

EXPRESSION OF INTEREST

DEVELOPMENT OF CHANSHAL AREA FOR TOURISM IN SHIMLA DISTRICT, HIMACHAL PRADESH ON PPP MODE

BACKGROUND:

1. Ropeways and Rapid Transport System Development Corporation H.P. Limited (RTDC) on behalf of Department of Tourism intends to undertake Development of Chanshal (Rohru), District Shimla by encouraging development of a world class Ski Resort, Winter Sports Training Centre, Ski Lift to promote Skiing activities, Camping, Ropeway, Chairlift, Trekking, Adventure and Eco Tourism activities. To improve connectivity development of an air strip/Helipad is also proposed near river bank at Chirgaon-for landing of helicopters which shall be connected to site by a ropeway, supporting infrastructure in and around Chanshal Area as PPP Project. (the "Project").

PROJECT:

2. It is proposed to undertake the project through Public Private Partnership, on Design, Build, Finance, Operate and Transfer ("DBFOT") basis, and has desired to invite Expression of interest (EOI) from Interested Developers for the purpose of assessing the interest among parties in the market.
3. The project is structured in such a way that private sector participation is anticipated for development of Chanshal. The project will be developed and established under pre specified performance standards which will be mentioned in the Bidding documents, to be issued at a later stage.
4. The scope of work will include planning, designing, financing, development and subsequent operation and maintenance of the infrastructure services and facilities for the Concession period. The Selected Bidder after completion of the bidding process will have to fulfill the requirements of the Minimum Development Obligations (the "MDOs") detailed out in the subsequent bidding documents. The selected bidder shall adhere to the MODs during design/construction of the Project.

PROJECT DETAIL:

5. The project has been planned at 6 locations starting from Dhanwari, Larot (Khalti), Chanshal Foot Hill, Chanshal Pass, Chanshal Peak and other between Khalti and Dhanwari. The components proposed at these locations are given as under:-

Sr. No.	PROJECT COMPONENT
1.	Ropeway (6 km)
2.	Chair-Car (3.5 km)
At Chanshal Peak	
3.	View Deck
At Chanshal Pass	
4.	Pod Camps
5.	View Deck
6.	Tinger Track Snow Vehicle
7.	Snow Sports
At Chanshal Foothills	
8.	Winter Olympics Training Centre
9.	Indoor Activity Centre
10.	Helipad
11.	Maintenance Office Yard/Office
At Larot (Khalti)	
12.	Bird Aviary & Butterfly Dome
13.	Viewing Deck
14.	Adventure Activities

AA

15.	Facilities for off-roaders; camp site
At Dhamwari	
16.	Urban Design of Village
17.	Helipad
18.	Tourist Amenities
Other proposals	
19.	Urban Design of Villages enroute
20.	Hiking route from Dhamwari to Chanshal
21.	Development of Theme villages

These Components are tentative and the promoter can make changes as per his requirement. The detail of project is given in Inception Report appended.

LAND STATUS:

6. The status of land availability for the project is given as under:-

Sr. No	Location	Type of land
1.	Dhamwari	Private and Govt. Land
2.	Larot	Private and Govt. Land
3.	Chanshal Foot Hills	Govt. Land
4.	Chanshal Peak	Govt. Land
5.	Chanshal Pass	Govt. Land

The State Govt. would facilitate in negotiation with the land owners and acquisition of **Pvt land** but the promoter shall bear the cost of acquisition. In case of **Govt land**, the state shall provide the land but the miscellaneous costs so incurred shall be borne by the promoter.

The State Govt would facilitate in obtaining **Forest/Environment Clearances** but again cost so incurred shall be borne by the promoter.

For shifting of utilities, the State Govt shall facilitate and coordinate with the owner departments and the cost so incurred shall be borne by the Govt/respective departments.

PROJECT COST AND PHASING:

7. The tentative total project cost is Rs 1200 Cr. but the promoter is free to phase or sub phase the project as per the availability of capital. The tentative breakup of the cost location wise is given as under:-

Sr. No	Location	Components	Breakup of Cost
1.	Dhamwari	Theme Village, Tourist amenities, Helipad	200 Cr.
2.	Larot (Khalti)	Bird Aviary & Butterfly Dome, Viewing Deck Adventure Activities, Facilities for off-roaders; camp site, Ropeway	460 Cr.
3.	Chanshal Foot Hills	Winter Olympics Training Centre, Indoor Activity Centre Helipad, Maintenance Office Yard/Office	130 Cr.
4.	Chanshal Peak	View Deck, Chair Car	200 Cr.
5.	Chanshal Pass	Pod Camps, View Deck, Tinger Track Snow Vehicle, Snow Sports,	50 Cr.
6.	Other Proposals	Urban Design of Villages enroute, Hiking route from Dhamwari to Chanshal, Development of Theme villages	160 Cr.

EXPRESSION OF INTEREST:

AK

8. At this stage RTDC is only inviting Expression of interest from interested parties for the purpose of assessing the interest among parties in the market.
9. RTDC invites Expression of Interest (EOI) from Developers/Investors/Operators to plan, design, finance, construct, operate, maintain and manage the proposed project.

9.1 Joint Venture/Consortium is allowed. Letter for Joint Venture to be submitted.

9.2 The EOI Document shall include:

- a. Company /Organization profile giving details of current activities, background of promoters and management structure etc.
- b. Details of similar & other projects of similar magnitude successfully implemented in the past ten years including period of implementation, cost and project features.
- c. Financial Capacity and Net worth certificate duly certified by the statutory auditor with name & membership no.
- d. The EOI document can be downloaded from the Web site <https://rtdchp.org> & <https://himachaltourism.gov.in> from 01.03.2021 to 18.04.2021 & the applicant shall enclose a EOI processing fee of Rs. 5,000/- (Rupees Five Thousand only) in the form of Demand Draft, in favour of General Manager, Ropeways and Rapid Transport System Development Corporation HP Ltd, payable at Shimla drawn on any Nationalized/ Scheduled bank.
- e. EOI applications shall be opened on 19.04.2021 at 15:00 Hrs of Applicants or their authorized representatives (max. of 2 Persons) will be permitted to be present at the time of opening of EOI's.

SELECTION OF DEVELOPER:

10. Developer Selection Process

- a. Selection of Developer for implementation will be on the basis of bidding process (Technical and Financial) in response to Request for Proposals (RFP) to be invited by RTDC at later stage.
- b. RTDC reserves the right to issue bidding documents to only from those firms, who expressed their interest in response to this invitation.

Or alternatively, to call for fresh proposals comprising of technical and financial Bid from open competitive process.

- c. RTDC reserves the right to reject any or all EOI's received without assigning any reasons.

SUBMISSION OF EOI:

11. The EOI must be submitted in original in sealed envelope clearly marked "EOI FOR DEVELOPMENT OF CHANSHAL AREA FOR TOURISM IN SHIMLA DISST, HIMACHAL PRADESH ON PPP MODE" and delivered at the address below no later than 12.00 PM on 19/04/2021:


Chief General Manager
Ropeways & Rapid Transport System,
Development Corporation,
US, Club, Shimla-1
Email:- cgmrttdchp@hmail.com



Ropeways and Rapid Transport System Development Corporation HP Ltd.

