fertility, further hindering agriculture.
  2. **Water Scarcity:** Declining groundwater levels and a lack of irrigation systems exacerbate water scarcity, affecting farming viability.

4.3.3 Beneficiary Details

- **Coverage:** 3 villages across Bamni Majhihira Gram Panchayat, Manbazar Block
- **Total Households:** 657 households (Census 2011)
- **Total Population:** 3,157
- **Female Population:** 1,573 (49.8% of total population)
- **Primary Beneficiaries:** Tribal communities in Purulia district

4.3.4 Sapling Distribution

The data below highlights the geographical reach of our initiative, the number of saplings planted per village and the specific species distributed.

Village Name	Total Saplings Planted	Species Distribution
Bamni	75,000	**Teak -** 25000 **Acacia -** 25000 **Karanj -** 5000 **Seesham -** 5000 **Simal -** 15000
Chakya	24,000	**Teak -** 18500 **Acacia -** 1150 **Karanj -** 300 **Seesham -** 300 **Simal -** 1500 **Mango -** 300 **Jamun -** 450 **Nimbu -** 1300 **Neem -** 200
Nathurdih	25,000	**Teak -** 12700 **Acacia -** 7000 **Karanj -** 600 **Seesham -** 2150 **Simal -** 1300 **Mango -** 200 **Jamun -** 150 **Nimbu -** 700 **Neem -** 400

4.3.5 Species Variety and Benefits

The species selected for the **Purulia District** project were chosen for their **ecological suitability** and **community benefits**. Below is a breakdown of the species planted and their respective contributions to the environment and community livelihoods:

- **Teak (Tectona Grandis): 45%** of total saplings planted Teak is a high-value timber species, contributing to soil conservation and providing significant economic returns.
- **Acacia (Acacia Auriculiformis): 27%** of total saplings planted Acacia, as a nitrogen-fixing species, is crucial for improving soil fertility and restoring degraded areas.
- **Seesham (Dalbergia Sissoo): 6%** of total saplings planted Seesham is a hardwood species used in furniture production and is effective in erosion control, especially in vulnerable areas.

- **Simal (Bombax Ceiba): 14%** of total saplings planted. A fast-growing tree that helps prevent soil erosion and promotes land stability.
- **Karanj (Pongamia Pinnata): 5%** of total saplings planted. Provides fodder for livestock and has potential for biofuel production, supporting sustainable energy options.
- Rest **Fruits trees** contribute to **2.8%** of total saplings planted. These species contribute to local biodiversity, providing edible fruits and enhancing community nutrition. **Neem** is particularly **valuable** for its medicinal properties and pest-repellent qualities, benefiting both health and agriculture.

4.3.6 Rationale for the Project

The Purulia project addresses the region's long-standing agricultural challenges and environmental issues. It focuses on improving soil health, combating land degradation, and enhancing water conservation to support the livelihoods of tribal communities.
The key objectives are:

- **Restoring Soil Fertility:** Purulia's soil has been severely degraded due to unsustainable farming practices, resulting in nutrient depletion and erosion. The tree plantation initiative, through species like Acacia and Teak, aims to restore soil quality by enhancing nutrient content, increasing organic matter, and preventing erosion.
- **Improving Water Availability:** The region faces declining groundwater levels and a lack of irrigation infrastructure, limiting agricultural productivity. By introducing water bodies (ponds) and planting trees that improve soil moisture retention, the project aims to increase water availability, thereby improving agricultural viability.
- **Diversifying Livelihoods:** The project aims to provide vocational training to tribal communities, particularly women, in handicrafts and fish farming. This training will reduce migration and provide communities with sustainable income options beyond agriculture.
- **Enhancing Climate Resilience:** By planting climate-resilient species, the project will help create a diverse ecosystem, which supports agricultural sustainability and mitigates the effects of climate change. Species like Karanj (Pongamia Pinnata) and Mango will also provide alternative income sources through fruit harvesting.

