



# ASTRO SETUP

## AND TRAINING REPORT

MURSHET VILLAGE, MAHARASHTRA



# 01

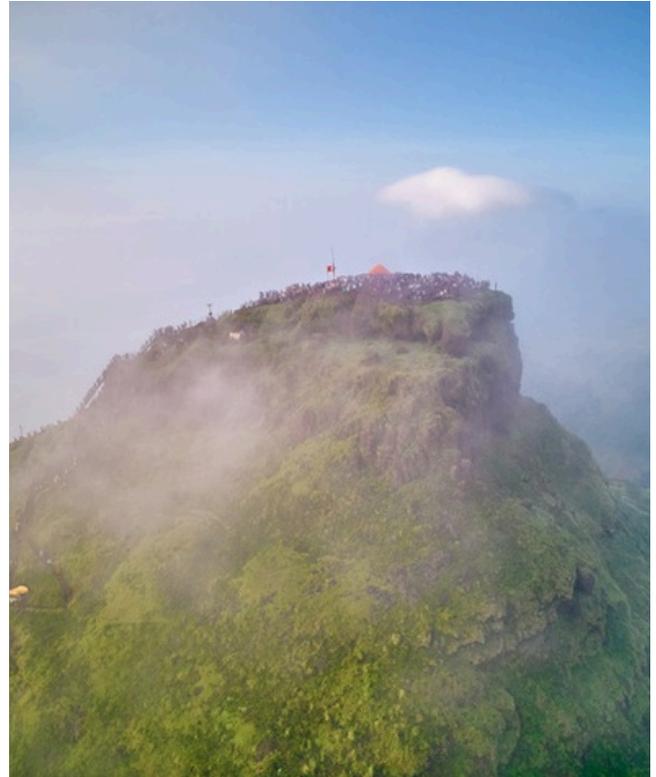
## EXECUTIVE SUMMARY



The Astro Training Program held in Murshet Village from 12th to 15th January 2026, supported by ASK Foundation and conducted by GHE, aimed to create sustainable livelihoods through astronomy-based tourism. Selected for its dark skies and existing Phase 1 setup of two tents and one homestay, Murshet offers ideal conditions for stargazing. Six local trainees were equipped with skills in telescope handling, stargazing and tourist engagement and a complete astro setup including a 10-inch Dobsonian telescope with 20 mm and 12.5 mm eyepieces was installed by the GHE team. The program established astro tourism as a stable, skill-based income model that complements trekking and camping while strengthening local livelihoods and expanding Murshet's tourism potential.

# REGIONAL OVERVIEW

Murshet is located in Akole Taluka of Ahmednagar District, within the scenic Bhandardara region of Maharashtra. About 134 km from Ahmednagar and 129 km from Mumbai, it lies amid the Sahyadri ranges, known for rivers, lakes, waterfalls, forts and trekking trails such as Mount Kalsubai, Wilson Dam, Arthur Lake, Ratangad, Harishchandragad, Sandhan Valley, Umbrella Falls and Randha Falls. Its proximity to major trekking routes makes Murshet an important base village for trekkers and campers, offering a peaceful blend of mountains, forests and rural life.



## TOURISM POTENTIAL

Murshet's key strength is its dark night sky with minimal light pollution, making it ideal for stargazing and astro tourism. Alongside trekking and camping, astro tourism adds a powerful night-time experience, enriches visitor engagement and creates new livelihood opportunities for the local community.

# SEASONAL LIVELIHOOD GAPS

Tourism in Murshet and the surrounding Bhandardara region is strongly dependent on trekking, camping and guiding activities, which are seasonal and highly influenced by weather conditions. While these activities attract visitors during peak months, they do not provide a stable or year-round source of income. This creates financial uncertainty for local guides and homestay operators and limits long-term livelihood security. The lack of diversified tourism products further restricts growth, making it essential to introduce a skill-based and sustainable model that can function beyond seasonal tourism and strengthen community resilience.



## Seasonal Dependence

Tourism is mainly based on trekking, camping and guiding, which are highly seasonal and affected by weather conditions. Monsoons and off-seasons reduce tourist flow and lead to frequent cancellations.

## Unstable Income

Income for local guides and homestay operators is uncertain and limited to peak seasons, resulting in long periods without consistent earnings.

## Limited Experiences

Most tourism activities are focused on daytime adventure experiences, restricting growth and reducing the ability to attract a wider range of travelers.

## Need for Stability

There is a strong need for a stable, skill-based income option that complements existing tourism, works across seasons and provides long-term livelihood security for the community.