प्रदूषण मुक्त यातायात के लिए हिमाचल की पहल

Development of Chanshal Area as Winter Tourism Destination in Shimla District of Himachal Pradesh on PPP Mode



Inception Report



ISO 9001 : 2015

WAPCOS

(A Government of India Undertaking)



3rd Floor, SKV House, Plot No. 57,

Sector-18, Gurugram-122015,

Haryana, INDIA

Tel: +91-124 - 2973650

E-mail: ropeways@wapcos.co.in

Website: www.wapcos.co.in

December 2020

Acknowledgement

We sincerely wish to thank the support from **Chief General Manager, RTDC and other officers of RTDC**, for providing all necessary data, documents, joint site visits and support to prepare the report as per the scope of the project.

We also like to thank **Department of Tourism** and **Tehsildar, Chirgaon, Distt. Shimla** for providing the necessary data to prepare this report.

This report is being submitted as the part of the scope of work for the “**Development of Chanshal area as Winter Tourism Destination in Shimla District, Himachal Pradesh.**”

Table of Contents

1.	Background of the Project	1
2.	Objective of the Study	1
3.	Scope of work of the Consultant	2
4.	Deliverables.....	2
5.	Introduction to Project	2
6.	Site Accessibility.....	5
7.	Proposals.....	6
7.1	Proposal for Ropeway.....	6
7.2	Proposal at Chanshal Peak.....	8
7.3	Proposal at Chanshal Pass.....	8
7.4	Proposal at Chanshal Foothill.....	10
7.5	Proposal at Khalti (near Village Larot)	12
7.6	Proposal at Village Dhamwari.....	14
7.7	Other Proposals	16
8.	Project Cost & Revenue Estimates.....	18
9.	Project Phasing.....	20
10.	Policies and Guidelines	21
10.1	Policy for Eco-tourism In Forest & Wildlife Areas, 2018.....	21
10.2	Forest Conservation Act 1980.....	21
10.3	Forest Conservation Rules 2003 (amended upto 2017)	21

List of Figures

Figure 1: Location of Chanshal Pass.....	3
Figure 2: View of Chanshal peak.....	3
Figure 3: View of Chanshal Pass.....	3
Figure 4: Tentative indication of slopes for different levels of skiing.....	4
Figure 5: Skiing slopes in Chanshal	4
Figure 6: Accessibility map of Chanshal (via road from Rohru side)	5
Figure 7: Glimpses of existing access road to Chanshal.....	5
Figure 8: Representational image of cable cars.....	6
Figure 9: Proposed alignment of ropeway and chair-car	7
Figure 10: Representational image of a chair-car lift (ski-lift)	7
Figure 11: Representational images of a viewing deck and chair-car lift (ski-lift) terminal station	8
Figure 12: Glimpses of landscape at Chanshal Pass.....	8
Figure 13: Beginner/intermediate skiing slopes at Chanshal (left) and Saru Tal, a trekking destination (right)	9
Figure 14: Representational image of proposed high-tech refuge pods.....	9
Figure 15: Representational image of internal view of pod accommodation (left and deck (right)	10
Figure 16: Representational image of a Tinger vehicle (left) and chair-car lift station (right)	10
Figure 17: Location map and glimpses of Chanshal Foothill.....	11
Figure 18: Representational images of activities proposed at Chanshal Foothills	12
Figure 19: Location map of Khalti	12
Figure 20: Glimpses of site at Khalti	13
Figure 21: Representational image of aviary and butterfly biome.....	13
Figure 22: Representational images of a viewing deck	14
Figure 23: The Domes at Garden by the Bay, Singapore	14
Figure 24: An aerial glimpse of village Dhamwari.....	14
Figure 25: Vacant land in village (left) and waterfall (right)	15
Figure 26: Proposals interventions in Village Dhamwari	15
Figure 27: Glimpses of Village Dhamwari highlighting lack of architectural character	16
Figure 28: Proposed alignment of hiking route and multiple theme villages.....	16
Figure 29: Representational images of hiking route from Dhamwari to Chanshal	17
Figure 30: Representational images of different theme villages: European, Vernacular, Hobbit-style, Cave House and Tree house	18

1. Background of the Project

Himachal Pradesh, also referred to as "*Dev Bhoomi*" (literally meaning *Abode of Gods*), is abundantly bestowed with natural beauty, ranging from vast tracts of high altitude trans-Himalayan desert to dense green deodar forests, from apple orchards to cultivated terraces from snow-capped high Himalayan mountain ranges to snow-fed lakes and gushing rivers. Inhabited by a populace that firmly believes in 'Atithi Devo Bhava' (the Guest is a God), Himachal's rich traditions and culture, fairs and festivities, dance and music, cuisines and handicrafts make the State a truly wonderful getaway. With such a diverse palette to offer, the State envisions positioning itself as a leading global sustainable tourism destination for inclusive growth. For this, the State plans to develop and promote tourism around ten broad themes:

- a) Eco-tourism
- b) Agro/Organic Tourism
- c) Snow Tourism
- d) Lake Tourism
- e) Adventure Tourism
- f) Pilgrimage Tourism
- g) Culture & Heritage Tourism
- h) Health & Wellness Tourism
- i) Film Tourism
- j) MICE Tourism

In light of this, the State Tourism Department intends to undertake greenfield development of the Chanshal Pass area in Rohru, District Shimla, as an International Ski Destination.

2. Objective of the Study

The objective of the assignment is to successfully develop a commercially viable, performance based tourist destination comprising of camping site, Ski Resort, Ski Slopes and Passenger Ropeway in Chanshal area, Distt. Shimla, Himachal Pradesh by utilising efficiency of private partner under PPP Mode. The project shall include Design, Build, Finance, Operate, Maintenance and Transfer Back to Concessioning Authority. The purpose is to develop Chanshal as a world class location for snow, ski & adventure tourism in the state of Himachal Pradesh by incorporating following components:

1. Resort at Base Station, Khalti
2. Ropeway from Khalti to Chanshal
3. Developing Ski Slopes for Beginners and Independent Skiers
4. Cultural Village-Centre for local craftsmanship
5. Maintain Biking Trails
6. Chaircar from Chanshal Valley to Chanshal Peak

7. Helipad
8. Eco Friendly High Tech Refuge, Forest Lodges, Hotels & Restaurants at appropriate locations
9. Winter Sports Training Facility
10. Any other suitable activity

The overall aim is to develop Chanshal as destination at par with the Winter Olympic Destination around the world by incorporating local architecture with innovation using local material and to create economic opportunity for the local population.

