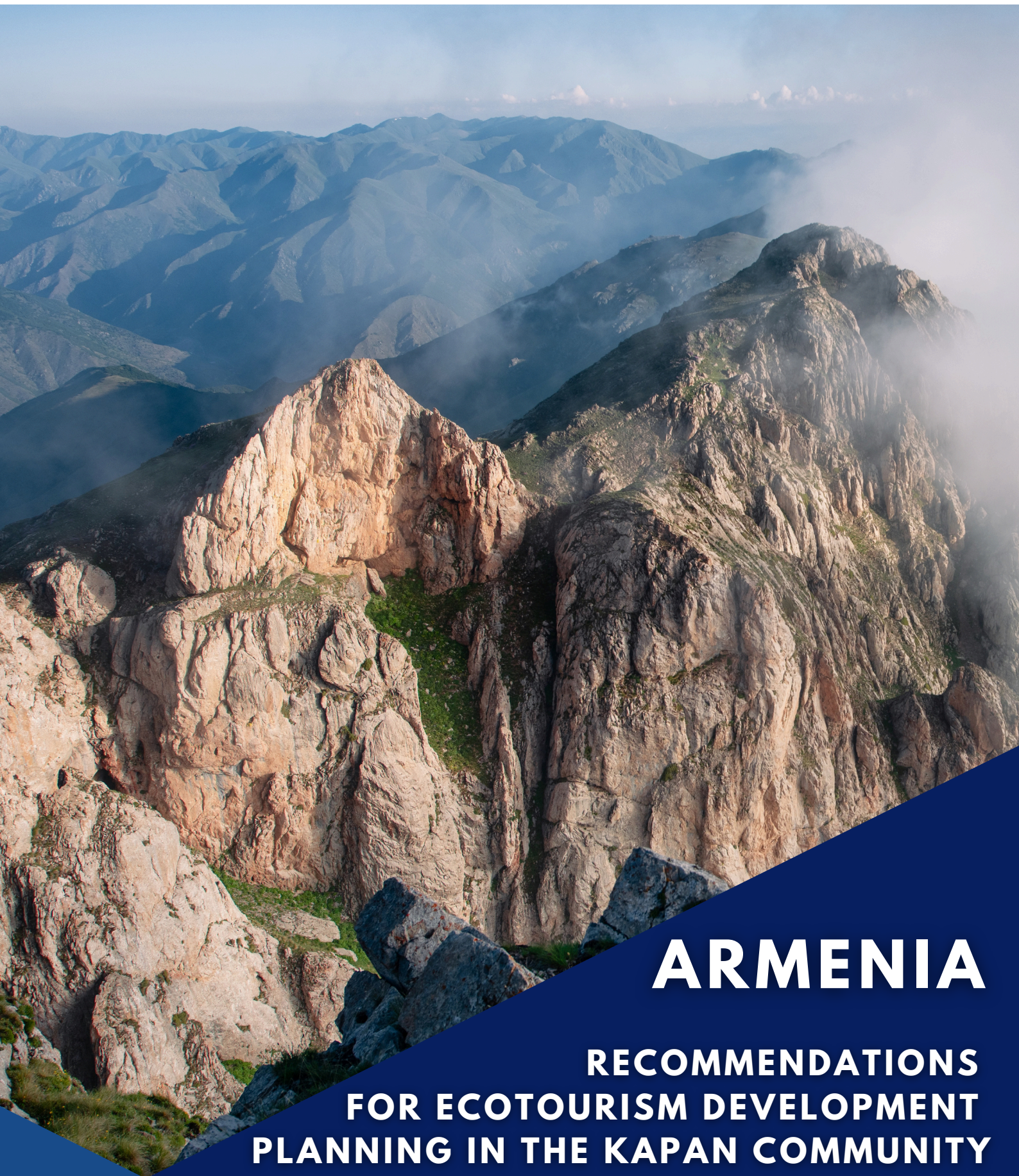




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ARMENIA

RECOMMENDATIONS FOR ECOTOURISM DEVELOPMENT PLANNING IN THE KAPAN COMMUNITY



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Recommendations for Ecotourism Development Planning in the Kapan Community, Armenia

September 2026

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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

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.

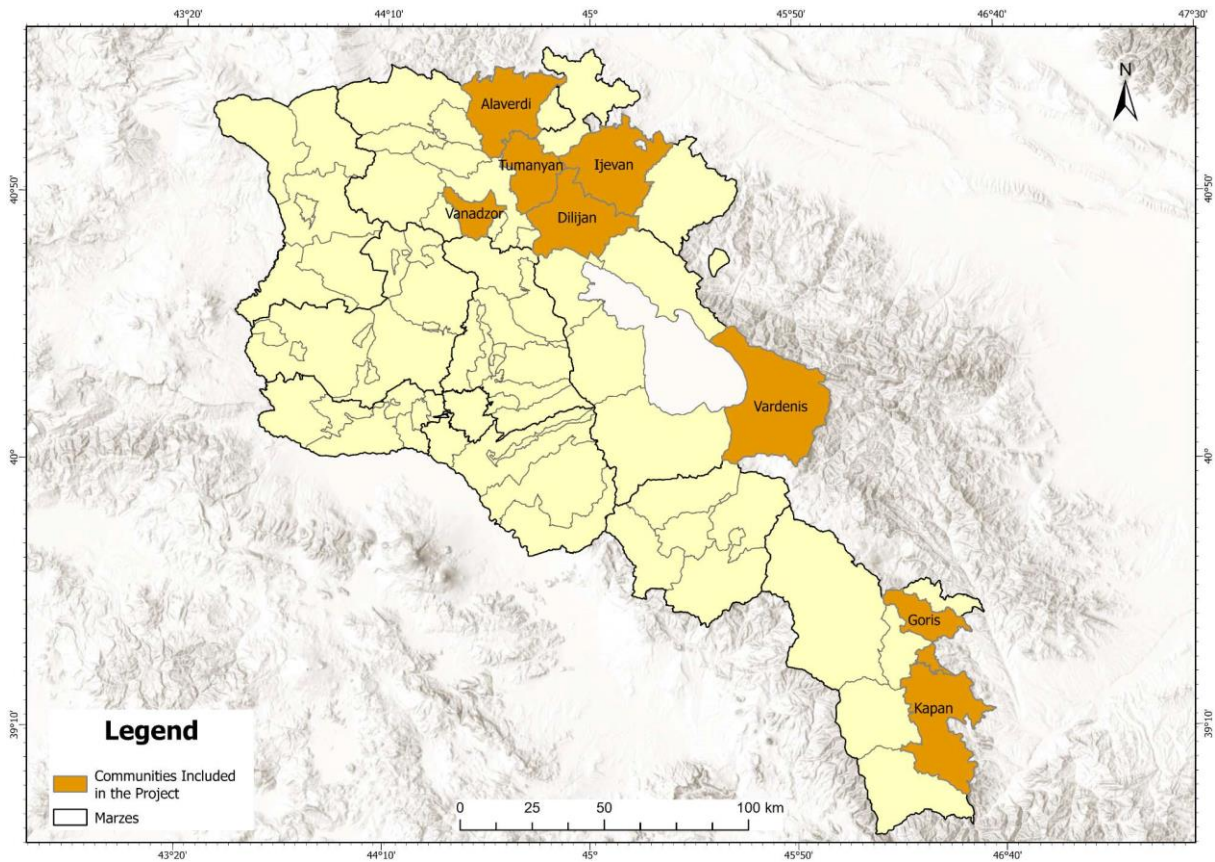
The purpose of this plan is to support decision-making on whether and how ecotourism can be developed in a controlled and sustainable manner. It ensures that tourism activities are aligned with conservation requirements, particularly in areas with sensitive ecosystems or species of concern, while also 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 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 mountain, forest, and protected area settings where ecotourism opportunities and management needs may vary.

The present document was developed with financial support from the European Union under the European Union for Environment (EU4Environment) program.¹

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.

Figure 1. Eight pilot communities



Source: REC Caucasus.

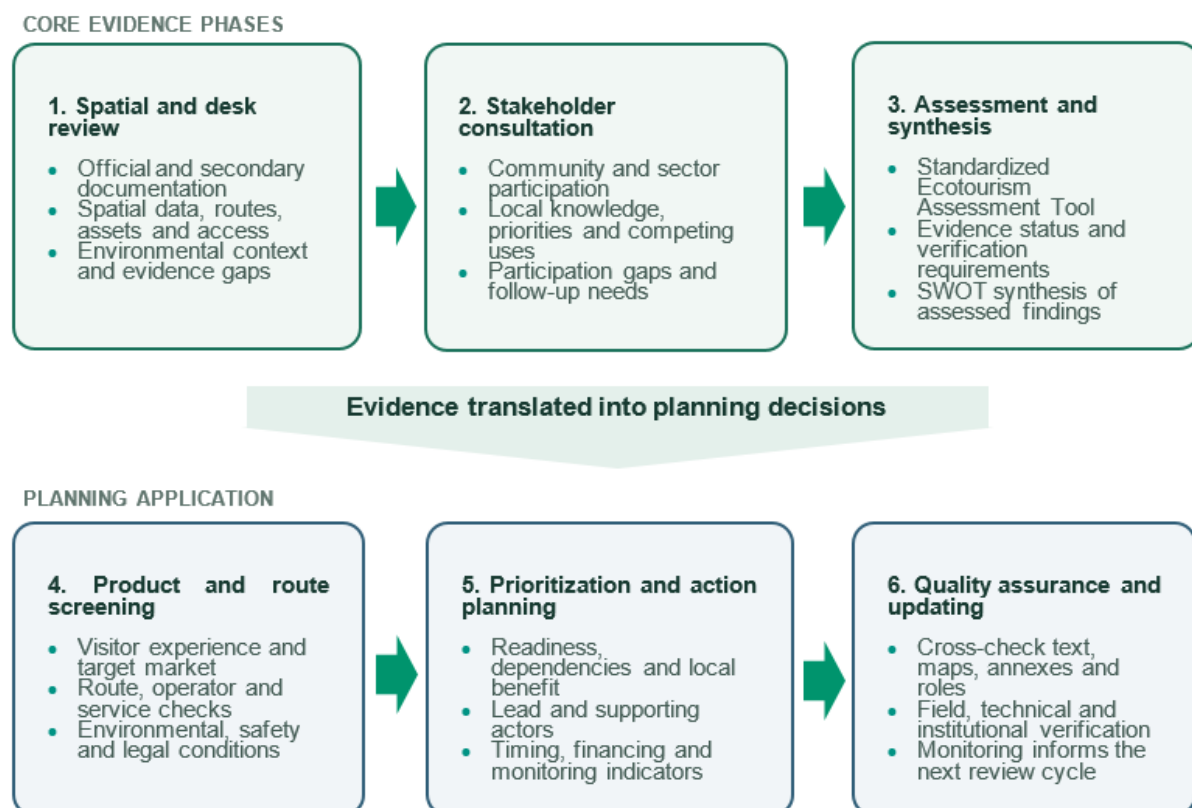
2. Methodological Approach

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.

