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ARMENIA

RECOMMENDATIONS FOR ECOTOURISM DEVELOPMENT PLANNING IN THE ALAVERDI COMMUNITY



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Recommendations for Ecotourism Development Planning in the Alaverdi Community, Armenia

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Table of Contents

Acronyms.....	4
Executive Summary	5
1. Introduction	7
2. Methodological Approach	9
3. Site Profile.....	14
4. Stakeholder Insights and Local Priorities.....	17
5. Tourism Baseline.....	19
6. Suitability Assessment and Zoning.....	24
7. Ecotourism Product Development	26
8. Infrastructure and Service Needs	31
9. Governance and Institutional Arrangements.....	34
10. Visitor Management System.....	37
11. Local Economy and Benefit Sharing.....	39
12. Environmental and Climate Considerations	41
13. Monitoring Framework.....	43
14. Investment and Implementation Plan.....	45
15. Final Site Classification and Conclusions	50
Annex 1: Ecotourism Assessment Tool.....	51
Annex 2: Stakeholders and Consultation Status.....	57
Annex 3: Summary SWOT Analysis for Ecotourism Development in Alaverdi Community ..	58

Acronyms

AMD	Armenian Dram
CBD	Convention on Biological Diversity
EU4Environment	European Union Programme for Environment
GIS	Geographical Information Systems
NGO	Non-governmental Organization
NTFPs	Non-Timber Forest Products
PA	Protected Area
PPP	Public-Private Partnership
UNESCO	United Nations Educational, Scientific and Cultural Organization
ToR	Terms of Reference

Executive Summary

Alaverdi should develop as a managed Debed Gorge heritage-and-landscape corridor that links internationally significant cultural heritage, the river and canyon environment, industrial history and local services through a small number of clearly organized visitor products. The community includes Alaverdi town and surrounding settlements within a steep and spatially complex gorge landscape. Haghpata and Sanahin, the Debed River, historic transport and industrial infrastructure, surrounding slopes and forest patches provide a strong tourism foundation. The final classification supports controlled ecotourism development with selective service and visitor functions in lower-risk and already used locations.

The Ecotourism Plan organizes the destination around heritage, landscape, local culture and corridor-based experiences. The Sanahin–Haghpata heritage setting can be combined with guided walks, accommodation, local gastronomy and interpretation; Alaverdi's industrial and railway history can add a distinctive layer where access is safe and legally appropriate; and approved viewpoints and gorge routes can interpret the river, geology, forest and cultural landscape. Local food and product experiences can complement stays and guided visits. The wider Vanadzor–Tumanyan–Alaverdi itinerary offers an additional opportunity to connect Vanadzor's outdoor recreation with Dsegh and Kobayr and Alaverdi's industrial-monastic landscape, provided that each community retains clear responsibilities and local spending opportunities.

The main barrier is the complexity of the corridor itself. Steep slopes, landslide and flood exposure, heritage constraints, fragmented land and site responsibilities and industrial legacy conditions mean that attractive locations are not automatically visitor-ready. Routes require confirmation of access, surface and gradient, seasonal conditions, hazard points, emergency response, management responsibility and environmental sensitivity. Industrial sites require particular caution: active, unsafe or potentially contaminated locations cannot be presented as visitor attractions without appropriate legal, environmental and safety clearance. The candidate Debed Gorge Emerald context and riparian and cliff habitats add further environmental considerations.

The central economic objective is to improve visitor retention and local spending within Alaverdi. Accommodation, food businesses, guides, transport operators and local-product suppliers can capture additional value where heritage visits are connected with meals, overnight stays and organized experiences. Public financing is most appropriate for route organization, signage, interpretation, coordination and safety-related functions; project financing can support pilot tools, guide development and low-impact infrastructure; and private actors can invest incrementally in accommodation, food, guiding and product sales. A large PPP model is not required at the current stage, although practical cooperation on services, visitor facilities and maintenance can develop progressively.

Implementation should begin with route and attraction verification, a visitor and provider baseline, corridor coordination, product testing and the establishment of clear safety and closure procedures. Later phases can strengthen interpretation, service integration, route-support facilities and benefit-sharing arrangements where observed use supports them. Monitoring is central to this process: visitor and market data, environmental and route condition, heritage and safety issues, local service use, spending, provider readiness and visitor feedback should be reviewed periodically and used to modify products, maintenance, visitor conditions or investment priorities. The short Lori hotel-arrival series is not used to project Alaverdi visitor growth to 2040.

The intended result is a more coherent corridor where tourism strengthens heritage interpretation, local services and visitor management without increasing pressure on unstable or environmentally sensitive areas. Progress should be measured through safer and better-

understood routes, greater use of local accommodation and food services, improved visitor information, functioning monitoring and maintenance, stronger coordination between responsible institutions, and evidence that corridor visitors are spending more time and money locally. Alaverdi's key lesson is that the value of the destination lies in connecting its existing assets into a manageable system, not in adding isolated attractions.

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¹ Since 2018, the "European Union for Environment" (EU4Environment) Action has helped the Eastern Partnership countries preserve their natural capital and enhance people's environmental well-being, by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and establishing mechanisms to better manage environmental risks and impacts. The program was funded by the European Union and principally implemented over 2019–24 by the Organisation for Economic Co-operation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO), and the World Bank. Over 2025–26, the World Bank will finalize the implementation of the program's Result 4 area.

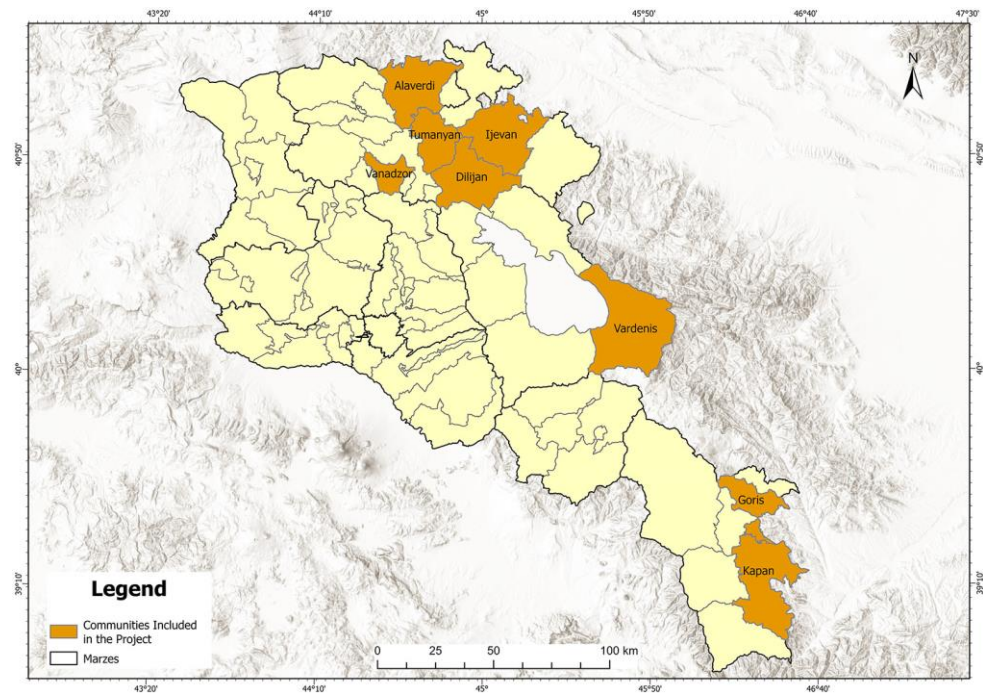
1. Introduction

This Ecotourism Management Plan provides a structured framework for assessing and guiding ecotourism development at the community level. It is based on a standardized ecotourism assessment tool that evaluates ecological conditions, socio-economic context, tourism assets, and associated environmental and operational risks. The plan is developed as part of a broader effort under the EU4Environment programme, implemented with methodological alignment to World Bank approaches and within the framework of the OIKO initiative. The overall activity focuses on supporting selected communities in identifying realistic and environmentally responsible ecotourism opportunities, while ensuring that development remains compatible with local ecological and socio-economic conditions.

Within this context, the project includes the application of a unified assessment tool across target communities, stakeholder consultations to capture local perspectives and priorities, and the preparation of site-specific management plans. These plans are intended to translate assessment results into practical guidance, including zoning considerations, identification of suitable ecotourism products, infrastructure needs, governance arrangements, and basic management measures. The purpose of this plan is to support decision-making on whether and how ecotourism can be developed in a controlled and sustainable manner. It ensures that tourism activities are aligned with conservation requirements, particularly in areas with sensitive ecosystems or species of concern, while also identifying opportunities for local economic engagement. The approach follows sustainable development principles by promoting low-impact tourism, supporting local livelihoods, and encouraging the use of natural and cultural assets without compromising their integrity. It also aims to strengthen coordination between local authorities, communities, and other stakeholders involved in tourism and environmental management.

The map below illustrates the spatial distribution of the eight communities included in the project in Armenia: Alaverdi, Tumanyan, Vanadzor, Dilijan, Ijevan, Vardenis, Goris, and Kapan. Together, these locations create a broad territorial coverage across the northern, eastern, and southern parts of the country and reflect different ecological, landscape, and accessibility conditions relevant to ecotourism planning. The map helps situate the project within the national context and illustrates that the selected communities represent different types of mountains, forest, and protected area settings where ecotourism opportunities and management needs may vary.

Figure 1. Pilot Communities



Source: REC Caucasus.

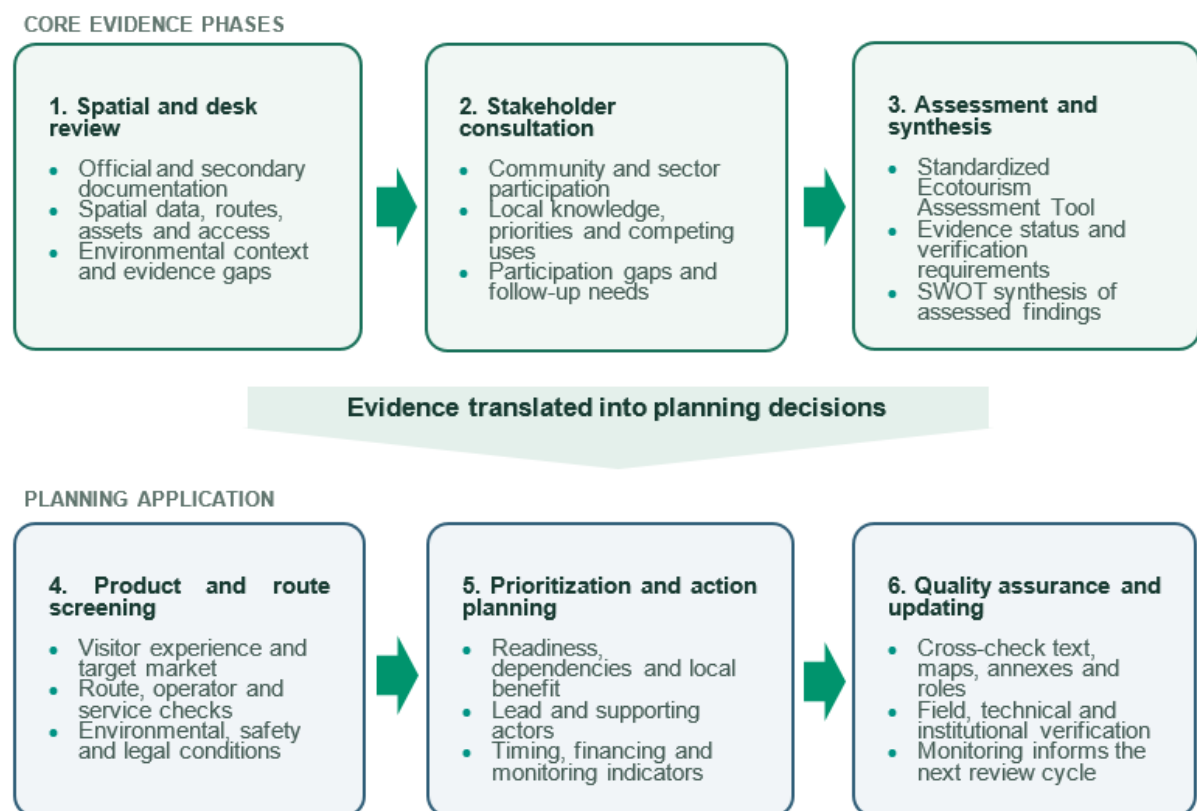
2. Methodological Approach

The Ecotourism Management Plan was developed through three complementary methodological phases: (i) spatial analysis and desk-based review; (ii) stakeholder consultation and participatory validation; and (iii) development and application of the Ecotourism Assessment Tool, followed by synthesis through SWOT analysis. Thus, these phases provide the evidence base for the Plan while distinguishing between information supported by available documentation and stakeholder inputs and aspects that still require field, technical or institutional verification.

The three phases form a connected and iterative process and thus possess an application logic and repeatability. Desk and spatial analysis establish the initial evidence base and identify gaps; consultation tests, corrects and supplements that evidence; and the Assessment Tool organizes the combined findings into a consistent community assessment. SWOT analysis then summarizes the assessed situation, while management recommendations translate the findings into actions, conditions and responsibilities. The same sequence should be followed when a Plan is prepared, reviewed or updated so that new evidence can be incorporated without changing the common analytical structure.

Additionally, these three phases are complemented with a follow up phases related to the planning application: (iv) product and route development, (v) prioritization and action planning and (vi) quality assurance and updating. The methodology sequence and its application to plan preparation, review and updating are summarized in Figure below.

Figure 2. Ecotourism development planning methodology



Source: Authors' elaboration.

Phase 1 – Spatial analysis and desk-based review

The first phase consisted of the review and consolidation of available project documentation, official and secondary sources, existing tourism and territorial information, and project-supplied GIS and spatial data. The spatial analysis was used to examine the community context, natural and cultural assets, settlement and accessibility patterns, protected area and Emerald Network context, and the spatial relationship between potential tourism areas and environmentally sensitive features. The analysis provided the initial basis for screening ecotourism opportunities and constraints and for identifying information gaps requiring subsequent verification. Importantly, the GIS layers and maps used in the Plan provide a planning and screening context; they do not in themselves confirm land tenure, legal access, ecological condition, route readiness or the suitability of individual sites for tourism development. This distinction is already reflected elsewhere in the Plan, including the requirement to confirm candidate Emerald boundaries and route relationships before zoning or promotion.

Evidence classification and treatment:

Information used in the assessment is classified according to its source and level of confirmation. The principal categories are: information confirmed through official documentation; information supported by project or technical sources; stakeholder-reported information; findings derived from spatial analysis; experience transferred from another community; planning proposals; and matters requiring field, legal, ecological, commercial or institutional verification. A statement is not treated as confirmed merely because it appears in more than one secondary source. Where sources agree, the finding may be used with greater confidence; where they differ, the inconsistency is retained as an evidence gap and addressed through a verification requirement rather than resolved by assumption.

Minimum spatial review and data handling:

For each community, the spatial review should consider community and settlement boundaries; forests; protected areas and candidate Emerald Network areas; recorded tourism routes; natural and cultural attractions; roads and transport access; settlements and service locations; environmentally sensitive features; known hazards; and links with neighbouring communities. Route records from official and user-generated spatial data should be screened for duplicate or alternative alignments and, where possible, checked for start and end points, distance, elevation, surface condition, land and management status, seasonal accessibility and connection to visitor services. Every map should identify its purpose, source and limitations. Spatial proximity does not by itself establish legal access, ownership, environmental suitability, visitor readiness or management responsibility.

Phase 2 – Stakeholder consultation and participatory validation

Stakeholder engagement was undertaken through two principal consultation and capacity-building stages. The first took place in March 2026, when representatives of the target communities participated in introductory stakeholder engagement activities. This phase introduced the project and ecotourism planning approach, applied a structured 28-question consultation instrument, and used participatory discussion and group work to identify local opportunities, constraints, existing initiatives and priorities. The second stage took place in July 2026 and shifted from initial identification of issues towards capacity building, review and validation of the emerging EMP proposals. The July process enabled stakeholders to review proposed measures, question assumptions and discuss implementation requirements, including responsibilities, financing, maintenance, visitor management and monitoring.

The stakeholder evidence and its documentation status are summarized in Annex 2 – Stakeholders and Consultation Status, which also distinguishes confirmed community-level participation from stakeholder roles and responsibilities that still require actor-specific confirmation.