3.Scope of work of the Consultant

The Scope of work for the Consultant is as follows:

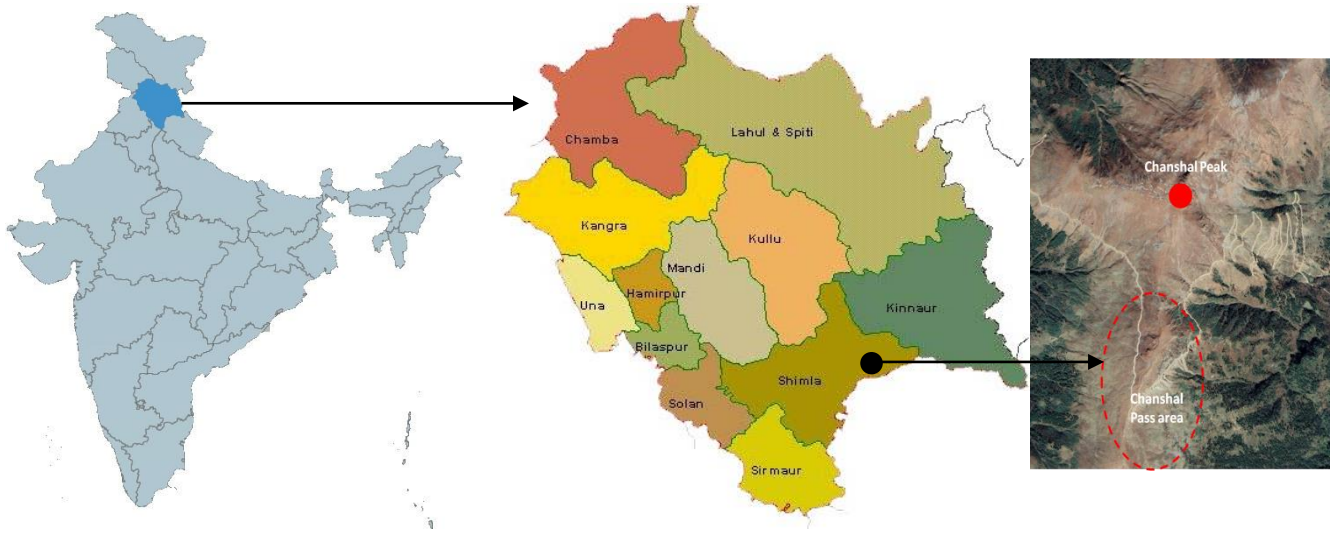
1. Field Reconnaissance Survey to priorities the location of all components and all possible alternative alignments to connect the proposed points
2. Selection of possible optimum route out of alternative alignments keeping in view the feasibility with regard to construction, operation and maintenance etc.
3. Consideration to the climatical, meteorological, traffic Survey and other survey/studies data etc. to the development of concept of eco friendly tourism.
4. Broad assessment of traffic survey based on the data collected from diff agencies and old traffic survey, if possible.
5. Assessment, Indication and Selection of appropriate Ropeway Technology for the area, power requirement, safety, electrical and telecommunication requirement for system. Staff required for the system etc.
6. Assessment of the Abstract Cost of the Total Capital required for the Development of the Project.
7. Assessment of the abstract cost of operation and Maintenance.
8. Financial appraisal of the project and structuring of project under different systems.
9. Preparation of RFP, Draft Concession Agreement, EOI etc.
10. Bid Process Management
11. Assistance till selection of contractor and signing of the agreement.

4. Deliverables

1. Inception Report/ Conceptual Plan
2. Technical and Financial Feasibility Study/Financial Modelling of the Project
3. Bid Documents

5. Introduction to Project

The Chanshal Pass (or Chanshal Valley) is a mountain pass located at the upper end of the Pabbar Valley in Himachal Pradesh, around 160 km from the State Capital Shimla.



Source: <https://mea.gov.in/india-at-glance.htm>

Source: https://censusindia.gov.in/maps/State_Maps/StateMaps_links/himachal01.html

Figure 1: Location of Chanshal Pass

Located at an altitude of 12,800 feet (i.e. 3,900 m) from the mean sea-level (MSL), the Pass links the towns of Dodra Kwar and Rohru, both located in the Shimla district of the state. Next to the Pass sits the Chanshal Peak, which at 14,830 feet (i.e. 4,520 m), is the highest peak in the Shimla district.



Figure 2: View of Chanshal peak



Figure 3: View of Chanshal Pass

The Peak & Pass (hereby referred to as 'area') offer magnificent views of the surrounding Himalayan ranges. The area is characterized by both gentle and steep slopes and remains covered with snow¹ from November to April.

¹ On an average, Chanshal Peak and Pass receive around 25-30 feet of snow in winters every year.

With presence of snow for over 6-7 months a year and slopes suitable for beginner (green-rated slopes), intermediate-level (blue-rated slopes) as well as advanced skiing², Chanshal has been identified for development as a 'snow and ski' tourism hotspot. Broadly, this shall involve development of facilities for skiing & other snow sports, adventure, travel and accommodation. Keeping in view its unique features, the idea is to promote Chanshal as a world-class Winter Olympics destination. Ropeways and Rapid Transport System Development Corporation H.P. Limited (RTDC), a State Government undertaking, has been entrusted with accomplishing the job. It is proposed to undertake the project through Public Private Partnership (PPP), on Design, Build, Finance, Operate and Transfer (DBFOT) basis.



Figure 4: Tentative indication of slopes for different levels of skiing

Source: McKinsey report mentioned in Footnote 4.



Figure 5: Skiing slopes in Chanshal

Source: <https://twitter.com/hashtag/chanshal> and <https://theoktravel.com/unexplored-destination-chanshal-heights/>

² Detailed study is required to validate slopes for skiing.

6. Site Accessibility

Chanshal area is accessible only by road currently. It is a 6-7 hour road journey from Shimla, with the last 30 kms (from the bridge on river Pabbar at Tikri village to the Chanshal Pass) taking almost 4 hours; courtesy the poor road conditions.

