

CSR Impact Assessment

FY 2023-24

Supported by :

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Impact Assessment Conducted by:



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Mahindra Project Hariyali – Northern India Environmental Sustainability Initiative



Project Objectives

Project Goal

Launched in 2007 and expanded to Araku Valley in 2010, Project Hariyali is Mahindra & Mahindra's flagship environmental initiative. Since 2022, Project Hariyali has extended its reach to Solan in Himachal Pradesh, Tarn Taran and Moga in Punjab, Shravasti in Uttar Pradesh, and Wardha in Maharashtra.

The overarching goal of the project is to restore degraded landscapes, enhance biodiversity, and improve livelihoods through afforestation and sustainable agroforestry, while also contributing to climate resilience and carbon sequestration.

Need of the Project

- Over-reliance on monoculture farming (wheat and paddy).
- Excessive use of chemical fertilizers and pesticides.
- Severe groundwater depletion and soil degradation.
- Declining biodiversity and agricultural sustainability.
- Migration trends among farmers due to reduced productivity & income instability.
- Rising input costs for farmers.
- Limited livelihood diversification, especially for women.
- India's Bonn Challenge: Restore 26M hectares by 2030.
- Alignment with National Agroforestry Policy (2014).

Activities



Community Mobilization and Needs Assessment:

- Gurdwara meetings and door-to-door awareness campaigns.
- Participatory decision-making for sapling selection and planting strategy.
- Extensive need assessment survey conducted to determine no. and type of saplings required and suitability & availability of land for specific plant species.



Sapling Distribution and Plantations :

- Centralized village drop-off points for sapling distribution.
- Sapling type - Mix of fruit (e.g., mango, guava) and timber trees (e.g., teak/Sangwan).
- Shift from paddy to water-efficient orchard farming.



Training & Capacity Building:

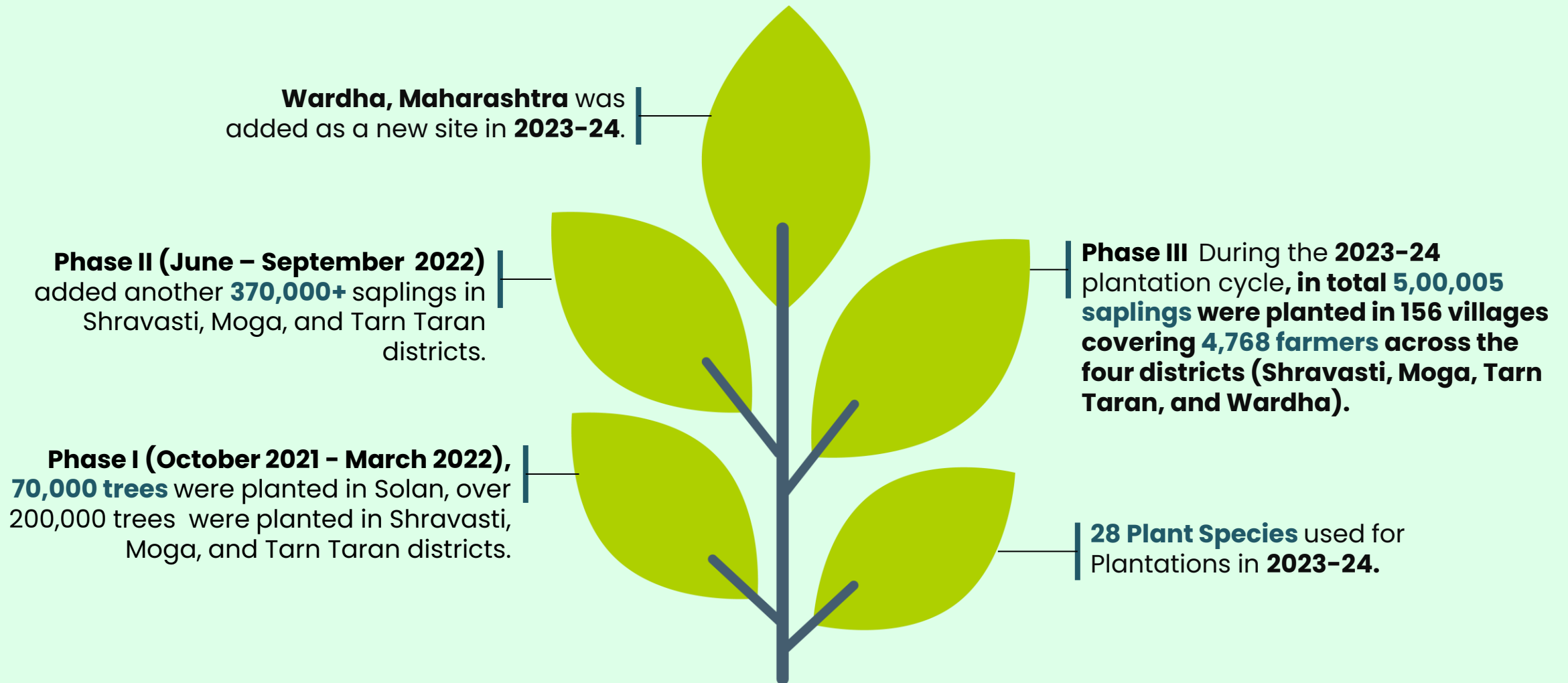
- **4+ training sessions annually** for farmers.
- Training on plant spacing, organic composting, mulching, weeding, and pest control using neem and Khatti Lassi.
- **Plant Spacing:** Mango trees 15-20 feet apart, Kinnow trees 7-8 feet apart, ensuring proper root expansion and nutrient absorption.
- Distribution of seasonal farming calendars.