Minimum stakeholder-engagement standard:

Application or updating of the template should seek input, as relevant to the community context, from the community administration; forest and protected-area managers; tourism businesses, guides and transport providers; accommodation and food providers; cultural and heritage managers; local producers and community groups; environmental organizations; technical specialists; and groups whose views may otherwise be underrepresented. The purpose is not only to collect proposals, but also to identify existing practices, competing resource uses, management constraints, business capacity, maintenance needs, environmental concerns and the actors able to implement or verify proposed measures. Participation should be recorded by date, format, represented institution or stakeholder category and the subject of the input provided.

Consultation evidence, participation gaps and differing views:

Community-level participation is distinguished from confirmation by a particular institution, business or responsible authority. If a relevant actor did not participate, or if the available participant record does not establish the actor's identity, the gap is retained and a follow-up requirement is assigned. Stakeholder views are treated as local knowledge and planning input, not as substitutes for legal, technical or environmental approval. Where participants express different priorities or interpretations, the Plan should record the issue and identify the decision-maker or verification process needed to resolve it.

Phase 3 – Assessment and Synthesis

A standardized Ecotourism Assessment Tool was developed and applied to structure the assessment of each pilot community. The tool covers screening and eligibility; ecological and conservation characteristics; socio-economic and community context; tourism assets and baseline use; suitability and zoning; potential ecotourism products; infrastructure and services; governance; visitor management; benefit sharing; environmental and social safeguards; climate resilience; monitoring; investment and implementation considerations. The completed community assessment is provided in Annex 1 – Ecotourism Assessment Tool and forms the analytical basis for the management recommendations presented throughout the Plan. The findings were subsequently consolidated through a SWOT analysis, presented in Annex 3, which distinguishes verified or desk-supported strengths and weaknesses from indicative opportunities and potential risks/threats. The SWOT therefore serves as a synthesis of the preceding assessment rather than as a separate feasibility study.

The Tool is applied as an evidence and decision record. For each relevant topic, the assessment should identify the available evidence, current condition, evidence status, principal gap, proposed management response, further verification needed and the institution or actor expected to confirm or implement the response. Conclusions should be traceable to the corresponding assessment fields, consultation evidence or spatial finding. A numerical score should be used only where an agreed scoring method, evidence basis and interpretation have been applied consistently; otherwise, findings should remain qualitative and conditional.

The attractions needs to meet specific requirement in order to become an ecotourism product. The identification of an attraction does not by itself establish an ecotourism product. A proposed product

should have a sufficiently defined visitor experience; a usable and legally accessible route or site; an identifiable visitor segment; a capable operator or service provider; available or realistically achievable guiding, transport, food, accommodation or information services; acceptable environmental and social conditions; defined safety and maintenance responsibilities; and a reasonable mechanism for local economic benefit. Product proposals that do not yet meet these conditions should be presented as conditional opportunities, together with the checks, partnerships and service-development actions required before launch or promotion.

Phase 4 - Product route and screening

Where a route, attraction cluster or visitor itinerary extends beyond one community, it should be assessed as a shared product rather than assigned entirely to the community in which the analysis began. The Plan should identify the participating communities and site managers, route and visitor handovers, operator roles, maintenance responsibilities, information and booking arrangements, emergency coordination and the intended distribution of accommodation, meals, guiding, transport and product sales. Cross-community proposals remain indicative until these responsibilities and benefit-sharing arrangements are agreed.

Phase 5 - Prioritization and action planning

Recommendations are prioritized according to their evidence base, implementation readiness, environmental and social conditions, institutional ownership, dependency on other actions and likely contribution to visitor experience and local benefit. Actions may be grouped as immediate organizational or low-cost measures; measures requiring field or technical verification; pilot products suitable for testing; infrastructure requiring feasibility, design and environmental assessment; and longer-term measures dependent on financing, permits or institutional agreements. Each priority action should identify an indicative lead, supporting actors, sequence, timeframe, verification requirement and monitoring indicator. The absence of a confirmed owner or maintenance arrangement is treated as an implementation gap rather than left implicit.

Phase 6 - Quality assurance and updating

Before completion, the Plan should be checked for consistency between the main text, assessment annexes, stakeholder record, maps, SWOT analysis, product proposals, action plan and monitoring framework. Names, boundaries, route references, responsibilities and evidence status should be used consistently throughout. The Plan should be updated when field verification changes route information, protected-area or Emerald data are revised, responsible actors are confirmed, visitor and provider data become available, infrastructure is implemented, or monitoring identifies environmental, safety, service or management issues. Updates should record the source, date and consequence of the new information.

Methodological Limitations

Methodological scope and limitations:

The preparation of this Plan did not include a feasibility study, detailed technical design or systematic field/site verification of the proposed routes, tourism sites or investments. Consequently, identification of a potential route, attraction, tourism product, visitor facility or investment in the Plan should not be interpreted as confirmation of its technical feasibility, environmental compatibility, legal availability,

safety, commercial viability or implementation readiness. The assessment deliberately identifies these evidence gaps and converts them into requirements for subsequent implementation. The Plan itself already reflects this principle by requiring route/GIS validation, specialist ecological screening and route-specific technical design before particular investments proceed.

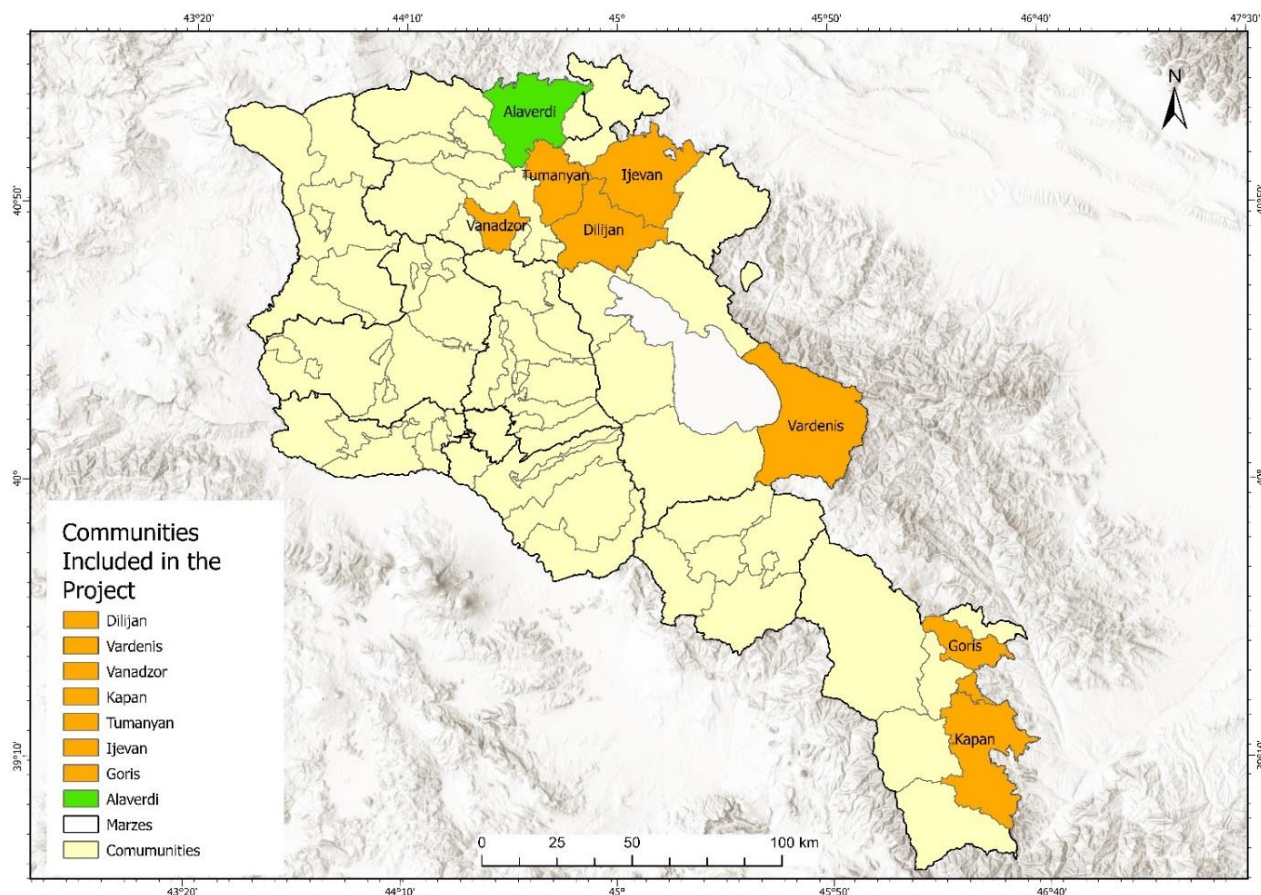
Additional evidence limitations:

Community-level tourism statistics, visitor profiles, household information and provider records may be incomplete or unavailable, and consultation participation may differ between communities and stakeholder groups. Consultation findings are therefore not treated as statistically representative survey results unless a representative sampling method is applied. Spatial data may vary in date, scale, accuracy and completeness, while route and site conditions may change seasonally or after the assessment period. These limitations should be stated wherever they materially affect a conclusion, target, product proposal or investment recommendation.

3. Site Profile

The community of Alaverdi is located in Lori marz in northern Armenia and represents one of the project's northern pilot communities. Its geographic position within the Debed Gorge gives it a distinctive territorial setting, shaped by steep slopes, the river corridor, clustered settlements, and close links to important heritage sites.

Figure 3. Alaverdi and other communities included in the project



Source: REC Caucasus.

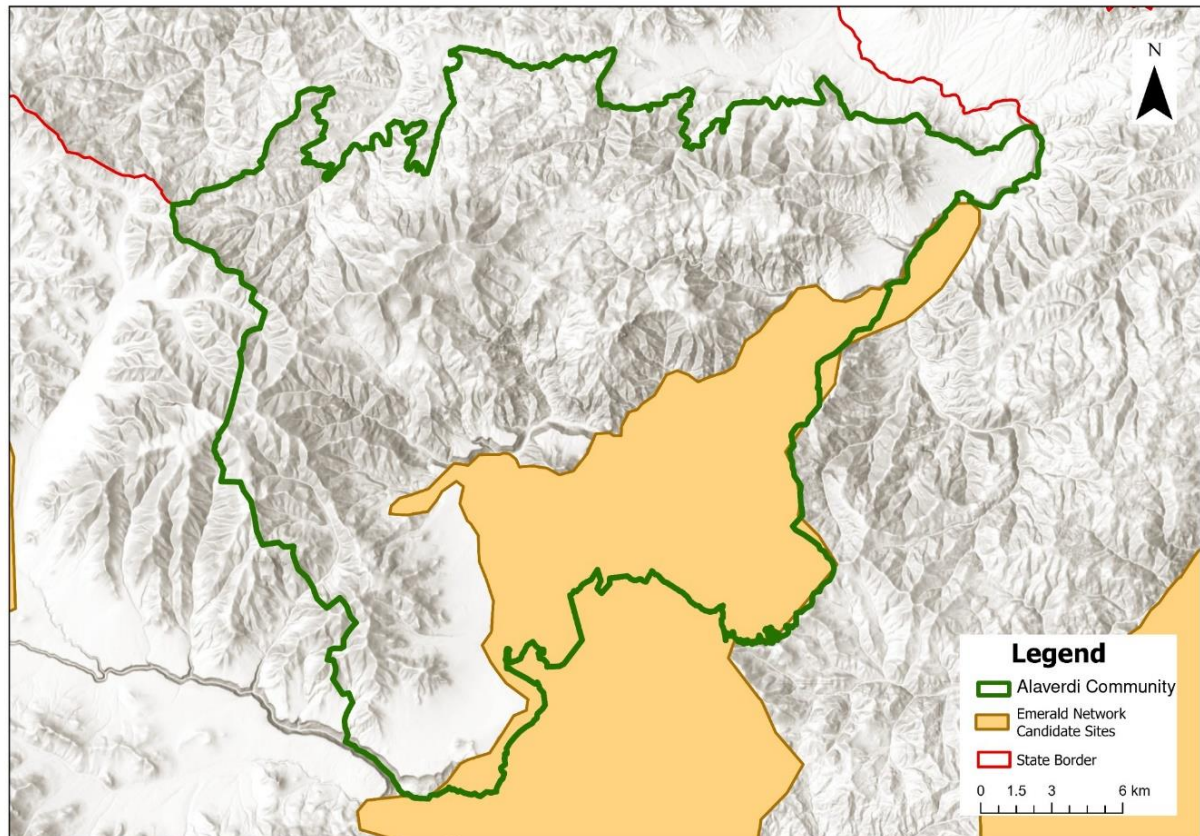
3.1 Location and Context

Alaverdi is located in Lori marz in northern Armenia and occupies one of the most distinctive positions among the pilot communities because it is shaped by the Debed Gorge and by a heritage corridor of national and international importance. It is not a compact stand-alone town destination. It should be understood as a wider community landscape where the town of Alaverdi, nearby urban settlements, historic monasteries, river infrastructure, and steep gorge slopes function together as one tourism and management space. As of 1 January 2025, Alaverdi community had a permanent population of 33.3 thousand, including 14.7 thousand urban residents and 18.6 thousand rural residents.

Alaverdi should be understood as a Debed Gorge corridor rather than a single town stop. The community service base, Sanahin–Haghpate heritage, the river landscape and industrial/railway history can be connected through a small set of approved routes and services. The project materials do not

provide verified route distances or travel times between all clusters. Before publication, a route sheet must record road and walking distance, normal and seasonal travel time, surface/gradient, legal access, transport or transfer mode, parking/trailhead, hazard points, mobile/emergency access, accessibility and responsible manager for every cluster connection.

Figure 4. Alaverdi Community and Emerald Network candidate-site context



Note: The map provides broad context only. It does not show approved routes, attraction points, forest-management boundaries, sensitive habitats, industrial safety/contamination areas, unstable slopes, legal access or visitor services. Those layers require joint GIS and field validation.

Source: Project GIS layers, 2026.

3.2 Ecological Characteristics

The ecological character of Alaverdi is defined by a mixed canyon, river, and forest landscape. The package identifies forest and mixed ecosystems, with canyon and river systems as the main ecological setting. This is consistent with the physical structure of the Debed Gorge, where riparian habitats, steep rocky slopes, mixed deciduous forest patches, and transitional shrub and grassland areas occur in close proximity. In practical terms, this creates a diverse but fragmented ecological setting: visually strong and attractive for ecotourism, but also sensitive to route placement, habitat disturbance, and poorly located visitor functions. The Debed Gorge itself is one of the defining ecological and landscape anchors of the site. The filled form describes it as a deep canyon of up to about 350 meters, with steep cliffs, terraces, riparian habitats, and forest-covered slopes. This topographic structure is important not only for scenery, but also because it creates ecological variation and supports species associated with forest and riverine systems. The nearby Debed Emerald site context is also relevant. Alaverdi is not itself classified in the package as a protected area or Emerald site, but it is directly influenced by the wider “Debed” candidate Emerald area, which confirms that the

surrounding landscape is already recognized in national and European conservation planning as biodiversity-relevant.

The draft assessment lists brown bear, Eurasian otter, black stork, Caucasian leopard, European yew and *Rhododendron caucasicum* as species of concern associated with the wider Lori/Debed setting. The available project materials do not verify occurrence, location, abundance or visitor suitability within Alaverdi Community. These entries are therefore screening hypotheses, not tourism claims. A science-reviewed desktop and field check must confirm each entry, map sensitive locations and determine whether interpretation is appropriate; tourism materials must not disclose sensitive locations or promise sightings.

3.3 Socio-Economic Context

The socio-economic profile of Alaverdi is more complex than in the smaller rural pilot communities because tourism here intersects with both heritage and an industrial legacy. The filled form identifies agriculture, tourism, services, and industry as the main livelihood sectors, and this reflects the real structure of the community. Alaverdi has long been associated with mining and metallurgy, and the package correctly highlights the copper mining and smelting complex, railway-linked industrial growth, Soviet worker settlements, and the cableway as part of the local economic and cultural landscape. In other words, Alaverdi's tourism profile does not emerge from a purely rural economy. It develops in a post-industrial setting where heritage, landscape, and everyday livelihoods overlap.

The wider Lori economy supports this mixed picture. In 2024, the volume of services in Lori reached 42.681 billion AMD, accommodation and food service activities reached 3.7399 billion AMD, and arts, entertainment, and recreation reached 105.5 million AMD. These figures show that the marz already has an active, though still moderate, tourism and hospitality economy within which a corridor site like Alaverdi can position itself. At the same time, this remains a region where tourism is not the dominant economic branch, which makes it more realistic to treat ecotourism as a diversification pathway rather than as the primary economic engine. Alaverdi's local product base also supports this interpretation. The package identifies honey, herbs, mushrooms, berries, wild fruits, and medicinal plants as present, with concrete examples such as blackberry, wild strawberry, rose hip, cornelian cherry, thyme, mint, sorrels, and several mushroom species. This means that ecotourism in Alaverdi is not based only on monuments and viewpoints. It also has a real local-product layer that can support route-based stops, food experiences, and small-scale value addition. Combined with the UNESCO-linked heritage corridor and industrial identity, this gives Alaverdi one of the more layered socio-economic foundations among the pilot sites: not a simple nature destination, but a landscape where history, livelihood, and ecology can be brought together through carefully managed tourism.

