

“YUVA VAN- YOUTH FOR AGROFORESTRY”

MAJOR PROJECT REPORT

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**DESIGN YOUR DEGREE,
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**SKILL INCUBATION INNOVATION ENTREPRENEURSHIP DEVELOPMENT CENTRE,
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Subject – Social Innovations and Does the World Revolve Around Economics

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CERTIFICATE

The work presented in this report, entitled “YUVA VAN- YOUTH FOR AGROFORESTRY” has been carried out by the team comprising Malhar Kadyal, Mohd. Sajid, Narayan Choudhary, and Pawandeep Singh as part of their Major Project for Semester 3 of the Four-Year Undergraduate Programme (Design Your Degree).

This project was conducted under the guidance of Prof. Anil Gupta and Dr. Shallu Sehgal as a partial fulfillment of the requirements for the award of the Design Your Degree, Four-Year Undergraduate Programme, at the University of Jammu, Jammu.

We hereby declare that this project report is an original work and has not been submitted elsewhere for any degree or academic credit.

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ABSTRACT

The "Yuva Van - Youth for Agroforestry" project aims to promote sustainable agricultural practices, specifically agroforestry, among the youth of Jammu and Kashmir. The initiative focuses on educating farmers and engaging youth to adopt agroforestry models, particularly shade cropping, as a transitional solution to the prevalent wheat-paddy system. The project combines practical tree plantation efforts with theoretical research, aiming to improve environmental health and economic resilience through diverse, integrated land-use systems. By organizing literature reviews, pilot plots, and online engagement activities, the project seeks to address the challenges of awareness and economic barriers in agroforestry adoption. Preliminary findings highlight the environmental and economic benefits of agroforestry, including increased biodiversity, improved soil fertility, and diversified income sources. The next steps will expand community engagement and involve direct agroforestry implementation. This project aligns with the broader goal of promoting sustainable agricultural practices and fostering environmental stewardship among the youth.

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Chapter 1

Introduction

The **Yuva Van Youth for Agroforestry** campaign is a youth-led initiative aimed at promoting agroforestry as a sustainable agricultural practice. In the early stages of the campaign, efforts have focused on conducting a thorough literature review of agroforestry practices, exploring potential revenue streams, and creating a community platform for engaging youth. This report outlines the foundational work achieved so far, which includes research findings, identification of viable revenue options, and the creation of a youth community to foster further engagement and education. Future phases will focus on increasing public interaction, expanding the community, and launching on-the-ground agroforestry activities.

Agriculture in India has long been dominated by traditional farming systems like wheat-paddy, which have significantly depleted soil nutrients and groundwater resources. To address this issue, agroforestry presents a sustainable alternative by integrating trees with crops to improve environmental health and economic resilience.

Yuva-Van is a youth-led initiative designed to promote agroforestry by creating awareness, offering implementation strategies, and ensuring scalability. This campaign focuses on engaging farmers and youth to adopt agroforestry practices, particularly through shade cropping as a transitional model.

Why Agroforestry?

- Agroforestry is a sustainable agricultural practice that combines tree cultivation with traditional farming. It offers numerous benefits, including
- Economic Diversification Farmers earn from timber, fruits, and shade crops simultaneously.
- Environmental Benefits It improves soil fertility, prevents erosion, and enhances biodiversity.
- Water Conservation Compared to wheat-paddy cycles, agroforestry requires less water.

- Carbon Sequestration Trees absorb carbon dioxide, reducing overall greenhouse gas emissions.

Objectives

- Educate farmers about agroforestry benefits and transitional approaches like shade cropping.
- Address economic barriers through Awareness and government subsidies.
- Create Awareness for scalable, low-risk agroforestry models.

Chapter 2

Literature Review

1. Literature Review Bottlenecks in Adoption of Agroforestry Practices in Jammu Division of Jammu and Kashmir

S. K. Gupta, Khare V. Pushkar, P. S. Slathia and Rakesh Kumar

Gupta et al. (2018) conducted a study in Jammu district to identify the bottlenecks in adopting agroforestry practices. The study, involving 160 respondents from 10 blocks, found key barriers to adoption. The research highlighted a significant lack of awareness among farmers about the benefits and practices of agroforestry, hindering its adoption. Farmers were unaware of agroforestry's potential to improve soil fertility, increase productivity, and offer diversified income streams. The absence of structured markets for products like timber and fodder was another major constraint, as farmers lacked the incentives to invest without proper market linkages. Additionally, the study revealed insufficient interaction with government organizations, leading to a lack of technical guidance and financial support for farmers. The absence of subsidies or loans further slowed the adoption process. In conclusion, the study emphasized that addressing these challenges—through enhanced awareness, market development, and stronger government support—is critical for promoting agroforestry as a sustainable livelihood strategy in Jammu and Kashmir.