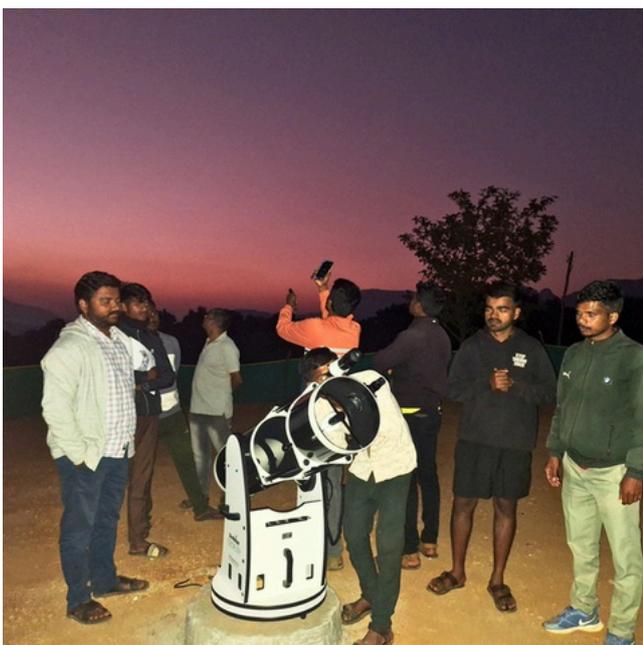
# SUSTAINABLE ASTRO TOURISM

Astro tourism offers a sustainable and year-round tourism experience that goes beyond traditional adventure activities. Unlike trekking and camping, which are highly seasonal and weather-dependent, stargazing sessions can be conducted throughout most of the year, except during heavy monsoon periods.



It is a skill-based activity that relies on knowledge, communication and technical handling of equipment rather than physical strength. This makes it accessible to a wider group of people and ensures longer career sustainability.

Guides, adding professional value to their role. Most importantly, astro tourism complements existing trekking and camping activities by adding a meaningful night-time experience, increasing visitor engagement, length of stay and overall tourism value.



# COMMUNITY ASTRO MODEL

The astro tourism initiative in Murshet is inspired by successful and proven models implemented in Ladakh, namely **Astrostays** and **Cosmohub**. These projects have demonstrated that astronomy-based tourism can be both impactful and sustainable.



By transforming villages into stargazing destinations, these models have added a new dimension to tourism while strengthening local livelihoods. The Murshet astro setup follows the same vision, adapting a proven framework to local conditions and ensuring long-term sustainability through skill-based tourism.

## THEY ARE TRIED AND TESTED MODELS THAT HAVE SUCCESSFULLY:



Built community-led astronomy initiatives



Empowered local youth as trained Astro guides



Created local employment



Introduced structured night-time tourism experiences

# TRAINING OBJECTIVES



## Local Capacity

To train local youth in astronomy and stargazing so they can confidently conduct professional sky sessions.



## Stable Livelihoods

Establish a steady income source for trainees through a year-round skill-based tourism activity.



## Astro Tourism Launch

To create a unique tourism experience that boosts the village's appeal and diversifies its offerings.



## Astro Guide Training

To train villagers as certified Astro Guides, providing them with a new identity and role in tourism.



## Astro Setup Installation

Install and hand over a functional telescope and stargazing setup for community management.



## Night Tourism Boost

To add a high-value night experience that enhances trekking and camping.

# TRAINING OVERVIEW



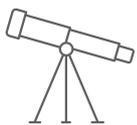
## Program Structure & Participation

A four-day training (12–15 January 2026) was conducted for six selected local youth and guides, supported by ASK Foundation and led by the GHE Team.



## Theory and Practical Learning

Participants learned basic astronomy and practiced identifying stars, planets, constellations, star clusters and nebulae through live sky observations.



## Telescope Handling & Technical Skills

Training covered telescope setup, alignment and safe operation, with the complete astro setup installed and made fully functional on-site.



## Storytelling, Engagement & Inauguration

Trainees learned celestial storytelling to engage tourists and the program concluded with the official inauguration of the stargazing facility.

# TELESCOPE INSTALLATION



## Professional Installation & Site Selection

The complete telescope and astro setup was installed by the GHE team after carefully selecting the site based on best sky visibility, minimal light pollution and open horizons. Proper alignment and calibration were done to ensure accurate tracking and clear observation of celestial objects.



## High-Performance Telescope Setup

A 10-inch Dobsonian telescope was selected for its simplicity and performance, featuring a large aperture for bright views of nebulae, star clusters and galaxies. The setup includes two eyepieces (20 mm and 12.5 mm) and a finderscope for flexible magnification and easy object location. Its collapsible design enhances portability and management.