4. Stakeholder Insights and Local Priorities

For Alaverdi, the stakeholder discussions are most useful where they reinforce the community's role as a corridor-based destination rather than a single-site destination. The strongest opportunity is not one isolated attraction, but the ability to combine Debed Gorge landscapes, UNESCO-linked monasteries, industrial heritage, local products, and route-based movement within one tourism system. This fits the actual profile of the site: low to medium visitor flow, medium to high community willingness, existing but weakly structured tourism activity, accommodation already present, and a landscape where tourism value comes from layering nature, history, and identity rather than from one dominant recreation product alone. One of the clearest opportunities is the integration of local products and food into the visitor experience. The stakeholder meeting repeatedly emphasized the creation of food points, the use of agricultural goods, inclusion of individual entrepreneurs, and stronger local economic participation through gastronomy and small services. This is particularly relevant in Alaverdi because the filled form already identifies a rich NTFP base, including honey, herbs, mushrooms, berries, wild fruits, and medicinal plants. In practical terms, this means that Alaverdi can build a tourism offer where route-based stops are supported by tasting points, local dishes, teas, preserves, and small-scale product sales, rather than relying only on monument visits or scenic viewpoints.

A second opportunity lies in cultural layering. Alaverdi is one of the few pilot sites where industrial heritage and outstanding medieval monument heritage exist in the same tourism space. The stakeholder discussions stressed that ecotourism packages should present natural, historical, and cultural assets together rather than separately. This is especially suitable for Alaverdi, where Sanahin, Haghpata, Akhtala, Odzun, Sanahin Bridge, and the copper-smelting and railway legacy all sit within the same Debed corridor. The tourism opportunity is therefore not only to attract visitors to famous monuments, but to interpret the wider landscape as a living corridor shaped by nature, religion, infrastructure, and industry across time. The stakeholder discussions also highlight the value of seasonal tourism offers, and this fits Alaverdi particularly well. Seasonal products such as mushroom and herb collection, harvest-related experiences, and changing landscape conditions can help diversify the tourism year. For Alaverdi, this is more than a generic idea. Spring and early summer can support canyon and monastery routes, while late summer and autumn are especially suitable for local-product experiences linked to berries, herbs, mushrooms, and food. Seasonal diversification is important here because the site is not likely to compete through high-volume tourism; it needs to increase depth and spread of experience rather than visitor intensity alone.

Inclusion is another major opportunity. Stakeholders emphasized the involvement of women, youth, vulnerable groups, and individual entrepreneurs in guiding, food production, crafts, hospitality, and small tourism services. This is directly relevant for Alaverdi because the package already supports women and youth inclusion but does not yet show strong formal local employment effects from ecotourism. In a community with a layered but still under-structured tourism economy, inclusion is likely to happen through small route-based services, local food points, cultural interpretation, accommodation support, and product sales rather than through large employers. This makes the stakeholder emphasis on entrepreneurship and broader participation especially important.

At the same time, the challenges identified during the stakeholder process are highly relevant for Alaverdi and in some respects more serious here than in the more straightforward pilot sites. The first is infrastructure weakness. Stakeholders pointed to limited tourism infrastructure, poor mapping, weak visibility, lack of basic visitor facilities, and the need for better route and site information. This is directly consistent with the package, which shows trails only in a limited and unstructured form, signage as partial, and no visitor center. In Alaverdi, this is not a minor inconvenience. Because the

tourism space is linear, dispersed, and complex, weak visitor orientation can quickly reduce the quality of the experience and make the corridor feel fragmented instead of coherent. A second challenge is coordination. Stakeholders highlighted the lack of standardized visiting conditions, weak cross-sector cooperation, and the need for an ecotourism platform to connect municipalities, businesses, institutions, and communities. This is especially relevant for Alaverdi because the tourism space includes heritage monuments, community land, nearby Emerald relevance, industrial legacy areas, and a mixture of services and attractions that are not governed through one simple system.

In practical terms, even where tourism assets are strong, implementation will remain fragile unless route management, visitor information, and shared responsibilities are better coordinated. Climate and safety risk were also raised in the stakeholder discussions, especially the weak coordination of climate change risks affecting tourism assets and visitor security. This is highly relevant for Alaverdi because the package already identifies medium to high fire and landslide exposure and high community impact risk. In a steep gorge setting with dispersed heritage and industrial sites, climate-related risk is not separate from tourism planning. It affects route safety, seasonality, site suitability, and the ability to maintain a coherent visitor experience across the corridor. The resulting priorities for Alaverdi are therefore clear. The community needs a more coherent corridor-based tourism structure, better mapping and route visibility, stronger integration of local products and food stops, clearer connection between accommodation and attraction use, and improved coordination across heritage, nature, and local service actors. Its opportunity lies in the exceptional layering of Debed Gorge landscape, UNESCO and monument heritage, industrial identity, and local products. Its challenge lies in turning that richness into a manageable ecotourism offer without allowing fragmentation, weak visitor orientation, and climate-related risk to undermine the experience.

Regarding the consultation status, the recorded March 2026 meeting confirms participation by Pavel Papoyan of Alaverdi Municipality and Kristine Hovsepyan of Lori DMO. Direct consultation with the competent Forest Economy/forest-management unit, heritage and church-linked site managers, industrial landowners/operators, environment and emergency bodies, named accommodation/food/guide/transport providers and community groups is not evidenced in the available records. They are listed as required implementation stakeholders, not as confirmed consultees.

5. Tourism Baseline

Attractions

Alaverdi's priority attraction system comprises the Debed Gorge and Debed River landscape; Sanahin and Haghpats as internationally important monastic anchors; Sanahin Bridge; Alaverdi's industrial, railway, worker-settlement and cableway history; selected safe gorge viewpoints and walking links; local food and product stops; and Akhtala and Odzun only where their administrative status, site-manager approval and route role are confirmed. The register below separates a tourism idea from a launch-ready product and prevents symbols on a map from being treated as approved visitor sites.

The cultural attraction base is exceptionally strong. The most prominent sites are Sanahin Monastery and Haghpats Monastery, both internationally known and recognized as UNESCO World Heritage monuments. They are complemented by Akhtala Monastery, notable for its fortified setting and frescoes, Odzun Monastery, one of the oldest churches in the Debed Gorge region, and Sanahin Bridge, a major medieval bridge over the Debed River. These sites give Alaverdi a much stronger monument profile than most of the other pilot communities and make heritage one of the main reasons visitors enter the corridor. What makes Alaverdi especially distinctive is that this heritage landscape is combined with industrial heritage of national importance. The package identifies the copper mining and smelting complex, the railway landscape, worker settlements, metallurgical plants, and the cableway as part of the attraction base. This gives Alaverdi a rare tourism layer that most communities do not have: the possibility of interpreting the landscape not only as natural and religious, but also as industrial and infrastructural. In practical terms, the attraction profile is therefore unusually layered. A visitor in Alaverdi can encounter medieval monastic architecture, canyon scenery, industrial history, and river-based landscape all within one connected geography.

Local products and landscape-linked food also strengthen the attraction base. The presence of honey, herbs, mushrooms, berries, wild fruits, and medicinal plants means that the area is not attractive only for sightseeing. It also has the potential to support route-based food stops, seasonal product experiences, and locally rooted gastronomy connected to the gorge environment.

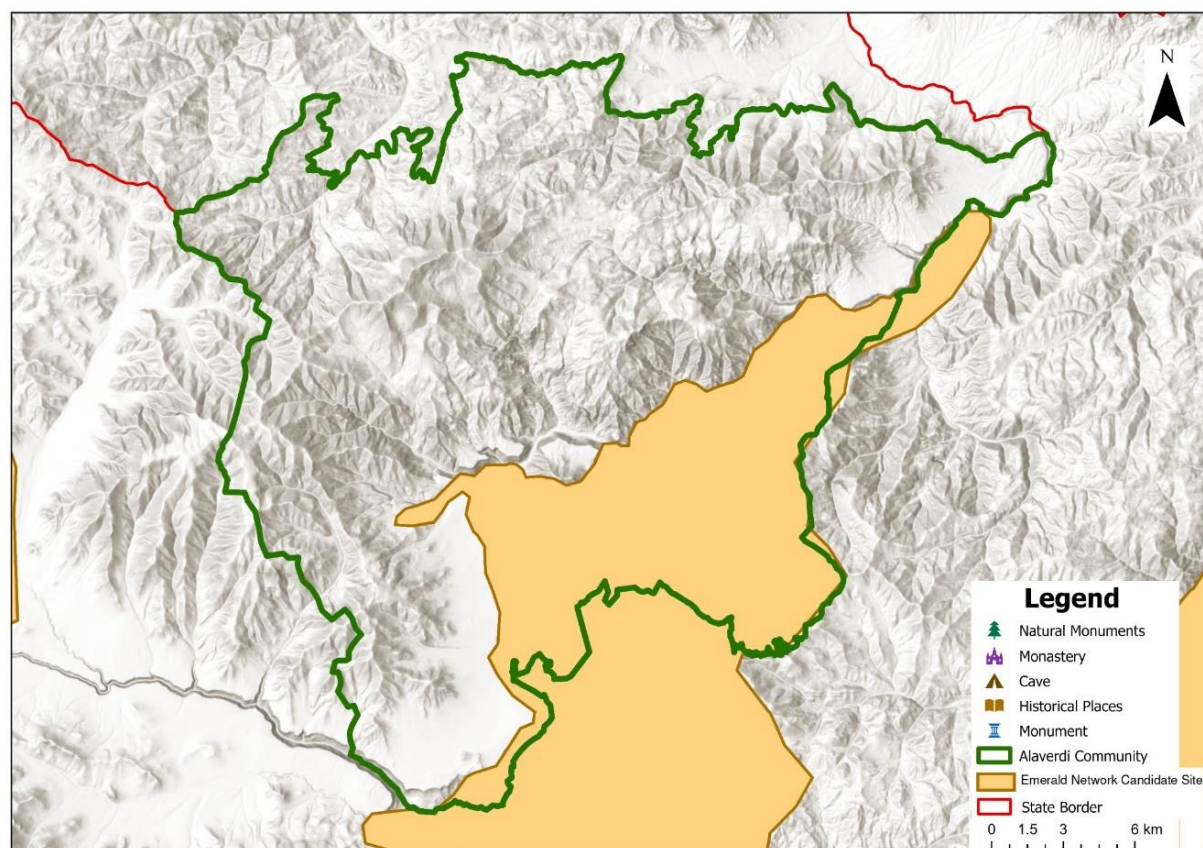
Table 1. Priority Attractions

Priority attraction / cluster	Visitor role	Evidence and launch conditions
Debed Gorge and river corridor	Core scenery, geology, river-habitat and bird interpretation	Select safe public routes/stops; validate riparian/cliff sensitivity, road/slope/flood risk, parking, group/season rules and maintenance
Sanahin–Haghpats heritage	Primary monastic, educational and cultural-landscape anchor	Confirm site boundaries, church/heritage managers, opening/access, interpretation, group/event rules, paths, sanitation and conservation conditions
Sanahin Bridge and town links	Short heritage-and-river walking sequence	Validate pedestrian safety, route continuity, river-edge condition, wayfinding, accessibility and public-space maintenance
Industrial/railway/cableway history	Distinctive post-industrial interpretation and possible future reuse	No visitor entry without ownership, contamination, structural, active-use and heritage checks; begin with safe public viewpoints and digital/guide interpretation
Local food and product stops	Meals, tastings and traceable sales linked to routes	Verify provider, hygiene, local origin, legal/sustainable collection, season, quantity, pricing and benefit record

Priority attraction / cluster	Visitor role	Evidence and launch conditions
Akhtala, Odzun and wider Lori links	Optional corridor extensions, not automatic Alaverdi attraction claims	Confirm boundaries, site managers, route times, operator handovers, visitor rules and how meals/stays/payments are distributed

Source: Authors' elaboration.

Figure 5. Interim detailed Alaverdi Community and Emerald context map

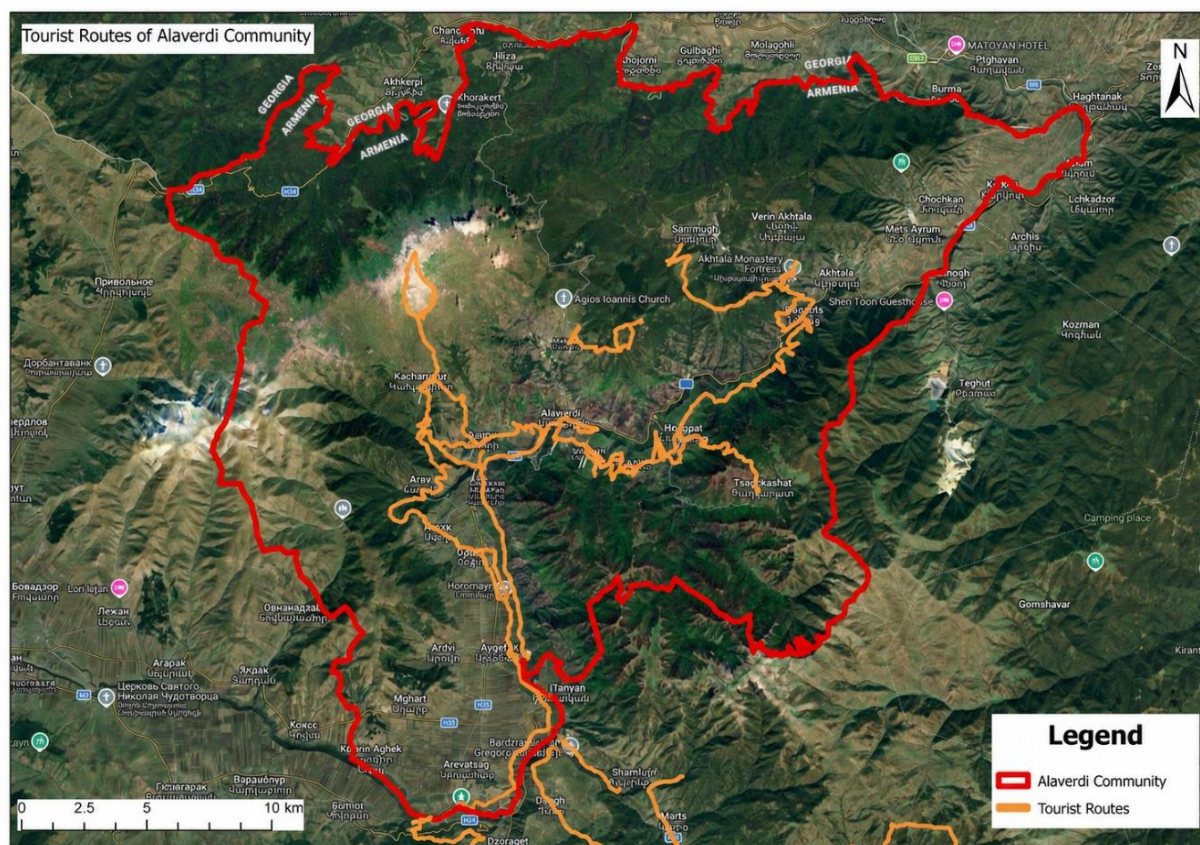


Note: the supplied detailed export does not contain the attraction-point layer. It must not be used as an attraction, route or zoning map. The register above should be converted into a numbered, field-verified GIS layer and re-exported before implementation.

Source: Project GIS layers, 2026

Analysis of available official and user-generated spatial data identifies a substantial but partly overlapping network of walking routes within and around Alaverdi Community. The network is structured around four main areas: the Sanahin-Akner-Kayan-Haghpat heritage corridor; the Akhtala-Shamlugh and Haghpat-Tsaghkashat area; the Akori-Sedvi-Kachachkut and Lalvar mountain area; and the southern Debed Gorge connections towards Odzun, Horomayr, Kobayr and Tumanyan. Most recorded alignments are approximately 3-17 km long, while several longer tracks form part of the wider regional network. Because some sources describe alternative or duplicate alignments of the same corridor, the mapped routes should be understood as an initial spatial inventory rather than as individually approved tourism products.

Figure 6. Indicative tourist-route network in Alaverdi Community



Note: Route alignments are indicative and require field validation before publication or promotion.