2. Evaluation of agroforestry systems viz-a-viz livelihood of farmers of Jammu

S K GUPTA, P V KHARE¹, S SEHGAL and P S SLATHIA

Agroforestry, the integration of trees with crops and/or livestock on the same land unit, has long been practiced in temperate regions, including Jammu and Kashmir. This approach offers multiple benefits, such as enhanced biodiversity, improved soil health, and diversified income sources for farmers.

Jammu and Kashmir, two primary agroforestry systems are prevalent

- 1. Agri-Silvicultural System** This system combines agricultural crops with tree plantations, allowing for simultaneous cultivation of crops and timber production.

3. Agro-Silvo-Pastoral System This system integrates agricultural crops, tree plantations, and livestock, providing a diversified source of income and enhancing farm resilience.

Impact on Farmers' Livelihoods

Studies have shown that these agroforestry systems significantly contribute to farmers' livelihoods in the region. For instance, a study conducted in Jammu district during 2019 found that the overall economic returns from the agri-silvicultural system were ₹164,833, while the agro-silvo-pastoral system yielded ₹181,820. These figures underscore the substantial economic benefits derived from integrating trees with agricultural practices.

Challenges and Bottlenecks

Despite the advantages, several challenges hinder the widespread adoption of agroforestry practices

- **Lack of Awareness** Many farmers are not fully informed about the benefits and practices of agroforestry.
- **Market Constraints** There is a lack of structured markets for timber and non-timber forest products, limiting farmers' ability to sell their produce at fair prices.
- **Limited Government Support** Insufficient interaction with governmental organizations and lack of supportive policies impede the adoption of agroforestry practices

Recommendations for Improvement

To enhance the adoption and effectiveness of agroforestry systems, the following measures are recommended

- **Awareness Programs** Conduct training and awareness campaigns to educate farmers about the benefits and implementation of agroforestry.
- **Market Development** Establish structured markets and value chains for timber and non-timber products to ensure fair prices for farmers.
- **Policy Support** Develop and implement policies that encourage agroforestry practices, including financial incentives and technical assistance.

4. AGROFORESTRY-A VIABLE OPTION FOR CROP DIVERSIFICATION IN PUNJAB

DHANDA RS, GILL RIS, SINGH B, AND KAUR N SANGHA KS

Introduction to Agroforestry

Agroforestry integrates trees with agricultural crops, providing ecological and economic benefits. In Punjab, the traditional rice-wheat cropping system has led to soil degradation, groundwater depletion, and pest resurgence. Agroforestry, with species like poplar, eucalyptus, and dek, offers an alternative for sustainable crop diversification. Tree-based systems enhance soil fertility by recycling nutrients from deeper soil layers and providing organic matter through leaf litter.

Year-wise Shade Cropping Under Trees

Intercropping in agroforestry systems is influenced by tree age and canopy growth, affecting light availability and crop yield. Key patterns include

- **Years 1-3** Shade is minimal, allowing most rabi and kharif crops (wheat, mustard, potato, turmeric, sugarcane, moong, bajra, berseem) to grow successfully.
- **Years 4-6** Increasing shade limits crop choices. Shade-tolerant crops like wheat, potato, and mustard are preferred. Kharif crops become less viable.
- **Post-Year 6** As trees mature, competition for sunlight and nutrients reduces crop yields significantly. Farmers often switch to non-crop options like floriculture (marigold or fodder crops)

Proper tree spacing, pruning, and fertilization mitigate yield loss and enhance overall system productivity.

Field During the initial phase, We learned how to assess the site's suitability for tree plantation. This included considering factors such as soil type, water availability, and sunlight exposure, ensuring that the trees would have optimal growing conditions.

Engagement & Pilot Plot Development (Phase 2)

Objective -The goal of Phase 2 was to engage in hands-on tree plantation and initiate a pilot agroforestry plot. This phase aimed to provide practical exposure to the process of planting trees and establishing a small-scale agroforestry project.

