

Thrive Impact Foundation

From Concept to Enterprise

Advisory Dialogue Report 2026

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1. Executive Summary



Thrive Impact Foundation is establishing a community-centred enterprise in Gilgit-Baltistan to process wild sea buckthorn into cold-pressed oil and other value-added products. To move from a broad concept to a structured, evidence-based and commercially sustainable model, Thrive sought the advice of practitioners with direct experience of enterprise development in the region.

This report draws on advisory dialogues with Mr. Ghulam Ali of the International Centre for Integrated Mountain Development (ICIMOD) in Gulmit, and with Mr. G.M. Saqib of Karakoram International University and Mr. Majeed of GLAD in Gilgit.

A consistent lesson emerged: the enterprise must be built on field evidence rather than general research, must be commercially viable independently of donor support, and must be designed from the outset for replication. Technology choices should be judged on extraction yield, waste and reliability rather than purchase price, and buyers should be identified before significant investment in processing capacity.

The dialogues also pointed to a staged funding pathway, beginning with CSR funding for a modest pilot and moving to larger institutional donors once results are demonstrated, and to the potential for the facility to serve as a showcase for solar-powered, women-led local value addition.

2. Introduction and Context

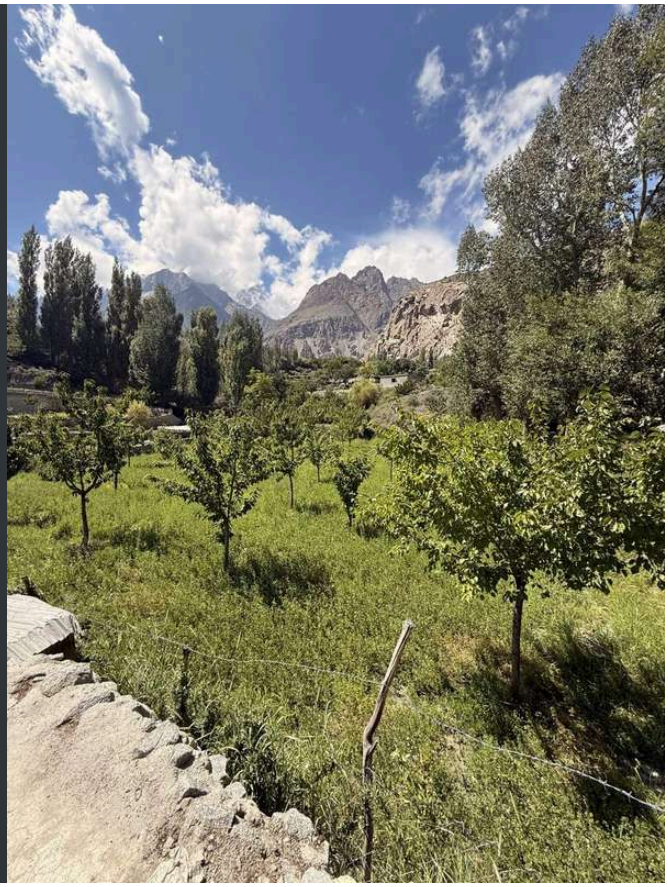
Sea buckthorn from Gilgit-Baltistan has historically been exported as raw berries, including to Germany and other international markets, with little value captured locally. Earlier initiatives, around 2015 to 2017, sought to move towards local processing and value addition, and examined plant management, harvesting, processing and potential products.

Processing initiatives in the Gilgit and Gakuch area, and subsequently towards Chitral, demonstrated that local value addition is technically and commercially possible. They also revealed recurring constraints: certification, electricity, water, infrastructure, appropriate processing technology, financing, market development and the availability of suitable partners. Thrive's approach is designed to learn from this experience.

3. Objectives of the Dialogue

1. To learn from earlier sea buckthorn initiatives in the northern areas.
2. To define the evidence base required for a sound enterprise model.
3. To establish criteria for selecting processing technology.
4. To determine an appropriate initial scale, business model and funding pathway.
5. To understand market conditions, product opportunities and sources of technical expertise.

4. Building the Evidence Base



4.1 From General Research to Structured Field Data

The existing body of research on sea buckthorn covers production, harvesting, processing, ecology, certification and product development, but is largely generic. It was agreed that this should be converted into structured research supported by field data and measurable assumptions, establishing in particular:

- The quantity and availability of berries and the resource base
- Locations of the resource and distances between collection points, communities and the facility
- The number and structure of village organisations, women’s organisations and committees
- The number of women and other potential collectors within the supply network
- Existing collection, aggregation and transport arrangements
- Processing capacities, yields, waste, power consumption and operational failures in existing units
- Potential buyers, pricing, payment cycles and distribution channels
- Cost and margin structures across the value chain

4.2 Comparative Models

Nepal, particularly Eastern Nepal, was identified as a useful comparison: communities in tourist areas produce small-scale juice and oil without large industrial facilities. Existing aggregation models for scattered produce such as apples, potatoes and cherries were also noted. Aggregators perform essential collection, logistics and market-linkage functions and should not automatically be treated as a problem; the enterprise should maximise community benefit while preserving necessary value-chain functions.