Source: Analysis of available official and user-generated spatial data.

The mapped network supports Alaverdi's proposed development as a connected heritage-and-landscape corridor. The Sanahin-Haghpat area provides the principal heritage cluster; Akhtala and Shamlugh extend the offer northwards; and the Akori-Sedvi-Kachachkut-Lalvar area introduces longer mountain and forest experiences. The southern routes towards Odzun, Horomayr, Kobayr and Tumanyan should be treated as regional extensions requiring coordination between the relevant communities.

The entire mapped network should not be promoted as immediately visitor-ready. Overlapping alignments should first be consolidated into unique route records. Each selected route should then be checked for its start and end points, length, gradient, surface condition, land and management status, heritage and environmental sensitivity, seasonal hazards, emergency access, signage requirements and maintenance responsibility. Initial product development should prioritize short and medium-length interpretive routes connected to settlements, monuments and existing services.

Activities

The existing activity profile is already broader than the site's weak infrastructure might suggest. Hiking is the clearest and most established activity, and this makes sense in a community where much of the tourism value lies in movement through the gorge, access to monuments, and viewpoint-based experience. The terrain and heritage layout naturally support walking routes rather than compact destination use.

Camping is also present, although still unstructured. This is important because it shows that the site is already used as more than a monument corridor or roadside stop. At the same time, the lack of stronger visitor management and the presence of fire and landslide risk mean that camping cannot be treated as a free-form expansion area. It remains part of the baseline, but one that clearly requires stronger control and definition.

Guided tours are already part of the site's tourism reality and are especially important in Alaverdi because the attraction system is too layered to be understood through casual visitation alone. Guided use is particularly suitable here because it allows the landscape to be interpreted as a combined natural, historical, and industrial corridor rather than as a series of disconnected stops. In a place like Alaverdi, guiding does not only improve visitor experience; it helps give structure to a tourism space that is otherwise fragmented. The package also supports wildlife observation, agro-ecotourism, cultural landscape tourism, and NTFP-based experiences, but these should be understood in proportion to the site's baseline. Wildlife observation is possible only in a limited way and should remain secondary to landscape and heritage-based experiences. Agro-ecotourism is also limited and is more realistically expressed through local products and rural food rather than through farm-based immersion. Cultural landscape tourism, by contrast, is one of the strongest directions for Alaverdi because the Debed corridor already functions as a combined landscape of monasteries, bridges, settlements, and industrial infrastructure. NTFP-based experiences are also realistic because the local product base is already there and can be linked to route-based stops and food experiences.

Visitor Flow

'Low to medium visitor flow' is an unmeasured planning classification, not a numeric result. The available materials do not quantify Alaverdi community visitors, monument-only visitors, corridor through-traffic, day versus overnight visitors, stay length, meals, accommodation use, expenditure or nature-route use. Bagratashen border traffic and Lori hotel statistics provide regional context only and must not be presented as Alaverdi demand. Until a common baseline is collected, no market share, conversion rate or growth target is adopted.

During Year 1, every pilot product and participating provider should use one simple record: date/season; product/route; enquiries, bookings and cancellations; visitor origin and segment; group size; day or overnight status; nights; accommodation and meal use; guide, transport and product purchases; indicative visitor expenditure and local provider payments; satisfaction; incident; and route/closure status. Monthly summaries should be compared by segment and product. Only repeated observed data should justify scaling, new facilities or numerical visitor limits.

Accessibility

'Moderate accessibility' means that the M6/Debed corridor and the Alaverdi service base are comparatively reachable, while movement between individual heritage, river, industrial and viewpoint clusters is uneven and may require walking, a licensed transfer, seasonal restriction or closure. A route-and-time sheet must measure each connection rather than rely on general labels. It should cover distance, travel/walking time, legal road/path, land/site manager, surface and gradient, flood/landslide/rockfall/fire risk, industrial restrictions, emergency access, public/transfer options and accessibility for visitors with limited mobility.

This means that Alaverdi is accessible enough to support tourism, but not in a smooth or uniformly organized way. Reaching the corridor is one thing; moving through it as a coherent tourism landscape is another. This is one of the reasons why the area still functions more as a chain of

attractions than as a fully integrated destination. The implication for the baseline is clear. Accessibility supports tourism, but not yet at a level that makes movement effortless or self-explanatory. This is why signage, route visibility, visitor information, and stronger organization become so important in later sections of the plan. Alaverdi's tourism potential does not depend on making the site easier to reach in general terms. It depends on making the corridor easier to understand and use once visitors are already there.

6. Suitability Assessment and Zoning

Alaverdi's zoning instrument is an operating map, not a general narrative. It must show: (1) settlement and service areas for information, accommodation, meals, parking and product sales; (2) controlled-use routes and stops with product-specific season, group, vehicle and guide conditions; and (3) temporary or permanent exclusion/closure areas for sensitive river/cliff/forest habitat, unstable slopes, flood or fire risk, active or contaminated industrial land, unsafe structures, heritage restrictions, forest work/haulage and unsuitable off-route vehicle use. The two project maps are context inputs; neither is an approved zoning map.

Sensitivity in Alaverdi is best understood as uneven rather than uniformly high. The wider landscape includes the Debed Gorge, mixed deciduous forest on the surrounding slopes, shrubland and semi-natural transitional areas, and riverine habitats along the Debed River. In addition, the form identifies likely Red Book species associated with forest and river systems, including Syrian brown bear, Eurasian otter, black stork, and the extremely rare Caucasian leopard, as well as threatened plant species linked to the Lori floristic region. This does not justify treating the whole community as a strict conservation tourism space, but it clearly means that some parts of the corridor require more caution than others. The ecological profile therefore supports selective access, route-based movement, and avoidance of careless expansion into habitats that are visually attractive but environmentally more vulnerable. Tourism demand is low to medium, and this is one of the reasons why the site is still manageable from a planning perspective. Alaverdi already receives real visitor attention because of Sanahin, Haghpata, Akhtala, Odzun, Sanahin Bridge, the Debed Gorge itself, and the town's industrial heritage. But the tourism flow is still dispersed and attraction-led rather than functioning as one structured destination system. This is a critical distinction. The site has enough demand to justify product development, service improvement, and route organization, yet not so much that zoning has to be driven mainly by overtourism control. In practical terms, the current demand level creates room to shape the tourism model before stronger pressure develops.

Accessibility also points in the same direction. Alaverdi is reachable and connected to a known corridor, but movement within the actual tourism landscape is more complicated than simple road access suggests. The form rates accessibility as moderate, which is the correct interpretation for a community stretched through a steep gorge where monasteries, settlements, viewpoints, industrial features, and natural areas are distributed across an uneven terrain. This does not prevent tourism, but it does mean that route choice, visitor information, and small infrastructure placement are more important than in flatter or more compact destinations. The selected zoning outcome is therefore well founded. The controlled ecotourism zone is justified because Alaverdi can support hiking, guided tours, limited wildlife observation, cultural landscape tourism, and NTFP-linked experiences, but only where visitor use is organized and does not intensify pressure on sensitive gorge habitats, steep slopes, or fragmented route sections. This is the core operational zone for the package. In practical terms, it is the space where the Debed Gorge landscape, walking access, and interpretation-based tourism can function under managed conditions rather than as unrestricted recreation.

The sustainable development zone is equally important in Alaverdi and, in many ways, more necessary here than in the more purely nature-based sites. The community already has accommodation, a strong heritage base, industrial legacy features, and a corridor structure where visitor support functions cannot all be placed inside sensitive natural space. The sustainable development zone is therefore the appropriate planning space for accommodation, local-product sales, food points, interpretation services, heritage-linked visitor functions, and other tourism-support activities that need to exist in lower-risk or already used areas. In Alaverdi, this zone is not about large-scale tourism

expansion. It is about giving the corridor a service and economic structure that can support ecotourism without pushing all visitor activity directly into the most sensitive parts of the landscape.

A strict conservation zone is not selected, and that should be read carefully. It does not mean that ecologically sensitive habitats, species-rich pockets, or unstable gorge areas are appropriate for general tourism use. Rather, it reflects the fact that the package is framed around controlled ecotourism and sustainable development functions on community land with nearby Emerald relevance, not around a formally designated strict-conservation tourism component. In practice, the most sensitive and unstable parts of the Debed Gorge system should still remain outside the main visitor-use space unless future spatial validation shows that low-impact access is appropriate and safe. The resulting zoning logic is clear. Alaverdi is not suitable for broad tourism spread across the whole gorge landscape, and it is not a site where monuments, natural areas, and industrial heritage should be promoted independently of one another. It is well suited to a controlled corridor-based ecotourism model, supported by sustainable development functions in lower-risk and already used parts of the community. That is the zoning structure most consistent with the site's actual mixture of heritage significance, ecological sensitivity, moderate demand, and terrain-related constraint.

Table 2. Operational zoning and approval tool

Layer	Permitted use after approval	Required decision and update
Service / information areas	Information, booking, accommodation, meals, sales, toilets, parking and public-space improvements in existing suitable locations	Municipality plus owner/operator; heritage, road, environment or utility review where relevant; annual service audit
Controlled-use routes and stops	Approved walking, guided interpretation, legal-road transfer and scheduled product use	Land/site manager, heritage/forest/environment and hazard review as applicable; publish open/closed status and conditions
Exclusion / closure areas	No visitor promotion or access except authorized management, emergency or research activity	Responsible authority records reason, boundary, duration, notice and reopening test after habitat, hazard, fire, flood, industrial or heritage trigger

Source: Authors' elaboration.

7. Ecotourism Product Development

Alaverdi's customer profile is a set of testable market hypotheses, not a completed quantitative analysis. Initial segments are: domestic and diaspora weekend visitors; small international culture-and-landscape groups already visiting northern Armenia; birdwatching and nature-learning visitors; industrial-history and architecture visitors; educational groups; and slower travellers interested in food, local products and one-night stays. Each segment must be tested through enquiries, bookings, cancellations, day/overnight conversion, expenditure, satisfaction and operator feedback before investment or promotion is expanded.

These initial market segments provide the basis for testing the viability of Alaverdi's proposed ecotourism offer. Table 3 translates each segment into a corresponding visitor need or product proposition and identifies the quantitative information that should be collected during pilot implementation to determine whether the product should be maintained, adapted, or scaled up.

Table 3. Ecotourism product development

Test segment	Need / suitable offer	Quantitative decision fields
Domestic/diaspora weekend	Clear full-day or one-night plan, road/parking information, meal and family/small-group options	Enquiries, bookings, party size, day/overnight conversion, meal/stay spend and satisfaction
International culture-and-landscape	Accurate monastery, gorge and industrial narrative; guide, transport and booking handover	Origin/language, operator referral, guide/transport/stay uptake, complaints and repeat/referral intent
Birdwatching/nature learning	Approved low-disturbance river/gorge route, trained guide and science-reviewed content	Departures, group size, season, route condition, conduct breaches, sightings log without sensitive location disclosure
Industrial-history/education	Safe public-viewpoint, digital/archive and guide interpretation; no unverified site entry	Group type, booking, content feedback, safety/ownership permissions and local service use
Food/local-product slow travel	Tasting/meal/sales linked to heritage/nature route and optional stay	Provider, local origin, items sold, visitor spend, season/stock, hygiene and benefit record

Source: Authors' elaboration.

The recommended formats are:

- a half-day three-to-five-hour town/river or single-cluster experience
- a full-day seven-to-nine-hour product combining one main heritage anchor
- a safe gorge/nature element, industrial-history interpretation and a meal
- a two-day/one-night Alaverdi corridor stay dividing heritage/nature and industrial/local-product themes
- and a two-to-three-day Lori route linking Vanadzor, Tumanyan and Alaverdi.

These are product formats, not verified travel-time claims. Operators must test the actual sequence, distances, transfer time, opening hours, walking duration, seasonal alternative and emergency margin before sale.

Hiking is therefore a core product line, but it should be treated as interpretive hiking rather than only as walking for its own sake. The form already identifies hiking, camping, and guided tours as existing activities, though not yet structured. In practice, hiking in Alaverdi is strongest where it connects monuments, viewpoints, and valley landscapes. The most suitable routes are likely to be short and medium-length walks linked to major heritage nodes, scenic edges of the gorge, and access points

where the relationship between landscape and built heritage can be interpreted. Alaverdi is not the strongest site for sport-oriented mountain hiking or biking. Its walking product is stronger when it is tied to the cultural geography of the corridor. Guided tours are especially important here and should be treated as one of the most relevant product formats rather than only a support service. In Alaverdi, guiding helps solve two problems at once. It improves visitor understanding in a complex and layered site, and it reduces fragmentation in a tourism space that can otherwise feel like a sequence of separate monument and roadside visits. The guided format is particularly suitable for monastery heritage, industrial legacy, and cultural landscape interpretation, but it is also the best way to introduce visitors to the wider ecological and historical context of the Debed Gorge. This makes Alaverdi one of the communities where guiding should become central to the tourism identity rather than optional.

The nature product should be a controlled Debed Gorge bird-and-river-habitat interpretation walk for small birdwatching, nature-learning and culture-and-landscape groups. It requires a field-approved route, trained guide or approved self-guided section, a science-reviewed bird/habitat checklist, small-group and season rules, no playback/feeding/collection/off-route pursuit, no guaranteed sightings, and a route-condition/observation log. If a sensitive feature, nest/roost area or deterioration is confirmed, the route is rerouted, seasonally restricted or closed.

Alaverdi's unique selling proposition is the close combination of Debed Gorge river and cliff ecology, Sanahin–Haghpat monastic heritage, medieval and transport infrastructure, copper/railway/worker-settlement history and local food/products. No other Lori package should duplicate this full identity: Vanadzor leads with city-based outdoor recreation, Tumanyan with canyon/literary/village products, and Alaverdi with the industrial-monastic-river gateway. The product should make these layers readable through one route rather than market them as disconnected attractions.

Camping is not a free-access product. Any campsite or organized overnight stop requires a named operator, lawful land/site use, hazard and environmental screening, sanitation and waste arrangements, water/fire rules, capacity and group conditions, booking/contact information, inspection, incident reporting, emergency access and a maintenance/closure owner. Unmanaged camping, open fires, use of industrial/contaminated land and stopping in unstable, riparian-sensitive or closed locations are prohibited.

The seasonal dimension is particularly important in Alaverdi because the site's attraction system changes character through the year. Spring and early summer are especially suitable for gorge scenery, monastery visits, flowering vegetation, and walking routes that combine natural and cultural interpretation. Summer remains the main season for hiking, guided tours, and corridor-based visitation, but it also requires stronger attention to heat, fire risk, and route comfort. Early autumn is one of the most valuable seasons for Alaverdi because it combines good visibility, milder walking conditions, and stronger relevance of local products such as berries, wild fruits, herbs, and food-based experiences. Winter should not be treated as a core ecotourism season in the current package. The corridor remains culturally important year-round, but the ecotourism product itself is clearly strongest from spring through autumn.

A practical optional itinerary for Alaverdi should reflect this corridor logic. A one-day itinerary could begin with arrival in Alaverdi and orientation to the Debed Gorge landscape, continue with a guided visit to Sanahin or Haghpat, move through one or two scenic and interpretive corridor stops such as Sanahin Bridge or an industrial heritage viewpoint, include a short guided walking section or viewpoint-based landscape interpretation, and end with a local meal or tasting built around forest and wild-growing products. A slightly fuller one-day version could combine one UNESCO monastery with

one industrial or infrastructural heritage stop and one local product point, rather than trying to maximize the number of monuments. A two-day format becomes more realistic because accommodation is already present in the package, allowing visitors to stay overnight and divide the corridor into two themed experiences: one more focused on heritage and landscape, the other on industrial identity, local products, and slower route-based exploration.

The ecotourism direction for Alaverdi should therefore be based on layering, interpretation, and corridor movement. The community does not need a wide portfolio of unrelated products. It needs a coherent product family built around guided heritage-and-landscape routes, selective hiking, limited nature observation, industrial interpretation, and local products. That is the form of ecotourism most consistent with the site's actual demand level, ecological setting, monument concentration, and corridor structure.

Based on Alaverdi's identified market segments, tourism assets and corridor-based development concept, the proposed ecotourism offer needs to translate the broader product directions described above into practical and potentially marketable experiences. Priority is given to products that combine the community's strongest comparative assets—the Debed Gorge and river landscape, Sanahin–Haghpat heritage, industrial history and locally produced food and products—while responding to the environmental, safety and management constraints identified for the area. Table 4 therefore summarizes the priority ecotourism products and supporting services proposed for further development and testing. For each product, it identifies the intended format and market, opportunities for local operators and visitor spending, and the safeguards that must be addressed before launch. These products should be understood as proposed operational tools rather than automatically approved tourism offers; their implementation remains conditional on the route, site, operator, safety, environmental and institutional validation specified in the table.