Learning Outcomes from Tree Plantation Process

- Site Assessment
 - We were introduced to various tree plantation techniques, such as determining the correct depth for planting, spacing between trees, and the importance of ensuring adequate drainage in the planting area. These techniques are crucial for ensuring long-term tree health and growth.
- Tree Plantation Techniques
 - We were introduced to various tree plantation techniques, such as determining the correct depth for planting, spacing between trees, and the importance of ensuring adequate drainage in the planting area. These techniques are crucial for ensuring long-term tree health and growth.
- Post-Planting Care
 - Post-planting, I learned about essential tree maintenance practices like watering schedules, mulching, and how to protect newly planted trees from pests and diseases. This stage was critical for ensuring that the trees established strong roots and thrived in the early stages of growth.
- Practical Engagement
 - Member actively participated in the tree planting process by a team member where we gained hands-on experience in planting and maintaining trees. This experience was vital in helping me build the necessary practical skills for agroforestry.

Learning Outcomes from Tree Purchase Session

- Tree Selection
 - We learned how to select appropriate tree species based on specific criteria such as climate, soil conditions, growth habits, and fruit-bearing potential. The trees purchased from Mega Fruit Nursery were chosen for their commercial value and suitability to the local environment. The selection process involved understanding different tree varieties and the expected outcomes they could provide in terms of yield and growth.

- Nursery Interaction
 - During the purchase process, I interacted with nursery experts who provided valuable insights into the care and maintenance of the selected trees. This information was essential in understanding the best practices for planting, maintaining, and maximizing the productivity of the trees.
- Diverse Species
 - We gained an understanding of the importance of choosing a diverse range of tree species to ensure variety in the agro forestry plot. This diversity can help mitigate risks and contribute to the sustainability of the farm in the long term.

Pilot Plot Development

- Establishment of the Pilot Plot
 - Based on the knowledge gained from the tree selection and plantation process, a pilot plot was created using 7 trees from MegaFruit Nursery. These trees were strategically chosen for their compatibility with the region's climate and their potential for commercial fruit production.
- Implementation of Techniques
 - The skills learned were directly applied in establishing the plot, including appropriate spacing, depth, and post-planting care practices. The plot is now set up for ongoing observation and monitoring to assess tree growth and revenue potential.

Outcome

The activities carried out in this phase have greatly enhanced my understanding of practical agro forestry. From selecting the right trees and planting them to understanding the care and maintenance required for healthy growth, this hands-on experience has provided me with the skills necessary to carry out successful agroforestry projects in the future. The insights gained from the tree purchase session and plantation process will be valuable for the long-term success of the pilot plot and contribute to the sustainable development of agroforestry systems in the region.

Chapter 3

Campaign Strategy

Campaign Strategy for Agroforestry Model Development- 3rd of January to 30th January

Phase 1- Initial Engagement & Awareness (Jan 3 - Jan 10)

1. Interaction with SKUAST Resource Person-

- **Objective** Gain expert insights on agroforestry practices and approaches.
- **Action** Conduct a detailed discussion with the resource person from SKUAST to gather knowledge on best practices and sustainability measures.
- **Outcome** Foundation of technical understanding for the agroforestry model.

2. Literature Review-

- **Objective** Understand current research and case studies on agroforestry.
- **Action** Review academic papers, reports, and market analysis related to agroforestry, its environmental benefits, and commercial viability.
- **Outcome** Informed decisions based on research for model design and implementation.

Phase 2 Field Engagement & Pilot Plot Development (Jan 11 - Jan 20)

1. Hands-on Tree Plantation by Team Member

- **Objective** Demonstrate practical application of agroforestry.
- **Action** One team member leads the tree plantation process on-site, showing the rest of the team how to properly plant and maintain trees.
- **Outcome** Demonstration of skill development and practical engagement in agroforestry.

2. Pilot Plot Creation with 7 Trees from MegaFruit Plant Nursery (Chakroi)

- **Objective** Start a hands-on pilot project to monitor tree growth and assess potential revenue streams.
- **Action** Establish a small plot with 7 trees purchased from MegaFruit, ensuring diverse species are chosen based on their commercial and fruit-bearing potential.
- **Outcome** A small-scale agroforestry plot ready for observation and evaluation.

3. External Market Price Study

- **Objective** Identify revenue opportunities for the agroforestry model.
- **Action** Conduct a market study to understand external pricing trends for tree products (fruits, timber, etc.).
- **Outcome** Insight into potential income from the trees once they begin bearing fruit.

Phase 3 Online Engagement & Volunteer Training (Jan 21 - Jan 30)

1. Online Webinar for Youth Volunteers

- **Objective** Build a community of young leaders who can spread awareness about agroforestry in their villages.
- **Action** Host a webinar engaging youth from various villages, introducing the concept of agroforestry and explaining their role as volunteers.

Outcome A committed group of volunteers who will act as awareness ambassadors in their respective villages.

Key Goals

- Increased awareness of agroforestry practices among youth in rural areas.
- Establishing a solid foundation for the agroforestry model with a pilot project.
- Community engagement through youth volunteers who will spread awareness in their villages.