## Equipment Handling & Sustainability Training

### ■ Maintenance Training

Trainees were trained in basic telescope maintenance to ensure long-term performance and care of the equipment.

### ■ Safety Protocols

Safety guidelines were shared to prevent damage to equipment and ensure safe handling during sessions.

### ■ Handling & Storage Practices

Participants learned proper handling and storage techniques to safeguard the telescope from dust, moisture and damage, promoting sustainable use.

# TRAINING PROGRESSION

## DAY 1 INTRODUCTION TO ASTRONOMY

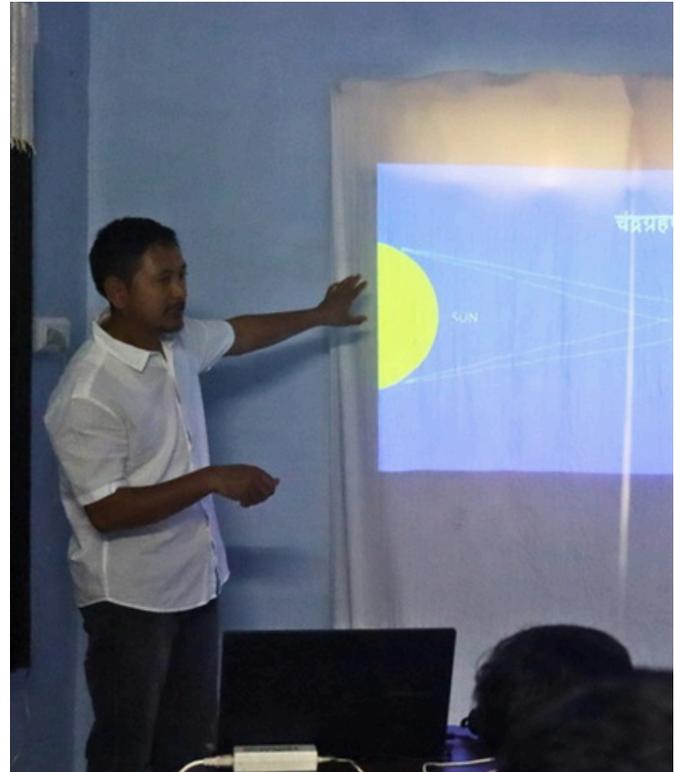
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Basics of astronomy and understanding the night sky
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Introduction to stars, planets, constellations and deep sky
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Importance of dark skies and light pollution awareness
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Overview of astro tourism and its role in livelihoods



## DAY 2 SKY OBSERVATION & IDENTIFICATION

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Identification of major constellations and bright stars
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Observation of planets like Jupiter and Saturn
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Introduction to nebulae and star clusters
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Learning how to explain the sky to tourists

# TRAINING PROGRESSION

## DAY 3 TELESCOPE HANDLING

	Understanding telescope parts and functions
	Alignment and calibration of the telescope
	Hands-on practice in locating celestial objects
	Conducting mock stargazing sessions