Table 4. Priority ecotourism product and service tools

Product / service tool	Format and market	Operator and local spending	Launch safeguards
Debed Bird and River-Habitat Walk	Two- to three-hour small-group nature/bird interpretation	Trained local guide; transport/meal/product add-on	Science and route validation; small-group/season rules; no disturbance or guaranteed sightings; condition log
Sanahin–Alaverdi Gorge Day	Full-day heritage, river landscape, bridge/town and industrial-history sequence	Guide; licensed transfer; meal/product stop; optional accommodation	Site-manager agreements; verified timings/routes; pedestrian/road safety; heritage and visitor rules
Industrial Heritage Safe Interpretation	Public-viewpoint, archive/digital and guide-led story; future reuse only after feasibility	Guide/creative/heritage partners; café/shop/event link where approved	Ownership, structural, contamination, active-use, access and heritage checks; no unapproved entry
Seasonal Local Products and Gastronomy	Meal, tasting, demonstration and traceable sales add-on	Household/small business and guide/accommodation referral	Food hygiene; local origin; legal/sustainable collection; season/quantity; price and sales record
Conditional Legal-Road Trailhead Transfer	Scheduled 4x4/minibus on an existing legal road followed by a guided walk; no recreational off-roading	Licensed driver/transport and guide; meal or stay link	Fixed road/stops; land/forest/road review; vehicle, insurance, capacity, weather and closure rules
Vanadzor–Tumanyan–Alaverdi Lori Route	Two-to-three-day city-outdoor, canyon/literary and industrial-monastic sequence	Joint operators; transport, guides, stays, meals and products in each community	Verified timings/handovers; differentiated offers; common visitor rules; cancellation, data and benefit method

Source: Authors' elaboration.

The development of attractive products alone will not be sufficient to establish Alaverdi as a coherent ecotourism destination. The quality and sustainability of the visitor experience will also depend on the performance of the accommodation providers, guides, transport operators, food businesses, local-product suppliers and other services connected to the proposed routes.

A common readiness framework is therefore proposed to ensure that participating providers meet basic requirements related to legal compliance, nature and heritage protection, local benefit generation, resource management, visitor safety, accessibility, information and service quality. Table 5 presents the proposed Debed Corridor Nature- and Heritage-Friendly Service Scorecard, which can be used as a practical local tool for assessing provider readiness and encouraging continuous improvement. The scorecard is not intended to function as an official certification scheme; rather, it provides a transparent basis for determining whether a provider is sufficiently prepared to participate in the approved ecotourism products and services, with mandatory eligibility gates complemented by a 100-point performance assessment and annual review.

Table 5. Debed corridor nature- and heritage-friendly service scorecard

Requirement	Proposed scoring / gate	Verification and consequence
Mandatory gates	Legal registration/permissions; food/accommodation/transport safety; site/land-manager approval; no closed, unsafe, contaminated or sensitive-area use; truthful marketing	Any failed gate = not eligible until corrected; this is a proposed local readiness tool, not official certification
Nature and heritage safeguards	0–25 points	Approved route/site, visitor code, no disturbance/collection, heritage rules, risk/closure information and condition checks
Local benefit and sourcing	0–20 points	Local jobs/providers, traceable local food/products, transparent referrals/payments and inclusion measures
Waste, water and energy	0–20 points	Waste prevention/separation, sanitation, water efficiency, energy measures and no unmanaged discharge/fire
Safety, accessibility and information	0–20 points	Emergency/contact, accurate maps/status, accessible information, complaint handling and staff competence
Quality, data and cooperation	0–15 points	Booking/service records, visitor feedback, incident reporting, monitoring participation and annual improvement action
Readiness result	All gates + at least 70/100; reviewed annually	Municipality convenes review with relevant land/site/heritage/environment authorities; suspend mark after critical breach or overdue correction

Source: Authors' elaboration.

To support the operationalization of the proposed ecotourism products, indicative retail price ranges have been developed as a preliminary market benchmark for 2026. These ranges provide an initial indication of how the proposed experiences could be positioned in the market and help local operators, guides and other service providers assess potential product packaging and commercial viability. They are based on comparable publicly available tourism and activity offers in Armenia and should therefore be treated as planning references, not as recommended or approved tariffs.

The ranges below reflect indicative 2026 retail prices in AMD. Per-person prices assume the stated paying group size, while vehicle-based prices assume the stated capacity. Before any product is launched, the itinerary and service package should be finalized and prices confirmed through supplier

quotations, including the applicable minimum group size, taxes and commissions, cancellation conditions and any fees established by the relevant authorities. Prices should subsequently be reviewed at least annually to reflect market conditions and operating costs.

Market benchmark: publicly available offers accessed on 8 September 2026, including ONE WAY TOUR day tours (AMD 8,000–13,500/person); Meet Dilijan and Yell Extreme Park activities (AMD 5,000–25,000); Armenian Explorer full-day 4x4 excursions (AMD 100,000/vehicle); and ExploreArmenia four-day specialist birdwatching tours (USD 460–910/person).

Table 6. Indicative product price ranges (2026 planning benchmark)

Product / service tool	Indicative 2026 retail range	Unit / base	Principal inclusions / exclusions
Debed Bird and River-Habitat Walk	15,000-30,000 AMD	Per person; 2-3 hours; 4-6 participants	Specialist guide and approved route/viewpoint interpretation included; transport, meals and specialist equipment extra.
Sanahin-Alaverdi Gorge Day	25,000-45,000 AMD	Per person; full day; 4-6 participants	Guide/host and interpretation included; transport, meals and paid-entry fees extra unless stated.
Industrial Heritage Safe Interpretation	6,000-12,000 AMD	Per person; 1.5-3 hours; minimum group charge may apply	Guide and approved public-viewpoint/digital interpretation included; no entry to unapproved premises.
Seasonal Local Products and Gastronomy	8,000-20,000 AMD	Per person; 1.5-3 hours	Hosted tasting, meal or demonstration included as specified; take-home purchases and itinerary transport extra.
Conditional Legal-Road Trailhead Transfer	25,000-60,000 AMD	Per vehicle, round trip; up to 4 passengers	Legal-road transfer and agreed waiting time included; guide, activity, meals and entry fees extra.
Vanadzor-Tumanyan-Alaverdi Lori Route	70,000-120,000 AMD / 115,000-190,000 AMD	Per person; 2 days/1 night or 3 days/2 nights; 4-8 participants	Accommodation, breakfast, guiding and corridor transfers included; other meals, entry fees and optional activities extra unless quoted.

Source: Authors' elaboration.

8. Infrastructure and Service Needs

Alaverdi has a more substantial tourism base than some of the other pilot communities, but its infrastructure is still too fragmented to support a coherent ecotourism offer. This is a particularly important issue here because the site is not organized around one compact attraction. It functions as a corridor of monuments, landscapes, settlements, and industrial heritage elements stretched through the Debed Gorge. Under these conditions, even where attractions are strong and accommodation exists, tourism can still remain weakly structured if routes, signage, orientation, and service points do not work together.

The most immediate gap is route organization. Trails are present, but they are limited and not structured, and signage is only partial. In a simple destination this would already be a problem. In Alaverdi, it is a major weakness because the tourism landscape is linear, layered, and difficult to read without guidance. Visitors may reach Sanahin, Haghpat, Akhtala, or a gorge viewpoint, but still not experience the wider corridor as one connected place. This reduces the quality of the visit and makes it harder to spread visitor movement and spending beyond the best-known stops. The practical priority is therefore not large new construction, but a functioning route system with clear trailheads, directional signs, route markers, and interpretation points that help visitors move through the gorge in a more structured way.

Visitor information is also underdeveloped. The package shows that no visitor center is in place, and this is especially important in Alaverdi because the tourism offer depends heavily on interpretation. The site is unusual in that its value comes from the interaction of natural scenery, UNESCO-related monuments, industrial heritage, bridges, settlements, and local products. Without stronger interpretation, visitors are likely to consume these assets as isolated stops rather than as parts of one corridor. A realistic improvement does not necessarily require a new standalone visitor center building at the outset. A more practical starting point would be a small visitor-information and interpretation function within an existing municipal, heritage, or accommodation-linked space, supported by visible outdoor information boards and better digital route material.

Accommodation is present, but the available materials do not provide a verified inventory of providers, rooms/beds, accessibility, season, average listed price, occupancy, length of stay, booking channel, route/product referrals or environmental performance. Before new bed-capacity investment is proposed, the Municipality and Lori DMO should complete a provider census and a monthly in-season sample covering these fields. The first priority is to connect suitable existing providers to approved products, booking/referral, meals, transport, visitor rules and the service-readiness scorecard.

Small service infrastructure is also important and currently insufficient. The stakeholder process highlighted the need for food points, better visitor facilities, public toilets, and stronger mapping and visibility. This is particularly relevant in Alaverdi because the corridor structure encourages stop-based visitation. Visitors moving between monuments, viewpoints, and heritage locations need simple, well-placed support services if the community is to retain value from their movement. In this context, small food points based on local products may be more useful than larger tourism facilities. They can improve visitor comfort, create local income, and strengthen the distinct identity of the corridor through honey, herbs, mushrooms, berries, teas, preserves, and local dishes.

The physical setting also means that infrastructure decisions must remain highly selective. Moderate accessibility, steep slopes, partial route structure, fire risk, and landslide exposure all place

limits on where tourism infrastructure should be strengthened. Alaverdi is not a site where expansion of access or facilities should be treated automatically as positive. In some parts of the corridor, more infrastructure could easily reduce rather than improve tourism quality by damaging scenic value, fragmenting habitat, or increasing safety problems. The practical focus therefore has to be on low-impact and well-located improvements, especially in already used and more stable areas.

What Alaverdi needs most is a minimum but coherent tourism-support system. In practical terms, the infrastructure agenda should focus on:

- Clearer trailheads, route markers, and directional signage along the corridor
- Interpretation points that connect monuments, landscape, and industrial heritage into one readable tourism system
- Small visitor-information functions within existing buildings or services
- Improved mapping and digital visibility of routes, access points, and stop locations
- Public toilets and basic visitor facilities at priority tourism stops
- Stronger linkage between existing accommodation and route-based ecotourism products
- Local gastronomy and product points that can serve visitors moving through the corridor
- Careful siting of all new small infrastructure in lower-risk and already used locations.

For Alaverdi, infrastructure planning should remain practical, low-impact, and corridor-oriented.

The community does not need heavy tourism construction in order to improve its ecotourism offer. What it needs is a stronger structure around the assets it already has. Because the natural, historical, and industrial layers are all already present, relatively modest improvements in route clarity, visitor support, interpretation, and local service integration can make a major difference in how the destination functions in practice.

The infrastructure assessment indicates that investment should focus first on resolving the operational gaps that prevent Alaverdi's existing assets from functioning as a coherent ecotourism corridor. Accordingly, investment priorities should combine physical improvements with the information, service, management and monitoring systems required to operate them effectively. Table 7 translates the identified infrastructure and service needs into priority fields of investment and, importantly, identifies the minimum conditions that should be satisfied before financing or physical works proceed.

Table 7. Primary fields of investment

Investment object	Why it is needed	Condition before finance / works
Numbered GIS attraction, route and zoning system	The supplied maps do not show launch-ready attractions, routes, times, hazards, services or closures	Correct GIS export; field/manager validation; legal access; heritage, habitat, forest, industrial and hazard layers
Information, booking and live route status	Visitors currently encounter disconnected stops and providers	Use an existing suitable municipal/heritage/accommodation space first; confirm operator, staffing, content, accessibility and maintenance
Trailheads, signs, toilets and small safety works	Approved routes need legibility, sanitation and risk information	Only after demand, siting, design, permissions, quantities and maintenance/closure owner are confirmed
Bird/nature interpretation readiness	The package needs a genuine nature product without wildlife disturbance	Science-reviewed checklist, route, guide training, small-group/season rules and monitoring points
Provider training and scorecard pilots	Accommodation, food, guiding, transport and product services need common readiness and visitor standards	Agree assessor, evidence, correction process and annual review; do not present as state certification
Industrial-heritage transformation pilot	Industrial history is distinctive but may involve unsafe, contaminated, active or privately owned assets	Ownership, contamination, structural, active-use, heritage and business feasibility; begin with safe public interpretation; adaptive reuse only if approved
Monitoring and maintenance fund	Routes, signs, habitats, heritage settings and service quality need recurring action, not one-time construction	Named contributors, eligible costs, procurement/repair rules, public reporting and closure authority

Source: Authors' elaboration.

9. Governance and Institutional Arrangements

The governance structure for ecotourism development in Alaverdi has to match the real character of the site: a community-land corridor where world-class monument heritage, industrial legacy, gorge landscapes, and nearby conservation relevance all overlap, but without a single protected-area administration governing the whole tourism space. This already sets Alaverdi apart from sites such as Dilijan. The package itself reflects that reality: the municipality and NGOs are assigned roles, while a protected-area authority, private sector role, co-management, revenue-sharing, and PPP are not yet formally in place. The legal and spatial situation is also more complex because the tourism space is linked to community land, industrial legacy areas, natural landscapes, and the nearby Debedi gorge Emerald context rather than to one park boundary or one simple management regime. At local level, Alaverdi Municipality should be the main coordinating actor. That is the most practical arrangement because ecotourism in Alaverdi depends on route planning, local roads, public spaces, signage, visitor information, small service points, and the connection between different settlements and heritage nodes along the Debed corridor. The municipality is the body most able to bring these elements together and to link tourism planning with local development priorities. This role is especially important in Alaverdi because the tourism space is dispersed and layered: without municipal coordination, Sanahin, Haghpata, Akhtala, industrial sites, local-product stops, and natural viewpoints are likely to continue functioning as isolated points rather than as one managed tourism corridor.

Heritage governance is one of the most important institutional layers in Alaverdi and cannot be treated as secondary. Sanahin and Haghpata are part of the UNESCO World Heritage property “Monasteries of Haghpata and Sanahin,” which UNESCO describes as a serial property in Lori marz, and Armenia’s most recent UNESCO reporting states that the Armenian Apostolic Church is the owner and key manager of the property, while the Ministry of Education, Science, Culture and Sports and its heritage institutions exercise state oversight, conservation monitoring, and technical responsibility. The same reporting also identifies the Service for the Protection of Historical Environment and Cultural Museum-Reservations SNCO and the Scientific Research Center of Historical and Cultural Heritage SNCO as institutions involved in regular monitoring and conservation-related work. This is a critical governance fact for Alaverdi. It means that tourism planning around the corridor’s strongest heritage assets cannot be handled only through municipal tourism logic; it must be coordinated with heritage institutions that are already responsible for site protection and management. Environmental governance is also important, even though the package is not built around a formally assigned protected-area authority. The site is not itself designated as a protected area in the form, but it is close to the Debedi gorge Emerald context and lies within a broader landscape of riverine habitats, forest patches, and steep gorge slopes. The Armenia scoping work and Emerald-related planning show that these kinds of areas fall within the wider institutional responsibilities of the Ministry of Environment and, where forest lands and sanctuaries are involved, the forest and protected-area governance system. In practical terms, this means that route development, access planning, and any tourism function close to sensitive habitats should not proceed as purely municipal tourism decisions. Alaverdi needs environmental consultation and route-level caution even without a park administration formally assigned inside the package.

The NGO role is also important and is correctly assigned in the package. In Alaverdi, NGOs are especially relevant not because they replace public authorities, but because the site is exactly the kind of corridor where facilitation, interpretation, training, and local coordination are needed. The broader project itself is already being implemented through Oiko and REC Caucasus Armenia, and the stakeholder process repeatedly emphasized the need for an ecotourism platform, clearer cooperation frameworks, and stronger inclusion of local entrepreneurs, food points, and local services. In

governance terms, this means NGOs and support organizations are likely to be most useful as conveners, facilitators, and technical partners helping connect municipality, heritage actors, local businesses, and corridor-based tourism development. The private sector role, by contrast, remains present in practice but weakly structured institutionally. The form does not assign it as a formal governance role, and this is understandable. Alaverdi does have accommodation and tourism-related businesses, and it clearly has services that benefit from monument and corridor visitation, but the site does not yet show a coordinated private-sector system shaping tourism management. This is one of the reasons the governance structure still feels incomplete: visitor accommodation, local food, product sales, guiding, and stop-based services exist or can exist, but they are not yet tied together through a shared management approach. In Alaverdi, the private sector is therefore important to implementation, but not yet a formal governance pillar in the way it might be in a more mature destination.