Execution of Phases

Interaction with SKUAST Resource Person (Phase 1)

Objective

The primary goal of interacting with the SKUAST resource person was to gain expert insights into agroforestry practices and approaches, specifically those suitable for the Jammu region. This interaction was aimed at enhancing the technical understanding of agroforestry systems and ensuring the model's sustainability.

Action

A detailed discussion was conducted with the expert from SKUAST, covering various aspects of agroforestry such as suitable tree-crop combinations, sustainability measures, and practical implementation strategies. Key topics included the benefits of agroforestry for soil fertility, water conservation, and improving livelihoods in the region. The expert also provided guidance on overcoming common barriers to adoption, such as market access and awareness gaps.

Outcome

The interaction laid the foundation for the technical understanding required to design the agroforestry model. It provided crucial information on best practices, sustainable techniques, and strategies for engaging farmers. The insights gained were instrumental in shaping the approach for the pilot plot and future outreach efforts. This knowledge will also inform the scaling of agroforestry practices in the region, addressing both environmental and economic goals.

Chapter 4

Economics

External Market Price Study and Comparative Analysis (Phase2)

1. Agroforestry Model (Mosambi & Guava Trees)

- **Initial Investment:** ₹9,120 (Net Cost after Government Subsidy: ₹4,560)
- **Revenue in Initial Years:**
 - **Mosambi:** Yield of 60 kg per tree for 41 trees = 2,460 kg. At ₹30 per kg:
 - **Revenue:** $2,460 \text{ kg} \times ₹30 = ₹73,800$
 - **Guava:** Yield of 10 kg per tree for 42 trees = 420 kg. At ₹40 per kg:
 - **Revenue:** $420 \text{ kg} \times ₹40 = ₹16,800$
- **Total Revenue in Initial Years:**
 - **Total Revenue** = ₹73,800 (Mosambi) + ₹16,800 (Guava) = ₹90,600
- **Profit in Initial Years:**
 - **Total Profit** = ₹90,600 (Revenue) - ₹4,560 (Net Cost) = ₹86,040
- **Revenue after Maturity (Post-3rd/4th Year):**
 - **Mosambi:** Yield of 100 kg per tree for 41 trees = 4,100 kg. At ₹30 per kg:
 - **Revenue:** $4,100 \text{ kg} \times ₹30 = ₹123,000$
 - **Guava:** Yield of 25 kg per tree for 42 trees = 1,050 kg. At ₹40 per kg:
 - **Revenue:** $1,050 \text{ kg} \times ₹40 = ₹42,000$
- **Total Revenue after Maturity:**
 - **Total Revenue** = ₹123,000 (Mosambi) + ₹42,000 (Guava) = ₹165,000
- **Profit after Maturity:**
 - **Total Profit** = ₹165,000 (Revenue) - Expenses = Profit (Varies)

2. Traditional Paddy Farming

- **Initial Investment (per acre):**
 - **Total Cost:** ₹18,000
- **Yield:** 25 quintals per acre
- **Revenue:** At ₹3,100 per quintal:
 - **Revenue** = 25 quintals × ₹3,100 = ₹77,500
- **Profit:**
 - **Total Profit** = ₹77,500 (Revenue) - ₹18,000 (Cost) = ₹59,500
- **Per Quintal Yield:**
 - **Price per Quintal** = ₹3,100

3. Traditional Wheat Farming

- **Initial Investment (per acre):**
 - **Total Cost:** ₹21,500
- **Yield:** 22.5 quintals per acre
- **Revenue:** At ₹2,500 per quintal:
 - **Revenue** = 22.5 quintals × ₹2,500 = ₹56,250
- **Profit:**
 - **Total Profit** = ₹56,250 (Revenue) - ₹21,500 (Cost) = ₹34,750
- **Per Quintal Yield:**
 - **Price per Quintal** = ₹2,500

5. Conclusion

- **Agroforestry** provides higher revenue and profit compared to traditional farming models, especially when considering the yield from both Mosambi and Guava trees.
 - **Per Quintal Revenue:** Mosambi (₹30), Guava (₹40) gives a more diversified and stable income.
 - **Total Profit after Maturity:** ₹160,440 (Varies as per LABOUR Environment)
- **Traditional Paddy Farming** generates a solid profit of ₹59,500, with a higher **per quintal yield** of ₹3,100 compared to wheat. However, it falls short when compared to agroforestry.
- **Traditional Wheat Farming** provides lower revenue and profit, and has the lowest **per quintal yield** of ₹2,500.