4.3.7 Project Pictures

4.3.8 Conclusion

In 2023-24, AWF's Purulia project made significant strides in addressing land degradation and water scarcity while empowering tribal communities. By planting 124,000 saplings, we have contributed to soil restoration, improved agricultural productivity, and climate resilience. Furthermore, our efforts in vocational training, fishery development, and income diversification have created sustainable livelihoods for local farmers, particularly women, reducing migration and supporting long-term community well-being.

AWF remains committed to its mission of promoting sustainable development, biodiversity restoration, and climate resilience, with a focus on expanding these efforts to create a greener, more resilient future for Purulia.

4.3.9 Impact Summary

Project Summary:

A total of 124,000 saplings were planted across 3 villages in Purulia, targeting the restoration of degraded landscapes and improving the livelihoods of tribal farmers through agroforestry and water conservation initiatives.

Contextual Observations (2022–24)

- The region continues to face challenges of land degradation, water scarcity, and soil erosion due to unsustainable farming practices and deforestation.
- No major ecological disasters (e.g., wildfires) occurred during this period, but the soil quality and water availability remain significant concerns for the community's livelihood.

Relevance to AWF's Project

AWF's tree plantation efforts, combined with water body rejuvenation and vocational training, have directly addressed soil restoration and water conservation. The project is contributing to reducing soil erosion, improving agricultural productivity, and increasing water availability, ensuring the sustainability of farming practices.

Projected Outcomes:

The expected outcomes of the project over the next 2-3 years include:

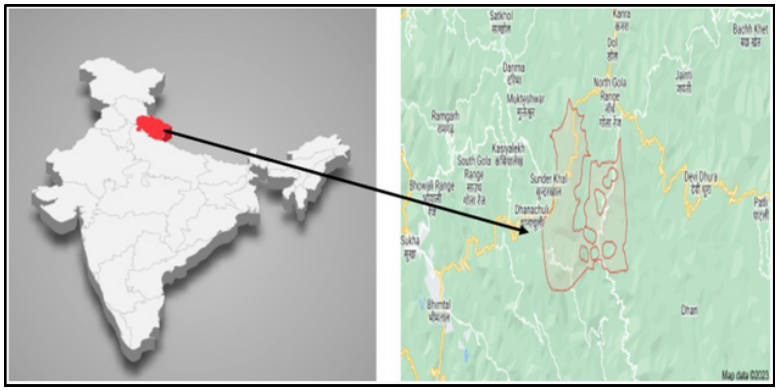
- **Improved Soil Fertility:** The plantation efforts will help restore soil fertility and reduce erosion in the degraded landscapes of Purulia. This is expected to enhance agricultural yields by approximately 20-30% over the next few years. By incorporating nitrogen-fixing species like Acacia, the soil's nutrient content will increase, supporting better crop growth.
- **Increased Water Availability:** The introduction of ponds for irrigation will directly address water scarcity during dry spells. These ponds will serve as a water source for irrigation and help recharge the groundwater table, benefiting agriculture and livestock.
- **Climate Resilience:** The plantation of diverse species like Teak, Acacia, and Simal will support agroforestry practices, enhancing the resilience of local farms to climate extremes. Over time, this will help mitigate the effects of soil erosion, water stress, and temperature fluctuations.
- **Diversified Livelihoods and Employment:** The establishment of fishery ponds and training programs will provide diversified income sources for local communities, especially women. With vocational training in handicrafts and artisanal skills, women will have the opportunity to generate income through the sale of locally made products. This will reduce migration and strengthen the local economy.

04- Project Descriptions

4.4 Impact for Himalayan Conservation

4.4.1 Project Overview

- **Location:** Mahtoli village and Van Panchayat, Okhalkanda Block, Nainital District, Uttarakhand
- **Project Type:** Water Conservation & Biodiversity Preservation
- **Total Water Structures Created:** 1,100 structures
- **Primary Objective:** To enhance water availability and promote biodiversity conservation by constructing traditional Chal-Khal systems, helping to recharge groundwater and mitigate water stress in the region.