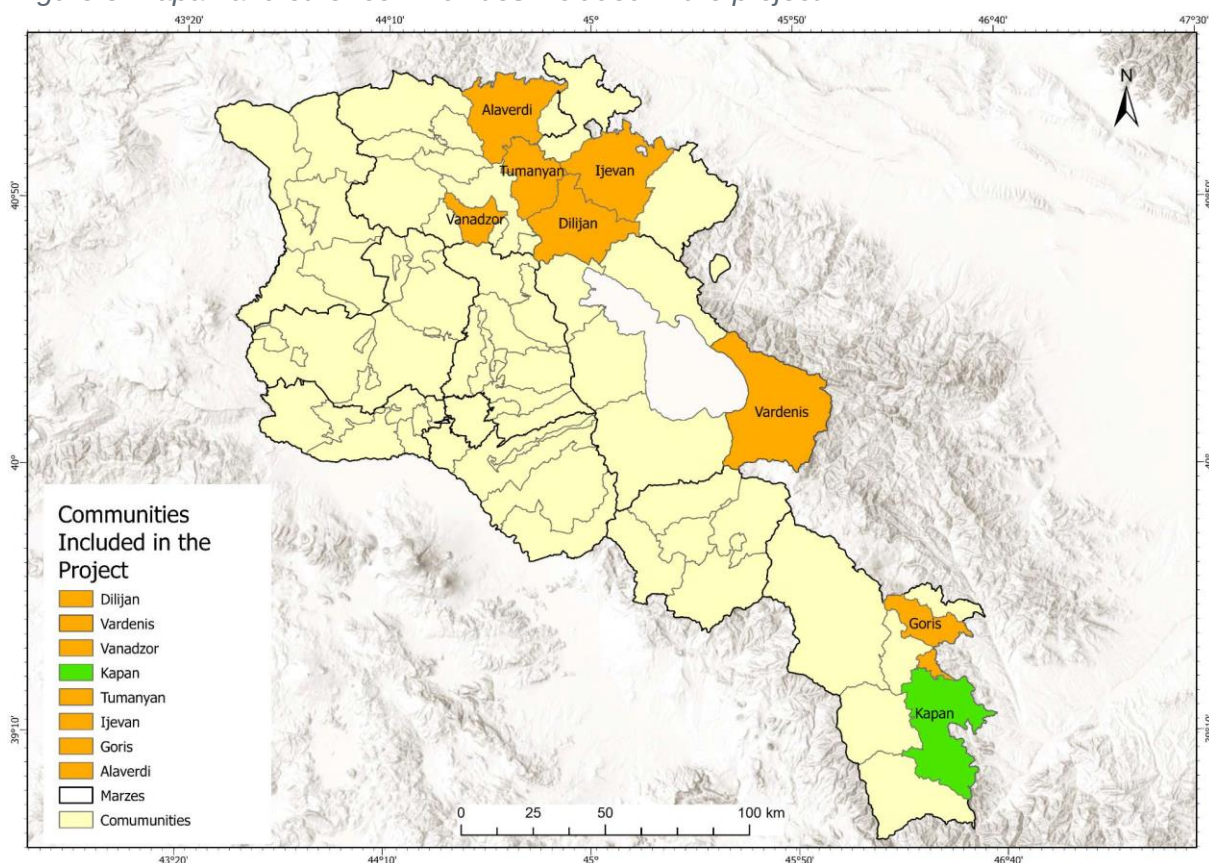
Additional evidence limitations:

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 Kapan is located in Syunik marz in southern Armenia and represents one of the project's southern pilot communities. Its geographic setting is defined by a rugged mountain environment, a narrow valley structure, and a strong territorial connection to the wider southern landscape of Armenia.

Figure 3. Kapan and other communities included in the project



Source: REC Caucasus

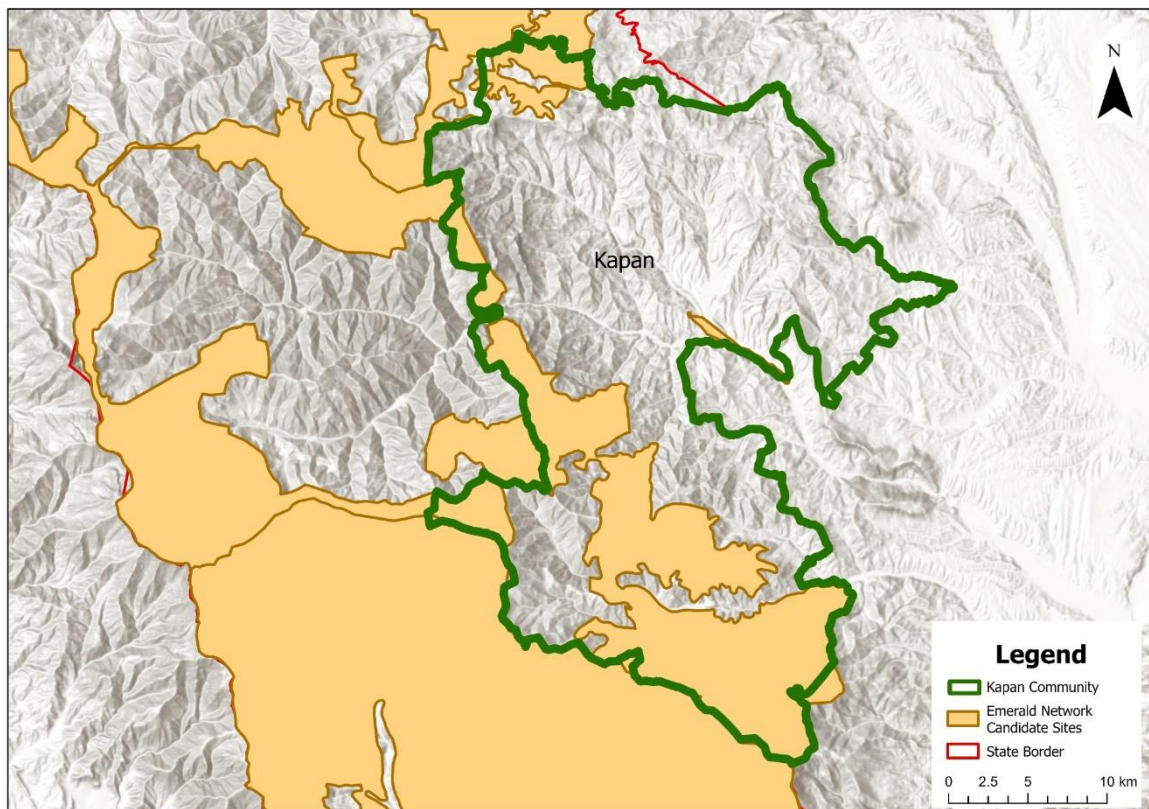
3.1 Location and Context

Kapan is located in Syunik marz in southern Armenia and serves as the marz center, which gives it a different planning profile from the smaller and more rural pilot communities. It is not only a town with nearby attractions, but a wider municipal landscape that combines the provincial capital with surrounding settlements, forested mountain areas, river valleys, protected-area interfaces, and major cultural sites. Kapan community includes the city together with 38 rural settlements, which means the ecotourism space extends well beyond the urban core into villages, mountain roads, and landscape units with very different levels of sensitivity and access.

As of 1 January 2025, **Kapan community had a permanent population of 38.4 thousand, including 32.9 thousand in Kapan city and 5.5 thousand in the rural part of the community.** Its location gives the site a very specific role in the wider region. Kapan lies at the foot of Mount Khustup and already functions as a service and transport base for southern Syunik. This means that, unlike more isolated mountain communities, tourism in Kapan does not begin with the problem of remoteness at town level. The more difficult question is how to connect the town to the surrounding mountain, forest, and

protected landscapes in a way that is safe, manageable, and environmentally compatible. That wider role is especially important because the tourism landscape includes not only the city, but also river valleys, mountain slopes, villages, and protected natural areas that are much more sensitive than the urban center itself.

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



Note: Candidate polygons are context layers; their official names, codes, qualifying features, legal implications and route relationships require GIS/register confirmation.

Source: Project-supplied GIS map.

3.2 Ecological Characteristics

Kapan contains mountain valleys, river corridors, broadleaf forest, rocky slopes, grasslands and higher-altitude terrain connected with Mount Khustup and the wider Zangezur system. The Zangezur Biosphere Complex combines Arevik National Park, Shikahogh State Reserve and other protected units under one management structure. The supplied project map also shows extensive candidate Emerald Network polygons within and around the community boundary. Because the image does not name polygons or qualifying features, exact site names, codes, boundaries and route overlaps must be confirmed against the official register and GIS data before zoning. Site-level wildlife and plant occurrence remains a separate verification task.

3.3 Socio-Economic Context

Kapan has a more diversified local economy than most of the pilot communities, but it is also more complex. Agriculture, livestock, tourism, services, and industry are all important, with mining and related industrial employment still central to the local economy. This matters because ecotourism in Kapan is not being developed in a weak rural economy. It is being developed in a mining-and-services

center that already has an urban workforce, transport functions, and a broader economic base than the smaller tourism sites.

Kapan's economic setting combines mining/industry, services, agriculture, livestock and tourism. Honey, herbs, mushrooms, berries, fruits and other local products are possible tourism linkages, but the available materials do not establish legal/sustainable collection areas, producer capacity, food-safety status or market volumes. The product register therefore requires supplier and traceability checks and excludes visitor harvesting. Industrial heritage can support interpretation only in safe, legally accessible and environmentally cleared places; active or contaminated sites are not tourism assets by default.

4. Stakeholder Insights and Local Priorities

The March 2026 workshop gives Kapan direct civil-society and education representation through Kapan Town NGO, Khustup NGO, Kapan Polytechnic University and Zangezur NGO. Desk sources additionally describe Guides from the South and Visit Kapan route, information and community-linkage work. The present mandate, capacity and willingness of every actor must be confirmed in the implementation workshop; Annex 2 distinguishes consulted participants from proposed partners.

Desk evidence reports earlier trail development between the Shikahogh and Arevik protected landscapes and wider links toward the Transcaucasian Trail. These references establish a route-development history, not current route readiness. The required output is a route register recording route ID, geometry, legal/manager status, app/platform representation, present condition, risk, season, operator, maintenance duty and closure status.

Wings of Tatev should be treated as a regional gateway, not a Kapan-owned attraction. The practical market test is a three-day/two-night southern package: Tatev/Wings of Tatev and Goris on the first part of the journey, followed by one Kapan overnight and a verified Kapan heritage, Khustup or local-product experience. No conversion rate is assumed. Kapan-level visitor numbers, day/overnight share, stay length, expenditure and package uptake are baseline fields to collect through accommodation, guide, gateway-desk and visitor surveys.

This also points to a strong local-product opportunity. Even where tourism-development publications focus mainly on routes and guiding, the economic logic they describe is based on communities selling products, offering food, and building small service functions around the tourism flow. That fits Kapan particularly well because the site already has a strong NTFP and local-product base — honey, medicinal and aromatic herbs, wild berries and fruits, and mushrooms — together with a broader cultural and heritage setting that can support route-based stops, meals, tea and preserve sales, and small local business participation. In Kapan, the local opportunity is therefore not only outdoor tourism itself, but the ability to connect the mountain and protected landscape to village- and town-based value chains. At the same time, the challenges emerging from local and project-related sources are equally clear. One major issue is route quality and safety. The World Bank stakeholder-engagement material notes that 12 routes had earlier been established by the protected-area management structure, but only 5 remained usable due to safety reasons. This is highly relevant for Kapan, where the tourism space is mountainous, seasonally uneven, and exposed to fire and landslide risk. In practical terms, local tourism development is not being held back by lack of scenery or lack of ambition. It is being constrained by the need to make routes safe, usable, and continuously maintained in a difficult landscape.

