PRE-FEASIBILITY REPORT VOLUME III
TOURISM, INDUSTRY AND EDUCATION

Province Government
Province Policy and Planning Commission
Madhesh Pradesh
Janakpurdham, Nepal

2022

PRE-FEASIBILITY REPORT VOLUME III — TOURISM, INDUSTRY AND EDUCATION — 2022

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Government of Madhesh Province

Province Policy and Planning Commission

Janakpurdham,Nepal

Foreword

The Province Policy and Planning Commission has been involved in the formulation of provincial policies and plans for the economic prosperity and poverty reduction of the province in close coordination with the government line ministries, development partners, private sector, and civil society.

We are pleased to come up with a published book entitled "Pre-feasibility study report of the selected Public Private Partnership possible project of the Madhesh province". The book has carried out the feasibility study report of the 16 selected projects of the province with detailed technical and financial analysis. The projects in the book have been selected in close coordination and consultation with the provincial ministries, private sector, and civil society. This list of projects in this publication will be helpful to meet the requirement of the investor whose interest to invest in the Madhesh province. Similarly, the publication will be helpful to select the project for investment summit under the implementation modality of the Public private partnership.

I hope that the document will be useful to interested planners of provincial and local level as well as private sector investors in economic development and poverty reduction, and that it will be able to attract investment opportunities in the province.

I would like to take this opportunity to extend my sincere thanks to Hon. Chief Minister Lalbabu Raut and the Hon. Ministers of the Government in Madhesh Province. My sincere thanks are also due to the Principal Secretary, the Secretaries of the Ministries and their colleagues, and other stakeholders for all their inputs to the various sectors covered by the publication. I would like to express my sincere thanks to the Economic Policy Incubator (EPI) for their technical support in preparing the final document of the project bank.

Dr. Bhogendra Jha
Vice Chairperson

May 2022

ACCELERATING INVESTMENT AND INFRASTRUCTURE

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Economic Policy Incubator

Acknowledgments

It gives me immense pleasure to see that the Policy and Planning Commission (PPC) of Madhesh Province is publishing the pre-feasibility reports of 16 projects in three volumes. These projects are related to tourism, infrastructure, education, agriculture, and industry. The reports present detailed technical and financial analysis, legal frameworks, environmental and social impact, risk analysis, and implementation modality for selected projects. This is an important exercise in terms of improving project preparation and prioritization in the Province and can help improve capital expenditure.

Capital expenditure has always been a challenge in Nepal, including at the provincial level. Budget allocated to development activities is not spent in time, which often leads to a bunching of expenditure towards the end of the fiscal year. This has implications for the quality of spending and raises questions over the quality of project outputs and, of course, value for money. Legislative and institutional efforts so far have yet to bear fruit. Poor preparation of projects, low project readiness, and the resulting delay in awarding contracts are other problems.

The guidelines on developing project bank issued by the National Planning Commission can be an important step forward in addressing this problem at all levels of government. The PPC was quick to recognize this opportunity and approached EPI for support towards institutionalizing the process for project prioritization based on feasibility assessments. We at EPI feel proud to have been able to work with the PPC on this innovative initiative.

I sincerely hope that the reports included in this publication will help the Province Government allocate resources to areas that offer high development returns. This would ultimately help improve capital expenditure of the Government, thereby creating economic opportunities for the people of the Province. The publication could also be a useful reference for private-sector investors.

EPI received significant support and guidance from the PPC in carrying out the feasibility work. I would like to extend my sincere thanks to Prof. Bhogendra Jha, Vice-Chair of the PPC and his team. All concerned line ministries of the Province Government provided critical support. I would like to express deep appreciation for their support and engagement. My special thanks are also due to Invest and Infra Pvt ltd and Dikshya Consulting for carrying out the feasibility assessments and preparing these reports. Finally, I would like to acknowledge the crucial role of my colleagues at EPI. They have put significant efforts into this publication.

Hiramani Ghimire, PhD
Team Leader

June 2022

PRE-FEASIBILITY REPORT CONTENTS

PRE-FEASIBILITY STUDY OF

ULTRA HIGH TEMPERATURE PASTEURIZATION (UHT) MILK PROCESSING PROJECT

LIST OF ACRONYMS

BCR	Benefit Cost Ratio
DESR	Debt Equity Service Ratio
DFID	Department for International Development
EIA	Environmental Impact Assessment
GoN	Government of Nepal
IEE	Initial Environmental Examination
IRR	Internal Rate of Return
NPV	Net Present Value
PPP	Public Private Partnership
USD	United States Dollar

EXECUTIVE SUMMARY

Buffalo and cows are the main milk-producing animals in Nepal. Being a highly perishable commodity and produced primarily in the heart of the rural environment, milk reaches the consumer not only with difficulty but also at a high cost.

The potential of dairy is huge but the sector operates mostly in the informal economy and needs a consistent effort to formalize and be able to contribute better to the national economy. Of the total milk production, 80% is marketed through the informal sector which includes the loose milk consumed in the villages and or sold in the cities through local milk sellers. In Nepal, dairy related businesses have the potential to offer good returns provided business gets the personal attention of the entrepreneur and all the critical factors are incorporated in business operations.

This pre-feasibility document provides details for setting up the "Ultra High Pasteurization Milk Processing" project. The project is proposed to be ideally located in Province 2 areas around major cities such as Janakpur, Birgunj etc. As milk and other dairy products constitute the basic need of the people, the milk producers will hit the market with full force. The proposed project is assumed to have a capacity to produce a maximum of 10,000 liters of milk in a day. During the first year of operations, it is assumed that the project will operate at 60% of its total capacity, which is 6000 liters. The capacity is assumed to increase at a rate of 5% per annum with a cap at 95% of total capacity. High return on investment and steady growth of business is expected with the entrepreneur having some prior experience in the related field of business.

The proposed project will be set up in a government provided area of 2 - 3 Bighas (145800ft2 - 218700 ft^2). The project requires a total investment of NRs 42 crore. The project will be established using 30% equity financing. The Net Present Value (NPV) of the project is NPR 425,990,440 with an Internal Rate of Return (IRR) of 17.14% and a payback period of 3.27 years. The project will generate direct employment opportunities for hundreds of people including farmers, milkmen/ milkmaids etc. As evident from the above financial figures, the proposed Ultra High Pasteurization Milk Processing project shows reasonable profitability and is economically and financially viable. The legal form of this project is proposed as "Public Private Partnership".

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Table 1: Salient features of the project

General information of the project		
1	Name of Project	Ultra High Temperature Pasteurization Milk Processing Project
2	Project Location	Province: 2 District: TBD
3	Project Implementation Modality	☐ Public ■ PPP ☐ Private ☐ Others/Please Specify
4	Category of Project	■ Short term: 5 years and below ☐ Mid term: 6 – 10 years ☐ Long term: 11 – 15 years
5	Sector as per 1st 5 years Provincial Plan	Economic
6	Type of project (Sub Sector)	Industry
7	Implementing/Facilitating Agencies	Private Sector facilitated by the Province Ministry of Land Management, Agriculture and Cooperatives and the Ministry of Industry, Tourism and Forest.
8	Project Management (Implementation Mechanism)	Private sector will manage the project with the support from Local Government and other local stakeholders.

General information of the project

1	Salient Features of Project	• Enhance the quality of the milk. • Manufacture various dairy products such as UHT whole milk, skimmed milk, ice cream, yogurt, butter, ghee, cheese, khuwa, flavored chilled milk and so on.
2	Affected Population, Land Requirement, Acquisition & Resettlement, Materials and Ease of Access	
	Affected Population	Local farmers and dairy businesses.
	Land Requirement	2-3 Bighas
	Acquisition & Resettlement	No issue of resettlement
	Materials and Ease of Access	Raw milk is available in the local market from farmers involved in animal husbandry of cows and buffaloes. Total annual production is around 300,000 MT in the province (MoALD, Province-2, 2075/76).
	Environmental and Social Management Plan (ESMP)	IEE needs to be conducted for environmental regulatory approvals.
3	Project Document Available	■ None (New/Rehabilitation) □ Concept Note/Desk Study □ Feasibility Study □ Detailed Engineering/DPR
4	Estimated Cost to Complete the Project	NPR 425,990,440
5	Estimated Time to Complete the Project	Feasibility Study/DPR: 6 months Approval and Financial Closure: 6 months Construction Period: 1 year
6	Project Financing Options	Private sector will invest the majority share. Provincial Government will contribute for land acquisition.
7	Project Technology/Components	• Ultra High Temperature Pasteurization (UTH or UP) • Heated to 280 egree Fahrenheit for 2 seconds • Perishable with a 1 to 2 month shelf life (until opened)
8	Contribution to SDG and Green Growth	Province 2 is a predominantly agrarian economy. This project would play a significant role in attaining the following Sustainable Development Goals: Goal No. 1: No poverty Goal No. 2: Zero hunger Goal No. 3: Good health and well-being Goal No. 8: Decent work and economic growth Goal No. 9: Industry, innovation and infrastructure
9	Project Capacity (at 100%)	10,000 liters per day
10	Project IRR	17.14%
11	Benefit Cost Ratio	1.16 times
12	Private Sector Roles	Planning, design, operation and maintenance of the project.
13	Government's Roles	• Facilitating for legal approvals • Providing subsidies for purchase of equipment and machinery • Providing land for the establishment of the factory.

Other project information

1	Target Beneficiaries	Animal husbandry farmers in the province and consumers.
2	Market of Project's Service/Product	Nepali market.
3	Key Risks and Opportunities of Project Development & Operation	
	Strengths and Opportunities	• Milk production is abundant in the province. • Opportunity for branding and marketing high quality dairy products of the province. • Long shelf life of milk products.
	Risks and Issues	• Lack of skilled manpower. • Heat-stable lipases or proteases can lead to flavor deterioration. • Challenge in market penetration.