Thus, **agroforestry** stands out as a highly profitable and sustainable alternative, especially with the long-term benefits of tree farming.

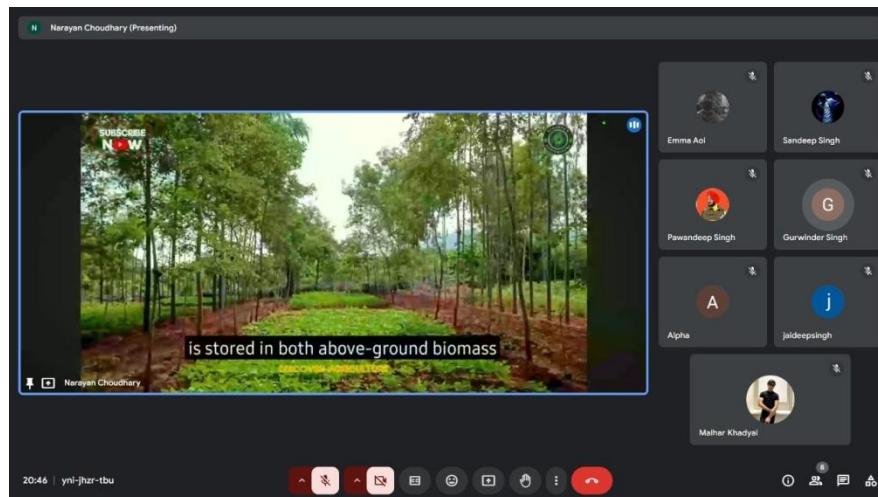
Chapter 5

Youth Engagement

Phase 3 Online Engagement & Volunteer Training

1. Online Webinar for Youth Volunteers

Completion of Online Webinar for Youth Volunteers



Objective-

The primary goal of the webinar was to build a network of young leaders who can actively promote agroforestry awareness in their respective villages.

Execution-

- A virtual webinar was conducted on 27/1/2025 via Google Meet.
- The session was led by Narayan Choudhary and attended by 10 Participants.
- Topics covered included the importance of agroforestry, its environmental and economic benefits, and the role of volunteers in creating local impact also pilot plantation was also a matter of discussion sourcing of raw material soil preparation was also discussed.
- A Q&A session allowed participants to clarify doubts and share insights.

Outcome-

As a result of this webinar, a committed group of 8 youth volunteers have been identified and on

boarded to act as awareness ambassadors in their respective villages. They will be actively involved in spreading knowledge about agroforestry practices and encouraging local adoption.

- **Limited Public Interaction** While the campaign has made strides in research and community setup, there has been limited interaction with a broader public.
- **Reaching a Wider Audience**, the campaign has yet to fully engage the wider farming community or youth across regions.
- **Next Steps**
 - Expand outreach efforts to involve more youth in agroforestry.
 - Encourage more active participation within the WhatsApp community.
 - Begin implementing on-the-ground activities, such as pilot agroforestry projects or workshops for farmers.

6. Performance Metrics (Preliminary)

- **Literature Review** 20+ key studies reviewed on agroforestry practices, benefits, and challenges.
- **Revenue Streams Identified** 5 viable revenue options identified for agroforestry (timber, carbon credits, etc.).
- **Community Engagement** 50+ youth members joined the WhatsApp community, providing initial feedback and interest.
- **Qualitative Impact** Some feedback in the WhatsApp group has expressed interest in exploring agroforestry for climate change mitigation and seeking advice on starting small agroforestry projects.

Chapter 6

Challenges and Conclusion

Challenges and Issues

- **Limited Public Interaction** The early stage of the campaign and lack of targeted engagement strategies have resulted in limited public interest so far.
- **Community Engagement** More active participation within the WhatsApp group is needed to ensure consistent knowledge sharing and to spark meaningful discussions on agroforestry adoption.

8. Lessons Learned

- **Research Insights** The literature review highlighted that agroforestry is a highly beneficial practice but faces adoption challenges, including financial risk perception and lack of awareness.
- **Community Engagement** The importance of creating interactive, engaging content to maintain the attention of the youth was clear. More dynamic and rewarding engagement strategies, such as online challenges or informational webinars, can help increase participation.

Conclusion

The Yuva-Van campaign has made significant progress in the foundational phase. Research on agroforestry has been initiated, potential revenue streams have been identified, and a youth-focused community has been created. The next phase will focus on expanding public engagement, actively involving youth in the campaign, and moving toward tangible agroforestry initiatives on the ground. The long-term goal remains to establish agroforestry as a key solution for sustainable agriculture and environmental stewardship.