5. Supply, Incentives and Sustainability

5.1 The Incentive Hypothesis

A central working hypothesis is that the immediate constraint may not be the availability of sea buckthorn, but insufficient incentives for communities to collect and supply it. Better incentives could increase collection and earnings and, over time, encourage managed cultivation, allowing better combinations of male and female plants and potentially higher yields, with wider benefits for soil stability and ecological resilience. This hypothesis will be validated through community-level data.

5.2 Ecological Design

Sustainability was treated as a core design consideration. Chemical-intensive methods should be avoided, and a more organic-oriented approach considered, subject to certification requirements. The plant's wider roles, as livestock feed, as a natural thorn boundary and in soil protection, should inform the enterprise design. Harvesting must allow regeneration, and collection technology, such as earlier devices that shake berries from branches, deserves the same attention as processing technology.

6. Processing Technology

Technology and machinery were identified as among the most significant technical and financial issues. Purchase price and nominal capacity are insufficient measures of suitability. Because collection effort is the same regardless of technology, waste and extraction efficiency directly determine production economics.

Criteria for assessing processing machinery

Extraction yield
How much oil the machine recovers from the raw material

Waste
The share of raw material lost in processing

Energy use
Power consumption, critical for a solar-powered site

Maintenance
Servicing needs and local availability of parts

Downtime
Reliability and time out of service after a failure

Scale fit
Suitability for a pilot of the intended size

Thrive is comparing five to six machines and intends to source locally where feasible to secure after-sales service. Experience at small units indicates that small screw presses can struggle with the hardness of sea buckthorn seeds. Chinese manufacturers may offer after-sales support in Pakistan, although communication, response times and spare parts require attention; a manufacturer may also be willing to treat a scalable pilot as a showcase for its technology. In Gilgit, cold-press and hydraulic systems for sea buckthorn were discussed, and food technologists and existing processing units were identified as sources of technical expertise.

7. Scale, Business Model and Funding



7.1 Determining the Initial Scale

Rather than sizing the plant theoretically, the dialogue recommended studying operational examples and following a clear analytical sequence:

Quantity → Quality → Network and relationships → Collection capacity → Pilot scale

The initial enterprise is envisaged to serve two to three valleys: small enough to manage well, and designed for replication in Baltistan and other suitable areas, growing horizontally through additional facilities and vertically towards higher-value products.

7.2 Commercial Viability

The core business model must be viable independently of donor support. Social and environmental elements strengthen the model, but production, supply, efficiency, sales and margins must sustain it. The enterprise should begin simply, establishing a workable collection and processing system before addressing every part of the value chain.

7.3 Funding Pathway

CSR seed funding → Establish and test the pilot → Demonstrate results → Institutional donors for scale-up

The Economic Transformation Initiative in Gilgit-Baltistan, associated with IFAD, was identified as a potential institutional partner for funding, community mobilisation and value-chain expertise.

Indicative period	Activity
October 2026 to February 2027	Partner engagement, fundraising and final preparation
From March 2027	Construction and site works, subject to funding
March to mid-2027	Solar installation and building works
March to July 2027	Procurement and installation of machinery
Late 2027	Testing and first production

Timelines are preliminary and depend on funding and final specifications.

8. Markets and Product Development

Buyers should be identified before significant investment in processing capacity. The initial market exercise will focus on six to eight realistic domestic buyers in Pakistan. Sea buckthorn should not be treated as limited to oil: potential categories include nutritional products, juices and processed foods, wellness products, beauty and cosmetic products, and organic fertiliser.

In Gilgit, the dialogue with Karakoram International University and GLAD focused on an organic, cold-press facility with a women-led, community-based model, powered by renewable energy and following a zero-waste approach. Supply-chain development, processing capacity and market access were identified as the main areas requiring further work. Existing market actors, including Hunza Organics, Bio Hunza and Alpine Food, were discussed, as were high-value product opportunities. Energy costs and dependence on generators were highlighted as significant constraints for local businesses, reinforcing the case for solar-powered processing.

9. The Facility as a Showcase

The facility could serve as a showcase as well as a production site, demonstrating solar-powered operations, women’s participation, community collection and local value addition. Corporate teams could visit Hunza, take part in a supervised berry-collection activity, observe processing and purchase products directly, subject to appropriate safety and hygiene controls. This links corporate engagement, tourism, community participation and environmental sustainability in a single, tangible experience.

10. Key Strategic Questions

1. What is the actual quantity and distribution of the sea buckthorn resource?
2. What proportion is currently collected, and why is the rest not collected?
3. What incentives would materially increase collection while keeping the enterprise viable?
4. Which existing aggregation structures can be used rather than duplicated?
5. Which technology best balances cost, yield, waste, energy use and reliability?
6. What certification and regulatory requirements apply to the intended products?
7. Who are the realistic domestic buyers, and what are their requirements?
8. Which CSR, donor and technical-partner opportunities are realistically available?

11. Conclusion

The dialogues provided a clear framework for developing the enterprise: begin with structured research and community mapping, select technology on its true economics, secure buyers early, and prove a simple, commercially viable pilot before scaling. Further practical steps include partnerships or MoUs with local organisations, the permissions required from the Deputy Commissioner’s office, links with established rural support programmes for training and machinery support, and the registration and supervision requirements of the chosen structure. Mr. Ghulam Ali has offered continued guidance and introductions as the proposition is refined.

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