1

BACKGROUND

1.1 Introduction

The concept note for Ultra High Temperature Pasteurization (UHT) Milk Processing project was prepared for an investment workshop to formulate a concern for public health & hygiene of milk marketing. The objective of the project will be to achieve economic growth and poverty reduction through accelerated growth of the milk sector. It aims at reaching at least 55,000 households with additional 200,000 indirect beneficiaries, absorbing a large number of youth in farm production and milk marketing enterprises for a long term positive impact on province level development and the maintenance of peace in the Province. The project will:

(i) Raise awareness in hygienic milk production and improve the quality of milk.
(ii) To ensure and balance the milk marketing during lean and flu season.
(iii) Strengthening management capabilities of dairy coops and private dairies.
(iv) Attracting private sector investments in dairy processing and marketing has resulted in increased demand of hygienic milk.
(v) Develop infrastructure for milk processing, product diversification, storage and hygienic milk marketing promotion.

The proposed project draws on the lessons learned from the existing milk market situation, and emerging trends and opportunities for demand, diversification and commercialization of the dairy sector in these areas. The project contributes to municipality and province as well as national economic development by commercially, qualitatively and competitively developing the dairy sector for employment generation and poverty reduction with the participation of Local, Province and Central Governments, cooperatives and the private sector. The project will be established in Province 2 and tentatively cover a total of eight districts representing the Terai and the Hills. The project will work closely with the Local, Province and Central Government.

1.2 Dairy Sector Scenario in Nepal

As the dairying sector in Nepal is in the developing stage, its position in terms of per capita availability is one of the lowest. The per capita availability of milk was about 132.88 gm per day in 1985 which has declined to 129.30 gm per day in 1995. However, the present level of per capita availability is 158.9 gm which is much lower than the recommended value of WHO (250gms) and even less than 220 gm recommended by the Nutritional Advisory Committee of the Indian Council of Medical Research (ICMR). The current milk production of Nepal as per the report of the Food and Agricultural Organization in the year 2017 is 2.05 MT.

As per the statistical information collected from Nepalese Agriculture- 2014/15, MoAD, total milk production in Nepal was 1724823 MT out of which 1153838MT is from buffalo and 468913 MT from cow. The total buffalo population was estimated to be 5133139 and that of the cattle population was 557669. Likewise, the total milking cattle were 1025947 and milking buffaloes were 135164 and they produced 1167154 milk. Out of the total livestock population, only 13% of the cattle and 26% of the buffaloes are of improved breeds (NARC, 2016). Jersey, Holstein, Brown-Swiss, Ayrshire and Sahiwal and their cross-breed cows were the breeds of cows, whereas the buffaloes included local, improved cattle such as Murrah and their crosses. Buffalo milk shares about 65% of the total milk production in Nepal (MoAD, 2016).

The decentralized system of governance in Nepal shifted from the development region to the province system in the year 2015.The data tabulated below in the table shows various milch animal populations in different provinces of Nepal. Province No. 1 holds the maximum cattle population whereas the maximum buffalo population is found in Province No. 5. Province No. 2 doesn't hold any yak whereas the maximum yak and sheep population is held by Province No. 6. Likewise, Province No.1 holds the first position in the goat and pig population. The total cattle population as per the report of livestock statistics of Nepal,2017 is 6430397.

1.3 Purpose of the Project

Nepal is currently caught up in a vicious cycle of poverty and low economic growth. About 31 percent of the population lives below the poverty line (urban 10 percent and rural 35 percent). Increasing rate of urbanization (5.6 percent per annum), increasing income and changing food habits have significantly increased the demands for hygienic milk and milk products. At present, most of the municipal demands for milk and milk products are met by not sufficient processing and diversification. The small dairy industries are already short supplied by about 12,000 liter a day. It has been estimated that the demand for milk and milk products together is expected to grow tourism and urbanization per annum. Similarly, the milk balance situation in the municipality is 111 liters per person per year moreover 73.65 liters at the province level and 70 liters at national level compared to the per person requirement of 91 liters per year.

Secondly, increasing road and power connectivity has provided accelerated commercialization of the dairy sector. The municipal policy of strengthening cooperative and Public Private Partnership and growing cooperatives & private sector service providers are an impetus for commercialization of the milk production systems.

Thirdly, the municipality has moved forward in the direction of sustainable development after the local election. At present, there is a consensus among the powerful Local Governments to develop related acts and rules. The opportunity emerging for hygienic milk products and milk diversification has raised enthusiasm, feelings and positive thoughts among the health conscious people which should be embraced as a new energy.

Finally, the municipality has opened up the prospect for promotion of dairy production, ultra-packed milk processing and marketing. However, it should not be forgotten that sustaining businesses in an environmentally sound manner along with the improvement of competitiveness through improved efficiency and cost effectiveness will be the major challenge.

1.4 Scope of Work

The pre-feasibility study aims to reflect the proposed location and to document the technical and financial feasibility of the project. Ultimately, study will help to get an overall idea of the possibilities of investment in this specific sector and area. Some of the major scope of the study are:

- To gather main data, secondary data, and any other necessary information for the project's development.
- Analyze the acquired data for many elements such as technical, economical, social, and environmental concerns.
- Develop the most appropriate investment model, such as private, Public Private Partnership, or blended finance.
- Also, depending on the findings, provide recommendations.

1.5 Approach & Methodology

A professional team from Invest and Infra Pvt. Ltd. produced this pre-feasibility study. After a thorough examination of market demand and business development prospects, the project's components

were determined. For the purposes of determining project features/components, input collected during consultations with Province Level Ministries and associated stakeholders was also taken into account. Secondary and primary sources were used to obtain the necessary data, information, and facts to meet the study's goals.

Primary data was acquired by telephone and e-mail conversations, as well as a field-based research, which included a field visit. Producers, marketers, entrepreneurs, and government officials from Province No.2 (Provincial Ministries, Rural/Municipalities, etc.) participated in stakeholder consultations and group discussions.

The study included secondary data collection methods. The present research is descriptive and is based on secondary data. The secondary data has been obtained from various sources such as, Ministry of Agriculture and Livestock Development (MoALD, Nepal), Ministry of Finance (MoF, Nepal) and various reports of Dairy Development Cooperation (DDC), Food and Agricultural Organization (FAO), National Agricultural Research Council (NARC) and National Dairy Development Board (NDDB). The basic statistical tools such as percentage, growth rate, variation etc. are used for economic analysis. The similar methodology was adopted by (Deshmukh, 2014) for analyzing the growth and performance of the dairy sector in India.

2

PROJECT DETAILS

2.1 Project Background and Description

Nepal is currently caught up in a vicious cycle of poverty and low economic growth. About 31 percent of the population lives below the poverty line (urban 10 percent and rural 35 percent). Increasing rate of urbanization (5.6 percent per annum), increasing income and changing food habits have significantly increased the demands for hygienic milk and milk products. At present, most of the municipal demands for milk and milk products are met by not sufficient processing and diversification.

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Finally, the municipality has opened up the prospect for promotion of dairy production, ultra-packing milk processing and marketing. However, it should not be forgotten that sustaining businesses in an environmentally sound manner along with the improvement of competitiveness through improved efficiency and cost effectiveness.

2.2 Project Features

Key Features of the Project

- The project shall include Ultra High Temperature (UHT) pasteurization of the milk to extend the shelf life of the milk.
- The UHT milk process will directly improve the life usability of the milk and can be transported to larger geographical areas for consumption.

- The project will help the farmers for sustainable production of the milk with better scope of the industry to purchase regular supply of milk thus helping in sustainable source of income for the farmers.
- UHT milk has a higher Nutritional value than untreated.

2.3 Overview of the Area

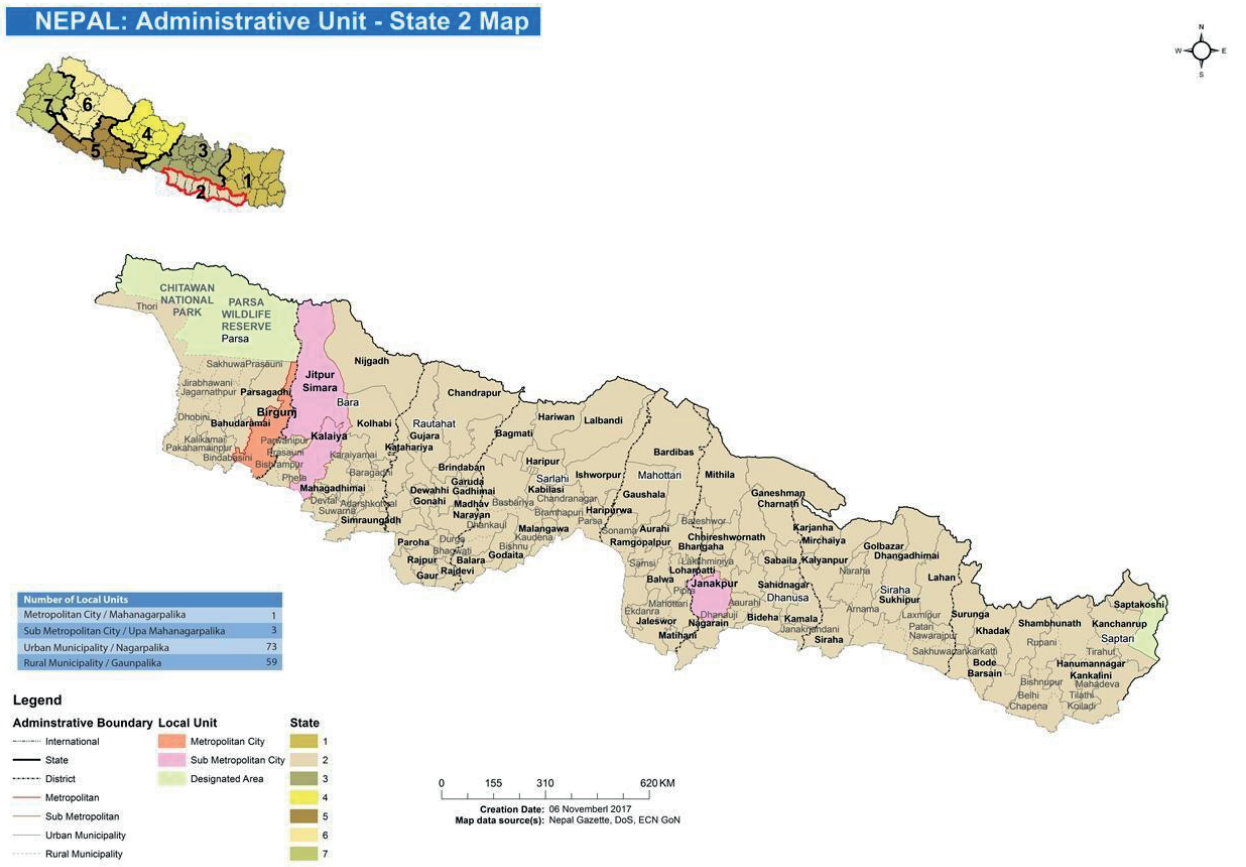
The project incorporates Janakpur district as part of Province 2 and is located in the Terai plain of the Eastern Development Region. The headquarters of the district is Janakpurdham. The total area covered by the district is 9,661 km It is Nepal's second most populous province, and smallest province by area. It has a population of 5,404,145 as per the 2011 Census of Nepal, making it the most densely populated province of Nepal. The province includes eight districts from Saptari District in the east to Parsa District in the west. The majority of the province's population speaks Maithili, Bhojpuri, Bajjika and Nepali. The province is located on the flat plains of Terai, and Chure (Churiya) or the Shivalik Hills are the natural border of the province which falls on the northern side. The southern side has an international border with India. Koshi River on its eastern side acts as a natural border with Province No. 1. Province No. 2 has eight districts in a series (parallel). Koshi River, Bagmati River, Kamla River, Lakhandei River and Bishnumati River are the main rivers of the province (fig. 1).