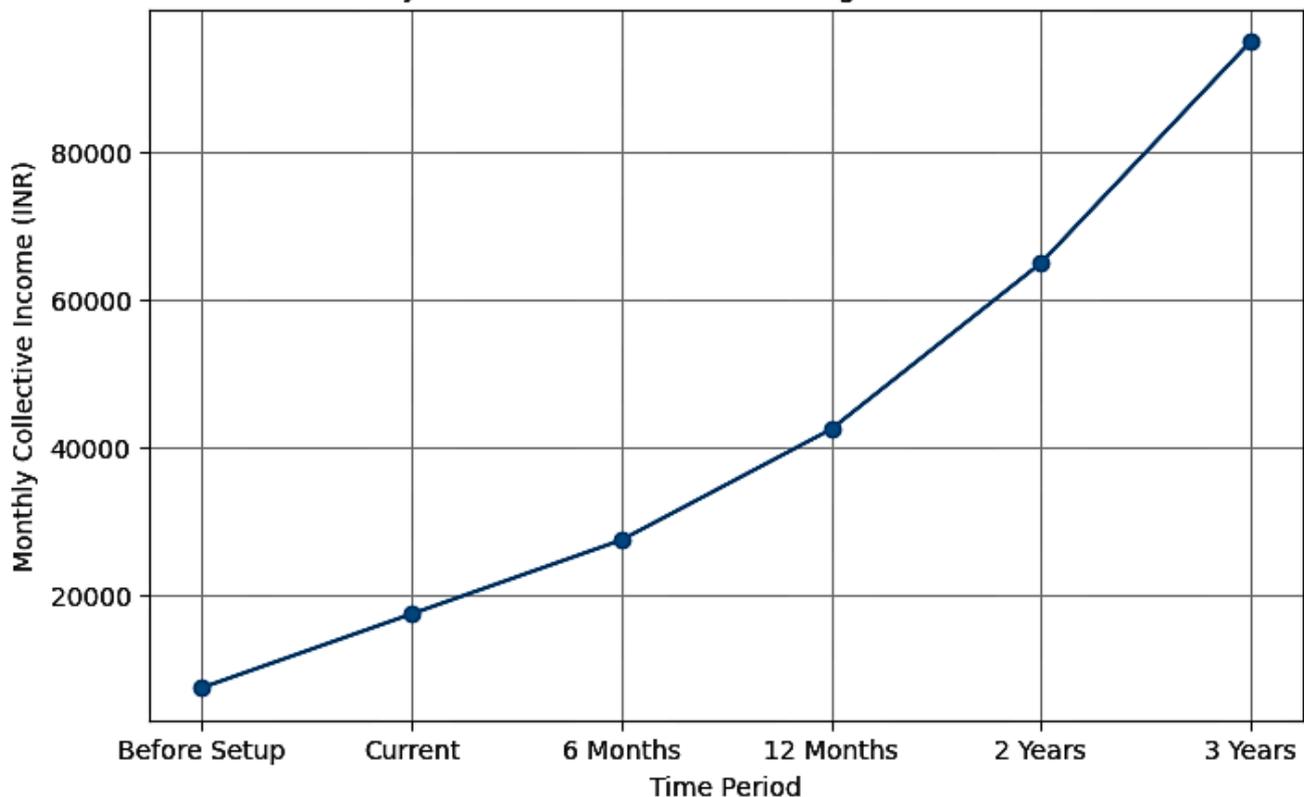
## DAY 4 PRACTICE, SETUP & INAUGURATION

	Independent practice sessions by trainees
	Finalization of astro setup and site readiness
	Assessment and confidence building of trainees
	Official inauguration of the stargazing facility

# EXPECTED OUTCOME

The Expected Outcome section highlights the transformative impact of introducing astro tourism in Murshet Village. It presents how a shift from seasonal, low-income guiding activities to a skill-based astronomy tourism model can significantly improve livelihoods, create financial stability and strengthen community participation in tourism. These projections demonstrate the potential of astro tourism to become a sustainable and scalable income source for local youth while adding long-term value to the region’s tourism ecosystem.

Projected Income Growth through Astro Tourism



The graph shows a clear upward trend in collective monthly income of the local guides after the introduction of astro tourism. From an average of ₹7,500 per month before the setup, earnings rise steadily to an estimated ₹95,000 per month within three years. This reflects the strong potential of astro tourism as a sustainable and scalable livelihood model.

# SUSTAINABILITY & FUTURE SCOPE

## 1 Regular Stargazing Programs

Establishing routine stargazing sessions to ensure consistent income and continuous tourist engagement.

## 2 Astro Camps & Night Sky Experiences

Developing immersive astro camps and special night sky events to attract longer stays and premium visitors.

## 3 Expansion to Nearby Villages

Replicating the model in surrounding villages to build a regional astro tourism network and create wider livelihood opportunities.

## 4 Advanced Training Modules

Introducing higher-level training in astronomy, storytelling, equipment handling and session management to strengthen professionalism and growth potential.



# TRAINER'S REFLECTION



Training local people in astro-tourism gives me deep satisfaction and I am grateful to GHE and ASK Foundation for this opportunity. I see great curiosity among locals to learn about space, astronomy and telescope handling and these skills open new possibilities for them. What makes this experience special is the connection between astronomy and local culture. While guests may know the science, they don't know our folk tales and that is our strength. This blend of stargazing and storytelling creates a meaningful and unforgettable experience for both guests and the community.

A handwritten signature in black ink, appearing to read 'Tsewang Dorje'.

**Tsewang Dorje**

Master Trainer, Astro

# SUSTAINABLE TRANSFORMATION

The astro training initiative in Murshet marks a significant step toward building sustainable rural tourism. It creates stable, skill-based income opportunities for local youth while reducing dependency on seasonal trekking and camping. Inspired by proven models from Ladakh, the program demonstrates how astronomy tourism can be successfully adapted to local contexts. By transforming seasonal tourism into a year-round livelihood option, it strengthens both the village economy and Murshet's identity as a unique experiential tourism destination.





GHE