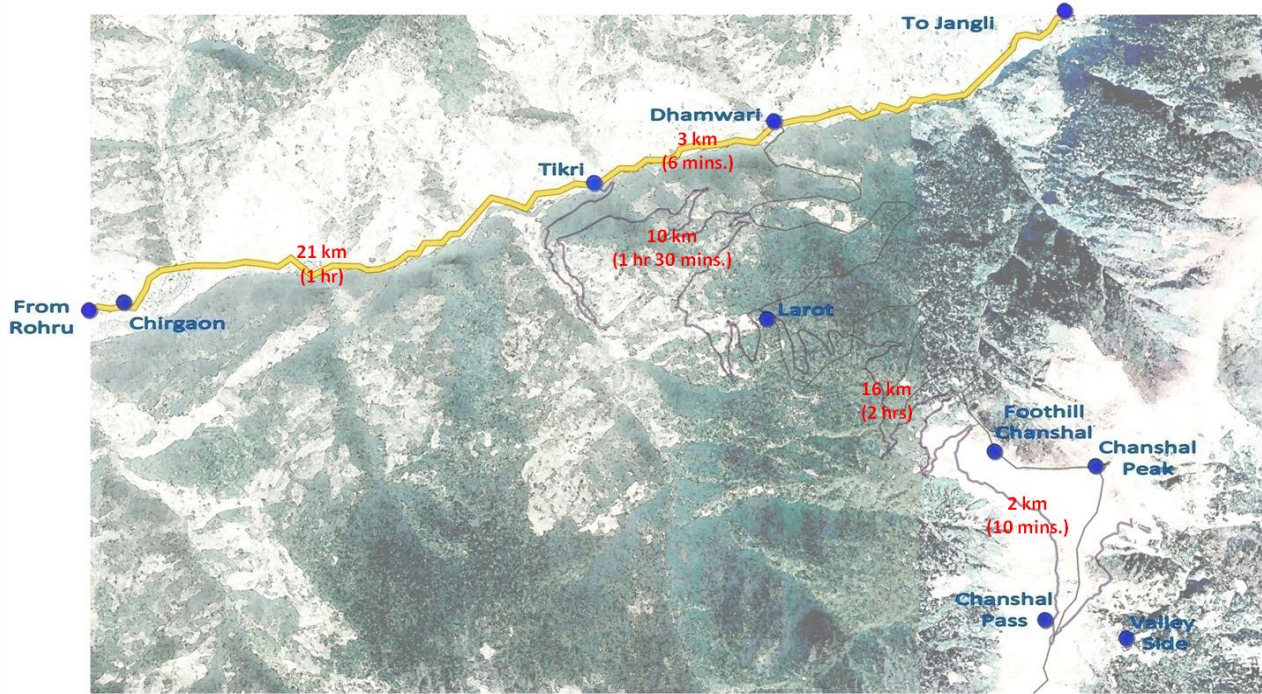


Figure 6: Accessibility map of Chanshal (via road from Rohru side)



Figure 7: Glimpses of existing access road to Chanshal

Shimla is the nearest airport and railway station (at around 160 km), while Chandigarh (270 km) and Dehradun (230 km) are other major airports and railway stations nearby.

7. Proposals

In order to realize the Vision of the State Tourism Policy and to promote Chanshal area as a world-class tourism destination, a slew of development measures are proposed. As hill ecosystems are generally fragile, they are ideally suitable for “high-value low-volume” tourism for long-term sustainability. Since this concept also gels well with the State Tourism Department, it is proposed to stretch out the planned developments across different locations (refer Figure 7) instead of concentrating them in the Chanshal Pass area only. These locations are:

- 1) Chanshal Peak
- 2) Chanshal Pass
- 3) Chanshal Foothill
- 4) Khalti (near Larot village)
- 5) Village Dhamwari
- 6) Other sites/villages between Khalti & Dhamwari

This mechanism shall help curtail tourist footfall in the Pass area, ultimately leading to high-value low-volume tourism. Additionally, these proposals, if undertaken, shall offer a holistic experience to a tourist. The recommendations are as follows.

7.1 Proposal for Ropeway

First and foremost, improving transport connectivity to the location is critical for its development as a successful tourism destination. As the existing road infrastructure (from Tikri village to the Pass) cannot sustain increased tourist traffic and keeping in mind the huge environmental cost³

of road construction also, it is proposed to develop a ropeway from near Tikri village till the Pass. For this, a suitable site has been identified in Village Dhamwari, which is located around 3 km from Tikri. Thus, a tourist need not cross river Pabbar and take the exhausting road journey uphill; instead, they



Figure 10: Representational image of cable cars

³ Ropeways cannot substitute for roads in all circumstances due to their higher capital cost per km and smaller passenger capacities and speed limitations. However, ropeways essentially offer substantial advantages in terms of cost, ease of development and limited ecological impact in hilly areas, where their straight-line alignment is less than 1/3rd of the comparable road length (Source: “Strategy for hill transportation and infrastructure creation/utilisation in synergy Bharatmala/Chardham”, a report by McKinsey & Company for MoRTH in year 2019)

can opt for a less-daunting 10-15 minute (approximately) cable car journey to the Pass. With this, they can also enjoy the breath-taking views of the Pabbar & Chanshal valleys and the mountain ranges.

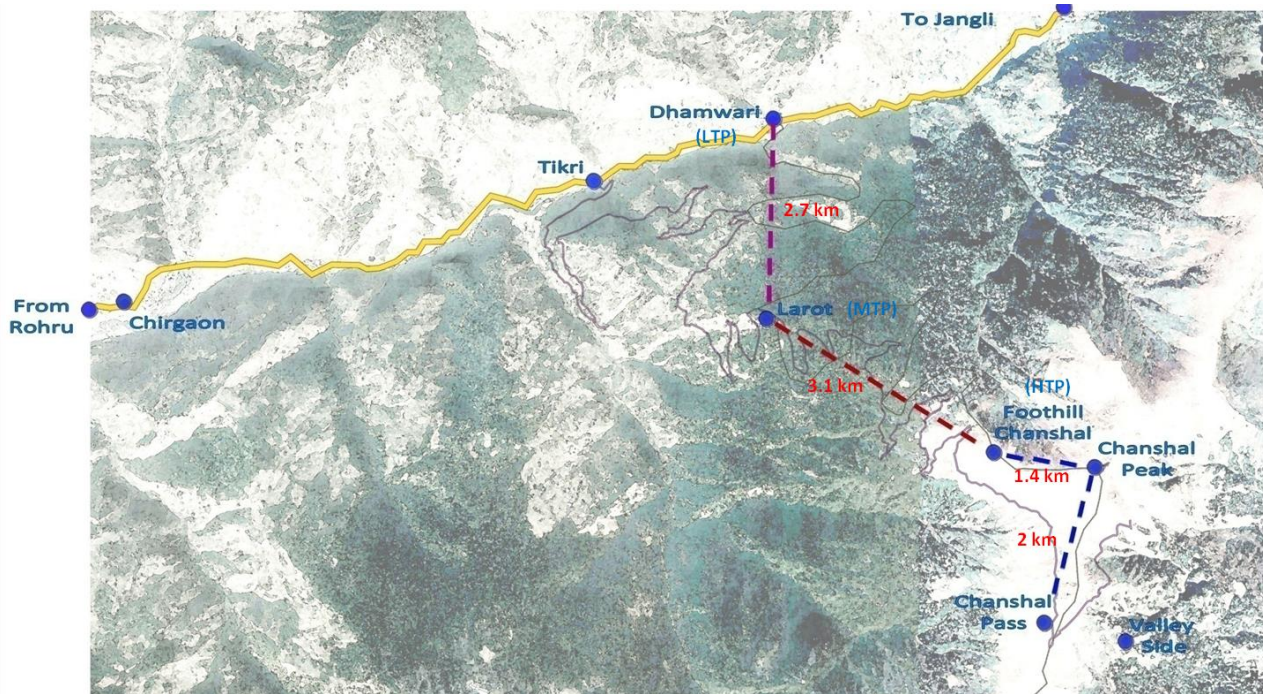


Figure 13: Proposed alignment of ropeway and chair-car

As per the proposed alignment (refer Figure 10), the Lower Terminal Point (LTP) of ropeway shall be located in the premises of Government Trout Farm in Village Dhamwari. From there, a 2.7 km ride uphill will lead to Intermediate Point (IP) at Khalti. From here, the ropeway alignment shall change and a 3.1 km ride, further uphill, will lead to Upper Terminal Point (UTP), located at Chanshal Foothill. Thus, the total ropeway shall span 5.8 km approximately. Additionally, a chair-car lift (ski-lift) network is proposed from Chanshal Foothill to Chanshal Peak (around 1.4 km length) and from Chanshal Peak to Chanshal Pass (around 2 km run); thus, spanning around 3.4 km approximately.