2.4 Developing a Business Case

Land and Location

- Ample space is required for buildings, future expansion, parking of transport vehicles and machinery. About 2-3 bighas of land is required for an ultra-packing milk processing plant handling about 10,000 liters of milk per day (8 hours). However, the built-up area to the total area should be normally around 1:3. The exact design and details of the built up area has to be decided in consultation with the plant and machinery supplier or with a professional dairy consultant.

Figure 1: Project area location map



- The location of a plant should be close to the milk producing area in case of a products manufacturing unit and if liquid milk and milk product is the main product it should be close to the consumption centers.
- The location of the site should have proximity to road facilities, services, such as water, electricity and effluent mains, social infrastructure, etc.
- Subsoil of the site should be firm with proper drainage. It is always advisable to conduct soil investigation for load bearing before setting up a dairy processing plant.

Site Development

- Preferably the entire site should be fenced with barbed wire or a compound wall constructed with gates at suitable places.
- Internal roads should be of tar/bricks/WBM depending upon the soil conditions, rainfall and the number of vehicles moving every day.
- At the raw milk reception area there should be provision for unloading from different types of vehicle.
- Proper drainage arrangements should be made to ensure cleanliness.

Layout and Buildings

The civil works comprise the main processing building, which includes the Raw Milk Reception Dock, Main Processing hall, provision for manufacture of other products, cold storage, CIP, laboratory, quarters, office, garages, security post etc. The factory building for the milk reception, quality control, processing, packing and storage of milk products should be as per BIS specifications. The total covered area depends on the processes involved, products manufactured, the quantity of milk handled and the equipment chosen for product manufacturing. About 4000 sq.ft. of building area is required for handling 10000 liters of milk. The essential sections of a milk processing plant are given below.

The milk processing plant shall have the following essential facilities.

- **Raw Milk Reception Dock (RMRD)** - Consisting of can conveyor, can washer, weighing balance, dump tank etc.
- **Processing Unit** - Cream separator, chiller, homogenizer, pasteurizer and other related machinery are installed.
- **Storage Area** - For milk storage tanks.
- **Products Manufacturing Area**- Depends upon the type of products, quantity of milk handled and the machinery to be installed.
- **Packing Area**- For ultra packing of liquid milk and other milk products.
- **Cold Storage**- For keeping the packing milk and milk products before sending them to market.
- **Quality Control Laboratory**- For testing the quality of milk and milk products.
- **Utilities Area**- For installing boiler, generator set, water treatment plant, maintenance and store area for spares.
- **Waste Water Treatment Plant Area**- For treating the dairy effluents before releasing them to the fields.
- **Quarters and Office Area**- For all the essential staff.
- **Vehicle Parking Area**- Both for the milk procurement and distribution vehicles.
- **Input Supply Area**- For providing veterinary service, supply of feed, fodder seeds, etc.

Plant and Machinery

Different machinery is required for the processing plant based on the type of milk received and products proposed. The machinery should be as per the BIS specifications. The section- wise equipment required, their specifications and quantity for 10,000 liters capacity milk processing plant are given below:

Table 2: Plant and Mechinary

S.No.	Description	Qty
I		
1	Can Roller Conveyor 3mtrs	1 No.
2	Can Tip Bar	1 No.
3	Electronic Weigh scale S.S.Weigh Bowl 500 L	1 No.
4	S.S. Dump Tank - 1000 Liters	1 No.
5	Disc Filter	1 No.
6	Can Drip Saver Suitable for 6 cans	1 No.
7	S.S. Can Scrubber.(40 Ltrs.)	1 No.
8	S.S. Milk Pump.-1.5 H.P	1 No.
9	Set of Lab Equipments. 1 Set. (including Milkoscan/Milkotester/Density Meter/Cryoscope/ Emulsion Quality Analyser/HPLC etc. and the associated glass ware)	1 set
II	PROCESS SECTION	
1	S.S. Balance Tank with Float. 100 Liters	1 No.
2	S.S. Milk Pump 2 H.P.	1 No.
3	S.S. Milk Chiller, Cap. 3KLPH.Make GEA	1 No.
4	S.S. Flow ControlValve. Manual	1 No.
5	Milk Pasteuriser - 2.5 KLPH	1 No.
6	S.S. Simplex Filter	1 No.
7	S.S. Hold the Coil for 16 secs.	1 No.
8	Flow Diversion Valve . Manual	1 No.
9	S.S. Remote Control Panel	1 No.
10	Inter Connecting S.S. Pipeline & Valves	1 set
11	Cream Separator. Cap 500 Ltrs/ Hr.	1 No.
12	Cream Tank - 1 KL	1 No.
13	Ghee Boiler - 250 Ltrs	1 No.
14	Ghee Balance Tank & Pump	1 set
15	Ghee Settling Tank - 250 Liters	1 No.
16	CIP Unit	1 set
III	STORAGE & PACKING SECTION	
1	Ultra Packing System	1 set
2	H.M.S.T-M,S.Outer 5KL, Single Comp.	1 No.
3	Spare S.S. Pump For Tanker Filling	1 No.
4	G. l. Pipeline & Controls, Driers for Air 1 set 9 Stabilizer for Packing Machine	1 No.
5	Utilities Area-for Installing Boiler, Generator Set, Water Treatment Plant, Maintenance and Store Area for Spares	
6	Waste Water Treatment Plant Area-for Treating the Dairy Effluents Before Releasing to the Fields	
7	Quarters and Office Area for all the Essential Staff	
8	Vehicle Parking Area-Both for the Milk Procurement and Distribution Vehicles	
9	Input supply Area- for Providing Veterinary Service, Supply of Feed, Fodder Seeds, etc.	
IV	REFRIGERATION SECTION	1 set
V	UTILITIES	
1	Hot Water Generator. Cap. 50,000Kcal Hr.wood Fired.	1 No.
2	Chimney 3 Mtrs high above.	1 No.
3	Makeup WaterTank & Valves (FRP - 200ltr)	1 No.
4	Water Softener Suitable Duty	
5	G.l.Pipeline, Valves & Water Pump	
VI	ELECTRICALS	
1	MCCB Panel for Above Equipments	1 NO.
2	All Cables, Armored, Flexible & Others	1 set
3	Generator 63 KVA	1 No.
VII	ERECTION & COMMISSIONING	1 Job

Technical Collaboration

Normally the technical collaboration may be for supply of machinery, technical know-how for manufacture or marketing of products. If any collaboration arrangement is there, the name of the firm, country and term of agreement is required to be mentioned in the project. While entering into an agreement with the machinery supplier, provision should be made for getting the training to the technical staff employed in the unit.

2.5 Infrastructural Facilities for Raw Material and Utilities

Raw Material

The principal raw material is milk. The extent of the milk procurement area, milk animal population, average milk yield, percentage of animals in milk, marketed surplus etc. will determine the size of the plant. The method of procurement, transportation of milk and input supply to the farmers is required to be highlighted. The availability of other inputs such as packing materials, disinfectants and consumables should be ascertained.

Utilities

i) Power

Normally a three phase electricity supply is required for milk processing plants. The power requirement depends upon the load to be connected and the necessary approval from SEB should be obtained for connection. Depending upon the position of the power supply, standby generators may be considered for connecting the essential sections.

ii) Water

A milk processing plant requires the water in the ratio of 2:1 (2 liters of water for 1 liter of milk processed) for cleaning of equipment, cold storage and drinking purposes (source of water supply, quantity available and suitability for the purpose has to be mentioned). Accordingly, the size of the well is required to be designed and depends on the quality of water, the water softening plant may be considered.

iii) Steam

The steam requirement (kg/hr) depends upon the processes involved and the source of steam may be met by a coal/oil/gas fired / electric boiler.

iv) Fuel

The fuel is needed for various processing operations. The type of fuel will depend upon the type of boiler used for steam generation. It is therefore necessary to assess the requirement of LDO/coal/gas and also ascertain the easy availability before purchase of a boiler.

v) Compressed Air

It will be required for various pneumatic flow control operations as well as for cleaning purposes. The total requirement of compressed air and the capacity of the compressors are required to be furnished.

vi) Vehicles

The vehicles required for procurement and distribution of milk depend on the quantity of milk to be handled. The number of vehicles required, source of supply, rental charges etc. need to be furnished. Depending upon the need, the requirement of vehicles may be considered in the project cost. Generally, insulated vehicles will be required to transport chilled milk and reefer vans for transport of finished products like ice cream, cheese, etc.

vii) Other Services

A maintenance workshop is an integral part of milk processing for carrying out repairs and maintenance of equipment. Computers with software are also integral parts for data management and marketing.