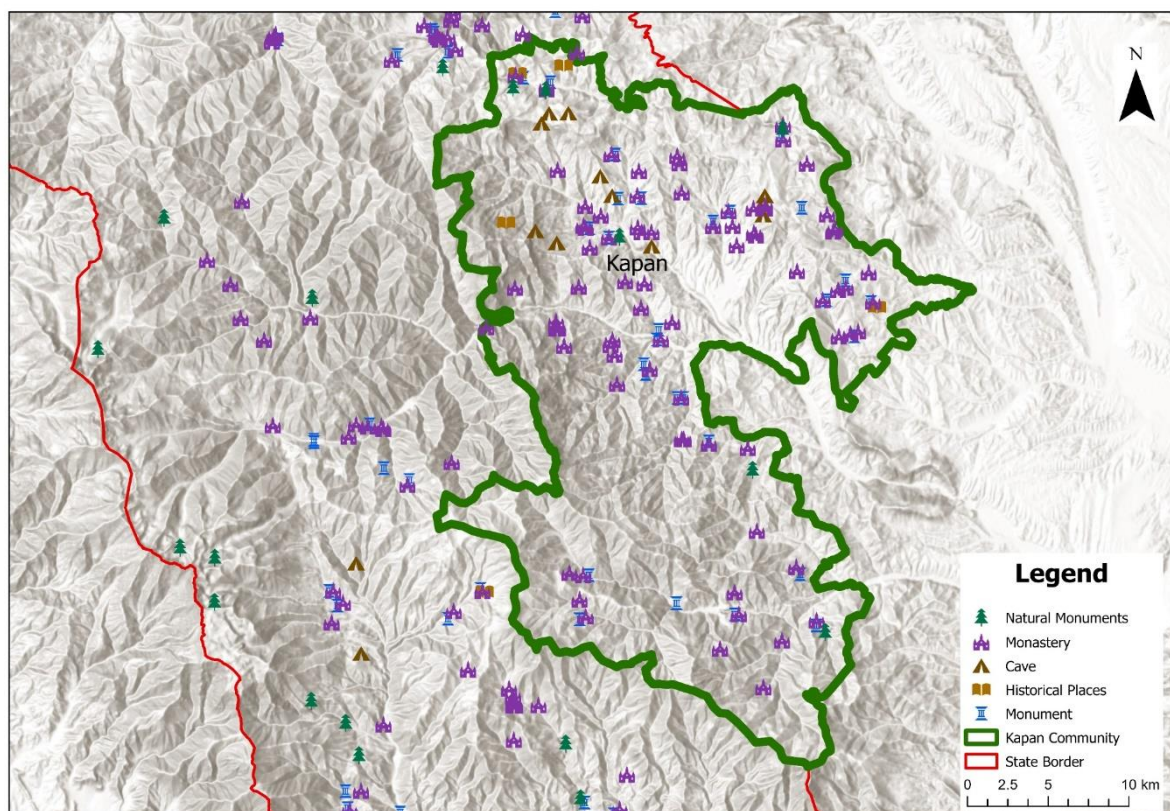
Coordination must include Kapan Municipality, the Zangezur Biosphere Complex SNCO and the responsible Kapan Forest Economy/territorial forestry unit, because routes may cross municipal, protected and forest-management interests. Horse riding is a possible service tool only on a separately approved route with land/manager consent, habitat screening, erosion and water-point review, animal-welfare and operator checks, group/season rules and maintenance responsibility. It is not added to the public offer merely because the terrain appears suitable.

5. Tourism Baseline

Attractions

Kapan's confirmed attraction themes are Mount Khustup and mountain landscapes, the Voghji and Vachagan valleys, Vahanavank, Halidzor, Baghaberd, the historic bridge, geology/local-history collections and the town's industrial identity. The detailed map shows many natural-monument, monastery, cave, historical-place and monument symbols, but they are not named or numbered and do not prove ownership, access, condition or visitor readiness. No high-mountain lake suitable for promotion is identified in the supplied map or evidence set; any lake product remains conditional on GIS/site confirmation.

Figure 5. Attraction categories in and around Kapan Community



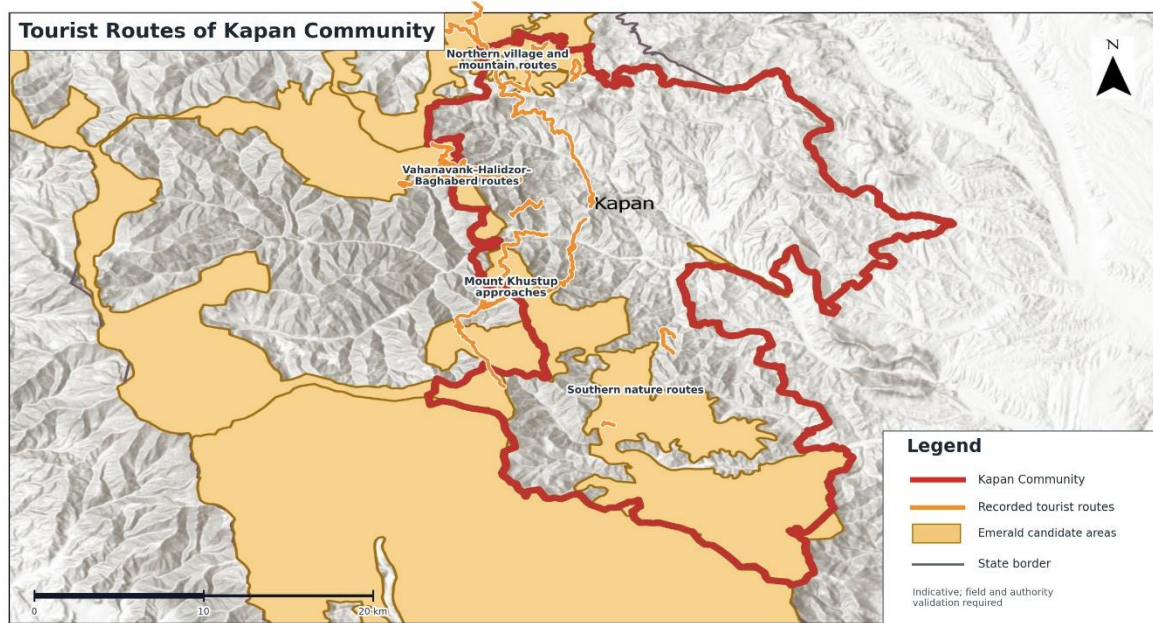
Note: The map is an inventory aid, not a visitor-readiness map. Symbols require names/IDs, ownership or manager, access, sensitivity, condition and operator checks. Symbols outside the boundary may support regional packages only by agreement.

Source: REC Caucasus.

Analysis of available official and user-generated spatial data identifies a connected but uneven network of town-access, heritage, mountain and village routes in and around Kapan Community.

Four operational clusters are visible: routes linking Kapan with Vahanavank, Halidzor and Baghaberd; several approaches to Mount Khustup from Geghanush, Verin Vachagan, Baghaburj and Shishkert–Storot; northern village connections through Arajadzor, Vanek, Antarashat, Tandzaver, Verin Khotanan and Shrvenants; and southern nature routes towards Shikahogh, Kari Berd and waterfall sites. Recorded alignments range from approximately 2 km to 26 km. Several Khustup records are overlapping or alternative approaches, while some regional alignments extend beyond the community boundary. The mapped network is therefore an initial spatial inventory, not an approved visitor network.

Figure 6. Indicative tourist-route network in and around Kapan Community



Note: Route alignments are indicative and require field, land-management and competent-authority validation before publication or promotion.

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

The mapped network supports a route-family approach rather than one Kapan trail. The Vahanavank–Halidzor–Baghaberd belt can support half-day town, monastery and fortress experiences. The Khustup approaches can form guided mountain products with different difficulty and seasonal profiles. Northern village connections can support multi-day or regional walking itineraries through agreements with neighboring communities and land managers. Short waterfall and Shikahogh-area routes should be treated as conditional nature-access products until ecological, road, protected-area and authority checks are complete.

The mapped network is not immediately visitor-ready. Overlapping Khustup alignments must first be consolidated into distinct route records. Each selected route should then be verified for trailhead and endpoint, distance and elevation, surface and water crossings, legal road and trail access, land and site manager, Emerald or protected-area sensitivity, forest-management conditions, grazing and mining interfaces, fire, landslide and weather exposure, border or security restrictions, emergency access, operator and maintenance responsibility. Initial development should prioritize the heritage belt, town-linked walks and selected Khustup routes that can meet these checks.

The attraction inventory confirms that Kapan has a diverse resource base, but not all identified assets have the same level of visitor readiness. The distinction between an identified attraction and a tourism-ready site is particularly important given the combination of mountain terrain, protected-area interfaces, heritage assets and environmental constraints. Table 1 therefore translates the attraction inventory into a readiness framework, identifying the potential visitor role of each priority attraction or cluster together with the route, access, environmental, safety and management information that must be validated before it is incorporated into the promoted ecotourism offer.

Table 1. Kapan attraction and readiness register

Attraction / cluster	Possible visitor role	Required validation	Validation lead
Mount Khustup / mountain routes	Guided hike, trailhead transfer, landscape interpretation	Route geometry, condition, season, manager, emergency access and habitat screen	Municipality + Zangezur Biosphere Complex + Forest Economy/route managers
Vahanavank	Heritage-and-landscape visit	Opening/access, site manager, parking/path, interpretation and service links	Heritage/site manager + Municipality + operator
Halidzor / Baghaberd	Fortress landscape and history route	Legal road/path, slope and edge safety, site condition and timing	Heritage/site managers + Municipality + guide
Kapan museums and town	Gateway orientation, geology/mining history, local products	Hours, staff, accessible route, industrial/environmental interpretation clearance	Municipality + museum managers + gateway operator
Rivers, caves and natural monuments	Conditional geology/nature interpretation	Named sites, water/environmental safety, cave ecology, access and visitor node	Competent authorities + qualified specialists
High-mountain lake opportunity	Conditional guided destination	No suitable named site confirmed; verify location, access, ecology, land/manager and route	GIS/ecology team + competent manager

Source: Authors' elaboration.

Wildlife is a potential interpretation theme rather than a guaranteed attraction. Exact viewing sites, species use, breeding/refuge periods and disturbance pathways have not been confirmed. The baseline therefore separates verified landscape and heritage assets from conditional wildlife, cave, lake and horse-riding opportunities.

Activities

Hiking, camping and guided tours are reported in the wider Kapan-Zangezur setting, but their current route, operator, volume and safeguard status is incomplete. Before new trail marking, the route audit must compare field GPS tracks with the Transcaucasian Trail data, Mapy.cz and other currently used trail platforms, identify contradictions or missing links, and publish one approved master track. Horse riding, legal-road vehicle transfer and high-mountain-lake access are candidate services, not baseline activities.

Hiking is the clearest reported outdoor activity and the strongest candidate backbone for Kapan's offer, subject to the route audit. Camping and guided tours are also reported, but their operating locations, scale and controls require confirmation. Cultural-landscape visits, local-livelihood experiences and NTFP-linked tastings may be combined with verified routes. Wildlife observation, horse riding and high-mountain-lake access remain conditional products and are not treated as operating facts until site, operator, season and safeguard requirements are met.

Visitor Flow

No numerical Kapan visitor-flow score is supported by the available data. The previous 'medium' label is a categorical judgement without a stated scale and is removed as a planning conclusion. Syunik marz recorded 8,960 incoming tourists staying in hotel facilities in 2024, but this regional figure cannot show Kapan visitors, route use, day/overnight shares or length of stay. Kapan's score and targets will be set only after a first-season baseline.

Regional interest and local visitor flow are different variables: Tatev and wider Syunik can have strong demand while Kapan captures only an unknown share. The mining/industrial identity creates a second market challenge. Kapan should present itself honestly as an industrial mountain city and biodiversity gateway, using safe geology/mining-history interpretation and town improvements while excluding active, contaminated or unverified sites from visitor products.

Accessibility

Accessibility is route-specific. Road access to Kapan town supports year-round orientation and services; access from the town to each trailhead, village, monument or landscape node must be assessed separately for road legality and condition, public/visitor transport, travel time, weather, fire, slope risk and emergency access. 'Moderate' therefore means that town access is workable but the wider product cannot be promoted as uniformly easy.