Figure 16: Representational image of a chair-car lift (ski-lift)

7.2 Proposal at Chanshal Peak

Chanshal Peak, being the highest point in the region, offers a breath-taking 360° panoramic view of the natural beauty surrounding it. Taking this into consideration, a 360° viewing deck and chair-car lift terminal station (along with public amenities like, café, toilets and first-aid room) are proposed on the Peak top. This shall cover approximately 1000 sq.m space. Additionally, the Peak shall act as the starting point of advanced skiing slopes.



Figure 19: Representational images of a viewing deck and chair-car lift (ski-lift) terminal station

7.3 Proposal at Chanshal Pass

The landscape at Pass is a mix of grasslands and rocky outcrops (refer Figure 13).



Figure 22: Glimpses of landscape at Chanshal Pass

The area shall act as starting point of beginner & intermediate skiing slopes. Besides, it shall also act as gateway for various adventure activities, like hiking/trek routes, mountain biking trails, snow-sports, etc; thus, infrastructure shall be developed for the same. Refer Figure 14.

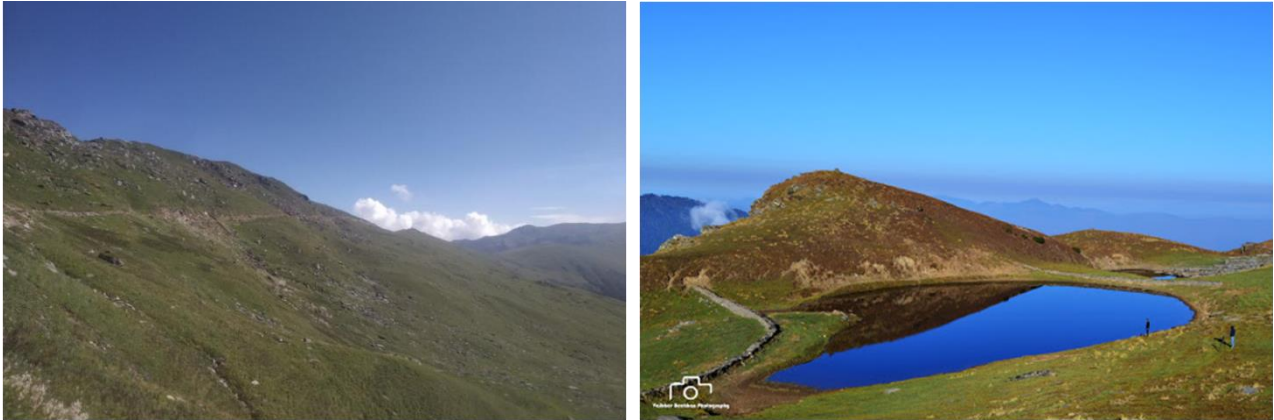


Figure 25: Beginner/intermediate skiing slopes at Chanshal (left) and Saru Tal, a trekking destination (right)

Since the site offers a comparatively gentle topography, a high-tech refuge of 50 rooms (in form of easy-to-assemble pods, refer Figure 15) will be developed for adventure and thrill-seeking visitors. The pods shall be designed so as to gel with the prevalent landscape, both with and without snow.

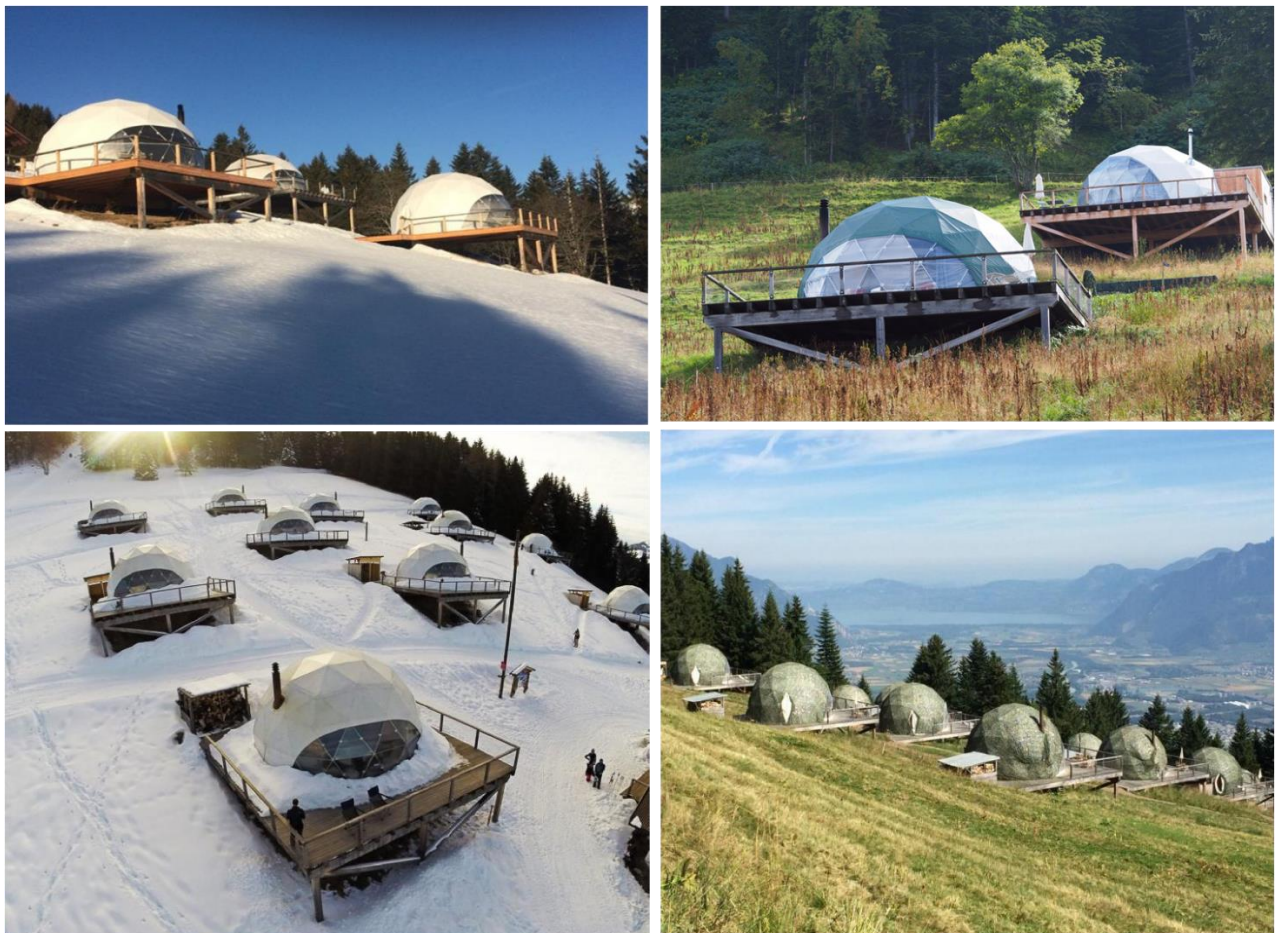


Figure 28: Representational image of proposed high-tech refuge pods

These pods shall be fabricated with using a metal structure enveloped a special fabric, with adequate provision for insulation. The pod shall rest on a wooden deck (that shall also act as an outdoor seating area), anchored with the rocky outcrop, so as to withstand strong winds prevalent in the area. Internally, these pods shall offer all the luxuries of a high-end hotel (refer Figure 16).



