Report on Hands-on Training on Yak Fine Wool Collection and Initiation of Wool Collection from Yak Herds

1. General Information

The hands-on training on Yak Fine Wool (Local Name: *Khuley*) collection was conducted from 5th till 6th at Leynag Village, Nubri, Tsentso Gewog in June and initiation of Wool Collection from Yak herds was conducted from 7th–18th June 2026 at different herds. The training was organized by the National Highland Development Centre (NHDC), Wangdue phodrang.

The training was facilitated by the Livestock Supervisors of Dotey Gewog and Tsento Gewog, supported by technical personnel from NHDC. The program was attended by 28 yak herders from the locality who are directly involved in yak rearing and management.

The training aimed to enhance the knowledge and skills of yak herders on scientific wool collection practices, improve the quality of collected yak fibre, and establish a systematic approach for sustainable yak fine wool production.

2. Background and Introduction

Yak rearing is an important traditional livelihood practice in high-altitude areas, providing meat, milk, transportation, and fibre resources to local communities. Among the various products obtained from yaks, fine wool has significant economic potential due to its softness, warmth, durability, and suitability for producing high-value fibre products.

Based on the Livestock vaccination records of 2025, Nubri village has recorded the highest number of young yaks, indicating strong potential for fine wool production. The availability of young yaks provides an opportunity to initiate organized yak wool collection and promote value addition activities.

Traditionally, yak fibre collection has been practiced on a limited scale by herders. However, due to lack of technical knowledge on proper collection methods, sorting, cleaning, grading, and storage, the quality and market value of wool has not been fully utilized.

Therefore, the training was conducted to introduce improved wool collection techniques, create awareness among herders, and promote sustainable utilization of yak wool resources.

3. Importance of Fine Wool Collection

Yak fine wool is a premium natural fibre with excellent insulating properties. Proper collection and management of fine wool can contribute to:

- Increased income generation for yak herders.
- Development of local fibre-based enterprises.
- Production of high-value products such as yarn, garments, handicrafts, and other wool products.
- Conservation and promotion of traditional yak-based livelihoods.

4. Purpose of the Training

The training was conducted as the first organized initiative for fine yak wool collection in Nubri village. The main purposes were:

- To introduce scientific yak wool collection methods.
- To develop practical skills among yak herders.
- To initiate collection from different yak herds.
- To improve wool quality through proper handling and storage.
- To establish a foundation for future yak wool value chain development.

5. Objectives of the Training

The main objectives of the training were:

- To provide theoretical and practical knowledge on yak fine wool characteristics and production potential.
- To train yak herders on proper wool collection techniques to obtain clean and quality fibre.
- To demonstrate safe handling and restraint techniques to minimize stress and injury to animals.
- To promote good practices in wool cleaning, sorting, grading, packaging, and storage.
- To initiate systematic collection of yak fine wool from different herds.
- To create awareness on the economic importance and market opportunities of yak wool.
- To strengthen collaboration between yak herders, livestock officials, and relevant stakeholders.

6. Theory Session Details

The theory session provided basic knowledge for effective yak wool collection.

6.1 Introduction to Yak Fine Wool

Participants were introduced to yak fibre production, the importance of fine wool, and its livelihood potential. Young yaks were highlighted as key producers of finer fibre suitable for quality products. Key points included fibre fineness, softness, length, strength, cleanliness, colour, absence of contamination, and proper handling to maintain quality.

6.2 Suitable Season and Timing

The appropriate collection period was discussed based on natural shedding, weather conditions, animal health, and herder accessibility.

6.3 Wool Collection Methods

Proper collection techniques such as manual combing and gentle removal of loose fibres were demonstrated. Participants were trained to collect only mature, loose fibre and avoid forceful pulling to prevent animal stress and fibre damage.

6.4 Animal Welfare Practices

Emphasis was placed on calm handling and proper restraint to ensure animal safety and reduce stress during collection.

6.5 Hygiene and Contamination Prevention

Participants were trained to maintain cleanliness by avoiding contamination with dirt, dung, vegetation, or moisture. Clean tools and storage materials were recommended to preserve fibre quality.