Manpower

While selecting the site, the availability of manpower should be looked into and the total requirement of manpower depends on the operations involved and the quantity of milk handled. For a plant handling 10000 liters of milk per day the manpower required is given below:

Table 3: Manpower

S.No.	Description	Numbers	Remarks
1	Manager		
2	Plant Operator		
3	Marketing Manager		
4	Marketing Supervisors		
5	Processing Supervisors		
6	Mechanics		
7	Computer Operator		
8	Laboratory Staff		
9	Administrative/Account staff		
10	Driver		
11	Watchman		
12	Dairy Labor		

2.6 Environmental Aspects and Pollution Control

The process involved is milk pasteurization and processing of milk into toned milk and products such as cream and ghee. The effluent will be in the form of washed water and milk solids apart from the detergents and sanitizers used in the plant. There are no hazardous effluents generated from a milk processing plant. However, construction of an effluent treatment plant is necessary for treating the effluents before discharging for proper disposal. The final effluent should meet the requirements of the Pollution Control Board and is necessary to get clearance from them. The treated water can be utilized for irrigation or creating a biotic zone where plants can be grown in and around the dairy plant.

2.7 Schedule of Implementation

Generally, it takes about 4 to 6 months for getting the DPR, obtaining investment, approval of plans, finalizing the suppliers and construction of various civil structures and installation of plant and machinery. Hence, during the first year of operations, only six months of milk procurement can be assumed. Proper planning needs to be done so as to take up various activities without any break. The activity wise schedule of implementation is to be given in the project.

2.8 Market Assessment

The market for the product (domestic and export), type of arrangements for distribution and sales, commission and additional incentive to be given, the proposed network and the advertisement plans should be furnished. Detailed market survey report is required to be submitted. In the present model, the product range proposed includes ultra packing toned, skim and flavored milk, cream and ghee. The proportion of these products (product mix) needs to be decided as per the market requirements and it can be varied depending upon market situation and lean and flush seasons.

Business Prospects

It involves the present demand-supply for various products, gap in supply and expected demand for various products. The major competitors and their present s hare are to be ascertained. The company projections for the next 3-5 years and the basis for projection may have to be furnished. The product wise quantities and cities where it is to be exported need to be mentioned.

The List of Targeted Customer Outlets

1. Supermarkets

These are an established network of high end shopping platforms in the greater area that can be relied on to provide access to expatriates and high-paying customers.

2. Market Women and Small Scale Vendors

These vendors are already experienced at selling raw milk and show it to the general public. These vendors equire sophisticated packaging and have good product handling knowledge.

3. Mini Markets

This is a fast growing segment that provides access to

the proliferating middle class economic community in the country. These are strategically located and have the facilities to carry delicate products.

4. Milk Wholesalers

These customers would be targeted as an import substitution strategy since they are generally responsible for the importation of UHT milk, powdered milk, and other dairy products and already have a market distribution network.

5. Corner Shops

Although these are challenging to supply due to the limited nature of their power supply, they are within reach of virtually every household in the village area.

6. Hotels, Guest Houses and Restaurants

These are to be used to provide a meaningful linkage with the tourism sector since most of the products consumed in this sector are imported.

7. Petrol Stations, School, Campus, Office and Religious center

Just like supermarkets, these areas' markets will be used for the traveling public, to purchase packing milk and milk products.

2.9 Dairy Co-operatives and their Challenges

The establishment of dairy cooperatives in Nepal was the result of the implementation of the first five years plan in the year 1956-61. The first dairy cooperative was formed at Tusal village of Kavre district. Though the dairy cooperative activities got initiated in the early 60s' their effective activities were observed only after December 1981, when DDC initiated the milk producers oriented program by participating the farmers to form their own Milk Producer Association (MPAs).

The MPAs thus formed were not provided with the legal status and they functioned for milk trade and support to milk production. Later on, MPAs were transformed into the Milk Producers Cooperative Society (MPCS) in February 1989 to make them function autonomously. The MPCS are governed by the Cooperative Act 1992. The functions of these MPCSs are to gather milk from the dairy farmers, test its quality, transport it for selling to the nearest milk processing plants, receive payment for the milk and distribute the payment to the individual milk supplier farmer.

The dairy cooperatives in Nepal function in a 3-tier system (FAO,2010). The first tier is MPCSs primary level cooperatives, second level is District Milk Producers Cooperative Unions (DMPCUs) of different MPCSs as District bodies. Their main theme is to deliver programs designed to support the increased production and processing of milk and milk products and also to contribute to the financial and social upliftment of the rural milk producers. The third tier is Central Dairy Cooperative Association Limited Nepal (CDCAN).

CDCAN is registered as a central-level cooperative organization established in 1993, mainly focused on increasing economic benefits to the milk producers and making the country self-reliant in clean and high-quality milk and milk related products. Moreover, it also implements policy advocacy activities at the central level to represent the interest of member organizations (Upadhyaya et.al, 2001). The milk processing plants function for the processing of raw milk and manufacturing the value-added products from the milk. They are the key elements of the formal sector of milk distribution. They help in maintaining a regular standard and balance of milk distribution throughout the region. They

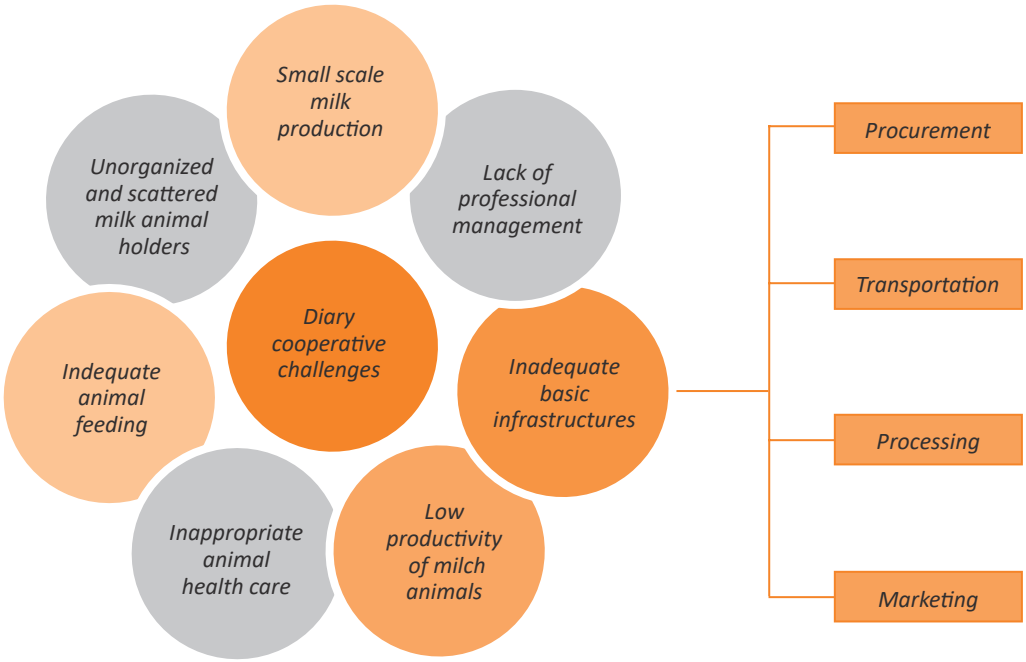
Fig. 2: Dairy value chain

are the bridge via which the rural milk and resources and urban capital can be interlinked. The dairy sector in Nepal is characterized by scattered, small scale, unorganized milk animal holders; inadequate and inappropriate animal feeding and health care; low productivity; an inadequate basic infrastructure for provision of production inputs and services. Moreover, lack of an assured year-round remunerative producer price for milk, inadequate basic infrastructure for collection, transportation, processing and marketing of milk is another aspect of the Nepalese dairy sector. Low productivity of the milch animals is a serious constraint to the dairy development in Nepal (GEC Nepal, 2012).

The dairy sector is complex and presents a number of opportunities for commercial farmers and investors to take advantage. Some of the current challenges in the dairy industry are:

1. Cold Storage: Refrigeration issues are a big challenge for such a sensitive and delicate product as milk. This is a particularly serious concern when one considers the need for milk to be kept at 4 degrees Celsius from the udder of the cow to the consumer's refrigerator – electricity is unreliable and expensive in this, this must be factored in.
2. Packaging issues are of serious concern for milk and milk products. Currently the only serious packaging that a commercial dairy producer could consider is located on a managed dairy. This is an added expense of transportation and customs duty fees.
3. Marketing challenges are very apparent, especially for small scale farmers in rural areas. There are no milk collection points, stationary or mobile, that they can sell their products too as is done in the village etc.
4. Like in several agri-business areas, there is inadequate financing for potential dairy projects. Virtually all financing in this is short term, which is inappropriate for such a project that takes some time to see a return.

Figure 3: Challenges faced by the dairy co-operatives



5. Inadequate veterinary services make it difficult for dairy farmers to invest in foreign breeds of cow that require special medical attention. The lack of appropriate medicines and expertise is a threat to the success of such a herd.
6. In many of the mini-markets and supermarkets where the majority of products would be sold, storage is mostly inadequate. Keeping dairy products at a 3-4 degree range is imperative and impinges on the shelf-life and

quality of the product.