Coordination is therefore the central governance need. In Alaverdi, it is not enough to have strong attractions. The main risk is fragmentation between heritage management, municipal planning, environmental sensitivity, local services, and corridor-based movement. The most realistic solution would be a local coordination platform involving Alaverdi Municipality, relevant heritage authorities and church-linked site managers, environmental and forest actors where route decisions require them, accommodation and food-service providers, and NGOs active in facilitation and tourism development. The purpose of such a platform should be practical rather than bureaucratic: corridor route planning, signage, visitor information, local-product integration, seasonal access, site interpretation, and alignment between monument visitation and wider ecotourism use. This is exactly the type of coordination gap that the stakeholder meeting identified across the project, and in Alaverdi it is more important than in simpler sites because the corridor is so layered. Public-private partnership is not yet in place, and the package is correct not to overstate it. In Alaverdi, PPP should not be imagined as major tourism construction or large investment-led regeneration of the gorge. The more realistic future form would be modest cooperation around signage, route maintenance, visitor-information functions, small food and product stops, and corridor interpretation. This would fit the actual demand level and the existing mixture of accommodation, heritage visitation, and local product potential. A larger PPP model would be premature under current conditions.

Revenue-sharing and co-management are also absent, and this is a serious gap for a site like Alaverdi. Because tourism here already depends on heritage of international importance and a corridor that crosses multiple types of land and use, the lack of shared management and benefit mechanisms risks producing exactly the wrong pattern: monuments and landscapes attract visitors, but responsibilities remain fragmented and local economic benefit remains weakly organized. For that reason, one of the longer-term governance priorities should be to move beyond simple municipal coordination toward clearer practical arrangements on route maintenance, visitor information, service responsibilities, and how tourism-related value is retained locally.

For Alaverdi, the most effective governance model is therefore a layered one: the municipality leads local coordination; heritage institutions and the Armenian Apostolic Church remain central around UNESCO-related assets; environmental authorities provide ecological oversight where routes and sensitive habitats intersect; NGOs help facilitate and connect actors; and local service businesses gradually become part of a more organized corridor tourism system. That arrangement is the one most consistent with Alaverdi's actual mix of community land, nearby Emerald relevance, UNESCO and monument heritage, industrial legacy, and still-developing ecotourism structure.

Given the number of institutions and land- and site-management interests involved in the Debed corridor, effective governance will depend not only on identifying relevant stakeholders but also on defining who is responsible for individual operational decisions. Table 8 therefore translates

the proposed governance model into practical responsibilities and identifies the minimum records required to document decisions, approvals, operating conditions and follow-up actions. This is intended to reduce institutional ambiguity and provide a traceable basis for implementation, particularly where tourism activities intersect with heritage protection, environmental management, industrial sites, visitor safety and private service provision.

Table 8. Operating responsibilities and decision records

Actor	Decision / operating role	Required record
Alaverdi Municipality	Convene corridor platform; coordinate public space, services, providers, investment, monitoring and public information	Annual action plan; attraction/product/provider, inspection, maintenance and closure registers
Heritage authority and church-linked/site managers	Approve heritage access, interpretation, works, events, group rules and condition monitoring	Site-use conditions, content approval and condition/incident record
Competent Forest Economy / environment authority	Confirm forest land/access, work/haulage conflicts, fire/closures, habitat and Emerald-context safeguards where applicable	Forest–Tourism Compatibility Register and route/season condition or refusal
Industrial owners/operators and technical authorities	Confirm ownership, active use, contamination, structural/public safety and permitted interpretation/reuse	Site-screening decision, access boundary, remediation/feasibility and emergency conditions
Lori DMO / packaging partner	Package and market only approved products; booking/referral, market feedback and cross-community coordination	Approved product directory and common visitor/booking-data method
Guides, transport, accommodation, food and product providers	Operate services, brief visitors, follow scorecard/conditions, report data/incidents and maintain agreed objects	Provider agreement, qualifications/licences as relevant, service and maintenance logs
Emergency, NGO, research and community partners	Emergency readiness, science, training, inclusion, accessibility and user feedback by agreement	Protocol/terms of reference, curriculum/review or consultation record

Source: Authors' elaboration.

10. Visitor Management System

Alaverdi requires a more structured visitor management system than its current tourism baseline would suggest. Visitor flow is still only low to medium, but the site is unusually complex: monuments of international importance, steep gorge terrain, partial trail structure, industrial heritage sites, river landscapes, and dispersed settlements all sit within one narrow corridor. In such a setting, even moderate visitor use can become fragmented and difficult to manage if movement is not clearly organized.

The main management principle for Alaverdi should be corridor-based control of visitor movement. Tourism here should not spread freely across the wider Debed Gorge landscape. The most appropriate model is one in which visitors are directed along clearly identified heritage-and-landscape routes, with defined access points, stopping places, and interpretation nodes. This is necessary not only because of biodiversity sensitivity, but also because the gorge landscape includes steep slopes, unstable sections, and visually attractive areas that are not automatically suitable for regular visitor use.

Formal numerical limits are not yet the main priority. There is no site-level monitoring system, no route-based counting mechanism, and no evidence base for setting carrying-capacity thresholds, maximum group sizes, or daily quotas across the corridor. Under current conditions, the more realistic form of limitation is spatial rather than numerical. Visitor use should be concentrated on selected routes and attraction clusters, while more sensitive, unstable, or poorly accessible sections of the gorge remain outside the main visitor-use space. A fully developed seasonal restriction system is also not yet in place, but practical seasonal caution is clearly needed. In Alaverdi, access quality changes with weather, slope conditions, and route safety. Seasonal accessibility issues are already recognized in the site material, and these should be treated as an operational reality rather than a theoretical concern. Some paths, viewpoints, and corridor sections may require temporary caution, restricted use, or route adjustment during periods of poor surface stability, heavy rain, or heightened fire risk. In this site, seasonality is not only an ecological matter; it is also a safety and route-management issue.

Visitor rules should remain simple, visible, and tied to the actual character of the corridor. In practice, visitors should remain on designated routes, avoid creating informal shortcuts across slopes or around heritage structures, respect monument sites and surrounding landscapes, and follow clear guidance on littering, noise, and low-impact behavior. Camping is already part of the tourism baseline, but in Alaverdi it should not be treated as open or informal use. Because of fire risk, terrain exposure, and the fragmented structure of the corridor, camping should be limited to appropriate and clearly identified places rather than spreading freely through the gorge. The same logic applies to open-fire use, which should be tightly controlled or avoided in sensitive and exposed areas.

Guided-only access is not necessary as a site-wide rule, but guided use should play a much stronger role than it does now. Alaverdi is one of the clearest examples in the package where guidance improves both product quality and visitor control. Guided routes are especially suitable for monastery heritage, industrial heritage interpretation, cultural landscape reading, and those walking sections where the relation between monuments, terrain, and local history is not obvious to casual visitors. In Alaverdi, guiding should not be seen only as an optional added service. It is one of the most useful tools for turning a fragmented corridor into a coherent visitor experience.

The immediate visitor-management system is: (1) a numbered attraction and route register; (2) mapped legal access, heritage, forest-work, Emerald/habitat, industrial safety/contamination, slope/flood/fire/weather, service and closure layers; (3) product status naming operator, season,

group/vehicle/guide conditions and alternative; (4) information, booking/referral and pre-visit briefing; (5) route/activity visitor codes; (6) signs and facilities only after approval; (7) inspections, counts, guide/provider, service-score, condition and incident logs; and (8) named maintenance, closure, emergency and reopening owners. Community-wide quotas should not be invented before a baseline exists; route-specific limits may be set whenever safety, habitat, heritage, parking or service evidence requires them.

Table 9. Visitor-management action tool

Trigger	Immediate action	Owner / reopening test
Heavy rain, flood, slope/rockfall warning or damaged access	Close affected route/stop, notify bookings and publish alternative	Municipality with road/emergency/land/site authority; reopen after documented inspection
Fire danger, forest work/haulage or habitat sensitivity	Apply seasonal/area closure, group or guided-use condition	Forest/environment/land manager; reopen under written condition
Heritage damage, unsafe structure or industrial concern	Stop access/promotion and move interpretation to approved public/digital format	Heritage/site/owner/technical authority; reopen only after approval
Litter, erosion, shortcuts, noise or visitor-rule breach	Clean/repair, brief operator, reduce group/use, reroute or suspend	Maintenance owner and Municipality; verify correction at fixed condition points
Critical service or scorecard breach	Correct by deadline or suspend provider from approved directory/product	Municipality with relevant regulator/site manager; evidence and re-review required

Source: Authors' elaboration.

11. Local Economy and Benefit Sharing

Alaverdi's local economy gives ecotourism both an opportunity and a constraint. The community had a permanent population of 33.3 thousand as of 1 January 2025, including 14.7 thousand urban residents and 18.6 thousand rural residents, while the town of Alaverdi itself had 11.6 thousand residents.² This means the ecotourism package is not being developed for an isolated monument site, but for a mixed community with both urban and rural functions. The filled form also shows that the main livelihood structure is not purely tourism-based: agriculture, services, tourism, and especially industry remain central, with mining and metallurgy still identified as historically dominant. In practical terms, ecotourism in Alaverdi should be treated as a diversification pathway in a post-industrial corridor economy, not as a replacement for the wider local economic base.

The wider Lori economy supports that reading. In 2024, accommodation and food service activities in Lori reached 3,739.9 million AMD, while average monthly nominal wages in the marz were 163,321 AMD. At the same time, officially registered unemployment in Lori remained high in absolute terms: 5,617 people at the end of 2024, including 2,241 men and 3,376 women.³ These figures matter for Alaverdi because they show both sides of the context. On one hand, the marz already has a functioning tourism and hospitality economy. On the other, labour-market pressure remains significant, which means even modest local income from ecotourism can be meaningful if it is retained locally and linked to real service functions.

Direct local employment through ecotourism is not yet strongly visible in the current package, and the form is explicit about that. This is an important planning signal. It suggests that Alaverdi already attracts visitors because of its corridor position and monument heritage, but that this visitation has not yet translated into a clearly structured local employment system. For that reason, the most realistic jobs effect in the near term is likely to come from corridor-based services rather than from large tourism employers. The strongest channels are accommodation, food provision, local guiding, monument-and-landscape interpretation, route support, small transport services, and stop-based sales linked to visitor movement through the Debed Gorge. In Alaverdi, tourism is therefore more likely to create distributed service income than concentrated employment in one sector. Local products are one of the clearest ways to make benefit sharing more visible. The package already identifies honey, herbs, mushrooms, berries, wild fruits, and medicinal plants, and it goes further by naming actual products and species used in local life: blackberry, wild strawberry, rose hip, blackthorn, cornelian cherry, thyme, mint, Solomon's seal, sorrels, and several edible mushroom species. This matters because Alaverdi does not need artificial tourism merchandise to build local value. It already has a credible product base that can be integrated into route-based food points, teas, preserves, small tastings, and local sales linked to monument visits and landscape stops. In a corridor destination such as Alaverdi, this kind of locally rooted product economy may be one of the most practical ways to convert dispersed visitor movement into local spending.

Inclusion should be treated as an economic issue, not only as a social principle. The package already supports women and youth inclusion, and the wider Lori labour profile helps explain why this matters. Because women represented the larger share of officially registered unemployed in Lori at the end of 2024, tourism-related opportunities in food preparation, product processing, local sales, guiding support, accommodation, and interpretation can play a meaningful role if they are deliberately opened

² Statistical Committee of the Republic of Armenia

³ Statistical Committee of the Republic of Armenia

to wider participation. This is especially relevant in Alaverdi because the most realistic tourism economy is based on small and medium local activity rather than on a few large operators. Youth inclusion is also important here, particularly in guiding, digital visibility, cultural interpretation, and event-linked services across the corridor. A formal community revenue-sharing mechanism is not yet in place, and that is a real weakness in Alaverdi. In a corridor where internationally important monuments, local products, accommodation, and landscapes already attract visitors, the absence of revenue-sharing means that economic value can remain fragmented while responsibilities for route maintenance, visitor information, and environmental or heritage pressure remain unclear. For that reason, benefit sharing in Alaverdi should gradually move beyond isolated business gain toward more visible local arrangements around food points, guide services, corridor interpretation, and visitor-support functions. At the current stage, however, the most realistic model remains one in which ecotourism creates modest but tangible local value through accommodation, local products, small services, and broader inclusion of women and youth in the tourism chain.

12. Environmental and Climate Considerations

The candidate ‘Debedi gorge’ Emerald context may support accurate conservation interpretation, but it is not a general tourism brand or a guarantee that every attraction lies within an Emerald site. Before any marketing, the current official boundary, status, qualifying habitats/species and management implications must be validated. Approved messaging may explain the Emerald Network, the river/gorge/forest habitats and visitor safeguards; it must not imply formal designation beyond the official record, use protected logos without permission, disclose sensitive locations, promise wildlife or promote access into exclusion areas.

The most serious community-related environmental issue is the industrial and post-industrial legacy of the corridor. Armenia’s Fifth National Report to the Convention on Biological Diversity states that the River Debed is in a state of ecological crisis and identifies contamination from the Alaverdi copper smelting plant and the ore enrichment plant in Akhtala as a major cause, with reduced fauna and worsening condition of aquatic and terrestrial ecosystems. An EU-supported investigative monitoring report also documented abandoned copper-mine overburden near Alaverdi, immediately adjacent to the Lalvar stream, with measured soil concentrations ranging up to 442 ppm arsenic, 641 ppm lead, and 1,034 ppm chromium at one site, and up to 1,417 ppm arsenic and 1,554 ppm lead at another. In a narrow settlement-and-gorge corridor, this legacy increases community impact risk because tourism development takes place in a landscape where environmental quality, public perception, and local everyday life are already sensitive issues. Cultural heritage pressure is also real, but it is different in character. The main issue is not only direct wear on one monument. UNESCO’s description of Haghpat and Sanahin emphasizes that the complexes are integrated with the picturesque landscape, which means the setting is part of the value. In Alaverdi, poorly placed visitor infrastructure, uncontrolled viewpoint development, informal path-making around heritage sites, visual clutter, and fragmented corridor management could gradually weaken both the monument experience and the wider landscape quality. That is why cultural heritage risk is better understood as cumulative and landscape-based rather than as a single-site preservation problem.

Climate-related pressure in Alaverdi is led by slope instability and water-related hazard, with fire also remaining material. The form already points to medium-to-high fire and landslide exposure, and broader evidence supports that caution. In May 2024, severe flash flooding struck Lori and Tavush after heavy rain, with the Debed River overflowing and creating an emergency situation in northern Armenia. Landslide sensitivity is also not theoretical in this corridor: the Government of Armenia previously financed emergency rehabilitation of the M-6 Vanadzor–Alaverdi–Georgian border road after landslide damage. Drought is less dominant than slope and hydrological risk, but in Alaverdi it still matters because drier periods can raise fire sensitivity in a landscape where camping is already part of the baseline and where forest patches and exposed slopes can be affected quickly by careless visitor behavior.

Table 10. Provisional species-of-concern validation register

Draft assessment entry	Current evidence status	Required action before interpretation
Brown bear	Listed in draft assessment for the wider forest setting; community occurrence/location not verified in available materials	Desktop and field validation; map sensitive habitat; no sighting promise or location disclosure
Eurasian otter	Listed for riverine habitat; current local occurrence and visitor suitability not verified	Specialist river survey/data review; exclude sensitive banks/den sites; low-disturbance interpretation only if approved
Black stork and river/gorge birds	Black stork listed; no verified Alaverdi route checklist, season or sensitive-site layer	Prepare science-reviewed checklist and route/season rules; no playback, feeding, nest approach or guaranteed sighting
Caucasian leopard	Listed as extremely rare in the wider context; no community occurrence evidence provided	Do not use as a tourism product claim; retain only as a screening item unless competent science authority confirms relevance
European yew and <i>Rhododendron caucasicum</i>	Listed as Lori-region plants; community locations and route overlap not verified	Botanical/GIS validation; protect locations; no collection or promotion of sensitive sites
Additional taxa	No complete community inventory supplied	Compile verified taxon, status, source/date, location sensitivity, route overlap and visitor rule before expanding the register

Source: Authors' elaboration.

For Alaverdi, the most appropriate mitigation approach is practical and highly selective:

- Keep visitor use concentrated on defined corridor routes and verified access points.
- Avoid opening tourism functions in unstable slope sections, unmanaged river-edge areas, or ecologically sensitive side habitats without validation.
- Use interpretation to explain both natural and industrial-environmental sensitivity, not only monument value.
- Prohibit unmanaged camping, open-fire use, and informal viewpoint creation in exposed parts of the gorge.
- Place new small infrastructure only in already used and lower-risk locations.
- Align monument access, route planning, and local-product stops so that the corridor works as one managed system rather than a string of disconnected pressure points.
- Account for flood- and landslide-related seasonal safety when planning route use and visitor facilities.