Figure 31: Representational image of internal view of pod accommodation (left and deck (right))

In addition to this, the site shall host chair-car lift terminal station, viewing decks, café, washrooms & first-aid room. It is also proposed to introduce all-terrain all-weather vehicle “Tinger” for local transportation (i.e. between Chanshal Pass and Chanshal Foothill). Total area required at Chanshal Pass shall be around 20,000 sq.m (excluding skiing slopes).



Figure 34: Representational image of a Tinger vehicle (left) and chair-car lift station (right)

7.4 Proposal at Chanshal Foothill

The area on the western foothills of Chanshal Peak has been named as Chanshal Foothill. It is characterized by huge tracts of comparatively flat topography. It is the first point of access in the Chanshal area for a tourist travelling by road from Rohru side. The UTP of proposed ropeway and lower point of the proposed ski-lift shall be located here.

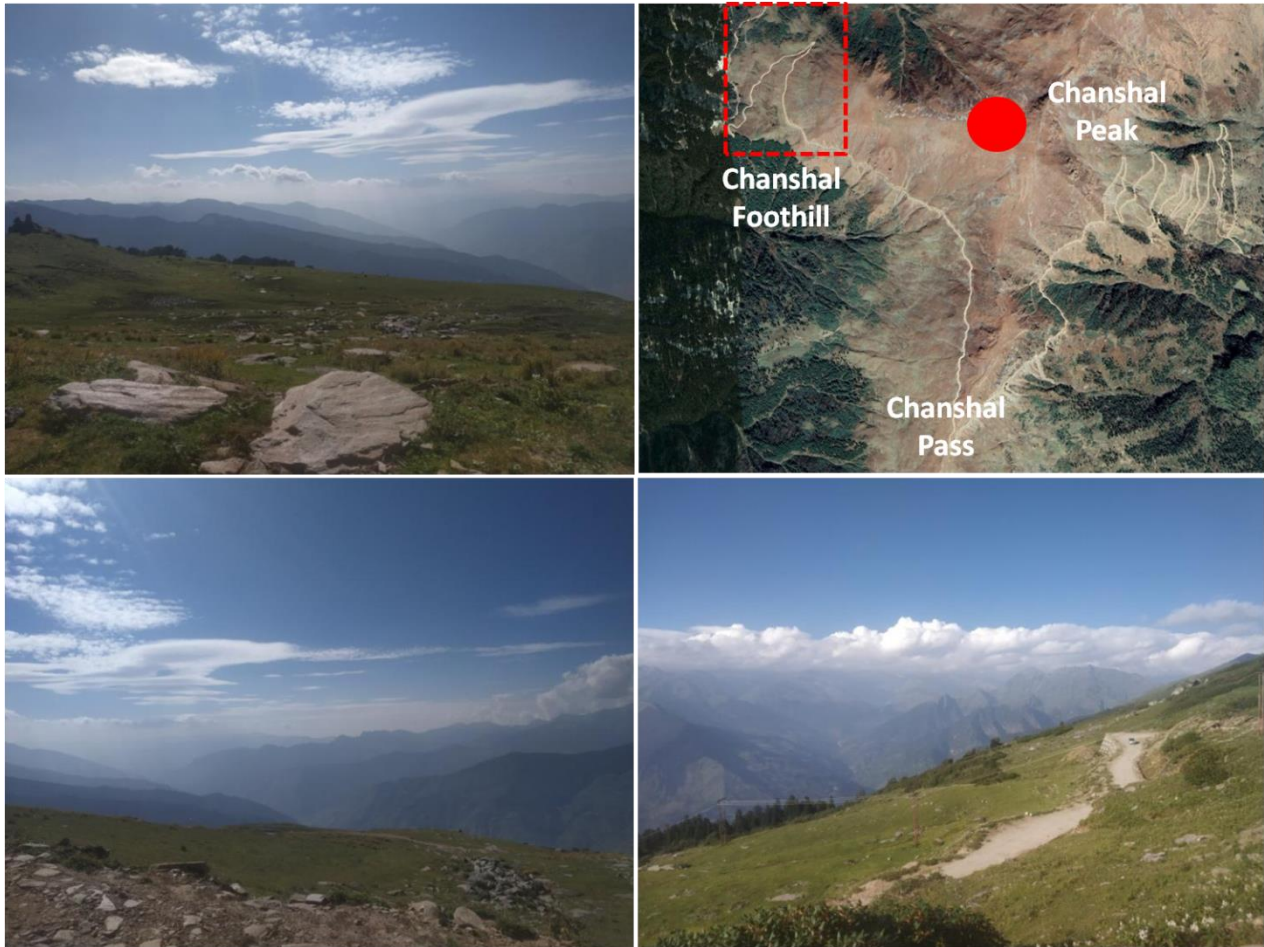


Figure 37: Location map and glimpses of Chanshal Foothill

The idea is to develop this site as a major activity zone. Consequently, Winter Olympics Training Centre, an indoor activity centre (that shall offer snow-sports activities even in summers) and an ice palace have been proposed here. Basic tourist amenities like café, washrooms & first-aid room shall also be provided here. For ensuring sufficient connectivity to Chanshal for high-end tourists, a helipad shall also be developed at the site. It can also double as a transportation mode for emergency evacuation. Additionally, a tinger vehicle stand and a general maintenance yard (with snow-clearing machines and other equipment) shall be established over here. Land area required is around 20,000 sq.m.





Figure 40: Representational images of activities proposed at Chanshal Foothills

7.5 Proposal at Khalti (near Village Larot)

Khalti is almost a mid-point (almost 8000 feet above MSL) between Tikri village and Chanshal Pass. Beyond this, it is all forest land till Chanshal (including Chanshal).