Thus, the available evidence provides a useful regional tourism context but remains insufficient to quantify Kapan-specific visitor use, accommodation performance or product demand. Establishing this baseline is therefore an implementation requirement rather than simply a data exercise: it will determine the scale and timing of route improvements, overnight products, service integration and subsequent investment. Table 2 distinguishes the regional evidence that can already be used for context from the Kapan-specific information that must be collected through visitor counts, provider surveys, route audits and pilot-product monitoring.

Table 2. Kapan visitor, service and market baseline

Baseline field	Available evidence	Interpretation / method	Timing
Syunik hotel-facility incoming tourists	8,960 in 2024	Regional context only; not Kapan visitor flow	Armstat regional series cited in source plan
Syunik hotel facilities	115 in 2024	Regional context only; current Kapan operators/capacity unknown	Armstat regional series cited in source plan
Kapan day/overnight visitors and stay length	Not available	Count at gateway/trailheads; accommodation/visitor survey	First operating season
Accommodation rooms/beds, prices, occupancy	Not available	Provider census with season, accessibility and package interest	Before package costing
Target-segment size and package conversion	Not available	Test Tatev-Goris-Kapan, Khustup and heritage products; record inquiries/bookings	Pilot season
Trail use and app coverage	Not consolidated	Field/app audit and approved route register	Before promotion
Tourism-linked local-product sales	Not available	Supplier register and voluntary sales sample	Quarterly during pilot

Source: Authors' elaboration.

6. Suitability Assessment and Zoning

Kapan is provisionally suitable for a controlled, route-based model. The supplied maps show candidate Emerald context and attraction categories, but they do not yet show legal routes, protected-area/forest-management zones, industrial/environmental constraints, sensitive habitat, hazards, service nodes or closures. The Municipality, Zangezur Biosphere Complex and Kapan Forest Economy should jointly approve the operational GIS layers before public promotion.

Strong regional demand does not prove high Kapan route use. Demand describes market interest; flow describes measured movement at Kapan sites. The plan therefore does not use either label as a substitute for data. First-season counts will show where visitors concentrate and whether zoning or service changes are needed.

The town gateway should provide one current source of information: approved route map/track, route status, operator contacts, estimated duration, legal-road transfer options, seasonal/fire/landslide notices, visitor rules and emergency contact. Access is considered adequate only when a specific product has a verified start/end point, safe legal approach, responsible operator, status update and fallback/closure rule.

The practical zoning system has four operating classes: (1) no-promotion/conservation areas defined by competent authorities; (2) guided or conditionally open routes requiring season/group rules; (3) ordinary controlled routes and heritage nodes with marked access and monitoring; and (4) town/service nodes for orientation, accommodation, food, toilets, products and transport. These classes are management outputs, not new legal designations. Each mapped object must show ID, status, rule, owner/manager and review date.

For these operating classes to guide actual visitor management, they need to be translated into a spatial decision-making system rather than remain as general planning categories. The operational GIS should show not only where attractions and routes are located, but also who manages the land, which environmental or physical constraints apply, where visitor services are available and where monitoring is required. Table 3 sets out the minimum spatial layers needed to convert the zoning approach into route approval, access, infrastructure and management decisions.

Table 3. Required GIS and map-to-action outputs

Map output	Minimum content	Management use
Route layer	Approved walking, horse and legal-road transfer tracks; start/end; duration/difficulty	Separates public, guided-only, seasonal and closed status
Authority/land layer	Protected-area, forest-management, community, heritage and other manager boundaries	Identifies consent and maintenance owner
Sensitivity/constraint layer	Candidate Emerald context, habitats, wildlife restrictions, caves, fire/landslide and industrial/environmental constraints	Sets no-go, screening and seasonal conditions
Visitor-service layer	Gateway desk, accommodation, food, toilets, water, transport, product points and emergency access	Turns attractions into usable products
Monitoring layer	Counters/observation nodes, incident locations, defects, erosion/litter and closure history	Supports adaptive management

Source: Authors' elaboration.

7. Ecotourism Product Development

Kapan's offer should connect the town with verified mountain and heritage routes while treating industrial identity honestly. Investment in the town is part of the product where it improves orientation, pedestrian linkage, public toilets, local-product display, accessible visitor information and safe geology/mining-history interpretation. It should not cosmetically hide environmental issues or direct visitors to unsafe industrial land.

Potential audiences are corridor visitors arriving through Tatev/Goris, domestic weekend visitors, hikers, heritage/geology visitors and smaller nature/local-product segments. The available evidence does not quantify their size. Pilot marketing will therefore test inquiries, bookings, stay length, spending channels and satisfaction by segment rather than assign invented market shares.

Hiking should remain the backbone of the ecotourism offer. Existing use already confirms this, and the wider trail context around Kapan is unusually strong. Local tourism material presents Kapan as a base for hiking routes and rural mountain experiences, while the mapped eco-trail connecting Shikahogh State Reserve and Arevik National Park through southern Syunik shows that the wider protected-landscape route logic is already in place. Mount Khustup is also clearly one of the main tourism anchors of the area and gives Kapan a recognizable mountain product that few other pilot communities have at this scale. Hiking in Kapan should therefore be developed not only as recreation, but as a structured route system linking valleys, viewpoints, monasteries, and protected-landscape edges.

Guided tours are equally important and should play a stronger role than they currently do. Kapan's landscape is too layered to work well through casual visitation alone. A guided format is especially useful here because it can connect very different elements within one visitor experience: the town, Khustup and surrounding mountain trails, Vahanavank and the fortress landscape, the Zangezur protected-area edge, and local products or village stops. In a site where biodiversity sensitivity is high and access is only moderate beyond the town, guiding is valuable not only for interpretation, but also for visitor discipline and safer route use.

Wildlife interpretation is conditional, not arbitrarily limited. 'Seasonal' means that site-specific open/closed periods are set by the competent authority after ecological review; 'guided-only' is used where route discipline or interpretation is needed. Fixed viewpoints, no baiting/calling, no disclosure of sensitive locations, group rules and immediate closure on disturbance evidence are the relevant controls. If screening finds no material disturbance risk, access need not be restricted merely for being nature-based.

Agro-ecotourism and local livelihood-based experiences are more realistic in Kapan than in some of the earlier sites, but they need to be framed correctly. The surrounding villages and mountain communities already combine agriculture, livestock, tourism, and local product use, so visitor experiences linked to village meals, orchards, household food traditions, farm-to fork events and community participation can be developed. These should remain small-scale and route-linked rather than trying to imitate farm-stay models from other contexts. What fits Kapan best is a mountain community format in which visitors encounter food, local production, and rural life as part of a wider landscape journey.

A distinct product should come from verified origin and story. A proposed Kapan/Khustup Mountain Pantry collection can combine traceable local honey, legally sourced or cultivated herb teas, preserves, dried fruits and seasonal foods from named producers, with one label explaining producer,

settlement, ingredients/source and landscape story. Zangezur pear, protected plants and other species of concern are interpretation subjects, not harvestable tourism products.

Cultural landscape tourism is also central. Kapan's monasteries, fortresses, bridge, museums, and mining heritage should not be treated as separate from its ecotourism offer. The strongest product is one in which the mountain landscape, heritage sites, and local identity are interpreted together. A 10th-century monastic complex set in forested highlands near Kapan, Vahanavank was an important spiritual and educational center of medieval Syunik and is closely associated with the Bagratuni dynasty (885–1045). Its atmospheric setting, combined with well-preserved ecclesiastical architecture and khachkars, offers visitors both cultural depth and scenic tranquility. Another famous cultural attraction is Halidzor Fortress - perched on a ridge overlooking the Vorotan Gorge, it is a 17th-century stronghold famously linked to the resistance of Davit Bek who led an Armenian liberation movement in Syunik (c. 1722–1730) against Persian forces, offering dramatic views and a powerful sense of Armenia's military history. Its strategic location and preserved defensive structures make it one of the most evocative fortifications in Southern Armenia. The medieval Baghaberd is another ancient fortress, once serving as a key defensive and political center of the Syunik kingdom, dramatically situated on a mountain ridge above the Voghji River valley. Today, its ruins and commanding landscape provide insight into early Armenian statehood and offer panoramic views of the surrounding highlands.

Vahanavank, Halidzor, and Baghaberd are not only historical attractions; they are part of the wider mountain-setting experience of the community. This gives Kapan a richer product than a simple hiking destination, because visitors can move between protected landscapes, historic architecture, river valleys, and the lived history of southern Syunik within one itinerary.

The seasonal dimension is especially important in Kapan because accessibility and product quality change significantly through the year. Spring and early summer are well suited to hiking, monastery visits, wildflower and herb-related experiences, and interpretation of the wider protected mountain landscape. Summer is the strongest season for hiking and guided nature-and-heritage routes, but it also brings the greatest need for caution around fire and route pressure. Early autumn is particularly valuable because it combines good walking conditions with stronger relevance of local products such as honey, herbs, berries, mushrooms, and food-based experiences. Winter should not be treated as a main ecotourism season under the current package logic. The town remains active, but the mountain and protected-landscape product is clearly strongest from spring through autumn.

Indicative timing must be validated against routes and transport. A Kapan heritage-geology day is designed for about 7-8 programmed hours, including orientation, one major heritage site, a town/museum component, meals and a short verified landscape walk. A hiking day is route-specific and may require a full 8-10 hours including legal-road transfer and safety briefing. Two days/one night is a short-stay extension, not a long stay; a three-day/two-night Tatev-Goris-Kapan package is the stronger regional retention product. Target audiences are stated in the product table rather than assumed.

Kapan therefore does not need a scattered menu of tourism activities. It needs a coherent product family that connects the town with the surrounding mountain, heritage and protected landscapes while creating clear opportunities for local services and products. The product concepts described above are consequently translated in Table 4 into a limited set of operational tourism and service tools. For each tool, the table identifies the intended visitor segment and duration, potential delivery arrangement, minimum service components and the conditions that must be satisfied before launch. The table should therefore be read as a product-development and readiness framework rather than as confirmation that all proposed products are already operational.

Table 4. Priority Kapan product and service tools

Tool	Target / duration	Operator	Minimum service components	Launch gate
Kapan Gateway and Route-Status Service	All visitors; 15-30 min	Existing information function or competitively assigned operator	Approved maps/tracks, status board/QR, providers, rules, bookings/referrals and incident log	Operational audit; no new building until need is proven
Khustup Gateway Hike	Hikers; route-specific 8-10 h	Certified guide + legal transport provider	Trailhead transfer, guide, safety/fire briefing, meal/product option, fallback route	Route/authority/ecology/emergency validation
Kapan Heritage-Geology Day	Cultural/geology visitors; 7-8 h	Guide + museums/site managers + food provider	Vahanavank or fortress node, town/museum interpretation, meal and product stop	Opening/access, industrial/environmental and timing checks
Legal-Road Trailhead Transfer	Hikers and small groups; timed add-on	Registered driver/operator	4x4/high-clearance vehicle only on validated legal roads; booking, pickup, luggage and emergency contact	No off-road driving; road status and operator/vehicle compliance
Screened Horse-Riding Pilot	Experienced/beginner segments as route permits; 2-4 h	Verified equestrian operator + route manager	Horse/guide, briefing, helmets, rest/water plan and small group	Land/route, habitat, erosion, welfare, insurance and season checks
Tatev-Goris-Kapan Southern Extension	Regional/corridor visitors; 3 d/2 n	Partner operators + Goris/Kapan providers	Wings of Tatev gateway, Goris stay/experience, Kapan overnight and one Kapan product	Partner agreement, schedules, prices, booking/referral and pilot data
Kapan/Khustup Mountain Pantry	All segments; 20-45 min or retail	Producer group + food/retail provider	Traceable tasting/sales set; no visitor wild harvesting	Supplier, food-safety, sustainable source, capacity and price checks

Source: Authors' elaboration.