7. Prohibitive construction costs in the Gambia make it considerably expensive to build dairy factories for operation.
8. Dairy machinery and equipment is unavailable in the local market and must be imported from other countries.

Innovative Features of the Proposed Project

Ultra High Temperature Pasteurization (UHT) milk processing is the new and pioneer concept in Nepal. For its operation, the dairy company is collecting 30,000 liters per day through its collection centers and has a milking van. Per day manufacturing capacity and items of the firm are: yogurt (2000 liter), UHT pasteurized standard milk (10,000 liter), UHT chilled whole milk 5000 liters, UHT chilled skim milk 3000 liter, Paneer (500 kg), Ice-cream of different flavor (500 liter in eight summer and autumn months), Ghee and butter (500 liter), Khowa (as per demand), UHT favors chilled milk 10,000 liters in different pouch packing. The firm sells UHT processed milk from 200 milk-selling stores and diversified products from its own market outlet made at the company office.

2.10 SWOT Analysis

SWOT analysis allows for the discovery of elements that characterize a company or organization in the

SWOT Analysis for Branding, Labeling and Marketing of Organic Products of Madhesh Province

Strength	Weakness	Opportunities	Threats
- There is an abundance of raw materials in the province. - There is an existing and growing domestic demand for standardized organic produce from Madhesh Province. - This will be a landmark project in branding and labeling a province's specialized commodity. - The project will create an opportunity for creation of intellectual property (Geographic Indication) which will place spices native to Madhesh Province in the domestic and international market. - It will unleash possibilities for large-scale commercial agriculture and agro-tourism in the province. - This can also be an opportunity for Madhesh Province to promote ecologically sustainable labeling and packing practices. - The benefits of organic farming to the environment, flora, fauna, and enhanced.	- Inadequate infrastructure, for providing high-quality services. - Lack of energy supply and modern processing and storage facilities can be a hurdle. - Poor road network within and beyond Madhesh Province can be a bottleneck in supply chain management. - A scarcity of qualified personnel and hospitality professionals. - Inadequate budget allocation by the responsible authorities. - The difficult terrain in the region has led to a lack of basic infrastructure which can make construction costly. - Lack of promotion.	- Because most of the country's rich customers have congregated around cities, and cities are attractive tourist attractions, there is a strong chance for organic farming in the country's urban and peri-urban regions. - Some specialized marketplaces have begun selling organic items, and others are planning to do so soon. - Organic goods have a lot of potential for delivery to India and other nations as long as quality criteria are met. - Growing awareness among the educated and increased buying power might have ramifications for the growth of organic farming. - Organic farming requires a greater amount of labor than conventional and contemporary agricultural techniques. As a result, organic farming will appeal to Nepal, which has a high rate of unemployment and underemployment.	- Large scale farming of select crops may adversely impact the local ecosystems and lead to gradual degradation of biological diversity. The project would need to be mindful of farming practices to ensure both that the product is 'organic' and that farming does not have adverse ecological consequences. - Competition from other nations with comparable advantages, particularly India, is a clear concern. Because the Indian government supports farmers with subsidies, they are able to manufacture the same quality product at a lower cost, and it is conceivable that such items would enter the Nepalese market. - Another danger to organic producers is the lack of pricing certainty for organic goods. Farmers will not be encouraged to become organic until and unless they are guaranteed of a fair price for their organic produce, and forcing them to do so remains a threat.

context of a certain goal, as well as the classification of those characteristics into four areas. As seen in the table, two of them are positive, while the other two are negative:

2.11 Relevant Case Studies

The global milk market has been observing a major consumer shift from normal milk to UHT milk since the past few years.

The global UHT milk market registered revenues worth US$ 60.8 Billion in 2012, which are expected to raise up to US$ 137.7 Billion by the end of 2019. Over the forecast period 2013-2029, the global UHT milk market will expand at a healthy CAGR of 12.8%.

Case Study 1

Project Type: Danone S.A.
Location: New York, United States

Danone S.A. is a multinational food-products corporation based in Paris and founded in Barcelona, Spain. It is listed on Euronext Paris where it is a component of the CAC 40 stock market index. Some of the company's products are branded Dannon in the United States.

As of 2018, Danone sold products in 120 markets, and had sales in 2018 of €24.65 billion. In the first half of 2018, 29% of sales came from specialized nutrition, 19% came from waters, and 52% came from dairy and plant-based products.

Danone signed joint ventures with Al Safi in Saudi Arabia (2001), India (2005) and Vietnam (2006), Colombia (2007), and Mengniu in China (2013–2014).

Danone's UHT portfolio comprised UHT Milk, buttermilk, lassi, cold coffee and smoothies, dahi, mishti dahi and flavored yogurts.

Case Study 2

Project Type: Nestlé
Location: Vevey, Vaud, Switzerland

Nestlé is a Swiss multinational food and drink processing conglomerate corporation headquartered in Vevey, Vaud, Switzerland. It is the largest food company in the world, measured by revenue and other metrics, since 2014. Nestlé's products include baby food, medical food, bottled water, breakfast cereals, coffee and tea, confectionery, dairy products, ice cream, frozen food, pet foods, and snacks.

Twenty-nine of Nestlé's brands have annual sales of over 1 billion CHF (about US$1.1 billion), including Nespresso, Nescafé, Kit Kat, Smarties, Nesquik, Stouffer's, Vittel, and Maggi. Nestlé has 447 factories, operates in 189 countries, and employs around 339,000 people. All Nestlé Milk is an Ultra-High-Temperature Milk treatment, which kills all germs and pathogens that may be present in the loose milk. This germ free milk is then packed in Tetra Pak through a sterile process. UHT treatment and special packaging gives NESTLÉ MILKPAK a longer shelf life than loose milk, as there is no bacteria to deteriorate the milk.

3

FINANCIAL ANALYSIS

3.1 Pre-Feasibility Approaches & Assumptions

Project Cost

Broadly the capital cost includes the cost of land, development of land, fencing, internal roads, civil works (plant building, office, quarters etc.), plant and machinery, preliminary and preoperative expenses, margin money for working capital, etc. The project's proposed cost of 10000 liters per day Ultra High Temperature Pasteurization (UHT) model milk processing plant is given below.

Particulars	Amount in NPR
Land	-
Civil Structure	50,000,000
Machinery	300,000,000
Others	30,000,000
Vehicles	20,000,000
Interest During Construction	25,990,440
Total Project Cost	**425,990,440**

The portion of the interest during construction is capitalized in the individual assets on a proportionate basis.

Capital Structure

The project is proposed to be financed in a 70:30 debt equity ratio on the total cost of the project including Interest During Construction (IDC). The requirement of working capital would be financed by internal resources itself. Based on the structure, the total investment pattern has been tabulated below:

Component	Percentage	Amount in NPR
Equity	30.00%	127,797,132
Debt	70.00%	298,193,308
Total		**425,990,440**

Project Construction and Operation Period

The project is assumed to be built in the period of 2 years. And the total operation period after the construction period would be 30 years. The project would be handed over to the government after the completion of the operation period.

Tax, Staff Bonus, and Depreciation Assumptions

The tax rate for the project is assumed at 20% on profit earned during the year. Further the loss carry forward has been taken for 12 years in due consonance with the provisions of Income Tax Act 2058. Further, the staff bonus is assumed at 10% on taxable income earned during any year of the operation as required by the Bonus Act.

Also, the rate depreciation and basis of depreciation is in due adherence to the provisions of the Income Tax Act as follows:

Particulars	Depreciation Method	Rate of Depreciation
Land	-	-
Civil Structure	WDV	5%
Machinery	WDV	25%
Others	SLM	20%
Vehicles	WDV	20%

However, 1/3 of the additional depreciation has not been taken into consideration as facilitated by the Income Tax Act.

Direct Income and Direct Expense

The income has been classified majorly in three categories:

1. Selling Milk and Milk Products
2. Food and Beverage
3. Other Amenities

The total units, rates in 100% capacity have been detailed below:

Particulars	100% Capacity	Sales Rate	UoM
Yogurt	2000	180	Liter
Pasteurized Standard Milk	20000	110	Liter
UHT Chilled Whole Milk	5000	105	Liter
UHT Chilled Skim Milk	3000	105	Liter
Paneer	500	600	Litre
Ice-cream	500	250	Liter
Ghee and Butter	500	700	KG
Khowa	500	900	KG

Other Cost of Operations

Besides salary cost and overhead cost, the total operating expense is likely to incur at the rate of 2% of total project. Cost which is likely to increase at the inflation of 3% with the cap of 200%. As discussed in the earlier paragraph, the project would be financed by 70% debt. The interest rate that has been taken into calculation is 12% which would be repaid in four equal installments in the period of 12 years.

Also, the revenue has been estimated to be inflated at the rate of 2% per annum which is capped at 180%. The income tax rate for the project is 20% and the loss carry forward period for the project is 12 years.

It is assumed that the government would provide required land for the project. Total operation period of the project is assumed to be 30 years and 2 years is considered as the pre-operative period.

Working Capital and Other Assumptions Used

It has been assumed that the overall working capital requirement would be financed by the equity holders. The working capital has been assumed on the following basis.

Receivable & Advance	30	Days
Payable and Liabilities	15	Days

Salary & Overhead Expenses

Details of employee cost on 100% capacity is as below:

Amount in NPR

Department	Total Number of Employees	Total Cost
A. Administration	19	12,273,240
B. Front Desk	2	845,880
C. Quality Control	2	1,436,400
D. Production	30	10,374,000
Total	**53**	**24,929,520**

3.2 Financial Analysis

3.2.1 Financial Results

The overall cost of the project is NPR 425,990,440 with an interest component of NPR 25,990,440 throughout construction. The overall project, excluding working capital, was financed by loan for 70% and equity for the remaining 30%.