Monitoring and Follow-up :

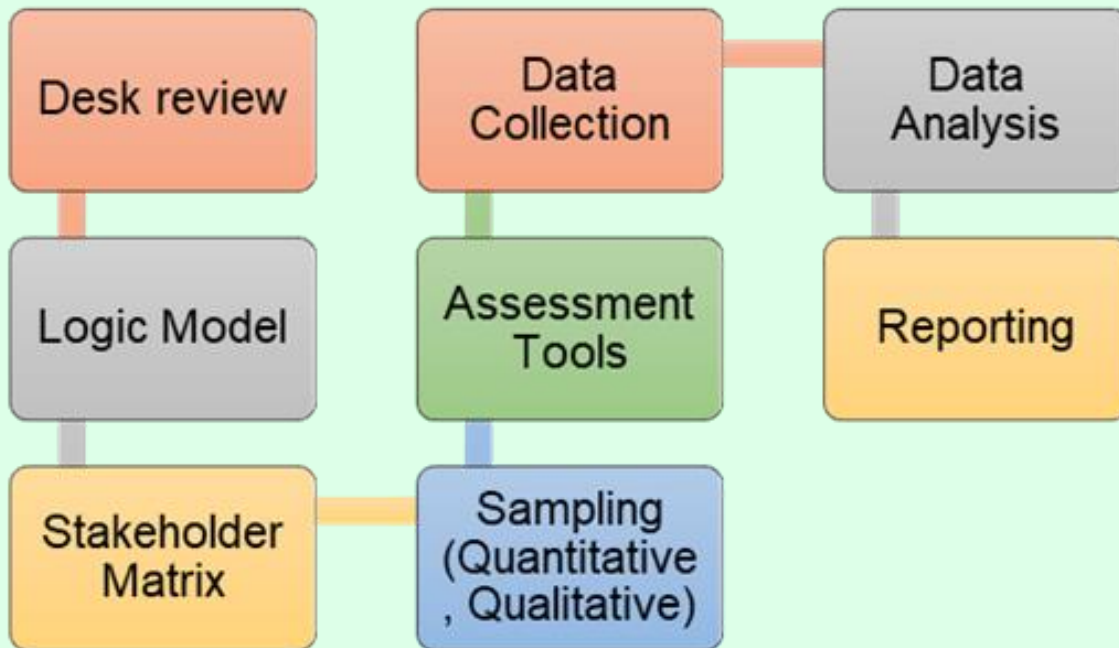
- Regular field visits and sapling survival tracking.
- WhatsApp groups formed for peer learning and problem-solving.
- Use of geo-tagging for farm mapping and sapling tracking.