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Yuva-Van : Youth for Agroforestry

A Campaign to make a Change



1. Malhar Khadyal 2. Mohd. Sajid 3. Narayan Choudhary 4. Pawandeep Singh

Under Mentorship of
Prof Anil Gupta
Dr Shallu Sehgal Sharma

Why Agroforestry?

- ❖ Traditional systems like wheat-paddy are depleting soil and water resources.
- ❖ Agroforestry offers **economic diversification** and **environmental benefits**.
- ❖ This campaign focuses on **awareness, implementation, and scalability** of agroforestry.

If agroforestry has such potential, why haven't we scaled it yet?"

Farmers Perception

- ❖ Over-reliance on traditional systems like wheat-paddy.
- ❖ Lack of awareness about sustainable alternatives like Agroforestry **65%**.
- ❖ Risk due to high initial costs of agroforestry.
- ❖ Absence of organized markets for agroforestry products **82%**.

Objectives of Campaign

- ❖ Educate farmers about agroforestry benefits and transitional approaches like shade cropping.
- ❖ Address economic barriers through Awareness and government subsidies.
- ❖ Create Awareness for scalable, low-risk agroforestry models.

WHY ? HOW ? WHAT ?

Why Agroforestry Over Wheat-Paddy?

- Reduces soil degradation and groundwater depletion.
- Diversifies income through timber and fruits.

How to Overcome Farmer Concerns About Costs?

- Encourage boundary planting.
- Utilize government subsidies to reduce upfront investment.

What is Environmental Impact of this ?

- Agroforestry improves soil health, sequesters carbon..

What About Youth Engagement?

- Workshops and Instagram campaigns will engage younger generations.

Why Yuva Van Campaign is Unique?

- ✓ Integrating Youth & Farmers
- ✓ Practical Implementation with Pilot Projects
- ✓ Boundary Plantation Approach
- ✓ Economic Viability & Market Linkages
- ✓ Community-Driven Model

Phases of the Campaign

Phase 1: Initial Engagement & Awareness

- Interaction with SKUAST experts for technical knowledge.
- Literature review on agroforestry adoption.

Phase 2: Field Engagement & Pilot Plot Development

- Hands-on tree plantation at pilot sites.
- Development of a pilot agroforestry plot with (4) tree species.
- Market research on agroforestry product pricing and demand.

Phase 3: Online Engagement & Volunteer Training

- Hosting an online webinar for youth ambassadors.
- Volunteer training to spread agroforestry awareness in rural areas.
- Establishing WhatsApp groups/Instagram Page for knowledge sharing and updates

Phase 1 - Initial Engagement & Awareness

Interaction with SKUAST Experts

- Purpose: Gain technical insights on agroforestry
- Topics Discussed: Suitable tree species, best practices, sustainability measures.

Literature Review on Agroforestry Adoption

- Objective: Understand challenges and opportunities.
- Sources: Research papers, case studies, government reports.

Phase 2 - Field Engagement & Pilot Plot Development

◆ Hands-on Tree Plantation at Pilot Sites

- Gain hands-on agroforestry experience.
- Gain Technical Knowledge.
- Gain insights about variety and plantation models

◆ Development of a Pilot Agroforestry Plot

- Planting fruit trees (guava, Citrus) to enhance land productivity.
- Documented best practices in soil prep, planting & mulching.

▲ Studying price trends to evaluate profitability



◆ Next Steps

- Develop farmer workshops & practical guides.
- Strengthen access to quality planting resources.
- Expand community collaboration for region-specific solutions.

"Progress in Action Trees Planted Under Yuva-Van" (P-2)



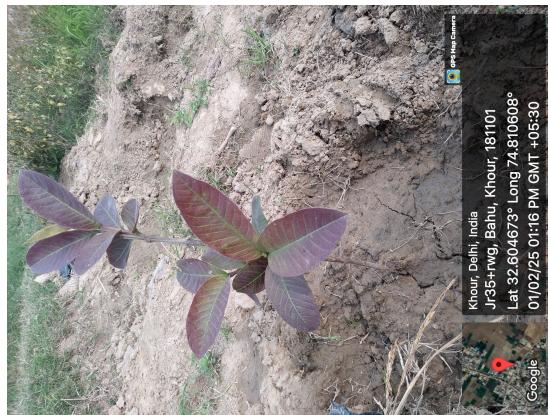
Citrus (M2)



Guava (Lalita)



Guava (Lalima)