6.6 Sorting, Grading, Storage, and Transportation

Wool was sorted and graded based on fineness, cleanliness, colour, and fibre condition. Proper packaging, dry storage, and protection from dust and moisture were emphasized to maintain quality during storage and transport.

6.7 Market Potential and Value Addition

Yak wool was highlighted as a valuable natural fibre with strong potential for value addition. Proper collection and processing can support yarn, textiles, handicrafts, and increase income opportunities for herders, promoting sustainable highland livelihoods.

7. Practical Session Details

The practical session was conducted through field demonstrations and active participation of yak herders to provide hands-on experience in yak fine wool collection and management practices. Participants were demonstrated safe methods of yak catching and restraint to ensure animal welfare during collection.

The training included identification of suitable areas of the yak body for collecting fine wool, practical wool combing techniques, and proper removal of loose fibre using appropriate tools and equipment. Participants practiced collecting wool samples while maintaining cleanliness and avoiding damage to the animals.

The collected wool was cleaned by removing impurities such as dirt, vegetation, and coarse hair. Participants were trained on sorting and grading wool based on fibre quality, followed by weighing and recording of collected wool quantity. Proper methods of packaging and storage were also demonstrated to maintain wool quality until further processing.

The practical session was conducted through demonstrations and active participation of yak herders.

8. Initiation of Wool Collection from Yak Herds

Following the completion of the training, field-level yak fine wool collection was initiated from different yak herds located in the highland areas of Nubri village. The collection team moved from one yak herd location to another to reach the herders and collect fine wool directly from the moving yak herds.

Due to the remote location and scattered distribution of yak herds, the team travelled by walking through difficult terrain. Some herds were located several hours away, while reaching other herds required a full day of walking. The field team visited each herd location, coordinated with yak owners, and carried out wool collection with the active participation of herders.

Yak herds from the following locations were covered during the collection activity:

Walking distance of Nubri Village Herd places

From	To	Walking Days

Leynag	Dulay	1 day
Dulay	Tsumdo/Layri	1/2 day
Tsumdo/Layri	Taenangma	2 days
Taenangma	Khagona/Shomona	1 day
Khagona	Tsoebthang	1 day
Tsoebthang	Goensa	1/2 day

A total of 17 yak herds were visited and covered during the field activity. The collection process provided practical experience to both Livestock staff and yak herders while establishing the foundation for regular and systematic yak fine wool collection in the area.

8.1 Yak Coverage for Wool Collection & Participation of Yak Herders

Fine wool collection was carried out from a total of 382 young yaks aged between one to three years from different yak herds. During the collection activity, it was observed that approximately 60% of the collected wool came from one-year-old young yaks, which produced comparatively better quantity and quality of fine wool than older yaks. The young yaks showed better fibre fineness, cleanliness, and suitability for value addition.

Yak owners and herders actively participated throughout the wool collection activity. They supported the team by bringing yaks for collection, assisting in safe animal restraint, identifying suitable animals for wool collection, and learning improved wool collection and handling practices. After collection, yak herders also participated in the sorting, cleaning, grading, and packaging of collected fine wool. They were involved in separating quality wool, removing unwanted materials, maintaining cleanliness, and properly packing the wool to preserve its quality for storage and further processing. Their involvement contributed to the successful initiation of systematic yak fine wool collection, proper post-collection handling, and improved awareness among herders on value addition of yak wool in the area.

A total of 48.7 kg of fine yak wool was collected during the activity, with an average collection of approximately 2.8 kg per participating herder.

Date of collection	**Location**	**Herd Owner**	**Wool collected from No. of Young Yaks**	**Wool Collected (kg)**
06-07/06/2026	Leynag	Nima	18	1.6
		Gyembo	24	2.5

		Pema Chophel	15	1.8
		Pema Tashi	25	2.5
9-10/06/2026	Dulay	Ugyen Lham	21	2.3
		Dawa Dem	20	2.3
		Sangay	25	2.7
12/06/2026	Tsumdo/Layri	Lhab Tshering	31	5
		Yangzom	26	3
14/06/2026	Taenangma	Tshering Dema	31	4
16/06/2026	Khagona/Shomona	Wangchuk	26	3.5
		Tshewang Dorji	20	2
		Sonam Dorji	14	1.5
		Lhab Dorji	13	2
		Rinchen	29	5.5
17/06/2026	Tsoebthang	Tshewang Dorji	13	0.5
18/06/2026	Goensa	Pemba Tshering	31	6
Total			382	48.7

Table 1: Details of wool collection and wool quantity against every herds.