Location: State Uttarakhand; Villages of Nanital district, North Gola Range

4.4.2 Climatic Profile

- **Climate:** The area's **monsoon patterns heavily dictate water availability**, with **long dry spells** during the summer months leading to **water stress**.
- **Soil:** The terrain is **mountainous** and characterized by **fragile soil structures**, prone to **erosion** from **runoff** and **landslides**, particularly during extreme weather events. Soil moisture retention is limited, and soil erosion is exacerbated by deforestation and loss of vegetation.
- **Ecological Challenges:**
  1. **Soil erosion** and **landslides** remain major ecological threats due to the fragile topography of the Himalayas, which is exacerbated by climate change and inconsistent rainfall patterns.
  2. **Water scarcity** affects both agriculture and daily water needs, making water conservation efforts imperative for local communities.

4.4.3 Beneficiary Details

- **Coverage:** 1 village (Mahtoli) in Mahtoli Gram Panchayat, Okhalkanda Block
- **Total Households:** 187 households (Census 2011)
- **Total Population:** 1,037 individuals
- **Female Population:** 475 (45.8% of total population)
- **Primary Beneficiaries:** Local communities dependent on seasonal water availability

4.4.4 Water Conservation

Structure Distribution:

- **Chals: 1,000** structures (Rectangular pits, **8 feet long**, **2.5 feet wide**, **2.5 feet deep**)
  - Water Storage Capacity: **~1,500 liters** per Chal
  - Primary Function: **Rainwater harvesting** and **soil erosion** prevention
- **Khals: 100** structures (**4 meters wide**, **1 meter deep**)
  - Water Storage Capacity: **~12,500 liters** per Khal
  - Multi-purpose Use: **Irrigation**, **livestock watering**, and **water purification**

Village Name	Total Water Bodies	Total Water Conserved (in Litres)
Mahtoli	**1100**	**2,750,000**

No. of Chals	No. of Khals
1000	100

4.4.5 Rationale for the Project

1. **Climate Change Mitigation:** The project aims to combat climate change by improving water conservation. The **Chal-Khal** systems are **natural**, **low-cost** technologies that capture and **store rainwater**, contributing to carbon sequestration by enhancing plant growth, increasing soil organic carbon, and preventing soil erosion, which helps in **storing carbon** in the **soil** and **vegetation**.
2. **Landslide Prevention:** By improving **soil stability** and water absorption, the project helps **reduce landslide** risk, stabilizing the region's fragile terrain.
3. **Water Resource Management:** The Chal-Khal systems effectively manage water resources by capturing rainwater, allowing for **better groundwater recharge**, and **preventing soil erosion**. These water bodies help mitigate water scarcity during dry months.
4. **Empowering Communities:** The project is focused on community empowerment by providing training programs in beekeeping, handicrafts, and other sustainable livelihood activities. This not only helps diversify **income** but also **preserves traditional skills** and promotes economic resilience.

4.4.6 Project pictures

Chal and Khal Pictures on-site

4.4.7 Conclusion

In 2023-24, AWF's Himalayan Conservation project successfully addressed water scarcity and soil erosion in Mahtoli village. By implementing 1,100 Chal-Khal structures, AWF has improved water conservation and enhanced ecosystem resilience in Uttarakhand. Additionally, the project has created economic opportunities for local communities through vocational training and livelihood development.

AWF is committed to scaling these efforts and ensuring the long-term sustainability of water resources, biodiversity conservation, and community empowerment in the region.

4.4.8 Impact Summary

Project Summary:

A total of 1,100 Chal-Khal structures were constructed in Mahtoli village, with the goal of enhancing water conservation and promoting sustainable land use practices.