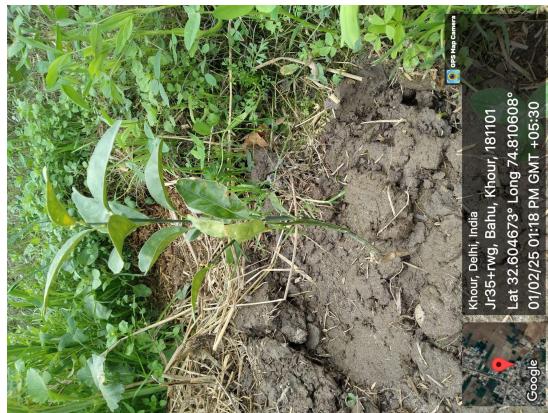


"Progress in Action Trees Planted Under Yuva-Van"

Hybrid Lemon

Citrus (Murcutt)

Citrus (Daisy)



"Boundary Plantation - The First Step Towards a Sustainable Agroforestry Journey"

- ✓ Maximizes Land Utilization Uses unproductive edges of farms without affecting main crops.
- ✓ Acts as a Windbreak Protects crops from strong winds, reducing damage and soil erosion.
- ✓ Provides Additional Income Farmers can earn from timber, fruits, fodder, or medicinal plants.

How Does Boundary Plantation Work?

 Trees are planted along field boundaries to avoid interference with main crops.

 Multi-purpose trees like fruit bearing or teak, neem, moringa, and bamboo provide wood, fodder, or other benefits.

Benefits to Farmers

- ฿ Extra Income Timber, fodder, or fruit sales add long-term financial gains.
- 🌿 Environmental Protection Reduces wind & water erosion, improves biodiversity.
- 🛡 Farm Security Acts as a natural barrier against animals and trespassers.
- 🌱 Improved Soil Fertility Leaf litter and organic matter enrich the soil.

Market Price Study and Comparative Study

1. Agroforestry Model (Mosambi & Guava Trees)

- Initial Investment ₹9,120 (Net Cost after Government Subsidy ₹4,560)

Revenue in Initial Years

- Mosambi 2,460 kg × ₹30 = ₹73,800
- Guava 420 kg × ₹40 = ₹16,800
- Total Revenue ₹90,600

Profit in Initial Years

- Profit ₹86,040

(Varies with expenses)

Revenue After Maturity (Post- 3rd/4th Year)

- Mosambi 4,100 kg × ₹30 = ₹123,000
- Guava 1,050 kg × ₹40 = ₹42,000
- Total Revenue ₹165,000

Profit After Maturity

- Profit ₹165,000 (Varies with expenses)

Prices used for calculations are from different sources Both Primary and Secondary (IndiaMart) etc

2. Traditional Paddy Farming

- Initial Investment (per acre) ₹18,000
- Revenue 25 quintals × ₹3,100 = ₹77,500
- Profit ₹59,500
- Per Quintal Yield ₹3,100

Traditional Wheat Farming

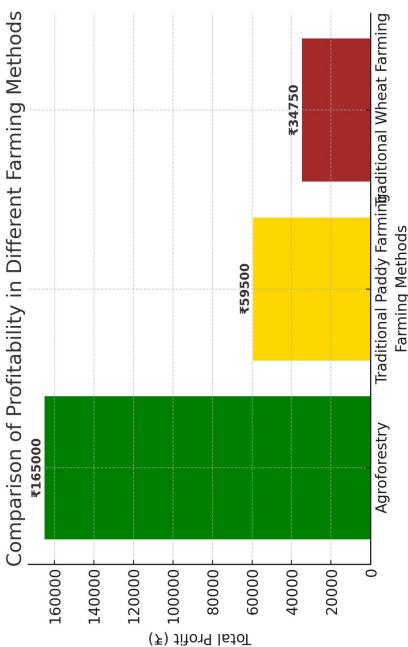
- Initial Investment (per acre) ₹21,500
- Revenue 22.5 quintals × ₹2,500 = ₹56,250
- Profit ₹34,750
- Per Quintal Yield ₹2,500

Prices used for calculations are from different sources Both Primary and Secondary (IndiaMart) etc

Key Takeaway

- Agroforestry
 - Higher revenue and profit, especially with diversified yields (Mosambi & Guava).
 - Total Profit After Maturity ₹1,65,000 (Varies based on environment & labor).
 - Long-term sustainable benefits.
- Traditional Paddy Farming
 - Profit ₹59,500, but falls short compared to agroforestry.
- Traditional Wheat Farming
 - Profit ₹34,750, with lowest per quintal yield of ₹2,500.