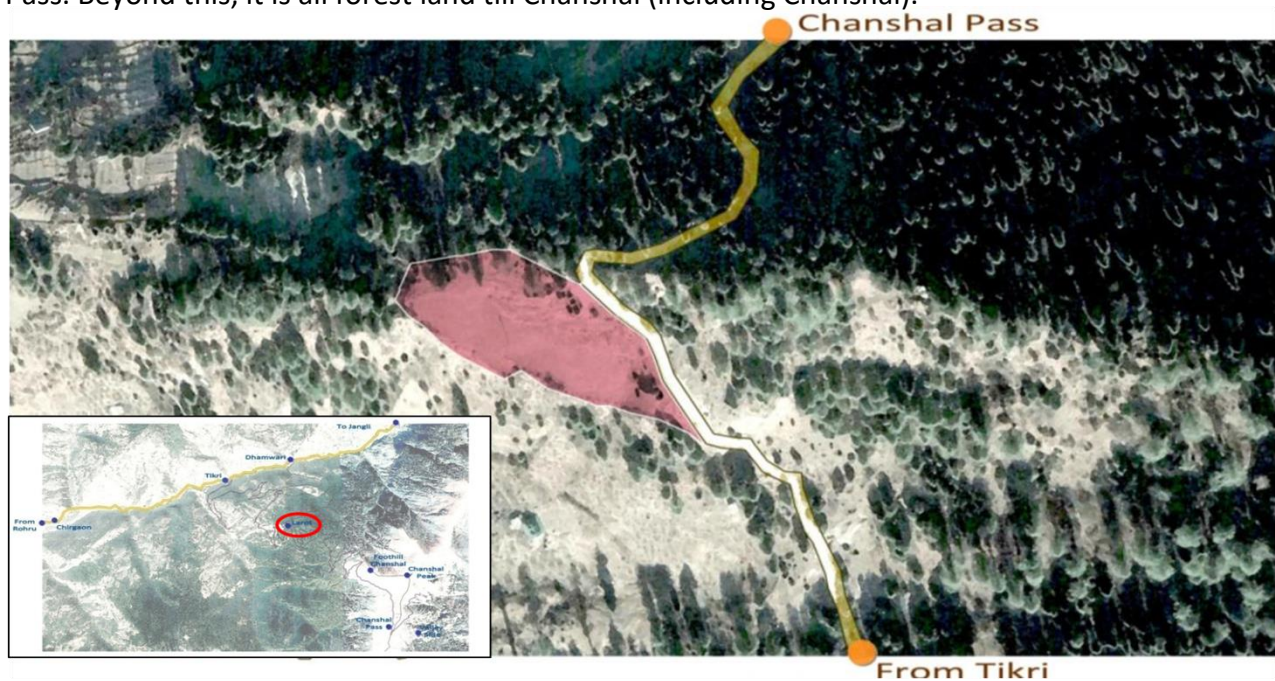


Figure 43: Location map of Khalti



Figure 46: Glimpses of site at Khalti

Courtesy its location, the site shall act as a mid-point in the ropeway alignment; thus, IP (along with allied facilities like café, washrooms & first-aid room) has been placed here. With an intention to attract tourist to Chanshal round the year and not just the snow season, Khalti shall act as a second activity hub. It is proposed to house a bird aviary, butterfly biome, adventure activities (like hiking, zip-lining, snow-scooters, zorbing, etc.), viewing deck, camp site and facilities for bikers, off-roaders, etc., over here.



Figure 49: Representational image of aviary and butterfly biome



Figure 55: The Domes at Garden by the Bay, Singapore



Figure 52: Representational images of a viewing deck

7.6 Proposal at Village Dhamwari

Dhamwari village is located around 3 km from Tikri and offers a direct view of Chanshal area; thus, LTP of proposed ropeway has been located here.



Figure 58: An aerial glimpse of village Dhamwari

The village rests on the bank of river Pabbar and also boasts of a beautiful waterfall in its vicinity. The village has large tracts of gently sloping vacant land (though private) to offer.



Figure 61: Vacant land in village (left) and waterfall (right)

In light of this, it is proposed to develop Dhamwari as the base station or the welcome station of the project. For this, tourists (heading towards Chanshal) would be encouraged to undertake ropeway journey uphill from here, instead of the daunting road travel.



Development of supporting Tourist Infrastructure (Like Plaza, Restaurant, Cafe, Haats, Toilets, Hotel Parking etc) on Private land through PPP

Figure 64: Proposals interventions in Village Dhamwari

Accordingly, tourist amenities, like, parking, plaza, shopping street, toilets, restaurants, cafes, gaming zone, home-stay/hotel, child-play areas, etc. shall be built over here; thus, the area shall act as another major activity zone . A helipad is also recommended here. Besides, as the village lacks an architectural character of its own (refer Figure 28), a design facelift is proposed for the entire village, to give a tourist village feel. The village will also act as a venue for international rock festival. Total land required in the village for the proposed activities, is estimated to be around 35,000 sq.m.



Figure 67: Glimpses of Village Dhamwari highlighting lack of architectural character

7.7 Other Proposals

In addition to the above proposals, some general proposals are recommended for enhancing the tourist experience. These are:

- Development of a **hiking route** from Dhamwari to Chanshal along the alignment of ropeway. **(highlighted in black dotted).**
- Development of **multiple theme villages** along this trek route, to provide accommodation facilities (around 200 keys in beginning) **(marked with red drop points – 40,000 sqm).**

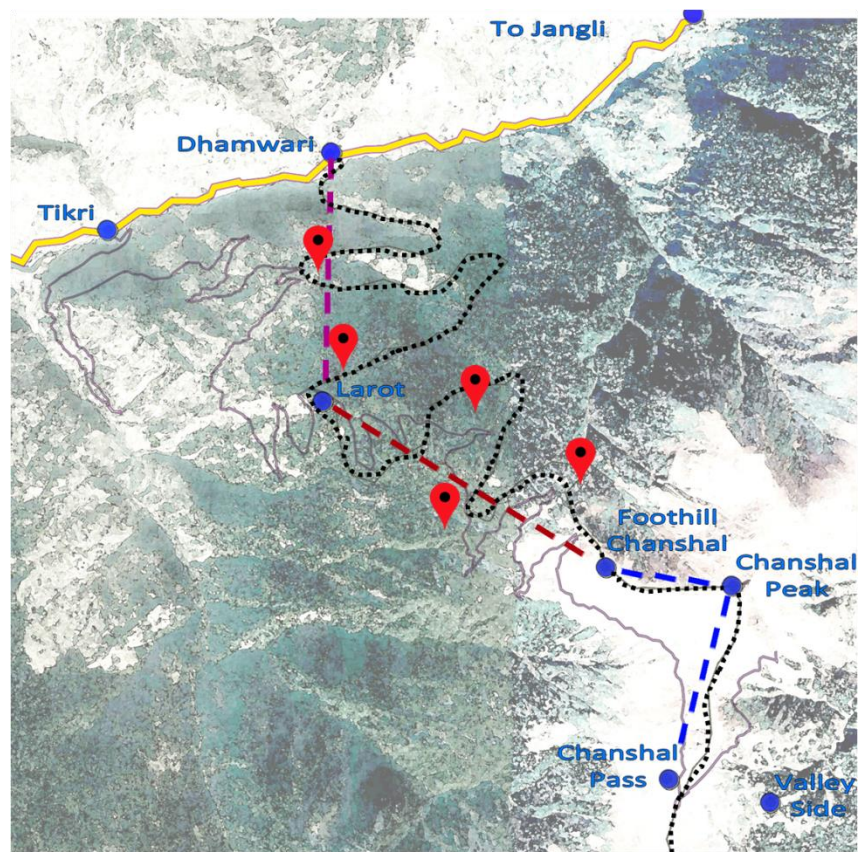


Figure 70: Proposed alignment of hiking route and multiple theme villages



Figure 73: Representational images of hiking route from Dhamwari to Chanshal





Figure 76: Representational images of different theme villages: European, Vernacular, Hobbit-style, Cave House and Tree house

Additional recommendations include,

- Double-laning Rohru-Dhamwari Road.
- Improvement of urban design character of small towns/villages (like Chirgaon), etc. enroute Chanshal
- Retaining road from Tikri to Chanshal as a dirt road, for off-roading.