Project Reach



Approach & assessment Methodology

Assessment Methodology



Social Responsibility Standards


The impact assessment methodology assesses the project on BlueSky's **Process Maturity & Goals Achievement Framework (PMGA)**, built on the guidance available to the following standards:

1. **Social Auditing Standards (SAS)**, regulated by the **ISAI** under **SEBI**
2. **ISO IS 26000:2018 – Guidance on Social Responsibility**
3. **The Companies Act 2013 Sched VII Sec 135**
4. **UN Sustainable Development Goals**




Key Findings


1. High Sapling Survival Rate & Reforestation Success



Saplings Planted (2023–24):
1,20,400 (in Tarn Taran)



Sampled Saplings Studied: 510
saplings across 5 villages of Tarn Taran, Punjab




Overall Survival Rate: 97.8%


Contributing factors:

- Scientific land and soil assessment
- Tailored sapling distribution
- Timely monsoon-aligned plantation
- Farmer training on spacing, mulching, and organic inputs

2. Significant Carbon Sequestration Contribution



For the saplings planted in 2023–24, a sample of **510 saplings was studied in 5 villages of Tarn Taran in Punjab**, to estimate the potential carbon sequestered.



Estimated Carbon Sequestration from FY 2023–24 plantations: **1,51,50,122 lbs of CO₂** by **2026–27**.

Details of Potential Carbon Sequestration

Locations	CO ₂ Sequestered in (Lbs) estimate for 2024-25	CO ₂ Sequestered in (Lbs) estimate for 2025-26	CO ₂ Sequestered in (Lbs) estimate for 2026-27
Tarn Taran Punjab	31,27,669	33,77,882	36,48,113
Wardha, Maharashtra	32,47,164	35,06,938	37,87,493
Moga Punjab	31,19,876	33,69,466	36,39,023
Shravasti UP	34,94,079	37,73,605	40,75,493

Key Findings

3. Strengthening Climate Resilience & Water Conservation



Adoption of regenerative agriculture with techniques such as mulching and organic farming methods.



Reduction in Water Consumption by Transitioning from Paddy to Horticulture.



Adoption of Mulching and Drip Irrigation for Water Conservation.



Shift in Farmer Mindset towards Long-Term Water Sustainability.

4. Biodiversity Enhancement & Ecosystem Restoration



Diversified sapling distribution to improve biodiversity – The selection included mango, guava, and Sangwan (Teak), which will contribute to soil enrichment and habitat creation for local wildlife.



Switching to organic farming methods, such as Neem and Khatti Lassi sprays for pest control, increased beneficial insects and soil fertility.



The higher number of trees planted has contributed to increased green cover in their region, improved soil retention, and better water conservation.

Key Findings

5. Socio-Economic Impact & Livelihood Enhancement



1,726 farmer families benefited in Tarn Taran, Punjab.



Reduced household expenses via homegrown organic fruits & vegetables



Women engaged in selling chemical-free produce for income



Anticipated revenue from maturing timber trees (e.g., Teak/Sangwan)



Gradual shift from water-intensive crops to sustainable orchard farming

6. Community-Led Ownership and Sustainability



Farmers were actively involved in: Sapling selection based on soil suitability.



Planning through community meetings (e.g., Gurdwaras).



WhatsApp groups creation for peer learning and continuous support.



Strong sense of community ownership → long-term sustainability of efforts.

PMGA Impact Assessment Framework

(Process Maturity & Goal Achievement)