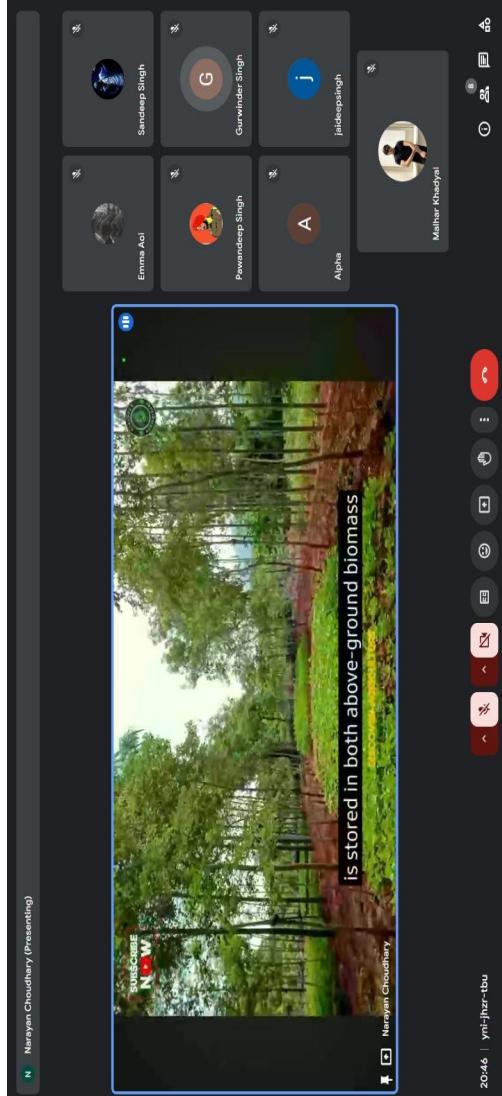
Agroforestry offers the most profitable and sustainable model, especially for long-term returns.



Phase 3 - Online Engagement & Volunteer Training

Online Webinar for Youth Volunteers

- ⌚ Objective Train young leaders to conduct awareness workshops for farmers in villages.
- 🛠 Action
- ✅ Webinar introducing agroforestry and their role as facilitators.
- ✅ Hands-on training on workshop delivery, key messaging & farmer engagement.
- 🏆 Outcome Volunteers ready to host workshops for small farmer groups and Gram Sabhas in their villages.



YW Volunteer Communication & Engagement

- 🎯 **Action** **Objective** Ensure ongoing support & coordination for trained volunteers.
- 🔧 **Action** **Created a WhatsApp and Instagram Page** for regular updates.
- 💡 **Action** **Sharing resources, FAQs & success stories** for better farmer engagement.
- 🏆 **Action** **Outcome** A dedicated team of workshop facilitators driving grassroots agroforestry awareness.

YUVA VAN : Youth for Agroforestry

Abhay, Bhoomi, Cyber, Dyle, Gurjot, ...
WEDNESDAY

Pawandeep added +91 7392 990 463
THURSDAY

M

34 members

Group info

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Add member

Invite to group via link

You Hey there! I am using WhatsApp.

Pawandeep ŠAM | NGO | VARŪNĀH

~ Alafasy Dont worry, Allah is always with ...

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Group admin +91 97976 74849

Group admin +91 60566 91464

Group admin +91 80320 3224

Agroforestry Basics

Slivopasture Systems
Windbreaks
Agroforestry
Agrocropping
Agroforest
Forest Buffers

Forest Farming
Aldo 100 gm. ↗

Type a message

yuva_van_agroforestry

3 posts 38 followers 13 following

NEW

Unlocking Agroforestry Potential in Jammu and Kashmir

Creating Awareness about Agroforestry

Plant Trees Earn Greens

Followed by **nirbhay_singh_1559**, **_ishaaan_21_** and 24 others

Following

Message

AGROFORESTRY

Slivopasture Systems
Windbreaks
Agroforestry
Agrocropping
Agroforest
Forest Buffers

Forest Farming
Aldo 100 gm. ↗

AGROFORESTRY

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Conclusion - Key Achievements and Future

Key Achievements

- ✓ Expert Knowledge Gained Insights from SKUAST resource persons and research-driven decisions.
- ✓ Pilot Agroforestry Model Established Hands-on tree plantation and market study completed.
- ✓ Youth Volunteer Network Formed Trained local leaders ready to spread awareness.

The Road Ahead

- ❖ **Workshops by Our Trained Volunteers** Volunteers will now host awareness sessions in their villages, Gram Sabhas, and farmer groups to promote agroforestry practices.
- ❖ **Local Engagement & Expansion** More farmers will be encouraged to adopt agroforestry through interactive demonstrations.
- ❖ **Sustained Monitoring & Growth** Volunteers will regularly follow up with participating farmers to ensure success.

Thankyou

See You in Workshops