8.2 Payment Distribution for Collected Yak Wool

After completion of wool collection, sorting, cleaning, and packaging, payment was distributed to the participating yak owners/herders based on the quantity of fine wool collected. A total of 48.7 kg of yak fine wool was collected and packaged during the activity. The payment was made at the rate of Nu. 750 per kg of collected wool.

The total amount disbursed for the collected wool was Nu. 36,525 (48.7 kg × Nu. 750/kg). The timely payment encouraged active participation of yak herders and supported the promotion of systematic yak fine wool collection and value addition practices in the area.

Sl.No	**Yak Herd Owner**	**Address**	**Wool Collected (kg)**	**Price per KG wool (Nu.)**	**Revenue Generated (Nu.)**
1	Nima	Leynag	1.6	750	1200
2	Gyembo		2.5	750	1875
3	Pema Chophel		1.8	750	1350
4	Pema Tashi		2.5	750	1875
5	Ugyen Lham	Dulay	2.3	750	1725
6	Dawa Dem		2.3	750	1725
7	Sangay		2.7	750	2025

8	Lhab Tshering	Tsumdo	5	750	3750
9	Yangzom	Layri	3	750	2250
10	Tshering Dema	Taenangma	4	750	3000
11	Wangchuk	Khagona	3.5	750	2625
12	Tshewang Dorji		2	750	1500
13	Sonam Dorji	Shomona	1.5	750	1125
14	Lhab Dorji		2	750	1500
15	Rinchen	Khagona	5.5	750	4125
16	Tshewang Dorji	Tsoebthang	0.5	750	375
17	Pemba Tshering	Goensa	6	750	4500
					36525/-

Table 2: Revenue Generated by herders from wool collection program.

8.3 Factors Affecting Yak Fine Wool Production and Quality

Several factors were observed during wool collection that influenced both the quality and quantity of yak fine wool, and are described as follows.

1. Age of Yak: Age played an important role in determining wool quality. Younger yaks, particularly those between one to two years of age, produced finer and better-quality wool compared to older animals. A higher proportion of fine wool was obtained from one year old yaks.
2. Time of Wool Collection (Seasonal Variation): The timing of wool collection varied and was not uniform across all herds in the same season. Although collection was generally carried out during the period when undercoat wool was ready for harvest, different herds shed and developed fine wool at slightly different times. This variation affected both the quantity and quality of wool collected.
3. Yak Health and Condition: The health status of yaks influenced wool yield and quality. Well-nourished and healthy animals produced better-quality wool, while poor health or nutritional stress reduced wool growth and fineness.
4. Number of Young Yaks in Herds: Herds with a higher number of young yaks contributed more fine wool. The availability of more young animals increased the overall yield and improved the proportion of fine-quality wool collected.

9. Challenges and Constraints

During training and field collection, the following challenges were observed:

- ✓ Difficult terrain and remote locations of yak herds.

- ✓ Long walking distance and transportation difficulties.
- ✓ Unpredictable weather conditions.
- ✓ Requirement of more manpower for large-scale collection.

10. Recommendations

Based on the training and field experience, the following recommendations are proposed:

- ➢ Conduct regular yak wool collection programs every year during the suitable season.
- ➢ Establish proper wool collection and storage centres in field level.
- ➢ Improving of skin health of young yaks for better quality wool.
- ➢ Promote value addition activities to increase income from yak wool.

11. Photos of training and wool collection process.

Figure 1:Theory session.

Figure 2: Practical session on wool collection.


Figure 3: Demonstration on Wool collection.


Figure 4: Initiation of wool collection from different herds


Figure 5: Collection of wool using comb.


Figure 2: Wool sorting after collection and measuring weight.


Figure 6: Payment distribution and transporting wool.

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