Contextual Observations (2023–24):

1. **Biodiversity Status:** The North Gola Range has maintained its ecological integrity, with no significant biodiversity losses reported during the 2023–24 period.
2. **Groundwater Recharge:** Uttarakhand has experienced a positive trend in groundwater recharge, with reports indicating an increase in groundwater levels across various regions. These improvements are attributed to enhanced water conservation practices and effective management of water resources.
3. **Water Scarcity Mitigation:** The implementation of traditional water conservation structures, such as Chal-Khal systems, has played a crucial role in mitigating seasonal water scarcity. These interventions have led to improved water availability during dry periods, benefiting local communities and ecosystems.

Relevance to AWF's Project :

AWF's traditional Chal-Khal systems have significantly improved local hydrology, enhanced groundwater recharge, and helped stabilize soil in vulnerable regions, contributing to the long-term resilience of both agriculture and biodiversity.

Projected Outcomes :

- **Increased Water Availability:** The water storage capacity of the Chal-Khal systems will significantly improve water availability for both agriculture and livestock, especially during dry seasons.

- **Reduced Landslide Risk:** The stabilization of slopes and soil erosion control will help reduce the risk of landslides, improving the safety of local communities and infrastructure.

- **Enhanced Biodiversity:** Increased water availability will support local vegetation and wildlife, including small mammals and pollinators, enhancing the region's biodiversity and ecosystem health.

05- Community Impact in 2023-24

In **2023-24**, **AWF** organized significant **community development initiatives** in **Jharkhand**. These efforts focused on both **healthcare** and **water conservation**, addressing essential needs in tribal communities.

Below are the details of these activities:

5.1 Medical Camp

Eye Checkup Camp in Mahulbona Village on 21st February 2024

Location: Mahulbona, Panchayat Mahulbona, East Singhbhum, Jharkhand

An Eye Checkup Camp was organized by AWF as part of its community health program. The camp was held in collaboration with local stakeholders, including the village leadership, to provide essential eye care services to the community. Free eye checkups were offered, addressing common vision problems among the residents. The camp also provided eye glasses to those in need, enhancing the quality of life for many individuals, particularly elderly tribal members.

Participants: Local villagers, including men and women from Mahulbona and nearby villages of East Singhbhum district.

Beneficiaries: The camp was especially beneficial for the elderly and those with limited access to healthcare facilities.

Impact: The eye checkup camp helped identify vision problems early, enabling timely medical intervention. It also highlighted the importance of health awareness in remote tribal communities.

05- Community Impact in 2023-24

5.2 Pond Creation

In 2023-24, **Aadivasi Welfare Foundation (AWF)**, in collaboration with Grow-Trees Mumbai, initiated a **vital pond construction project** in **Mahulbona village**. This initiative was launched to address the region's persistent water scarcity and to improve the overall water management system in the area.

Project Overview

- **Location:** Mahulbona village, East Singhbhum district, Jharkhand
- **Collaborators:** AWF and Grow-Trees Mumbai
- **Project Focus:** Enhancing local water storage capacity to **support agricultural** activities, **improve water access**, and **increase community** resilience.

Pond Construction Details

- **Total Water Conserved:** 2.75 million liters
- **Key Structures:** The project involved the construction of the water body strategically placed to catch rainwater and recharge the groundwater table. It is designed to maximize water conservation and provide a consistent water source throughout the year.

Direct Benefits

- **Sustainable Water Access:** The pond provides the community with a reliable source of water for both irrigation and drinking during dry spells, reducing dependence on distant water sources.
- **Enhanced Agricultural Productivity:** By maintaining adequate water levels for crops, the pond supports agricultural activities, ensuring better crop yields and sustaining farming livelihoods.
- **Livestock Support:** The pond also serves as a water source for livestock, improving the well-being of animals and ensuring the smooth functioning of the local agriculture-based economy.
- **Community Resilience:** By providing a nearby water source, the pond enhances community resilience to water scarcity and contributes to climate adaptation in the face of unpredictable weather patterns and drying water sources.