In Alaverdi, the central environmental challenge is not overtourism. It is the risk that a corridor of very high landscape and heritage value, already carrying ecological and industrial burdens, becomes more fragmented as tourism grows. That is why the right model is controlled, interpretation-based ecotourism with strong route discipline, hazard awareness, and careful respect for both the Debed Gorge ecosystem and the monument landscape embedded within it.

13. Monitoring Framework

The monitoring framework for Alaverdi is intended to support adaptive management by tracking whether ecotourism development remains compatible with environmental and safety conditions, heritage and forest-management requirements, local economic objectives and visitor expectations. Its main objectives are to establish a consistent visitor, day/overnight, stay-length and segment baseline; confirm that visitor use remains on approved routes and complies with heritage, environmental, forest, industrial-site, seasonal and vehicle conditions; detect habitat, heritage, route, litter, fire, flood and slope problems at an early stage; measure local provider participation, service use and visitor spending; track service readiness, inclusion and visitor experience; and trigger timely adjustments to products, routes, maintenance, closures, investment or promotion where conditions or results deteriorate. Table 11 translates these objectives into an operational monitoring framework by linking each objective to indicators, an initial direction or target, monitoring frequency, responsible actors and the corresponding management response.

Table 11. Monitoring framework

Objective	Indicator and baseline	Initial direction / target	Frequency and lead	Management response
Visitor/market baseline	Users, segment, origin, bookings, day/overnight, nights, meals, stay and expenditure. Baseline: not available	Use one Year 1 method; improve verified package conversion within site conditions	Monthly in season; annual. Municipality + DMO/providers	Adjust product, schedule, price, information and promotion
Approved use and safety	Open/closed routes, manager conditions, incidents, off-route/unauthorized vehicle or industrial-site entry	Zero operation in closed/prohibited areas; every product reviewed	Pre-season and trigger-based. Authorities + Municipality	Close/reroute, notify bookings, correct or suspend operator
Habitat, heritage and route condition	Fixed points for erosion, litter/fire, habitat/heritage condition, signs, slope/flood and industrial warning	No net tourism-related deterioration after baseline	Pre/post-season and events. Managers + technical support	Repair, restrict, reroute, remediate or close
Local value	Active local providers; guide/meal/stay/product/transport bookings and payments	Year 1 baseline; increase verified local linkages and payments	Six-monthly/annual. Municipality + providers	Redesign suppliers, price, referral or itinerary
Service readiness and inclusion	Gate/score results, assessed staff/guides, women/youth among owners/workers/providers	All approved providers pass gates; improve score and inclusion baseline	Annual and after critical breach. Review group	Correction plan, training, outreach or suspension
Visitor quality/conduct	Satisfaction, complaints, rule breaches, interpretation accuracy and unresolved defects	Improving satisfaction; no unresolved critical breach	Per product; annual. Providers + DMO/ Municipality	Coaching, content change, correction deadline or suspension

Source: Authors' elaboration.

Alaverdi-specific monitoring priorities: The common indicators in Table 10 should be applied through fixed observation points and route records that reflect the combined heritage, industrial and natural character of the Debed Gorge corridor. Monitoring should record route erosion and informal shortcuts, litter and fire signs, flood, slope and access hazards after major events, visitor pressure and physical condition at Sanahin, Haghat and other heritage stops, and compliance with industrial-site exclusion and safety requirements. Where approved products use river, riparian or forest-edge areas,

observations should confirm that visitors remain on designated routes and that no tourism-related deterioration is recorded.

Visitor retention and local value: Alaverdi's distinctive performance question is whether movement through the wider corridor is converted into longer stays and paid use of local accommodation, food, guiding, legal transport and local products. Provider and booking records should therefore connect day or overnight status, stay length and service use to named routes and products. The same review should identify whether local enterprises and women- and youth-led providers are participating in the resulting tourism activity.

Review and management response: The Municipality should review the combined results with Lori DMO, relevant heritage, land, forest and site managers, participating providers and other competent actors before and after the main season and following significant incidents. Each review should record the decision taken, the responsible actor and the completion date, including whether a route or product is maintained, repaired, adapted, restricted, temporarily closed or considered ready for the next implementation phase.

14. Investment and Implementation Plan

Investment must be organized around specific objects, responsible actors, operating costs and maintenance arrangements. The first phase is evidence, route, service, people and management readiness; physical works and industrial adaptive reuse follow only after validation. Precise amounts remain to be determined after field assessment, design, quantities, ownership, contamination/structural review, permissions, procurement method and operating/maintenance plans are confirmed. Regional Lori or border statistics do not demonstrate Alaverdi demand or financial viability.

This combination is important because it defines the right type of investment. Alaverdi does not need broad destination construction. It needs a stronger structure around the assets it already has. The priority is to make the corridor legible, safer, and more locally beneficial, while keeping tourism growth compatible with heritage sensitivity, landslide exposure, fire risk, and the ecological value of the Debed Gorge. In that sense, investment in Alaverdi is less about expansion of attractions and more about corridor organization, interpretation, service linkage, and risk-aware site management. The wider economic context supports a cautious approach. The package itself notes that Alaverdi reflects the broader situation of Lori, where industrial decline, limited diversification, and high unemployment constrain local incomes. This is a strong reason to support tourism-linked local value creation, but it is not a reason to overestimate the site's immediate commercial capacity. For that reason, the first implementation stages should focus on relatively modest interventions with high practical value rather than on heavy capital projects. At the same time, the form records a large annual flow at the Bagratashen border crossing, but its exact figure, source year and applicability require verification. This should not be confused with local Alaverdi visitation, but it does show that the northern corridor already carries substantial movement, and Alaverdi can realistically aim to capture a better-organized and more locally beneficial share of that wider flow if its corridor offer improves.

Figure 7 summarizes the common three-phase implementation sequence. The dates indicate planning periods rather than automatic progression; movement to the next phase depends on the monitoring evidence and readiness conditions stated below.

Figure 7. Phased investment and implementation sequence



Source: Authors' elaboration.

Phase 1

Implementation begins before 2030. During 2026–2027, complete the visitor/provider baseline, corrected attraction GIS layer, route/time/access/hazard sheets, consultation record, species/habitat review, industrial-site screening, governance agreements and maintenance responsibilities. During 2027–2029, train and assess providers, test the bird/river, heritage, industrial-interpretation and local-product pilots, operate information/booking and collect one full-season data series, using only approved low-impact works. The 2030–2032 period is a consolidation phase for products and facilities that have demonstrated demand, safety, site compatibility, local benefit and maintenance capacity; later scaling is conditional on monitoring results.

- Validation of priority routes linking the main heritage, landscape, and local-product stops
- Installation of clear trailheads, directional signage, and route markers in the most used sections
- Creation of basic interpretation points explaining the relationship between the Debed Gorge, monastery heritage, industrial legacy, and local products
- Preparation of simple digital and printed route information for visitors moving between the main nodes
- Identification of local service actors who can support accommodation, food, guiding, and stop-based product sales
- Establishment of a practical coordination mechanism between the municipality, heritage actors, local businesses, and support organizations.

These first-phase actions are launch prerequisites rather than stand-alone infrastructure projects. They establish where visitor use is safe and manageable, which routes and services can be promoted, who is responsible for operation and maintenance, and what information is needed before physical investment is finalized. Table 12 translates these priorities into specific investment objects, minimum outputs, responsible actors, indicative timing and the technical information required before costs can be confirmed.

Table 12. Priority investment objects and implementation requirements

Investment object	Minimum output	Lead / partners	Timing	Cost status
Attraction, route and zoning validation	Numbered and field-verified GIS register of priority attractions and routes; confirmed legal access and land/site-management status; relevant heritage, forest, environmental, industrial and hazard conditions; approved operating and closure requirements	Alaverdi Municipality + Lori DMO + competent land/site managers + GIS/technical support	First priority / 0–6 months	Field survey and technical scope required
Visitor and provider baseline	Consistent baseline covering visitor use, day/overnight status, stay length, visitor segments, accommodation and service use, participating providers and indicative local spending	Municipality + Lori DMO + accommodation and tourism providers	Start immediately; first operating season	Survey methodology and staff/provider time to be costed
Visitor information, booking and route-status function	Defined information/referral point or function; approved product and route information; maps; booking/referral arrangements; live route/status	Municipality + Lori DMO + participating providers/site managers	0–9 months	Existing facility/function and operating requirements to be assessed

Investment object	Minimum output	Lead / partners	Timing	Cost status
	information; visitor rules and emergency contacts			
Priority route and product pilots	Validated and tested nature, heritage and corridor-based products with defined itinerary, operator, timing, visitor conditions, safety procedures and local-service linkages	Lori DMO + Municipality + guides/providers + relevant site managers	6–18 months	Pilot design and operating costs required
Nature, heritage and industrial-site screening	Site-specific environmental, heritage, safety and access screening for proposed products, including sensitive habitats, heritage assets and industrial/legacy-site constraints where applicable	Competent environmental/heritage/site authorities + Municipality + technical specialists	Before relevant product launch	Specialist scope and assessment requirements to be defined
Trailheads, waymarking and essential visitor-safety measures	Basic signage, route marking, warnings and small safety interventions on approved routes only; identified maintenance and closure responsibility	Municipality + land/site managers + technical partners	After route validation / within 6–18 months	Technical design, quantities and BoQ required
Provider training and service readiness	Participating provider register; readiness assessment; guide/service training; safety, environmental and visitor-information procedures; corrective-action arrangements	Lori DMO + Municipality + competent training partners/providers	Year 1–2	Cohort, curriculum and training costs required
Local food and product integration pilots	Verified local suppliers and products; agreed hygiene/source requirements; prices; product/meal formats; links with approved visitor packages; basic sales/benefit records	Local providers/producers + Lori DMO + Municipality	Year 1 pilot	Provider and pilot design required
Monitoring, maintenance and closure system	Monitoring forms and responsibilities; route/site condition points; incident and closure records; inspection schedule; maintenance responsibilities; visitor-notification mechanism	Municipality + Lori DMO + relevant site/land managers + providers	Start with first pilots; ongoing	Equipment, staff time and annual maintenance requirements to be costed

Source: Authors' elaboration.

Completion of these initial investment objects provides the operational foundation for subsequent product consolidation and selective scaling. Progression to the subsequent phases should depend on evidence from visitor and product use, route and environmental condition, provider participation, maintenance performance and demonstrated local economic benefit.

Phase 2

For the period 2033–2036, the focus should shift toward strengthening the actual ecotourism offer and improving the way value is retained locally. By this stage, the expectation is not that Alaverdi becomes a mass destination, but that it begins to function as a coherent heritage-and-landscape corridor with better route support and stronger local participation. The most relevant actions should include:

- Improvement of route-support infrastructure in already used and stable sections of the corridor
- Stronger integration of existing accommodation into corridor-based tourism packages

- Support to guiding and interpretive services for heritage, industrial history, landscape, and local products
- Development of small food and product points using honey, herbs, berries, mushrooms, teas, preserves, and other locally rooted products
- Improvement of visitor-support facilities such as rest points, toilets, and small information functions in priority locations
- Regular seasonal review of route safety, visitor movement, and local business participation.

This is the phase in which Alaverdi's comparative advantage becomes most visible. The site's strength lies in combination. A visitor should not only see a monastery or a viewpoint, but experience the corridor as one layered space where heritage, landscape, and livelihood are connected. Investments in this phase should therefore strengthen the coherence of the visitor journey rather than multiply disconnected facilities.

Phase 3

For the period 2037–2040, the site may support more selective strengthening of facilities and institutional arrangements, but only where earlier phases show that visitor use is increasing in a manageable way and that local value retention is improving. Because financial viability is still weak at the current stage, this later phase should not be treated as automatic scaling. It should depend on evidence from route use, accommodation uptake, local product sales, and the operational performance of the corridor system. Relevant actions may include:

- Improvement of visitor-information functions within existing heritage, municipal, or accommodation-linked spaces
- Selective upgrading of route infrastructure in the sections that prove both popular and stable
- Clearer maintenance and financing arrangements for signage, route markers, and interpretation points
- Stronger packaging of overnight stays, local food, and guided corridor experiences
- Gradual development of more formal local benefit-sharing or service-coordination arrangements where tourism use becomes regular enough to justify them.

Financing, Costing and Investment Review

Financing should follow the same staged logic. In the early phase, public financing will be essential because the main needs are route organization, signage, interpretation, local coordination, and low-impact visitor support. These are enabling functions and are not likely to be delivered sufficiently by private initiative alone. Private financing, however, is also relevant from the beginning, but in a very specific form: not major tourism construction, but incremental investment by accommodation providers, small food businesses, local product sellers, and guide or service operators. This is fully consistent with the form, which supports public and private financing, excludes PPP at this stage, and identifies services and products as the most realistic revenue base.

For Alaverdi, the most realistic financing mix is therefore:

- Public financing for route organization, signage, interpretation, and corridor coordination
- Donor or project-based financing for pilot ecotourism tools, guide support, local-product integration, and low-impact infrastructure

- Private financing for accommodation improvement, food and product points, guiding, and small service upgrades.

PPP is not yet an appropriate central model for Alaverdi. The package is correct not to rely on it. Under current conditions, a large partnership model would be premature and could easily push the site toward overdesigned or commercially disconnected interventions. What is more realistic is gradual operational cooperation around services, route support, and visitor facilities, which may later evolve into more formal arrangements if the corridor system becomes stronger and more economically stable. At this stage, precise investment amounts should not be fixed without route-level validation, safety assessment, and technical costing. The stronger planning approach is to define investment by sequence and function. For Alaverdi, that sequence is clear: first make the corridor understandable and safer to use, then connect visitors more effectively to local services and products, and only after that support selective strengthening of facilities and institutional arrangements where real use, local participation, and corridor performance justify it.

Investment review and scaling should be based on observed performance rather than a predetermined long-term growth scenario. The short 2022–2024 Lori hotel-arrival series provides useful regional context but does not measure Alaverdi-specific ecotourism demand and cannot support a defensible visitor projection to 2040. No Alaverdi visitor-growth forecast is therefore adopted. Progression between implementation phases and decisions on additional investment should instead draw on the Year 1 product, route and provider baseline and subsequent monitoring of visitor demand, day-to-overnight conversion, local spending, route, habitat and heritage condition, service readiness and operator performance. In this way, the monitoring framework above provides the evidence for determining whether individual investments should be maintained, adjusted, advanced or deferred.

15. Final Site Classification and Conclusions

Alaverdi is classified as suitable for controlled ecotourism development, with selective service and sustainable-development functions concentrated in lower-risk and already used parts of the Debed Gorge corridor. This conclusion consolidates the baseline, attraction, zoning, product, infrastructure, governance, environmental, monitoring and investment assessments and replaces the preliminary eligibility judgement previously presented near the beginning of the Plan.

The classification is supported by a strong and distinctive asset combination. The Debed Gorge and River landscape, Sanahin and Haghpats monastic heritage, medieval and transport features, industrial and railway history, existing accommodation and locally rooted products can form one coherent heritage-and-landscape visitor corridor. Alaverdi's opportunity is therefore not the multiplication of isolated attractions, but the organization of a legible journey that connects nature interpretation, heritage, local stories and paid local services.

The suitability is conditional rather than unrestricted. Steep terrain, fire, landslide and flood exposure, fragmented routes, industrial legacy conditions, heritage-management requirements, ecological sensitivity and the involvement of several land and site managers require route-based control. No unverified route, unstable slope, industrial or contaminated area, sensitive habitat or restricted heritage location should be promoted. Legal access, authority conditions, field safety, environmental compatibility, route status and maintenance responsibility must be confirmed for each product. Visitor services and small facilities should remain within verified lower-risk nodes and already used areas.

The planning conclusion is therefore a managed, low-impact corridor model. The immediate task is to validate the attraction and route register, establish visitor and provider baselines, assign operating and maintenance responsibilities, provide accurate information and route-status communication, and test a limited set of approved nature, heritage, industrial-interpretation and local-product experiences. Later consolidation or investment should proceed only where monitoring confirms safe operation, acceptable site condition, visitor uptake, local economic benefit and the capacity to maintain the assets. This classification supports ecotourism as a practical diversification pathway for Alaverdi, but it does not support open landscape access or infrastructure-led expansion.

Annex 1: Ecotourism Assessment Tool

The following table presents the completed ecotourism assessment for the site, forming the basis for the management plan.