8. Project Cost & Revenue Estimates

Approximate cost estimation of the various components of the project has been presented below.

Table 1: Estimated Project Cost

Sr. No.	PROJECT COMPONENT	TENTATIVE BUDGET (in INR CRORES)
1	Ropeway (6 km)	360.00
2	Chair-Car (3.5 km)	175.00
At Chanshal Peak		

3	View Deck	4.80
At Chanshal Pass		
4	Pod Camps	15.00
5	View Deck	4.80
6	Tinger Track Snow Vehicle	15.00
7	Snow Sports	10.00
At Chanshal Foothills		
8	Winter Olympics Training Centre	100.00
9	Indoor Activity Centre	25.00
10	Helipad	5.00
11	Maintenance Office Yard/Office	5.00
At Khalti		
12	Bird Aviary & Butterfly Dome	30.00
13	Viewing Deck	4.80
14	Adventure Activities	25.00
15	Facilities for off-roaders; camp site	5.00
At Dhamwari		
16	Urban Design of Village	100.00
17	Helipad	5.00
18	Tourist Amenities	100.00
Other proposals		
19	Urban Design of Villages enroute	50.00
20	Hiking route from Dhamwari to Chanshal	10.00
21	Development of Theme villages	75.00
22	Helicopter	10.00
23	Land Acquisition Cost	19.00
24	Miscellaneous/Contingency Expenses	115.31
GRAND TOTAL		1,268.45

The total project cost is estimated to be around INR 1270 crores.

For a successful project, a suitable revenue model is a must. Since the State Government wishes to develop this project on PPP mode, it is important that revenue model is a profitable one, with

a justified gestation period (break-even period). Approximate revenue estimation (from the various components of the project) has been presented below.

Sr. No.	PROJECT COMPONENT	TENTATIVE REVENUE (in INR CRORES)
1	Ropeway Ticket Sale	20.00
2	Film Shooting Revenue	1.60
3	Advertisements	0.40
4	Property Development @ station	1.60
5	Hotel/Camp/Resort/Theme Village – Rental	54.00
6	Helicopter Revenue	5.00
7	Snow Sports & Snow Bike Revenue	1.60
8	Revenue from Indoor Activity Center	1.60
9	Revenue from Winter Olympic Training Center	1.20
10	Revenue from Adventure Activities	1.60
11	Revenue from Parking	0.80
12	Revenue from Shopping Street	5.00
13	Revenue from Aviary & Butterfly Dome	5.00
14	Revenue from Skiing	20.00
GRAND TOTAL (per Annum)		119.40

A preliminary calculation estimates revenue generation of about INR 120 crores per annum; thus, giving a cost recovery horizon of about 9-12 years.

9. Project Phasing

Since project scale and cost are huge and the geographical condition with weather pattern is at difficult level, the project can only be done in phase-wise manner. These phases can be divided into three parts.

Phase 1: Basic Infrastructure

This Phase shall include development of ropeway and ski-lift facility (along with basic public amenities at Dhamwari, Khalti, Chanshal Peak, Chanshal Pass and Chanshal Foothill). Provision for emergency services and evacuation and two helipads shall also be made in this phase.

Phase 2: Other dependant facilities

This Phase shall cover development of restaurants, hotels, markets and other supporting infrastructure at Dhamwari; high-tech pod village at Chanshal Pass; snow sports and other adventure activities at Khalti & Chanshal Pass; and, viewing decks.

Phase 3: Project expansion

This Phase shall involve development of Winter Olympic training facilities, theme villages, aviary and butterfly domes; infrastructure for annual events (like International Rock Festival, Snow festival, etc.); and, hiking route from Dhamwari to Chanshal.

10. Policies and Guidelines

Since, majority of locations fall under forest land, the proposal has been developed keeping in mind the following policies and guidelines of the Ministry of Environment, Forests and Climate Change (MoEF&CC), Government of India. A brief about each guideline, as relevant to us, has also been highlighted below.

10.1 Policy for Eco-tourism In Forest & Wildlife Areas, 2018

- ✓ Infrastructure for eco-tourism should merge with ambient environment.
- ✓ Eco-friendly activities; Utilise local resources; No permanent structure; Avoid use of cement concrete as far as possible.
- ✓ Construction works, like permanent buildings for camps, camping complexes with lodging/boarding facilities, helipads, new roads, tourist bungalows, commercial lodges, etc. Shall not be allowed without clearance under FCA.
- ✓ Homestead-based hospitality enterprises will be encouraged to improve local livelihood

10.2 Forest Conservation Act 1980

- ✓ No forest land or any portion thereof may be used for any non-forest purpose.

10.3 Forest Conservation Rules 2003 (amended upto 2017)

- ✓ Eco-tourism has been regarded as non-forestry activity. Prior approval of the Central government under the Forest (Conservation) Act, 1980 is required for Eco-tourism Projects.
- ✓ Infrastructure projects requiring diversion of forest land under the FCA, 1980 fall under following categories:
 - Road Widening and construction, including widening in existing RoW.

- Construction of railway lines
 - Ecotourism in Forest Areas
 - Passenger Ropeways (it should involve least tree-cutting)
- ✓ Compensatory afforestation (CA) is one of the most important requirement/condition for prior approval of the Central Government for diversion of forest land for non-forest purposes and the purpose of CA is to compensate the loss of 'land by land' and loss of 'trees by trees'.
- ✓ Waste lands of Himachal Pradesh, which come under the category of Protected Forests but have neither been demarcated on the ground nor transferred & mutated in the name of forest department in the revenue records, shall be considered for the purpose of CA provided that double the area of such category is covered under CA and is declared as RF/PF under IFA, 1927 after mutation in the name of SFD prior to Stage-II approval. This dispensation shall be applicable for the Central, State and Private sector projects.
- ✓ Any non-forest land for the purpose of CA, selected by the State Government, in lieu of forest land to be diverted may be accepted by MoEF&CC irrespective of crown density. All such lands shall be mutated in favour of State forest department and declared as protected forest prior to stage I approval.

Chanshal area is a unique and sensitive environmental zone. In light of this, all construction shall be temporary in nature (except for those allowed under various rules and regulations of MoEF&CC). Usage of locally-available non-alien materials shall be maximized, so as to maintain the sanctity of the natural environment. No tree shall be axed or transplanted. Locals shall be engaged for holistic development of local economy. Attempt shall be made to follow principles of eco-tourism in full spirit, so as to develop Chanshal as an International Ski destination.