Projections are created utilizing several methodologies in the examination of the project's pre-feasibility. The project's Net Present Value (NPV) was found to be NPR 64,556,568.23 based on the analysis.

Furthermore, the project IRR is assessed to be 17.14%, which is higher than the project's needed rate of return. The project's equity IRR is 31.36%. The project's IRR and equity IRR prove the project's viability. The Benefit Cost Ratio (BCR) for a project is 1.16 times, whereas the BCR for equity is 1.51 times.

The project payback period is 3.27 years, while the equity payback period is 6.15 years. The payback term appears to be enough, given the nature of the firm and the broader industry.

The average DSCR is calculated to be 1.60. Although the DSCR was initially low, it has steadily grown.

Indicators	Result
Firm IRR	17.14%
Equity IRR	31.36%
NPV Equity	64,556,568.23
Debt Equity Service Coverage Ratio(Average)	1.6 times
Project BCR	1.16
Equity BCR	1.51
Simple Payback Period	3.27 years
Discounted Payback Period	6.15 years

3.2.2 Sensitivity Analysis

Sensitivity Analysis has been carried out on three different components: Interest Rate, O & M Cost and Project cost.

Based on the analysis, It seems that the interest rate is highly sensitive as compared with O & M Expenses and project cost. The special focus is to provide project cost, ensuring the cost remains as projected.

Interest Rate Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	31.36%	
5.00%	30.30%	-3.40%
-5.00%	32.36%	3.17%

O & M Increase/Decrease by 5%

O&M Cost	Impact on Equity IRR	% of Change
0.00%	31.36%	
5.00%	30.99%	-1.19%
-5.00%	31.73%	1.17%

Project Cost Increase/Decrease by 5%

Project Cost	Impact on Equity IRR	% of Change
0.00%	31.36%	
5.00%	31.39%	0.09%
-5.00%	31.25%	-0.36%

The financial statement of the first 10 years of operation has been separately annexed in the report.

4

STATUTORY AND LEGAL FRAMEWORK

4.1 Statutory and Legal Framework

Foreign investors need to apply for approval before they incorporate a company and conduct business activities in Nepal. Application shall be made to the Department of Industry or the Investment Board Nepal, depending on the size of the investment.

5

PRELIMINARY ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The table below summarizes the results of a preliminary desktop-based environmental and social impact assessment. It highlights some of the potential repercussions that might occur throughout the project's pre-construction, construction, and operation stages, as well as mitigation techniques for each impact. Later in the project cycle, a full evaluation will be done, if required by relevant regulations

Activity	Possible Environment Impact	Possible Mitigation Measure
Pre-construction phase.	1. Distress to the micro-habitat and natural fauna due to tree felling.	1. Cutting of trees shall be avoided to the extent possible and natural vegetation present on the site shall be kept in mind while preparing the architectural and landscape designs of the project. Compensatory plantations should be carried out.
Construction Phase- Construction activities for the development of the project.	1. Air pollution due to earth work excavation and other construction activities.	1 Frequent spraying of water at construction sites to suppress dust emission. Soil, muck and other construction materials should be covered during transport by vehicles.
	2. Soil contamination.	2 Preventive measures should be taken to minimize spillage of oil/diesel from the construction equipment. Appropriate measures should be taken in case of accidental contamination.
	3. Water pollution/ contamination- Impact on lake.	3 It should be ensured that the water bodies surface and ground water, are not polluted due to the project. Appropriate measures should be taken in case of accidental contamination. Particular attention should be given to avoid pollution in the lake due to the project.
	4. Disposal of excess earth.	4 The excess earth should be transported to a designated place and shall be used for filling and covers.
	5. Disturbance to other services.	5 Any shifting of cable/utility lines should be attended to with a minimum period of disturbance.

Activity	Possible Environment Impact	Possible Mitigation Measure
	6. Safety of road users in the project area.	6 Provision of temporary crossings/bridges as well as warning signs wherever necessary to facilitate normal movement.
	7. Noise pollution due to the use of machinery and movement of traffic.	7 Use of less noise generating equipment and avoiding activities during night.
	8. Impacts due to hazardous waste.	8 Hazardous waste will be managed as per applicable laws of Nepal.
	9. Impacts due to construction waste.	9 Construction debris will be managed/disposed of properly.
Operation Phase	1. Impact on water resources supply to nearby residents due to possible extraction of ground water.	1. This will be a residual impact if water is sourced from well/ boring in the project area. However, possible mitigation measures can be recharging of the groundwater by installation of a well-designed rain-water harvesting system, which is already envisioned by the project as one of its components. Similarly, water saving features could be installed where feasible. In addition, wastewater treatment plants or biological treatment systems (reed-bed) could be installed, if feasible, to treat gray water with utilization of the treated water for watering plants, etc.
	2. Contribution to GHG emissions from use of machines and equipment (heating, air conditioning, etc) in the building, etc.	2. Efforts will be taken to offset carbon emissions by incorporating a green/sustainable building design, including installation of solar power and energy-efficient equipment, as well as ensuring that natural light is received for maximum duration.
	3. Increased solid waste generation, if not managed well can be a nuisance to surrounding communities and may create health hazard.	3. Segregate wastes and ensure they are collected frequently by waste collection companies/facilities. Build a compost facility, if feasible, and use the compost in the green spaces/plants inside the project compound.
	4. Water contamination- Impacts on lake/river.	4. Ensure that the water bodies/flowing adjacent are not contaminated. Appropriate measures should be taken in case of accidental contamination. Install a wastewater treatment plant if feasible.

The initiative will provide locals and other Nepalese with both short and long-term job opportunities. Through its spin-off economic impacts, it will help other current businesses as well as bring up new investment prospects.

6

PRELIMINARY RISK ANALYSIS

The following are some of the most significant risks linked with the PPP project:

1. Risks related to construction and project completion delays, which might lead to cost overruns.
2. This project may pose a business risk since the demand and market trend must be properly analyzed in order for the project to be financially and commercially viable.
3. According to relevant legislation, the project would need to complete either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA), which would identify possible environmental and socioeconomic implications as well as necessary mitigation measures.
4. Changes in the legislative framework and political risk might be some of the additional risks linked with the project.
5. Financial risks to the project include changes in interest and currency exchange rates, as well as changes in tax regulations.

7

PROJECT STRUCTURE AND IMPLEMENTATION MODEL

Public Private Partnerships (PPP)

A Public Private Partnership (PPP) is an agreement between public and private entities for a certain length of time in which private businesses agree to take on the risk of all or part of the funding, construction, operation, repair, and maintenance of projects under the PPP model. Such an entity may generate a fair profit by providing public services directly or indirectly through the building, operation, repair, and maintenance of public or private assets. Through legislative, legal, institutional, and economic arrangements, public institutions must establish an environment that encourages private sector investment.[1]

It will be suitable to develop a project using the PPP model, which involves both public and private entities. When national treasury resources are insufficient, assets of public utility and less expensive operation of public services, as well as resources, skills, and technology accessible in the private sector, must be drawn to nation-building projects based on the PPP idea.

The PPP model is appropriate in the current context of the UHT Milk Processing Project in Madhesh Province. According to the preliminary research done in these towns, Local Governments would give land for the construction of the UHT Milk Processing Project in Madhesh Province.

1 World Bank, 2072, Public Private Partnership Policy

8

FINDINGS AND RECOMMENDATIONS

8.1 Findings

The following are some of the study's significant findings:

1. The UHT milk processing project will provide the highest grade of pasteurized milk and other dairy products with a long shelf life.
2. Based on the study, Janakpur is the most suitable location to develop UHT milk processing project will be near water bodies in these area.
3. The project's business model was determined to be a Public Private Partnership.
4. With a total cost of NPR 425,990,440 (including interest component throughout the construction period) and an equity IRR of 31.36%, the project may be completed.
5. Payback period has been determined as 3.27 years.

8.2 Recommendations

To overcome the challenges faced by dairy cooperatives and to strengthen the entire dairy sector, the principles of sustainable development are to be taken into account. For upgrading dairying to a larger scale, firstly the farmer's dairy capacity and needs should be improved. Farmers need to improve the quality standards of milk, which would require a strategy to motivate them that dairy is a profitable business other than an optional business. The combination of proper provision of animal breeds, nutrition, health care, processing and marketing is key for bringing success in dairy sectors. Awareness programs should be initiated to provide knowledge about animal science and sanitation.

Moreover, the government should direct, coordinate and regulate the activities of institutions and organizations involved in the dairy sector to create and provide a favorable environment for small scale dairy farmers. Special and aseptic transportation utensils should be assessed by the producers for the safer handling and delivery of the products thereby minimizing the risks of food contamination and spoilage. In this way, consumers can get milk from their choice. Incentives for better quality milk could be suggested around the collection centers on a competitive basis.

Further, a transparent pricing system for respective cattle and buffalo milk could be encouraged and adequate pricing should be offered based on the fat and SNF content. Adequate training should be offered to the farmers regarding the advanced technologies and systematic cattle rearing for generating efficient and active manpower in the dairy sector. The income and price elasticity of consumers should also be considered in the long run for a better pricing system. The total mixed ration can be used to feed the animals in order to get higher milk production. This is in line with the findings of the project. The proper provision of animal breeds, nutrition, health care, processing, marketing along with awareness programs is key for bringing success in dairy sectors.