Component	Field / Criteria	Input / Selection	Notes / Logic
Screening & Eligibility	Critical habitat overlap	☒ Yes ☐ No	
	Endangered species presence	☒ Yes ☐ No	Medium importance
	Land ownership unclear	☒ Yes ☐ No	
	Community opposition	☐ Yes ☒ No	
	Climate risks (fire, landslide, drought)	☒ Yes ☐ No	
	Access constraints	☐ Yes ☐ No ☒ Moderate	
Site Identification & Planning Context	Site name	Alaverdi Community	
	Marz / Municipality	Lori/Alaverdi	
	Coordinates / GIS reference	Latitude	43.81888601
		Longitude	42.60430988
	Coordinates and route points: complete a numbered, field-verified GIS layer; the supplied detailed export lacks attraction points.		
	Legal status	☐ Protected Area ☐ Emerald Site ☒ Community Land ☒ Other	Community/industrial legacy landscape near candidate 'Debedi gorge' Emerald context (AM0000023); confirm current official boundary, overlap and implications.
Ecological & Conservation Profile	Link to existing plans	☐ PA Management Plan ☒ Community Development Plan ☐ Tourism Strategy	
	Ecosystem type	☒ Forest ☐ Grassland ☐ Wetland ☐ Alpine ☒ Mixed	Canyon, River
	Key habitats	Debed Gorge, forest patches	Debed Gorde, Riverine and riparian systems along the Debed River, mixed deciduous forests on surrounding slopes, rocky cliffs and canyon habitats, and shrublands with semi-natural grasslands in transitional areas.
	Species of concern	Draft screening entries only: brown bear, Eurasian otter, black stork, Caucasian leopard, European yew and <i>Rhododendron caucasicum</i> ; verify scientifically/spatially before use.	Red Book and endangered species linked to its forest and riverine habitats, including <i>Ursus arctos</i> (Syrian brown bear), <i>Lutra lutra</i> (Eurasian otter), <i>Ciconia nigra</i> (black stork) <i>Panthera pardus ciscaucasica</i> (Caucasian leopard - extremely rare). The area also hosts threatened plant species, as part of the Lori floristic region, which contains around 47 Red Book plant

Component	Field / Criteria	Input / Selection	Notes / Logic
Socio-Economic & Community Context			species, including <i>Taxus baccata</i> (European yew) - Red Book Armenia, <i>Rhododendron caucasicum</i> - Red Book Armenia.
	Conservation sensitivity	☐ Low ☒ Medium ☐ High	Map river/riparian, cliff, forest-edge, heritage, unstable-slope, flood/fire, industrial safety/contamination and seasonal/no-go conditions per product.
	Population ~	33.3 thousand permanent population in Alaverdi Community, including 11.6 thousand in Alaverdi town (1 January 2025, as cited in the plan).	
	Main livelihoods	☒ Agriculture ☐ Livestock ☐ Forestry ☒ Tourism ☒ Services ☒ Industry	Mining and metallurgy - historically the dominant sector, particularly copper mining and processing,
	NTFPs present	☒ Honey ☒ Herbs ☒ Mushrooms ☒ Berries ☐ Other	Wild fruits and berries: pear, blackberry, wild strawberry, rose hip, black thorn and cornelian cherry. Wild greens and herbs / medicinal plants: thyme, mint, Solomon's seal, sorrels Mushrooms: <i>Pleurotus ostreatus</i>, <i>Agaricus campestris</i>, <i>Lepista personata</i>, <i>Lactarius deliciosus</i>, and <i>Cantharellus cibarius</i>.
	Cultural assets	Industrial heritage, historical monuments	Copper mining and smelting complex - major copper mining and metallurgical center Industrial landscape - railway construction (1899), industrial urban planning (1929-1960s Soviet period) - worker settlements, metallurgical plants, cableway (1977, now non-operational). Alaverdi Copper Molybdenum factory. Historical monuments: Sanahin Monastery - 10th c. UNESCO World Heritage site; major medieval educational and religious center, Haghpat Monastery - 10th-13th c. UNESCO site; outstanding example of Armenian monastic architecture, Sanahin Bridge - 12th c. (1192) stone bridge over the Debed River - key medieval infrastructure monument. Akhtala Monastery - 10th-13th c. fortified monastery known for well-preserved frescoes, Odzun Monastery - 6th c. basilica; one of the oldest churches in the Debed Gorge area.
	Community willingness	☐ Low ☒ Medium ☒ High	
Tourism Assets & Baseline Use	Natural attractions	Debed Gorge and river; verified safe viewpoints/walks; Sanahin-Haghpat; Sanahin Bridge; town/industrial-history interpretation; traceable local-product stops.	Debed Gorge - A deep canyon (up to ~350 m) with steep cliffs, forests, and dramatic landscapes; one of the most distinctive natural formations in Armenia. Debed River - the main river corridor shaping the landscape, with terraces and riparian habitats supporting biodiversity. Forest-covered canyon slopes, surrounding highlands with rolling hills,

Component	Field / Criteria	Input / Selection	Notes / Logic
	Cultural attractions	Debed Gorge, landscapes	viewpoints, and hiking terrain connected to the Debed canyon system.
			Sanahin Monastery - 10th c. UNESCO World Heritage site; major medieval center of learning and manuscript production. Haghpat Monastery - 10th-13th c. UNESCO site; outstanding example of Armenian monastic architecture integrated into the Debed landscape. Akhtala Monastery - 10th-13th c. fortified monastery known for rare and well-preserved frescoes. Sanahin Bridge - 12th c. medieval bridge over the Debed River; key historic infrastructure monument. Odzun Monastery - 6th c. basilica; one of the earliest Christian monuments in the region. Alaverdi industrial heritage (copper smelter & railway) - 18th-20th c.; reflects the town's development as a major metallurgical center in the Debed Gorge.
	Existing activities	☒ Hiking ☐ Biking ☒ Camping ☒ Guided tours ☐ None	Not structured
	Visitor flow	☒ Low ☒ Medium ☐ High	Unmeasured planning classification; establish product/route, day/overnight, stay-length, service-use, segment and spending baseline in Year 1.
	Accessibility	☐ Easy ☒ Moderate ☐ Difficult	Corridor access is favorable; every cluster requires measured distance/time, legal/seasonal access, hazard, transport, accessibility and emergency validation.
	Ecological sensitivity	☐ Low ☒ Medium ☒ High	Requires zoning
	Accessibility	☐ Good ☒ Moderate ☐ Poor	
Suitability Assessment & Zoning	Tourism demand	☒ Low ☒ Medium ☐ High	
	Zone classification	☐ Strict Conservation Zone ☒ Controlled Ecotourism Zone ☒ Sustainable Development Zone	Map service areas, controlled-use routes/stops and habitat/heritage/hazard/forest-work/industrial closure layers; project maps are not approved zoning.
Ecotourism Product Development	Hiking routes	☒ Yes ☐ No	Validate legal access, route/time, surface/gradient, hazard, land/site manager, operator, group/season conditions, emergency access and maintenance.
	Wildlife observation	☒ Yes ☐ No	Controlled bird-and-river-habitat interpretation after science/route validation; no guaranteed sightings, playback, feeding or off-route pursuit.
	Agro-ecotourism	☒ Yes ☐ No	Limited

Component	Field / Criteria	Input / Selection	Notes / Logic
Infrastructure & Service Planning	Cultural landscape tourism	☒ Yes ☐ No	http://lori.mtad.am/about-communities/464/
	NTFP-based experiences	☒ Yes ☐ No	Traceable meal/tasting/sales experiences only; verify local origin, legal/sustainable collection, hygiene, season/quantity, pricing and benefit record.
	Trails	☒ Yes ☐ No	Limited, not structured
	Signage	☒ Yes ☐ No	Partial
	Visitor centers	☐ Yes ☒ No	No verified visitor centre; audit existing suitable municipal/heritage/accommodation space before considering a new facility.
Governance & Institutional Arrangements	Accommodation	☒ Yes ☐ No	Provider census required: establishment, rooms/beds, accessibility, season, price, occupancy, booking and product/referral links.
	Protected Area Authority role	☐ Assigned	Heritage/site managers, competent Forest Economy/environment bodies and industrial owners/technical authorities approve conditions within their mandates.
	Municipality role	☒ Assigned	Alaverdi Municipality convenes corridor platform, maintains registers and coordinates public space, services, investment, monitoring and information.
	Community groups role	☐ Assigned	Community/user groups provide route/service feedback, local products/services, inclusion, stewardship and benefit priorities.
	Private sector role	☐ Assigned	Providers operate approved services, follow conditions/scorecard, report bookings/incidents and maintain agreed objects.
	NGO role	☒ Assigned	NGO/research/training partners support science, interpretation, standards, inclusion and accessibility by written agreement.
	Co-management agreement	☐ Yes ☒ No	Proposed corridor operating agreement; statutory powers remain with each competent authority. Confirm membership, decision and dispute/closure procedures.
	Revenue-sharing agreement	☐ Yes ☒ No	
Visitor Management System	Public-private partnership	☐ Yes ☒ No	
	Visitor limits	☐ Yes ☒ No	No community-wide quota before baseline; set route/product group, vehicle, guide or seasonal limits where evidence/manager conditions require.
	Seasonal restrictions	☐ Yes ☒ No	Seasonal route status for slope/rockfall, heavy rain/flood, fire, forest work, heritage/industrial condition and maintenance.
	Guided-only access	☐ Yes ☒ No	Guided use for bird/nature, industrial interpretation and specified safety/heritage conditions; approved lower-risk self-guided use may remain possible.
	Zoning enforcement	☐ Yes ☒ No	Publish open/closed route and product status; enforce through signs, briefing,

Component	Field / Criteria	Input / Selection	Notes / Logic
			inspections, operator conditions, incident logs and closure authority.
	Max visitors per day	N/A	
	Max group size	N/A	
Benefit Sharing & Local Economy	Local employment	☐ Yes ☒ No	
	Local product sales	☒ Yes ☐ No	
	Community revenue share	☐ Yes ☒ No	
	Women / youth inclusion	☒ Yes ☐ No	
Environmental & Social Safeguards	Biodiversity disturbance risk	☐ Low ☒ Medium ☒ High	
	Community impact risk	☐ Low ☐ Medium ☒ High	
	Cultural heritage risk	☐ Low ☒ Medium ☐ High	
Climate Resilience	Drought risk	☐ Low ☒ Medium ☐ High	
	Fire risk	☐ Low ☒ Medium ☒ High	
	Landslide risk	☐ Low ☒ Medium ☒ High	
Monitoring Framework	Visitor numbers	Baseline: not available / Initial target: Year 1 product, route, segment, day/overnight, stay-length and service-use baseline / Frequency: monthly in season; annual summary	Large Bagratashen border flow is reported; the exact value, source year and relevance to Alaverdi are unverified.
	Local income	Baseline: not available / Initial target: Year 1 provider, accommodation, meal, transport, product-sales and local-payment baseline / Frequency: six-monthly/annual	Alaverdi reflects the broader Lori context of industrial decline, limited diversification and reported high unemployment; community-specific figures require verification.
	Biodiversity condition	Baseline: Year 1 fixed river/cliff/forest-edge/route/heritage condition points / Direction: no net tourism-related deterioration / Frequency: pre/post-season and trigger-based	
Investment & Financial Structuring	Estimated investment	To be determined after route/site/provider and industrial feasibility audits, design, permissions, quantities and operating/maintenance plans	
	Financing type	☒ Public	

Component	Field / Criteria	Input / Selection	Notes / Logic
Implementation Plan		☐ PPP ☒ Private	
	Revenue sources	☐ Entry fees ☒ Services ☒ Products	
	Financial viability	☒ Low ☐ Medium ☐ High	
	Action	2026-2027 validate baselines, GIS/routes, authorities and safeguards; 2027-2029 train/test pilots and minimum services; consolidate/scale only after evidence	
	Responsible	Alaverdi Municipality with heritage/site managers, competent Forest Economy/environment bodies, industrial owners/technical authorities, Lori DMO, providers and partners	
	Timeline	Immediate 2026-2027 preparation; 2027-2029 pilots; 2030-2032 consolidation; later scaling conditional on demand, safety, local benefit and condition monitoring	

Source: Authors' elaboration.

Annex 2: Stakeholders and Consultation Status

The recorded stakeholder meeting confirms the named participation shown below. Other actors are included as required implementation stakeholders and are not described as consulted where the available record does not confirm participation. The project file should be updated with organization, representative, date, issue, decision and evidence after each consultation. Contact details should remain in controlled project records rather than in the public plan.

Required Implementation Stakeholders and Status		
Stakeholder	Expected role	Consultation evidence / next action
Pavel Papoyan – Alaverdi Municipality	Municipal corridor coordination, public space, services, registers, maintenance and implementation	Named participant in the 9 March 2026 joint stakeholder meeting; confirm formal decision role and annual work plan
Kristine Hovsepyan – Lori DMO	Approved-product packaging, market feedback, booking/referral and Lori cross-community route	Named participant in the joint stakeholder meeting; confirm mandate, operating role and data agreement
Heritage authority, Armenian Apostolic Church and named Sanahin/Haghpat/other site managers	Approve access, interpretation, works, visitor rules and condition monitoring	Direct Alaverdi site-level consultation not evidenced; engage before product/works
Competent Forest Economy / forest-management and environment bodies	Validate forest access, work/haulage, fire/closures, habitat and Emerald-context safeguards	Direct consultation not evidenced; confirm official unit title/coverage and engage before forest/nature products
Industrial landowners/operators and structural/environmental/heritage authorities	Ownership, active-use, contamination, structural/public safety and transformation feasibility	Direct consultation not evidenced; no site entry, works or reuse claim before formal screening/approval
Guides, transport, accommodation, food and product providers	Operate bookable services, visitor briefing, records, scorecard, local sales and maintenance commitments	Map and consult named providers; verify licences/qualifications as relevant, capacity, season and written commitments
Emergency/road bodies, NGOs, researchers and training/accessibility partners	Hazard response, science, route/industrial review, training, standards, inclusion and accessibility	Roles not confirmed; agree protocols or terms of reference where selected
Community/user groups, women and youth	Route/service feedback, entrepreneurship, inclusion, stewardship and benefit priorities	Hold settlement/product-level consultations and record participants, concerns and decisions

Source: Authors' elaboration.

Annex 3: Summary SWOT Analysis for Ecotourism Development in Alaverdi Community

This concise matrix is a planning summary, not a separate full SWOT study. 'Verified' denotes information supported by the available project materials; 'Indicative' denotes a planning conclusion that still requires site, route, market, ecological, ownership, operator or institutional validation.

STRENGTHS	WEAKNESSES
▲ [Verified] The Debed Gorge, Debed River, Sanahin-Haghpat heritage and Alaverdi's industrial history create an unusually layered corridor identity. ▲ [Verified] Existing accommodation, guided visits and northern-corridor access provide a base for one-day and overnight packages. ▲ [Verified] Honey, herbs, mushrooms, berries, wild fruits and local food can support route-linked meals and sales after origin and legality are confirmed. ▲ [Verified] Alaverdi Municipality and Lori DMO representatives attended the recorded stakeholder meeting.	▲ [Verified] No community-level visitor, day/overnight, stay-length, occupancy, price, expenditure or local-sales baseline is available. ▲ [Verified] Routes, travel times, legal access, hazards, services, sensitive habitats and forest-management interfaces are not yet mapped and approved. ▲ [Verified] The detailed project-map export lacks attraction points and cannot function as an attraction or route map without a corrected GIS layer. ▲ [Verified] Governance, maintenance, standards, booking and provider responsibilities are not yet organized as one operating system.
OPPORTUNITIES	THREATS
▲ [Indicative] Full-day and one-night corridor products can convert short monument visits into guiding, meals, local purchases and accommodation use. ▲ [Indicative] A controlled bird-and-river-habitat walk can add a genuine nature component after science and route validation. ▲ [Indicative] Safe interpretation and selective adaptive reuse of industrial heritage can create a distinct product after ownership, structural, contamination and heritage checks. ▲ [Indicative] A Vanadzor-Tumanyan-Alaverdi route can combine urban outdoor recreation, canyon/literary experiences and industrial-monastic heritage over two to three days.	▲ [Verified] Landslide, flood, fire, steep-terrain and road-condition risks may close routes or make poorly placed facilities unsafe. ▲ [Verified/Indicative] Industrial contamination, unsafe structures or unclear ownership can make industrial sites unsuitable for visitor entry. ▲ [Verified] Off-route movement, litter, fire, unmanaged camping, disturbance and informal viewpoints can affect river, cliff, forest-edge and heritage settings. ▲ [Indicative] Promotion before route, operator, service, safety and maintenance validation could produce unsafe visits, weak local benefit and reputational damage..

Source: Authors' elaboration.