8. Infrastructure and Service Needs

Tourism-information and ecotourism initiatives are reported in Kapan, but the current operator, location, hours, staffing, data systems, route-status function and accessibility have not been audited. The plan therefore proposes a Kapan Gateway and Route-Status Service within an existing suitable facility or service contract before considering a new visitor-center building.

Trail work begins with a field-and-digital audit. Every candidate route is checked against the Transcaucasian Trail data, Mapy.cz and other platforms actually used by local operators/visitors; conflicts are resolved into one authority-approved GPS track. Marking adds start/end panels, difficulty/duration, route ID, directional markers, QR/offline track, conduct/safety rules and named maintenance/closure responsibility.

Visitor information is also stronger here than in many other sites, but not yet strong enough for the landscape around it. Because ecotourism services and information already operate in Kapan, the priority is not to invent a visitor-information function from zero. The more important need is to make this existing function work as the real orientation hub for the wider ecotourism landscape: routes, seasonal access conditions, village connections, biodiversity-sensitive areas, monastery and fortress visits, local-product stops, and guided experiences. In practical terms, Kapan needs a stronger bridge between the urban information base and the mountain-and-protected-area tourism space around it.

Syunik's 115 hotel facilities in 2024 are regional context and cannot establish Kapan capacity. Before overnight packages are costed, a Kapan provider census must record operator, rooms/beds, seasonal opening, price range, occupancy sample, accessibility, meals, transport/guide links and willingness to participate. Investment begins with integration/readiness, not assumed bed-stock expansion.

The practical town-to-landscape recommendation is a scheduled/booking-based trailhead transfer on validated legal roads, connected to the gateway desk and certified guide roster. Each service card states pickup point, route/trailhead, vehicle requirement, passenger/luggage capacity, operating season, last return time, cancellation/closure rule, emergency contact and price.

Small visitor-support facilities also matter. In mountain and protected-landscape tourism, even relatively simple missing elements can reduce the quality of the destination: resting points, interpretation boards, route warnings, waste-management points, and basic sanitation at priority nodes. This is particularly relevant in Kapan because the site already has enough tourism interest for route-based use to grow, while the wider Armenian scoping work also notes that maintenance of publicly used infrastructure such as trails and resting sites is often not well institutionalized. In Kapan, the problem is not that nothing exists, but that the system still needs to become more reliable, more visible, and easier to maintain.

The wider legal and planning context reinforces this. Armenian tourism legislation regulates tourism services and provider registration, but it does not provide detailed operational requirements for trails, trailheads, car parks, or ecotourism-specific site design. In practical terms, this means places like Kapan cannot rely on national tourism law alone to create a working ecotourism landscape. Local planning has to fill that gap through route design, signage systems, visitor-information logic, and small infrastructure that fits both tourism use and conservation sensitivity.

For Kapan, the most realistic infrastructure agenda should therefore focus on:

- Clearer trailheads, route markers, and directional signage across the existing Kapan–Zangezur trail system
- Stronger use of the town's existing tourism-information function as the operational entry point to the wider ecotourism landscape
- Better linkage between accommodation, guiding, local transport, and route-based tourism products
- Selective support facilities at priority nodes, including interpretation, resting points, warning signs, and basic visitor services
- Careful improvement of access to surrounding villages, heritage sites, and mountain routes where tourism use is realistic and environmentally acceptable
- Low-impact placement of all new infrastructure in already used and lower-risk spaces rather than in sensitive or unstable mountain areas.

Kapan does not need heavy tourism construction to become stronger. It already has a service base, information capacity, accommodation, and a real mountain tourism setting. What it needs is a more coherent support system that connects the town, the trail network, the protected-area edge, the heritage landscape, and the local service economy into one functioning ecotourism structure. Table 5 translates these needs into priority service and infrastructure objects, specifying the minimum output, responsible actors and indicative implementation timing for each.

Table 5. Priority service and infrastructure objects

Object	Minimum output	Lead / partners	Timing
Gateway/route-status function	Existing facility audit; staffed/digital map, status, bookings, provider and incident logs	Municipality + assigned operator	0-9 months
Two priority trailhead packages	Start/end panels, markers, QR/offline track, safety/rules, rest/toilet/waste needs and maintenance plan	Route managers + Municipality + PA/Forest Economy	6-18 months
Town orientation and public-realm link	Signed pedestrian connection among gateway, museums, services and product point; accessibility review	Municipality + town institutions	6-18 months
Legal-road transfer system	Operator roster, pickup signage, booking/status protocol and safe turnaround/parking where approved	Private operators + Municipality	6-12 months
Basic sanitation at priority nodes	Public toilet need/capacity, water, waste and maintenance/cleaning arrangement	Municipality/site manager	After site and demand audit
Digital route/app alignment	Approved master tracks, platform audit, correction requests and version/date control	Gateway operator + route managers	Before public launch; seasonal update

Source: Authors' elaboration.

9. Governance and Institutional Arrangements

Kapan needs a three-authority operating core: Kapan Municipality for destination and public-service coordination; the Zangezur Biosphere Complex SNCO for protected-area compatibility within its mandate; and the responsible Kapan Forest Economy/territorial forestry unit for forest-land access, use, monitoring and maintenance within its mandate. Community, provider, NGO, heritage and emergency actors join by route/product.

The protected-area role is especially important in Kapan. The tourism landscape directly interfaces with the Zangezur Biosphere Complex, which Armenia's environmental institutions describe as a major protected-area unit combining Arevik National Park, Shikahogh State Reserve, and several sanctuaries under one management structure. The current director and administrative base of the Zangezur Biosphere Complex SNCO are in Kapan, which makes the protected-area presence unusually concrete in this site rather than distant or symbolic. In practical terms, this means ecotourism planning around mountain routes, forest edges, wildlife-sensitive areas, and biodiversity-rich valleys cannot be treated as an ordinary municipal tourism matter. Route choice, access conditions, seasonal use, and the design of low-impact visitor functions all need to remain compatible with protected-area management logic.

Municipal leadership is operational: designate a focal point; convene the working group; maintain the attraction, route, provider and infrastructure registers; assign gateway/service and municipal asset responsibilities; coordinate village representation; publish route status; collect visitor/service data; record incidents and decisions; budget municipal maintenance; and ensure that promotion is limited to validated products.

Community groups also have a real role here, and that is appropriate. Kapan is not only a town next to a protected area. It is a wider community with 38 rural settlements, and the surrounding villages are part of the tourism logic through mountain routes, local food, household-based accommodation, and local products. In a place like this, community participation matters not as a symbolic consultation layer, but as part of the delivery system itself. Village-level involvement is especially relevant where visitors move beyond the town into landscapes used by local residents for agriculture, livestock, forest-related activities, and everyday mobility. That makes community participation important both for local benefit and for avoiding tourism growth that feels externally imposed on the surrounding settlements. The private sector role is also more substantial than in several of the smaller pilot sites. The Kapan file already points to realistic employment channels in guiding, accommodation, transport, handicrafts, and food services, and the current tourism landscape confirms that these are not hypothetical. Hotels, guesthouses, village stays, camping services, guides, and small visitor services already exist. In governance terms, that means private actors should not be treated only as beneficiaries. They are part of the management system, because service quality, visitor orientation, transport reliability, and the integration of local products all depend on them. In a destination like Kapan, where the town already has a service base and the mountain landscape already has tourism demand, the private sector is one of the main channels through which ecotourism becomes economically real.

NGOs and local support organizations are especially relevant in Kapan because they already occupy a practical space between conservation, guiding, local communities, and tourism promotion. The Visit Kapan platform and the Guides from the South Tourism Development NGO are clear examples. Their own materials show that they develop routes in the Kapan and Meghri areas, assist tourists with information, help connect visitors with local communities, train guides, and cooperate with the Zangezur Biosphere Complex and the Kapan Geological Museum. This is important because Kapan is one of the few sites where a local tourism-development actor is already operating in direct

relation to the protected-area edge and surrounding communities. In governance terms, NGOs here are not peripheral. They are potential facilitators of route management, guide development, local-product integration, and coordination between local actors who otherwise operate separately. What remains weak is the absence of a formal shared governance arrangement across these actors. The Kapan file is explicit that there is no co-management agreement, no revenue-sharing agreement, and no PPP. In a lower-demand site this might be less urgent. In Kapan, where tourism demand is already high and biodiversity sensitivity is also high, this gap matters much more. Without a clearer framework, the likely outcome is fragmented governance: the protected-area side focuses on conservation, the municipality on town and community issues, service businesses on visitors, and communities on local livelihoods, but without one agreed mechanism for balancing access, benefit, and responsibility. That becomes more serious where mountain routes, protected landscapes, village interests, and tourism growth overlap.

Three practical models are proposed: (1) a route operating protocol signed by the relevant authority/manager, Municipality, operator and maintenance partner; (2) a jointly governed gateway/route-status function with one approved data register; and (3) a voluntary provider charter and nature-friendly readiness mark linked to training, referral and co-promotion. These are simpler than a formal PPP and can be piloted route by route.

For Kapan, the most appropriate governance model is therefore a layered but operational one: protected-area and forestry authorities safeguard ecological and land-management requirements within their respective mandates; the Municipality leads destination coordination and municipal services; site and heritage managers control individual assets; private operators deliver tourism services; and community, NGO and education actors support local participation, interpretation and monitoring. The effectiveness of this arrangement depends on converting these general roles into explicit responsibilities and operating instruments. Table 6 therefore defines what each actor is expected to do and the mechanism through which that responsibility should be formalized or implemented.

Table 6. Kapan ecotourism coordination and responsibility model

Actor	Operating responsibility	Required instrument
Kapan Municipality	Convene; registers; town services; gateway assignment; data; municipal budget/maintenance; promotion gate	Named focal point; monthly in season, quarterly off-season
Zangezur Biosphere Complex SNCO	Protected-area route/site compatibility, biodiversity conditions, seasonal restrictions and enforcement within mandate	Written decision/conditions for affected routes
Kapan Forest Economy / responsible forestry unit	Forest-land access/use compatibility, route/forest risk, maintenance and enforcement within mandate	Written route/asset status and focal point
Heritage/museum/site managers	Opening/access, interpretation, site rules, visitor data and heritage safeguards	Product-specific agreement
Guides, transfer, accommodation, food and product providers	Deliver registered services; brief rules; share agreed data; report incidents/defects	Provider charter and service card
Community/NGO/education actors	Validate local impacts, village/product participation, inclusion, interpretation and citizen monitoring	Recorded representation and actions
Emergency and technical specialists	Emergency plan, risk review, training and route/site screening	Pre-launch sign-off as applicable

Source: Authors' elaboration.

10. Visitor Management System

Kapan requires a clearly structured visitor management system because the site combines high tourism interest with direct access to a protected mountain landscape. This is not a destination where open recreational use can simply expand outward from the town. The wider tourism space includes mountain trails, forest and grassland habitats, valleys, monastery routes, village access roads, and areas closely connected to the Zangezur Biosphere Complex. In a landscape like this, the main question is not only how many visitors arrive, but where they go, how they move, and whether that movement stays within routes and areas that can absorb regular use.

Guides should be trained and certified in line with applicable national requirements. Kapan Municipality and the Zangezur Biosphere Complex may jointly coordinate local needs, route modules and the roster, but certification should be delivered or recognized through the competent/accredited mechanism. The local module covers approved tracks, protected/forest rules, interpretation, first aid, fire/slope response, incident reporting and inclusive visitor service; horse and vehicle operators receive separate service-specific checks.

Controls extend beyond guiding: public/conditional/closed route status; physical and digital route cues; no-go buffers defined by competent authorities; booking or group rules where screening requires them; legal-road-only vehicle service; designated camping/fire rules; operator contracts; seasonal/incident closures; patrol/inspection within authority mandates; and one defect/incident log with owner and deadline.