1. Process Maturity Score (X-Axis)

- Scored on: Standard Criteria
- Frameworks Referenced: ISO 26000 & NGRBC

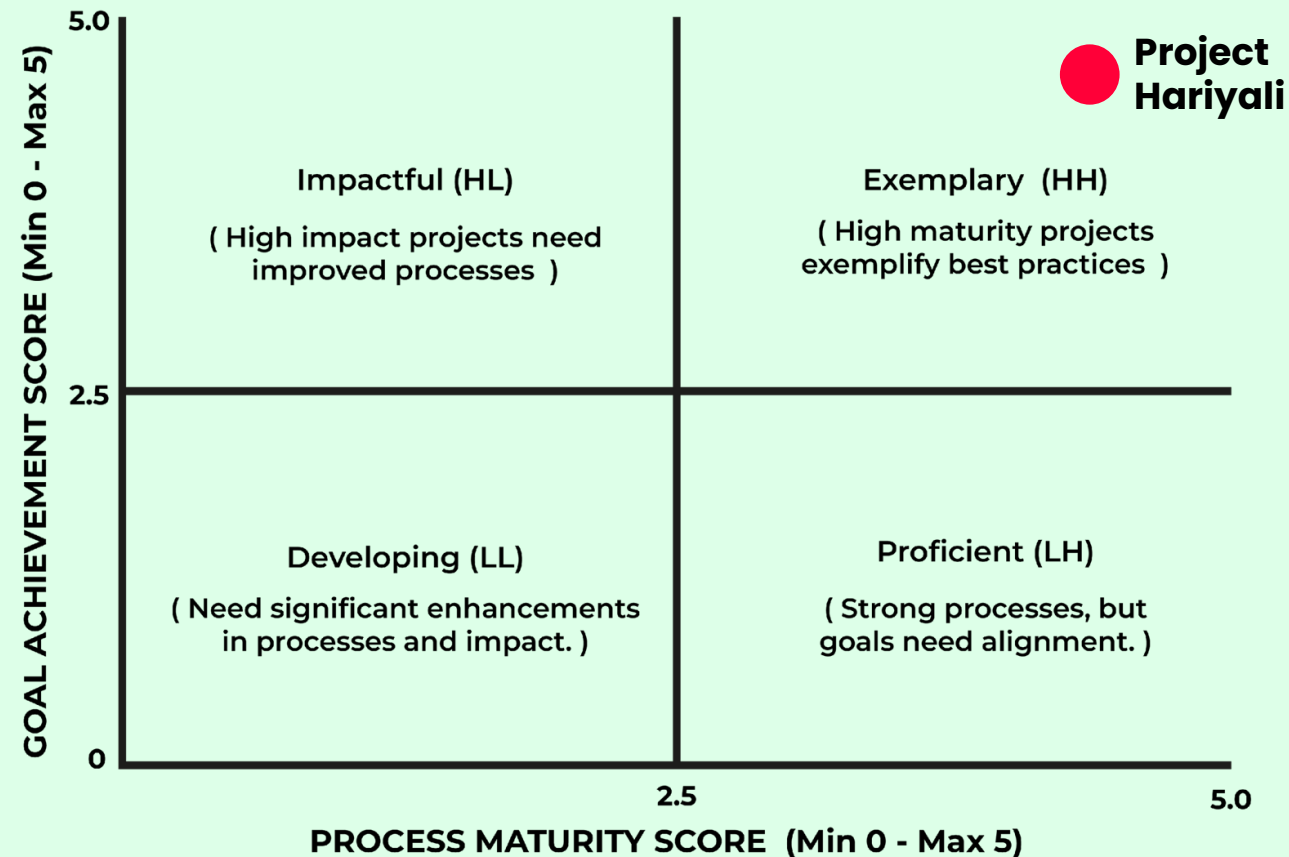
Indicates strong alignment with standardized best practices across projects

2. Program Goal Achievement Score (Y-Axis)

- Scored on: Project-specific Criteria
- Framework: Program Logic Model

Reflects high achievement against intended project outcomes for Project Hariyali

Project Impact Category



Farmers Testimonials

On Sustainable Farming & Regenerative Practices



"Earlier, we used excessive water for wheat and paddy. Now, with mulching and drip irrigation, we save water and see better results in fruit trees." — **Farmer, Tarn Taran, Punjab**

On Climate Change & Environmental Impact



"The air is cleaner, and the land is healthier since we started planting fruit trees. Earlier, we depended on chemical fertilizers, but now we use organic compost." — **Farmer, Tarn Taran, Punjab**



Farmers Testimonials

On Livelihood Improvement & Financial Security



"We no longer go to the market to buy fruits and vegetables. It has not only increased our income but also reduced our household expenses." — **Farmer, Tarn Taran, Punjab**

On Community Engagement & Farmer Training



"Training under Project Hariyali has helped us understand organic farming. We now make our compost and use neem and lassi-based pest control sprays instead of chemicals."
— **Farmer, Tarn Taran, Punjab**



CASE STUDY 1

MANJIT KAUR

NAUSHEHRA PANNUAN VILLAGE, TARN TARAN, PUNJAB

Background

- 20+ years of traditional farming (wheat & paddy)
- Faced rising costs, water scarcity & declining soil fertility