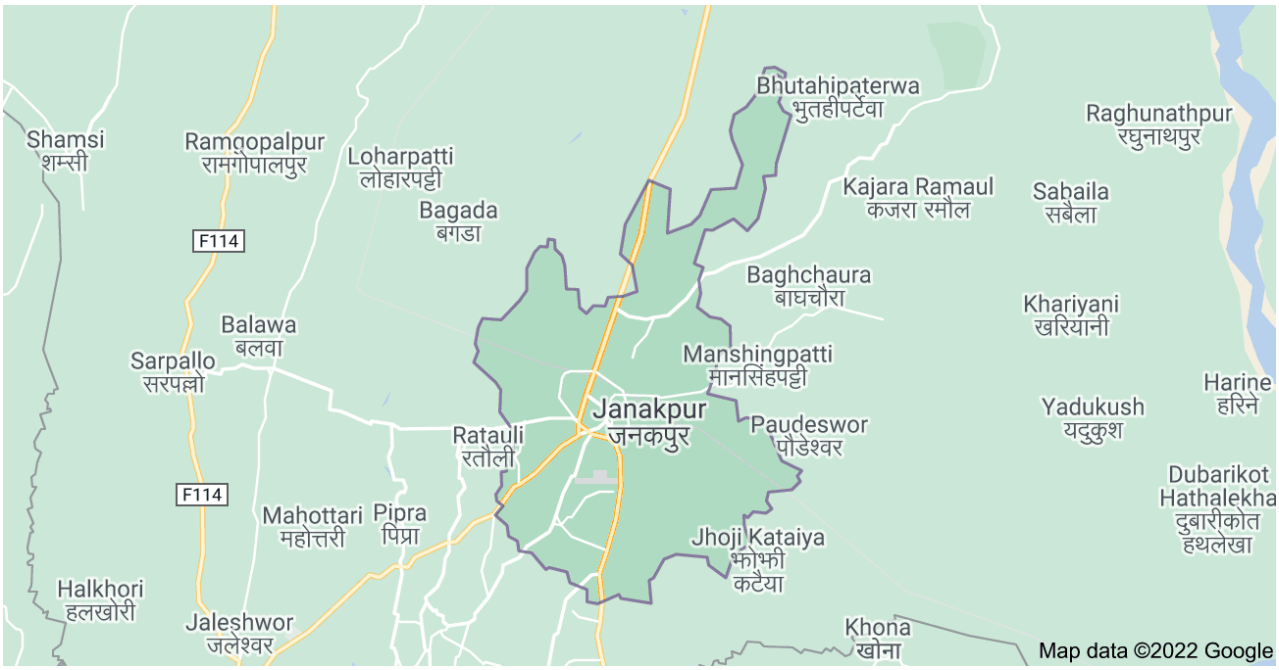
Disclaimer

This project profile is based on preliminary study to facilitate prospective developers to assess possible scope. It is, however, advisable to get a detailed feasibility study prepared before taking a final investment decision.

9

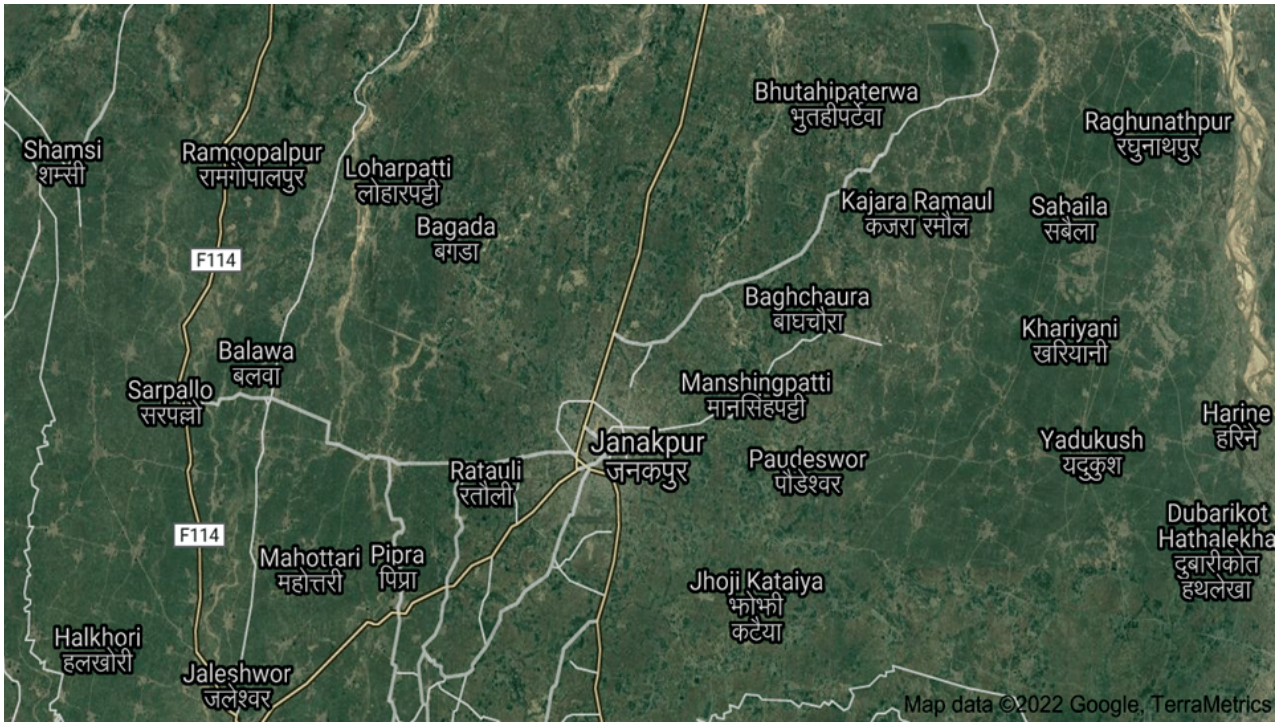
ANNEX

9.1 Map of Janakpur Sub-Metropolitan City



Source: Google map

Figure 4: Satellite map of Janakpur



Source: Google map

9.2 Financial Report

Projected Balance Sheet for Initial 10 years of Operation

Amount in NP R'000'

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	11 years	9 years	10 years	11 years
Sources of Fund	-	-	-	-	-	-	-	-	-	-
Shareholders Fund	-	-	-	-	-	-	-	-	-	-
Share Capital	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797	1,27,797
Reserve and Surplus	(16,485)	(14,567)	(604)	17,391	39,756	64,949	91,721	1,32,655	1,72,715	2,11,370
Loan Fund	-	-	-	-	-	-	-	-	-	-
Term Loan	2,86,245	2,72,797	2,57,660	2,40,625	2,21,451	1,99,870	1,75,581	1,48,244	1,17,475	82,845
Short Term Loan	-	-	-	-	-	-	-	-	-	-
Total	**3,97,557**	**3,86,026**	**3,84,854**	**3,85,813**	**3,89,004**	**3,92,616**	**3,95,100**	**4,08,696**	**4,17,988**	**4,22,013**
Fixed Assets (Net)	3,15,765	2,48,219	1,96,798	1,57,547	1,27,489	1,04,381	86,533	72,672	61,837	53,304
Investment	-	-	-	-	-	-	-	-	-	-
Current Assets	82,157	1,38,184	1,88,443	2,28,665	2,61,926	2,88,659	3,09,004	3,36,474	3,56,614	3,69,185
Sundry Debtors	12,225	11,966	11,686	11,385	11,062	10,716	10,346	11,941	11,436	10,899
Inventory	-	-	-	-	-	-	-	-	-	-
Cash & Bank Balance	69,932	1,26,218	1,76,758	2,17,280	2,50,865	2,77,943	2,98,658	3,24,533	3,45,178	3,58,287
Less: Current Liabilities	366	377	388	400	412	424	437	450	463	477
Net Current Assets	81,791	1,37,807	1,88,055	2,28,265	2,61,515	2,88,235	3,08,567	3,36,024	3,56,150	3,68,708
Total	**3,97,557**	**3,86,026**	**3,84,854**	**3,85,813**	**3,89,004**	**3,92,616**	**3,95,100**	**4,08,696**	**4,17,988**	**4,22,013**

Projected Profit and Loss Statement for Initial 10 years

Amount in NP R'000'

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	11 years	9 years	10 years	11 years
Product Sales	7,51,500	7,66,530	7,81,861	7,97,498	8,13,448	8,29,717	8,46,311	10,35,885	10,56,602	10,77,734
Total Direct Income	**7,51,500**	**7,66,530**	**7,81,861**	**7,97,498**	**8,13,448**	**8,29,717**	**8,46,311**	**10,35,885**	**10,56,602**	**10,77,734**
Less: Cost of Direct Material	6,04,800	6,22,944	6,41,632	6,60,881	6,80,708	7,01,129	7,22,163	8,92,593	9,19,371	9,46,952
Total Indirect Income	**6,04,800**	**6,22,944**	**6,41,632**	**6,60,881**	**6,80,708**	**7,01,129**	**7,22,163**	**8,92,593**	**9,19,371**	**9,46,952**
Gross Profit	1,46,700	1,43,586	1,40,228	1,36,617	1,32,740	1,28,588	1,24,148	1,43,291	1,37,231	1,30,782
Profit Before Overhead and Interest	**1,46,700**	**1,43,586**	**1,40,228**	**1,36,617**	**1,32,740**	**1,28,588**	**1,24,148**	**1,43,291**	**1,37,231**	**1,30,782**
Operating Expenses	-	-	-	-	-	-	-	-	-	-
Depreciation	88,926	67,546	51,421	39,251	30,058	23,108	17,848	13,861	10,835	8,533
Salary Expenses	17,451	17,974	18,513	19,069	19,641	20,230	20,837	24,528	25,264	26,022
Overhead Expenses	12,775	13,158	13,553	13,960	14,378	14,810	15,254	17,956	18,495	19,050
O & M Expenses	8,775	9,039	9,310	9,589	9,877	10,173	10,478	10,793	11,116	11,450
Operating Profit	**18,773**	**35,869**	**47,431**	**54,748**	**58,786**	**60,267**	**59,731**	**76,153**	**71,521**	**65,728**
Interest Expenses	35,259	33,759	32,071	30,172	28,033	25,627	22,918	19,870	16,439	12,577
Profit	(16,485)	2,110	15,360	24,577	30,752	34,640	36,813	56,284	55,083	53,151
Provision for Staff Bonus	-	192	1,396	2,234	2,796	3,149	3,347	5,117	5,008	4,832
Income Tax	-	-	-	4,348	5,591	6,298	6,693	10,233	10,015	9,664
Net profit	**(16,485)**	**1,918**	**13,963**	**17,995**	**22,365**	**25,193**	**26,773**	**40,933**	**40,060**	**38,655**