The response rule is explicit. Repeated off-route movement, wildlife disturbance, erosion, litter, fire misuse, unsafe access, contaminated-site concern or infrastructure failure triggers a recorded action: stronger briefing/signage, group/guide condition, rerouting, repair, temporary closure or product suspension. Numerical carrying limits are set only after route-level baseline and monitoring evidence.

The visitor-management system therefore combines preventive controls with an adaptive response mechanism. Restrictions are not intended to be applied uniformly across Kapan; they should respond to the legal status, environmental sensitivity, physical risk and observed condition of individual routes and sites. Table 7 translates this approach into operational controls, identifying the rule applicable to each type of visitor use, the evidence or condition that triggers management action, and the means through which the resulting restriction, closure or corrective measure should be communicated and implemented.

Table 7. Kapan ecotourism coordination and responsibility model

Control	Rule	Trigger / evidence	Communication / response
Route status	Public / guided-condition / seasonal / closed	Authority/manager decision, hazard or ecological evidence	Gateway map/QR/app and trailhead
Vehicle access	Validated legal roads only; no off-road recreation	Road status, consent, erosion or safety concern	Booking card, operator terms and barrier/sign where lawful
Wildlife/cave use	Fixed route/viewpoint; no baiting/calling; no sensitive-location disclosure	Species/site/season screen or disturbance evidence	Guide brief, digital content control, closure
Camping/fire	Designated/approved places and current fire rules	Fire danger, waste, water or habitat concern	Seasonal notice, operator brief, inspection
Maintenance/safety	Defect and incident log with owner/deadline	Damaged sign/trail, slope/road issue or complaint	Repair, reroute or temporary closure

Source: Authors' elaboration.

11. Local Economy and Benefit Sharing

Kapan has a broader and more diversified local economic base than most of the pilot communities, and that changes the way ecotourism benefit sharing should be understood. The community already combines mining and industry, services, tourism, agriculture, and livestock within one local economy, while the town itself functions as the main service center for southern Syunik. The package places the population at about 38,400 and identifies the main tourism-linked employment channels as guiding, accommodation, food services, transport, handicrafts, and local product sales. This means ecotourism in Kapan is not being introduced into a weak or purely rural economy; it is being developed in a town-based system that already has the labour, service, and commercial structures needed to absorb tourism-related income if that income is organized well. The wider Syunik tourism economy supports this picture. Official Armstat tourism statistics for 2024 show that Syunik had 115 hotel facilities, an average nominal monthly number of 295 employees in hotel facilities, 951.2 million drams in hotel-facility proceeds, and 8,960 incoming tourists staying in hotel facilities.² Those are regional rather than Kapan-only numbers, but they are highly relevant because Kapan is one of the main tourism-service bases in the marz and clearly operates inside this wider hospitality economy. In practical terms, that means Kapan does not need to create a tourism market from zero. It needs to capture a stronger and more locally beneficial share of a market that already exists.

Service quality should be made visible through a proposed Kapan Nature-Friendly Service Readiness Mark. This is not an official certification scheme, but a local management and co-promotion tool for accommodation providers, guides, transport operators, food businesses, local-product suppliers and other participating services. The readiness assessment should cover legal and truthful service information, safety and emergency preparedness, environmental and route-rule compliance, waste and resource practices, local sourcing and benefit, and inclusion and accessibility. Each criterion is scored from 0 to 2, with eligibility requiring at least 9 of 12 points and no zero score for legal, safety or environmental compliance. Table 8 presents the proposed scoring framework and the evidence to be considered in assessing provider readiness for participation in Kapan's ecotourism products, referrals and promotional activities.

Table 8. Kapan ecotourism coordination and responsibility model

Criterion	Score	Evidence
Legal and truthful service information	0 missing / 1 partial / 2 verified	Registration/permit as applicable, price, operator and accurate product claims
Safety and emergency readiness	0 missing / 1 partial / 2 verified	Route/service risk brief, first aid/emergency plan and incident reporting
Nature/route-rule compliance	0 missing / 1 partial / 2 verified	Approved route, seasonal rules, no off-road/harvest/disturbance practices
Waste and resource practice	0 missing / 1 partial / 2 verified	Waste prevention/return, sanitation and low-impact operation
Local benefit and sourcing	0 missing / 1 partial / 2 verified	Named local staff/suppliers and transparent local-value links
Inclusive/accessibility practice	0 missing / 1 partial / 2 verified	Clear physical/service access information and fair participation

² Statistical Committee of the Republic of Armenia

Alongside service readiness, local distinctiveness will be tested through named producers and traceability, not asserted for generic product categories. The proposed Kapan/Khustup Mountain Pantry label identifies the producer and settlement, ingredients/source, food-safety status and the associated landscape story; protected plants and unverified wild collection are excluded. Participating providers can be bundled with guide, meal and overnight packages.

12. Environmental and Climate Considerations

Kapan's environmental profile is defined by a direct interface between an active town, a mining landscape, and one of Armenia's most important protected mountain systems. The wider tourism space includes the Voghji and Vachagan river valleys, broadleaf forest patches, rocky slopes, mountain grasslands, higher-altitude habitats linked to Mount Khustup, and direct adjacency to the Zangezur Biosphere Complex. This means ecotourism in Kapan does not develop in a neutral landscape. It develops in a mountain system where biodiversity value, protected-area relevance, settlement, and industry already overlap.

Controls are site- and pathway-specific rather than guide-only. They include authority-approved routes and seasonal rules; no-promotion areas; fixed viewpoints; legal-road-only transfers; camping/fire restrictions; operator terms; avoidance of environmentally burdened or unverified industrial/river sites; physical/digital route cues; inspection/patrol within mandates; and monitoring-linked rerouting or closure. Species are not marketed until their occurrence and viewing compatibility are confirmed.

A second environmental issue in Kapan is the interaction between tourism and the mining-affected landscape. This should not be ignored, because it is one of the real differences between Kapan and most of the other sites. World Bank environmental material for the Northern Kapan waste-ore disposal site records official monitoring of the Voghji River within Kapan city and notes persistent water-quality problems for several metals, while separate laboratory findings cited in the same document report acid drainage from the Kavart mine entering the Kavart River and then the Voghji, with cadmium, nickel, cobalt, copper, zinc, and manganese above water-quality norms. In a tourism context, this matters for two reasons. It increases community impact risk in river-linked areas, and it means that some landscape sections may look attractive for tourism while still carrying environmental burdens that require caution in route planning, interpretation, and visitor messaging.

Cultural heritage in Kapan also sits inside this sensitive environmental setting rather than outside it. Vahanavank, Halidzor, Baghaberd, the historic bridge, and museum heritage all gain part of their value from the mountain-and-valley landscape around them. The main risk is therefore not only direct damage to one monument. It is cumulative pressure from poorly placed visitor infrastructure, informal parking or stopping points, path widening, and visual clutter in areas where heritage, scenic value, and ecological quality overlap. In Kapan, cultural risk remains moderate because the heritage resource is real and important, but the larger pressure still comes from the broader landscape rather than from one heavily overused monument. Climate-related pressure is also significant and should remain aligned with the actual mountain setting. Drought is relevant, but it is not the dominant issue. Fire risk is much more serious, especially in a landscape where forest patches, open grassland, camping activity, and summer mountain visitation coincide. Landslide exposure is also materially important because access beyond the town depends on mountain roads, steep slopes, and seasonal route conditions. This is consistent with Armenia's broader tourism-climate policy context: the National Climate Change Adaptation Action Plan for 2021–2025 incorporated preparation of a tourism-sector adaptation program, and official tourism-sector guidance notes that tourism in Armenia is already affected by heavy precipitation, floods, droughts, and other climate stresses. For Kapan, these are not abstract national policy points. They translate directly into route safety, fire management, seasonal access, and infrastructure placement in a mountain destination.

The most appropriate mitigation approach for Kapan is therefore practical and strongly selective:

- Keep visitor use concentrated on validated routes and trailheads rather than allowing casual spread into the wider protected and mountain landscape.
- Avoid opening tourism functions in habitat-sensitive slopes, cliff areas, river-edge sections, or poorly assessed mining-affected sites without validation.
- Use guiding and visitor information to explain biodiversity sensitivity, route discipline, and local hazard conditions.
- Prohibit unmanaged camping, open-fire use, and informal viewpoint creation in exposed mountain and forest areas.
- Apply seasonal caution where weather, fire danger, road condition, or slope stability reduce safe access.
- Place new small infrastructure only in already used and lower-risk locations.
- Align tourism growth with protected-area management logic and with the environmental realities of the wider Kapan mining-and-river landscape.

In Kapan, the environmental challenge is not only to protect nature from tourism. It is to prevent a high-potential mountain gateway from growing in a fragmented way across a landscape that is already ecologically valuable, climatically exposed, and environmentally complex. That is why the right model for Kapan is controlled, route-based ecotourism with strong attention to biodiversity, fire and landslide risk, and careful separation of tourism use from the most sensitive or environmentally burdened parts of the wider landscape.

13. Monitoring Framework

The monitoring framework for Kapan is intended to support adaptive management by tracking whether ecotourism development remains compatible with environmental and safety conditions, protected-area and forest-management requirements, local economic objectives and visitor expectations. It has five main management objectives: (1) keep promoted visitor movement on validated routes and legal access; (2) prevent or respond to ecological, heritage, fire, slope and industrial/environmental harm; (3) assess whether regional visitor flows translate into Kapan stays and use of local services; (4) increase documented participation of local providers, producers, women and youth; and (5) ensure that route, information and maintenance responsibilities respond to recorded evidence. Table 9 translates these objectives into an operational monitoring framework by linking each objective to measurable indicators, an initial management direction or target, monitoring frequency, responsible actors and the corresponding management response.

Table 9. Operational monitoring framework

Objective	Indicator and baseline	Initial direction / target	Frequency and lead	Management response
Validated-route and safe-access use	Promoted routes with approval/status; node counts; off-route observations; incidents. Baseline absent.	100% of promoted routes validated and status displayed; numerical thresholds after first season	Monthly in season / route working group	Repair, reroute, guide-condition or closure
Environmental/heritage compatibility	Erosion, litter, fire misuse, disturbance, heritage or industrial/environmental concern. Baseline absent.	No product launched without applicable screening; zero promotion of unverified sensitive/unsafe sites	Pre-launch + seasonal / competent managers	Suspend; expert review; change route/season/rules
Kapan stay and package conversion	Day/overnight share, stay length, inquiries, bookings/referrals and satisfaction. Baseline absent.	Test at least one two-day/one-night and one Tatev-Goris-Kapan offer	Seasonal / gateway operator + providers	Revise timing, links, price or product
Local value and inclusion	Active guides, transfers, accommodation, food/product suppliers; paid roles; women/youth participation. Baseline absent.	All pilots list verified local suppliers; numerical targets after provider census	Quarterly/annual / Municipality + provider group	Open call, training, referral or procurement adjustment
Maintenance/governance response	Defects/incidents with owner, date, status and closure time	100% logged with responsible actor and action status	Monthly in season / working group	Escalate overdue action; close unmanaged asset

Source: Authors' elaboration.

Kapan-specific monitoring priorities. The common indicators in Table 9 should be applied through fixed observation points and route records at the town gateway, validated Kapan–Zangezur trailheads and routes, and approved mountain, heritage, village, river, forest and horse-linked product nodes. Monitoring should record route erosion and informal shortcuts, litter and fire signs, off-route or unauthorized vehicle movement, marker condition, slope, road and weather hazards, industrial or environmental restrictions and heritage condition. Any biodiversity observation should use a verified checklist and must not present unverified species as confirmed.