05- Community Impact in 2023-24

5.3 Health Check-up Camp

AWF, in collaboration with **Sri Satya Sai Sanjeevani Hospital**, organized a **Health Check-up Camp** in **Chaura village**. The camp focused on providing essential healthcare services to the tribal population, particularly **pregnant women**, to **improve maternal health** and **prevent complications** during pregnancy.

Event Details

- **Location:** Chaura, East Singhbhum, Jharkhand
- **Beneficiaries: 20+** individuals, including pregnant women and tribal children
- **Services Provided:**
  - Comprehensive health assessments, including blood pressure monitoring and hemoglobin checks.
  - Distribution of essential medications, including iron and protein supplements for pregnant women.
  - Health education about proper prenatal care, nutrition, and hygiene.

Impact

The health camp successfully provided **free medical screenings**, raising awareness about **maternal health** and offering essential **care** to **pregnant** women and children in remote areas. The distribution of necessary medications and the health education offered will contribute to reducing complications during pregnancy and improving the overall health of women and children.

05- Community Impact in 2023-24

5.4 Health Check-up Camp

AWF, in partnership with Sri Satya Sai Sanjeevani Hospital, organized a Health Check-up Camp in **Shankardah village**. This camp primarily aimed at providing **healthcare services** to the tribal community, especially **pregnant women** and **children**, ensuring better health outcomes through early detection and treatment.

Event Details:

- **Location:** Shankardah, East Singhbhum, Jharkhand
- **Beneficiaries: 50+** tribal women and children
- **Services Provided:**
  - General health screenings to detect common health issues like blood pressure and iron deficiency.
  - Distribution of essential medications for pregnant women and children, focusing on nutrition and prenatal health.
  - Consultations for early diagnosis and treatment of health issues that could impact pregnancy and child health.

Impact:

The camp provided vital healthcare to pregnant women and children who would otherwise have limited access to such services. It helped raise awareness about maternal health, contributed to early health interventions, and provided free medications to prevent deficiencies, improving the overall health outcomes of the beneficiaries.

05- Community Impact in 2023-24

5.5 Beekeeping Training Program

AAWF conducted a **4-day beekeeping training program** in **Patamda** village, East Singhbhum, to empower tribal communities with **sustainable beekeeping** practices, creating **new income opportunities** while contributing to environmental conservation.

Event Details:

- **Location:** Patamda, East Singhbhum, Jharkhand
- **Beneficiaries: 30+** tribal farmers (with a focus on women)
- **Training Duration:** 4 days

- **Training Focus:**
    - Introduction to beekeeping, including setting up and maintaining bee boxes.
    - Honey extraction techniques and pest management.
    - Sustainable beekeeping practices for honey production and colony health.
    - Ecological benefits, especially in pollination, support biodiversity.

- **Key Deliverables:**
    - **50 Bee Boxes** Distributed among the participants to help them **start** their **beekeeping ventures**.
    - **Ongoing Expert Support** for continued guidance and successful implementation of beekeeping.

Impact:

- **Empowerment of Women:** The program provided women with new economic opportunities, fostering income independence and promoting gender equality.
- **Sustainable Livelihood:** Beekeeping offered an additional income stream for farmers while enhancing local biodiversity through increased pollination.
- **Ecological Contribution:** The beekeeping initiative supported the local environment by encouraging the role of honeybees in pollination, which directly contributes to agricultural resilience and biodiversity.

06- Acknowledgement & References

6.1 Acknowledgement

All the impact created this financial year was only possible due to the following:

Stakeholders/ Partners:

A huge thanks to all our partners & stakeholders for helping us make our vision come to life- **Grow Trees, Grow Billion Trees, Rotary Club of Jamshedpur, Rotary Inner Wheel, Impact Guru, Care Guru & Chlorochem Pvt. Ltd**.

Employees & Volunteers:

We thank our dedicated employees and passionate volunteers for their continued commitment to community impact. Your efforts on the ground are the foundation of every success we achieve.

6.2 References

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