Joining Project Hariyali (2023)

- Attended an awareness meeting in her village
- Adopted organic farming & agroforestry
- Received guava, mango, sapodilla saplings, and training on:
 - Mulching
 - Organic composting
 - Pest control
 - Tree spacing

Impact Within a Year

- **Improved Soil Health** → Higher fertility, better yields
- **Reduced Costs** → Organic methods cut expenses
- **Diversified Income** → Fruit trees maturing, new revenue streams
- **Community Influence** → Inspired peer adoption of practices

Future Aspirations

- Scale organic farming
- Mobilize more farmers to join Project Hariyali
- Promote agroforestry for environmental sustainability

CASE STUDY 2

Kalwinder Kaur

Bhail Dhai Wala Village, TARN TARAN, PUNJAB

Transition to Organic and Sustainable Farming

Kalwinder received training under the project on sapling spacing, organic pest control, and composting. She observed better soil fertility and plant health and switched fully to organic fertilizers. She also adopted mulching and drip irrigation, reducing water use.

Financial Impact

By eliminating chemical fertilizers and growing more of her produce, Kalwinder has cut household expenses and expects additional income from selling surplus.

A Role Model for Sustainable Farming

Now a vocal advocate for organic farming, Kalwinder motivates other farmers in her village to adopt sustainable practices. Her success has inspired many to attend training sessions and explore organic methods.

Awarded Exemplary Rating

CSR INSPECTION CERTIFICATE	
	Bluesky Sustainable Business LLP AWARDS AN Exemplary Rating Exemplary Projects have high process maturity and are successfully reaching their program goals. These projects represent best practices in both implementation and impact, demonstrating an exemplary model for other projects to follow.
FOR CSR PROJECT Project Hariyali Northern India FY 23-24 Project Hariyali aims to increase green cover, restore degraded landscapes, and mitigate climate change through large-scale plantation of native and agroforestry species. The initiative enhances soil health, supports sustainable farming practices, and improves farmer livelihoods by integrating fruit, forest, and shade trees—fostering climate resilience, carbon sequestration, and long-term community ownership.	
SUPPORTED BY Mahindra & Mahindra Ltd 4th Floor, Mahindra Towers, Dr G.M. Bhosale Marg, PK. Kume Chowk, Worli, Mumbai - 400018	
CSR Category: (i) Eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care (iv) Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water (v) Rural development projects	
Service contract number:	BSSB-2400-00054
Certificate number:	IB067-2400-00-00054
Date of issue:	25th March 2025
 Jyotsna Belliappa Head - CSR Inspections	 Shrinivas Bhat Chief Executive Officer
 	
* Bluesky Sustainable Business LLP complies with NABCB accreditation criterion of "Type A" Inspection Body. * To be read in connection with Annexure 1	

ANNEXURE 1	
Scope of Work To assess sapling survival rate, carbon sequestration potential, and socio-economic benefits of afforestation for farmer communities for Project Hariyali - North India FY 2023-24.	
Assessment Criteria BlueSky's Accredited Impact Assessment methodology framework is based on IS ISO 26000: 2006 Guidance on Social Responsibility and National Guidelines on Responsible Business (NGRBC, 2008).	
Inspection Rating Table Developing: Projects have low process maturity and are not reaching their intended program goals effectively. These projects may require significant improvements both in terms of how they are being implemented (processes) and their overall impact. The focus should be on strengthening their operational processes and setting clearer, more attainable goals. Insufficient: These projects have a high impact despite lower process maturity. The outcomes are being achieved, and program goals are being met, but the internal processes and operational practices need more development. Such projects could benefit from refining their processes to sustain or enhance their impact. Potential: These projects have strong operational processes in place but are not yet achieving their intended program goals. They demonstrate maturity in planning and execution but may need to realign their focus on ensuring that these efforts translate into meaningful impact. The focus should be on adjusting goals or strategies to improve outcomes. Exemplary: Projects have both high process maturity and are successfully reaching their program goals. These projects represent best practices in both implementation and impact, demonstrating an exemplary model for other projects to follow. The challenge for these projects is to maintain their excellence and look for continuous improvement.	
 	