Visitor retention and local value. Kapan's distinctive performance question is whether movement through the wider Syunik corridor is converted into Kapan stays, bookable packages and paid use of local accommodation, meals, guiding, legal transport and local products. Gateway, provider and booking records should therefore connect visitor origin, 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.

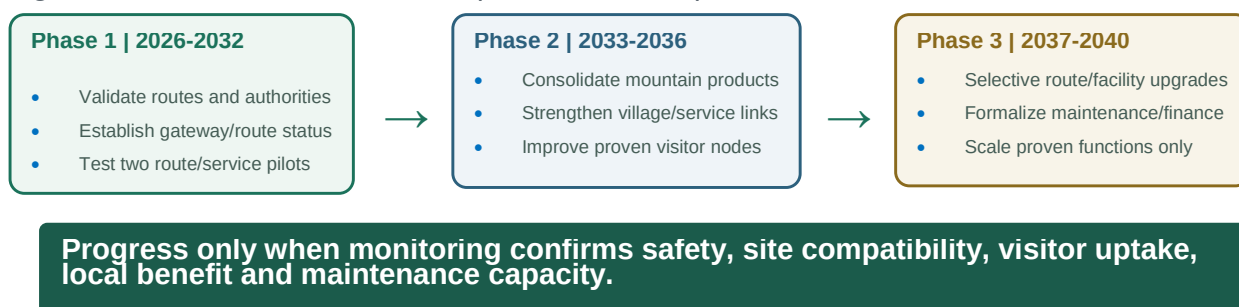
Review and management response. The Municipality should review the combined results with relevant protected-area, forest, heritage, land and route managers, tourism partners and participating providers before and after the main season and following significant incidents. Each review should record the 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 should begin with eight defined fields: GIS/route and attraction validation; gateway/route-status service; two priority route/trailhead packages; town orientation and accessible public services; legal-road transfer and conditional horse pilot readiness; provider/guide certification and service scoring; local-product traceability and package pilots; and monitoring/maintenance finance. No amount is fixed before owner, technical design, bill of quantities, safeguard decision and operating/maintenance cost are known.

Figure 5 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

The first implementation period starts immediately with validation and pilots rather than waiting until 2030. The initial 0-18 months should establish the evidence, authority, service and maintenance system; later scaling depends on safe operation, measured uptake and local benefit.

- Validation of the main ecotourism routes linking Kapan with priority mountain, heritage, and village destinations
- Improvement of trailheads, route markers, directional signs, and interpretation points in the already used Kapan–Zangezur trail network
- Stronger use of the town's existing tourism-information and ecotourism-service functions as the entry point for route orientation, seasonal guidance, and visitor conduct
- Preparation of a practical visitor-management package for mountain and protected-landscape use, including fire and slope-risk awareness
- Organization of local service actors around guiding, transport, accommodation, and product-based stops
- Establishment of a practical local coordination mechanism linking municipal, protected-area, village, and tourism-service actors.

This first phase should remain strongly management-oriented. In Kapan, relatively modest investments in route clarity, orientation, and coordination are likely to have greater immediate value than new large facilities because the town already has a functioning service base and the wider landscape already has tourism demand.

The initial implementation phase should therefore concentrate on establishing the evidence, authority, service and maintenance conditions required for safe operation before larger investments are considered. The priority is not major construction, but investment readiness: validating routes and attractions, establishing the visitor and provider baseline, organizing the gateway and route-status function, testing priority route and service packages, strengthening town-to-landscape connections, preparing operators and local suppliers, and putting maintenance and monitoring arrangements in place. Table 10 translates these immediate requirements into priority investment objects, minimum outputs, responsible actors, implementation timing and the additional information required before costs can be finalized.

Table 10. Priority investment objects and phasing

Investment object	Minimum output	Lead / partners	Timing	Cost status
Attraction, route and GIS validation	Named assets; route IDs/tracks; authority/land, sensitivity, industrial/environmental and closure layers	Municipality + PA/Forest Economy/site/GIS specialists	0-6 months	Survey and technical scope required
Visitor/service baseline	Counts, day/overnight/stay survey, provider census, prices, capacity/occupancy and sales sample	Municipality/gateway operator + providers	0-12 months	Data design required
Gateway/route-status service	Existing-facility audit; maps/status, booking/referral, provider and incident/defect registers	Municipality + assigned operator	0-9 months	Cost after operational audit
Two route/trailhead pilots	Track, access, panels/markers/QR, safety, sanitation need and maintenance/closure plan	Route managers + Municipality + operators	6-18 months	Route design and BoQ
Town orientation/public-service link	Accessible signed connection, public toilet/service and local-product point plan	Municipality + town institutions	6-18 months	Site design and BoQ
Guide/operator and nature-friendly readiness	Training/certification pathway, roster, audits and annual scoring	Competent training body + Municipality/PA	6-12 months; annual	Curriculum/participant costing
Transfer, horse and regional package pilots	Legal-road service cards; screened horse pilot; Tatev-Goris-Kapan partner agreement and booking test	Private/partner operators + managers	6-18 months	Business case after baseline
Local product and maintenance systems	Traceable supplier collection; asset register, inspection schedule and maintenance/closure budget	Producer/provider group + Municipality/managers	From first launch	Annual budget and supplier plan

Source: Authors' elaboration.

Phase 2

For 2033–2036, the emphasis should shift toward strengthening the actual ecotourism offer and spreading local economic value more clearly through the wider community. Once the main route structure and orientation system are functioning better, the next need is to deepen the product itself and connect it more directly to the local economy. The most relevant actions should include:

- Improvement of guided mountain, heritage, and village-linked tourism products
- Better integration of local accommodation with hiking, cultural landscape tourism, and local-product experiences
- Support to small food and product points using honey, herbs, berries, mushrooms, preserves, and other locally rooted goods
- Selective strengthening of visitor-support facilities in already used and lower-risk nodes
- Better connection between surrounding villages and the town-based service economy through route-based tourism
- Regular seasonal review of route condition, visitor use, biodiversity-sensitive areas, and local service performance

This is the phase where Kapan's comparative advantage becomes much more visible. The destination is not strongest when it tries to imitate a remote wilderness site. It is strongest when it operates as a town-based gateway to a high-value mountain landscape, with real products, local services, and well-structured access.

Phase 3

For 2037–2040, the site may support more selective strengthening of facilities and institutional arrangements, but only where earlier phases show that tourism use is being managed successfully and that local value is being retained in a broader way. Because financial viability is only medium, later-stage strengthening should remain evidence-based rather than automatic. The most relevant actions may include:

- Upgrading visitor-information functions within existing facilities rather than through large new construction
- Selective improvement of route-support infrastructure in the most used and ecologically and physically manageable sections
- Clearer maintenance and financing arrangements for signage, trailheads, interpretation points, and visitor-support facilities
- Stronger packaging of overnight stays, local products, guiding, and heritage visits into longer-stay ecotourism offers
- Gradual development of more formal service-coordination or benefit-sharing arrangements where tourism use becomes stable enough to support them.

Financing, Costing and Investment Review

Financing should follow the same staged logic. Public financing is essential in the early phase because the main needs are route organization, signage, visitor information, safety, and local coordination. These are enabling functions and cannot realistically be left to private initiative alone in a mountain destination with protected-area sensitivity and seasonal access limits. Private financing is

also relevant from the beginning, but mainly through small and medium local actors rather than large investors. The most likely channels are guesthouse and hotel improvement, guiding services, local transport, food and product sales, and other service upgrades tied to the ecotourism economy. A PPP model is not yet the right central instrument here, and the present structure of the site supports that conclusion.

The most realistic financing mix for Kapan is therefore:

- Public financing for routes, signage, interpretation, visitor information, safety-related measures, and coordination
- Donor or project-based financing for biodiversity-sensitive tourism design, guide support, local-product integration, and pilot ecotourism tools
- Private financing for accommodation quality, guiding, transport, food services, and local-product-based business activity.

The revenue and investment logic should remain similarly grounded in the structure of the destination. Kapan is more likely to generate direct tourism income through services and locally delivered products than through entry fees, reflecting its town-based accommodation, transport, guiding and food services and the potential to integrate verified local products associated with the surrounding mountain landscape. The priority should therefore be to strengthen the organization, quality and market connection of existing and emerging services rather than introduce fee-based access systems that would be difficult to apply consistently across a broad and partly protected tourism area. Precise investment amounts should likewise be established progressively as individual interventions reach technical readiness. Route-level validation, biodiversity-sensitive spatial planning, technical design and costing, and clarification of operating and maintenance responsibilities should precede fixed investment estimates. The sequencing principle is therefore to first establish a coherent mountain-and-town tourism system, then strengthen local products and services around it, and subsequently support selective facility and institutional improvements where demonstrated use, ecological compatibility and local participation justify further investment.

Investment review and scaling should be based on observed performance rather than a predetermined long-term visitor-growth scenario. The available Syunik marz hotel-based series contains only three annual observations for 2022–2024 (5,967, 15,516 and 8,960), is regional rather than Kapan-specific, and shows substantial year-to-year variation. It is therefore insufficient to support a defensible Kapan visitor projection to 2040, and the observed figures should be retained only as regional market context rather than used to derive regression statistics or long-range growth rates. Future quantitative scenarios may be considered once a longer comparable series is available together with Kapan-specific information on visitor use, stays, bookings, provider capacity, prices, costs and sales. Until then, progression between implementation phases and near-term investment decisions should be guided by verified route and product readiness, first-season visitor and service use, environmental performance, provider participation, local economic results and maintenance requirements.

15. Final Site Classification and Conclusions

Kapan is provisionally classified as suitable for controlled ecotourism development, with orientation, accommodation, food, product and transport functions concentrated in the town and other verified lower-risk service nodes. 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 Kapan's combination of a functioning urban base and access to the Zangezur mountain landscape. Forest, river, mountain and heritage settings, surrounding villages, local products and existing visitor services can support a gateway model that links town-based orientation and paid services to approved landscape experiences. The main opportunity is to organize these assets into a legible, locally beneficial offer; the remaining visitor, route, provider and ecological evidence gaps mean that the offer must first be tested rather than assumed.

The classification remains conditional and does not authorize open access across mountain, forest or protected landscapes. Every promoted route, cave or lake visit, horse-riding section, wildlife-observation point, heritage stop or facility must pass route-specific legal-access, land or site-manager, ecological, industrial or environmental, safety, seasonal, operator and maintenance checks. Service infrastructure should be concentrated in the town, established settlements and other verified lower-risk nodes, while sensitive, unsafe or unverified areas remain outside promotion.

The planning conclusion is therefore a controlled town-to-landscape gateway model. The immediate task is to complete the verified GIS attraction and route register, establish visitor and provider baselines, confirm the gateway and live route-status function, test two approved route-and-service pilots, strengthen provider and local-product links, and operate the monitoring and maintenance system. 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.

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	High importance
	Land ownership unclear	☐ Yes ☒ No	
	Community opposition	☐ Yes ☒ No	
	Climate risks (fire, landslide, drought)	☒ Yes ☐ No	
	Access constraints	☐ Yes ☒ No ☒ Moderate	Mountain roads to surrounding villages and protected landscapes create seasonal and terrain-related access constraints.
Site Identification & Planning Context	Site name	Kapan Community	
	Marz / Municipality	Syunik/Kapan	
	Coordinates / GIS reference	Latitude: 39.2076° N Longitude: 46.4068° E	
	Legal status	☒ Community/service areas; protected and forest-management interface; candidate Emerald context ☐ Emerald Site ☒ Community Land ☒ Other	The supplied map shows candidate Emerald polygons within/around Kapan. Confirm official site names/codes, qualifying features and exact route overlap before zoning or promotion.
	Link to existing plans	☐ PA Management Plan ☒ Community Development Plan ☐ Tourism Strategy	
Ecological & Conservation Profile	Ecosystem type	☒ Forest ☒ Grassland ☐ Wetland ☒ Alpine ☒ Mixed	Mountain valley landscapes, broadleaf forest, rocky slopes, river corridors and a forest-grassland mosaic
	Key habitats	River valleys, broadleaf forests, rocky slopes, mountain grasslands	Key habitats include the Voghji and Vachagan river corridors, broadleaf forest patches around Kapan and adjacent villages, rocky slopes and cliffs, open shrub-grassland habitats, and higher mountain

Component	Field / Criteria	Input / Selection	Notes / Logic
			areas linked to Khustup and the Zangezur Biosphere Complex.
	Species of concern	Wider-landscape species references; site-level occurrence not verified species	Do not promise sightings or design wildlife products until the competent authority/survey confirms species, site, season and disturbance conditions.
	Conservation sensitivity	☐ Low ☒ Medium ☒ High	HIGH → Conservation priority, tourism strictly limited; MEDIUM → Controlled ecotourism; LOW → Potential for broader ecotourism development
Socio-Economic & Community Context	Population ~	38400	
	Main livelihoods	☒ Agriculture ☒ Livestock ☐ Forestry ☒ Tourism ☒ Services ☒ Industry	Main livelihoods include mining and related industrial employment, trade and services, agriculture and livestock in surrounding villages, tourism and hospitality, and small-scale processing.
	NTFPs present	☒ Honey ☒ Herbs ☒ Mushrooms ☒ Berries ☐ Other	Possible product categories only. Verify legal/sustainable source, producer, volume and food-safety status; no visitor wild harvesting.
	Cultural assets	Medieval monasteries, fortresses, local museums	Key cultural assets include Vahanavank Monastery, Halidzor Fortress, Baghaberd Fortress, the historic bridge of Kapan, Kapan Museum of Geology and the Kapan history museum, the historic mining and settlement heritage of the area.
	Community willingness	☐ Low ☒ Medium ☒ High	
Tourism Assets & Baseline Use	Natural attractions	Mount Khustup, river valleys, forests and canyons	Natural attractions include Mount Khustup, the Voghji and Vachagan river valleys, broadleaf forest and canyon landscapes, and access to the wider Zangezur Biosphere Complex and mountain trail network.
	Cultural attractions	Vahanavank, Halidzor, Baghaberd, museum heritage	Cultural attractions include Vahanavank Monastery, Halidzor Fortress, Baghaberd Fortress, the medieval Kapan bridge and museum heritage in Kapan.
	Existing activities	☒ Hiking	Reported activities require route/operator/app, volume,

Recommendations for Ecotourism Development Planning in the Kapan Community, Armenia

Component	Field / Criteria	Input / Selection	Notes / Logic
		☐ Biking ☒ Camping ☒ Guided tours ☐ None	safety, environmental and maintenance audit. Horse riding, legal-road transfers and lake access are candidate services only.
	Visitor flow	☐ Not quantified - establish Kapan route/node and day/overnight baseline ☒ Medium ☐ High	No numerical score is supported; Syunik marz hotel data cannot be assigned to Kapan visitor flow.
	Accessibility	☐ Town access workable; site/route access variable and to be audited ☒ Moderate ☐ Difficult	
Suitability Assessment & Zoning	Ecological sensitivity	☐ Low ☒ Medium ☒ High	Requires zoning
	Accessibility	☐ Good ☒ Moderate ☐ Poor	
	Tourism demand	☐ Not quantified - test demand by product/segment ☐ Medium ☒ High	Regional interest does not establish Kapan route use, overnight conversion or market-segment size.
	Zone classification	☐ Strict Conservation Zone ☒ Controlled Ecotourism Zone ☒ Sustainable Development Zone	Zoning must be validated with spatial data (GIS, habitat maps, PA zoning where available)
Ecotourism Product Development	Hiking routes	☒ Yes ☐ No	
	Wildlife observation	☒ Yes ☐ No	Conditional after site/species/season/disturbance screening; fixed routes/viewpoints and no guaranteed sightings.
	Agro-ecotourism	☒ Yes ☐ No	Community participation required
	Cultural landscape tourism	☒ Yes ☐ No	
	NTFP-based experiences	☒ Yes ☐ No	
Infrastructure & Service Planning	Trails	☒ Yes ☐ No	Create route register with track, legal/manager status, app coverage, condition, season, operator, maintenance and closure status.
	Signage	☒ Yes ☐ No	Partial

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Component	Field / Criteria	Input / Selection	Notes / Logic
	Visitor centers	☒ Existing information function reported; operational readiness not verified ☐	Audit operator, location, hours, staff, accessibility, route-status, data, referral/booking and incident functions before deciding whether a new center is needed.
	Accommodation	☐ Regional accommodation base confirmed; Kapan provider capacity not consolidated ☐	Provider census required: rooms/beds, season, price, occupancy sample, accessibility, services and package interest.
Governance & Institutional Arrangements	Protected Area Authority role	☒ Assigned	Zangezur Biosphere Complex role by mandate; product/route decisions require written conditions where applicable.
	Municipality role	☒ Assigned	Municipality convenes working group, manages registers/gateway/town assets/data and gates promotion.
	Community groups role	☒ Assigned	Include affected settlements and the four documented Kapan workshop organizations; record representation and actions.
	Private sector role	☒ Assigned	
	NGO role	☒ Assigned	
	Co-management agreement	☐ Yes ☒ No	
	Revenue-sharing agreement	☐ Yes ☒ No	
Visitor Management System	Public-private partnership	☐ Yes ☒ No	
	Visitor limits	☐ Yes ☒ No	Use route status, booking/group conditions and closures where monitoring or authority decisions require them; no unsupported destination-wide cap.
	Seasonal restrictions	☒ Yes ☐ No	Seasonal accessibility and weather constraints in mountain and forest areas
	Guided-only access	☐ Yes ☒ No	
	Zoning enforcement	☐ Yes ☒ No	
	Max visitors per day	N/A	
	Max group size	N/A	
Benefit Sharing & Local Economy	Local employment	☒ Yes ☐ No	Potential for local guiding, accommodation, transport, handicrafts and food services
	Local product sales	☒ Yes ☐ No	
	Community revenue share	☐ Yes ☒ No	
	Women / youth inclusion	☒ Yes ☐ No	

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Component	Field / Criteria	Input / Selection	Notes / Logic
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 / First-season counts by node, route and product / Monthly-seasonal	No official community-level visitor count identified; Kapan is a tourism and service hub for southern Syunik and a gateway to nearby protected and heritage landscapes.
	Local income	Baseline: not available / Provider, paid-service and local-sales baseline / Quarterly-annual	Official community-level income statistics are not publicly available; livelihoods are strongly shaped by mining, services, agriculture and tourism. 245,000 - 293,000 AMD/month is average salary for Syunik region mention by Armstat in 2024 reporting.
	Biodiversity condition	Baseline: route/site screening before launch; route-condition and incident observations / Seasonal and event-based	
Investment & Financial Structuring	Estimated investment	Cost after survey, ownership/manager confirmation, design, safeguard decision and bill of quantities	
	Financing type	☒ Public ☐ PPP ☒ Private	
	Revenue sources	☐ Guiding, accommodation, meals, legal transfers	

Recommendations for Ecotourism Development Planning in the Kapan Community, Armenia

Component	Field / Criteria	Input / Selection	Notes / Logic
Implementation Plan		and traceable products; no forecast before baseline ☒ Services ☒ Products	
	Financial viability	☐ Low ☒ Medium ☐ High	
	Action	Validate and pilot gateway, priority routes/services, regional package and monitoring/maintenance system	
	Responsible	Kapan Municipality with Zangezur Biosphere Complex, Kapan Forest Economy, site managers, providers and affected communities	
	Timeline	0-18 months for validation/pilots; annual evidence-based review and scaling	

Annex 2: Stakeholders and Consultation Status

The 9-10 March 2026 workshop participant list confirms four Kapan-based organizations. Their participation supports direct Kapan input but does not by itself establish agreement by the Municipality, protected-area/forest authorities, every settlement, site manager or tourism business. The tables below separate documented participants from required implementation stakeholders and state the next action for each.

Required Implementation Stakeholders and Status		
Stakeholder	Expected role	Evidence / next action
Kapan Municipality	Destination lead, registers, gateway/town services, data, maintenance and convening	Direct participation not confirmed; designate focal point and validate plan
Zangezur Biosphere Complex SNCO	Protected-area compatibility, biodiversity conditions and enforcement within mandate	Institutional role confirmed; direct consultation/route decisions required
Kapan Forest Economy / responsible Hayantar territorial unit	Forest-land access/use, route/forest risk, monitoring and maintenance within mandate	Required by reviewer/project logic; direct consultation not confirmed
Kapan Town, Khustup and Zangezur NGOs; Kapan Polytechnic University	Local priorities, interpretation, inclusion, citizen monitoring and training support	Workshop participation confirmed; implementation roles to agree
Guides from the South / Visit Kapan	Route/product, visitor information, guide and community linkage	Desk-referenced role; present mandate/capacity and participation to confirm
Heritage and museum/site managers	Access, opening, interpretation, heritage protection and data	Managers and agreements to identify by product
Trail/app and guide-training bodies	Master tracks, platform correction and competent training/certification support	Select after route and legal review
Guides, 4x4/legal-road transfer and horse operators	Deliver screened service cards, visitor rules and incident reporting	Open provider census and compliance/readiness audit required
Accommodation, food, retail and local producers	Overnight/meal/product links, capacity/price and voluntary sales data	Provider/supplier census and safety/source checks required
Affected settlements and community representatives	Route access, local impacts, participation, maintenance and benefit	Representation required before route/product approval
Emergency, biodiversity, cave, heritage and industrial/environmental specialists	Risk plans, site/season screens and interpretation clearance	Engage before relevant product launch

Source: Authors' elaboration.

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

STRENGTHS • [Verified] Kapan is a marz-center service base with direct links to Mount Khustup, the wider Zangezur protected-landscape system and a substantial heritage layer. • [Verified] The project maps show dense natural/cultural attraction categories and extensive candidate Emerald context within and around the community. [Verified] Four Kapan-based civil-society/education actors participated in the March 2026 workshop. • [Desk evidence] Existing guiding, trail and visitor-information initiatives provide a starting point, subject to an operational audit.	WEAKNESSES • [Verified] Kapan-level visitor numbers, day/overnight shares, stay length, accommodation capacity, prices, occupancy and tourism-linked sales are not consolidated. • [Verified] Route legality, condition, app coverage, maintenance ownership and seasonal status are not held in one public register. • [Verified] Proposed lake, wildlife and horse-riding products lack site-level ecological and operational validation. • [Verified] No shared Municipality-protected-area-Forest Economy operating protocol is documented.
OPPORTUNITIES • [Indicative] A Tatev-Goris-Kapan multi-day package can convert pass-through travel into Kapan accommodation, guiding, meals and product sales. • [Indicative] Khustup gateway hikes, heritage-geology interpretation, legal-road trailhead transfers and a screened horse-riding pilot can become bookable service tools. • [Indicative] A proposed nature-friendly service mark can connect environmental rules, safety, local sourcing and joint promotion. • [Indicative] A traced Kapan/Khustup food-and-product collection can create a distinct local offer without encouraging visitor harvesting.	THREATS • [Risk] Promotion before route, habitat, access and operator validation could spread visitors into sensitive, unstable or environmentally burdened areas. • [Risk] Fire, landslide, off-route movement, unmanaged camping, litter and informal vehicle access can harm habitats and visitor safety. • [Risk] Industrial/environmental burdens can create safety and credibility problems if hidden or used as tourism sites without clearance. • [Risk] Fragmented responsibilities may leave routes, signs, toilets and visitor information without maintenance.

Source: Authors' elaboration.