Projected Cash Flow for Initial 10 years

Amount in NP R'000'

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	11 years	9 years	10 years	11 years
Cash Flow from Operating Activity	-	-	-	-	-	-	-	-	-	-
Net Profit Before Interest and Tax	(16,485)	1,918	13,963	22,342	27,957	31,491	33,466	51,167	50,075	48,319
Add: Depreciation	88,926	67,546	51,421	39,251	30,058	23,108	17,848	13,861	10,835	8,533
Add: Interest	35,259	33,759	32,071	30,172	28,033	25,627	22,918	19,870	16,439	12,577
Operating Cash Flow Before Working Capital Change	1,07,699	1,03,223	97,456	91,765	86,048	80,226	74,232	84,898	77,349	69,429
Increase/Decrease in Current Assets	(12,225)	260	280	301	323	346	370	(1,595)	505	537
Increase/Decrease in Current Liabilities	366	11	11	(2,162)	(610)	(341)	(185)	(1,757)	123	190
Payment of Tax	-	-	-	(2,174)	(4,970)	(5,945)	(6,496)	(8,463)	(10,124)	(9,839)
Net Cash Flow from Operating Activity	**95,840**	**1,03,494**	**97,747**	**87,730**	**80,792**	**74,286**	**67,922**	**73,082**	**67,852**	**60,316**
Cash Flow from Investing Activity	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Purchase of Fixed Assets	(4,04,691)	-	-	-	-	-	-	-	-	-
Increase/Decrease in Investment	-	-	-	-	-	-	-	-	-	-
Less: Payment of Dividend	-	-	-	-	-	-	-	-	-	-
Net Cash Flow from Investing Activity	**(4,04,691)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	11 years	9 years	10 years	11 years
Cash Flow from Financing Activity	-	-	-	-	-	-	-	-	-	-
Increase in Share Capital	1,27,797	-	-	-	-	-	-	-	-	-
Increase in Borrowing Fund (Long Term Loan)	2,98,193	-	-	-	-	-	-	-	-	-
Increase in Short Term Loan	-	-	-	-	-	-	-	-	-	-
Less: Repayment of Long Term Loan	(11,949)	(13,448)	(15,136)	(17,036)	(19,174)	(21,580)	(24,289)	(27,337)	(30,769)	(34,630)
Less: Payment of Interest on Short Term Loan	-	-	-	-	-	-	-	-	-	-
Less: Payment of Interest on Long Term Loan	(35,259)	(33,759)	(32,071)	(30,172)	(28,033)	(25,627)	(22,918)	(19,870)	(16,439)	(12,577)
Net Cash Flow from Financing Activity	**3,78,783**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**	**(47,207)**
Increase/Decrease in Cash and Cash Equivalent	69,932	56,286	50,540	40,522	33,585	27,079	20,714	25,875	20,645	13,109
Cash & Bank Balance at the Beginning of the Period	-	69,932	1,26,218	1,76,758	2,17,280	2,50,865	2,77,943	2,98,658	3,24,533	3,45,178
Cash Balance at the End of the Period	**69,932**	**1,26,218**	**1,76,758**	**2,17,280**	**2,50,865**	**2,77,943**	**2,98,658**	**3,24,533**	**3,45,178**	**3,58,287**

The cash balance is seen as negative in initial years, the amount has to be injected by the equity holders
The equity shareholders need to inject additional cash for serving Working capital in initial years as assumed in the report Earlier

PRE-FEASIBILITY STUDY OF

POKHARIYA LAKE BEAUTIFICATION PROJECT WITH RESORT FACILITY AND PICNIC SPOT FACILITY

EXECUTIVE SUMMARY

Entertainment is a component of several tourism settings and can be a strong incentive to visit particular places[1]. The pre dominant and most popular mode of travel is still heavily entertainment featured[2]. One of the vital components of a tourism destination's offering is entertainment activities and offerings[3]. It's also one of the most important variables in defining a destination's attractiveness and appeal, as well as contributing to tourist pleasure. Recently, entertainment tourism has grown in popularity, and there are only a few recreational centers and amusement parks in Nepal to keep tourists entertained. The Pokhariya Lake Beautification Project with Resort and Picnic Spot is a project that has several attractions and amenities created around the lake (taal) that may provide guests with a unique and one-stop travel experience.

By establishing a single platform at the next Investment Summit, the Provincial 2 Planning Commission (PPC) hopes to attract investment in a variety of initiatives, including tourism projects. Pokhariya lake beautification project with resort facility and picnic spot facility is one of the primary sites designated for investment. The research on the Pokhariya Lake Beautification Project with Resort Facility and Picnic Spot Facility is primarily intended to document the project's technical and financial feasibility. Both primary and secondary data gathering approaches were used in the study. Primary data was acquired from field-based research, which included a field visit and stakeholder consultations and group discussions. Secondary data was gathered from a variety of sources, including published papers, journal articles, and other verified and trustworthy online sources.

This project appears to be best suited for a Public Private Partnership (PPP) approach, in which GoN will assist in obtaining the necessary land for the project. The developer will then build all of the infrastructure required for the project's smooth execution and will run

1 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

2 Taylor & Francis online, 2018, Entertainment Tourism, https://www.tandfonline.com/doi/abs/10.1080/02614367.2018.1454976? needAccess=true&journalCode=rlst20

3 Entertainment planet, 2007, The tourism and entertainment industry, http://entplanet.blogspot.com/2007/09/tourism-entertainment-industries.html

it for 30 years before handing it over to GoN in good working order.

The research examined the project's technical and financial elements and determined that it is technically and financially feasible, with a total anticipated cost of roughly NPR 1,331,208,892.00 (including interest component throughout construction period). The project's internal rate of return (IRR) is assessed to be 17.05 %, while the project's equity IRR is calculated to be 21.98%. The project's IRR and equity IRR prove the project's viability.

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SALIENT FEATURES OF THE PROJECT

Table 1: Salient features of the project

General information of the project		
1	Name of Project	Pokhariya Lake Beautification Project
2	Project Location	Province: Madhesh District: Dhanusha Municipality: Mithila Ward No: 7
3	Project Implementation Modality	☐ Public ■ PPP ☐ Private ☐ Others / Please Specify
4	Category of Project	■ Short term: 5 years and below ☐ Mid term: 6 – 10 years ☐ Long term: 11 – 15 years
5	Sector as per 1st 5 years Provincial Plan	Economic
6	Type of Project (Sub Sector)	Tourism
7	Implementing/Facilitating Agencies	Private sector, facilitated by the Ministry of Industry, Tourism, Forest and Environment, Madhesh Province.
8	Project Management (Implementation Mechanism)	Private sector will manage the project with support from the Federal, Provincial Government and the local stakeholders.

Project specific information

1	Salient Features of Project	● Enhance the beauty of Pokhariya taal by creating a beautiful site location with garden, park, sitting area and aesthetic lights. ● Building a resort facility in the vicinity of the lake ● Building an eco-friendly picnic spot with a well-developed waste management system.
2	Affected Population, Land Requirement, Acquisition & Resettlement, Materials and Ease of Access	
	Affected Population	Small Entrepreneurs having small businesses in the location.
	Land Requirement	Lake and surrounding land
	Acquisition & Resettlement	No resettlement issues
	Materials and Ease of Access	The project site is easily accessible via an all weather road. Construction materials are easily available in the region.
	Environmental and Social Management Plan (ESMP)	ESMP will be prepared to set general principles, rules, guidelines and procedures to assess the environmental and social risks and impacts. EIA needs to be conducted for environmental approvals.
3	Project Document Available	■ None (New/Rehabilitation) ☐ Concept Note/Desk Study ☐ Feasibility Study ☐ Detailed Engineering/DPR
4	Estimated Cost to Complete the Project	NPR 1,331,208,892.00
5	Estimated Time to Complete the Project	Pre- Construction Period: 1 year Financial Closure: 1 year Construction Period: 4 years Concession Period: 30 years
6	Project Financing Options	Majority of the investment will be done by the private sector, the local Government will contribute land while the provincial government can provide some grants on beautifying the lake and its surrounding areas in consultation with the Local Government.
7	Project Technology/Components	● State-of-the-art eco-friendly resort that reflects the local cultural and natural heritage. ● Boating facilities and aqua tourism. ● Earthquake resistant physical infrastructure. ● Picnic spots. ● Well managed waste management system.
8	Contribution to SDG and Green Growth	The project will prioritize the clean water and green surroundings. This project will also contribute to creating employment opportunities for the local people living in the surrounding area. The project will help to attain the following SDGS goals. Goal No. 6 Clean water and sanitation Goal No. 8 Decent work and economic growth
9	Project Capacity (at 100%)	80 Rooms Luxury resort with 5 picnic spots.
10	Project IRR	17.05 %
11	Benefit Cost Ratio	1.34

12	Private Sector/Consumer Committee/Beneficiary Roles	● Plan, design, finance, engineer, construct, and develop the envisioned facilities and other components of the project. ● Operate, maintain and manage the project facility throughout the concession period. ● Development and execution of marketing and advertising strategies. ● Collection of revenues from the project during the concession period. ● Handover to the government after the concession period.
13	Government's Role	● Land acquisition, facilitation and project security. ● Facilitating various legal approvals/permits for the smooth operations of the project. ● Setting up of institutional framework for review & monitoring.

Other project information

1	Target Beneficiaries	Local population, domestic and international tourists
2	Market of Project's Service/Product	Local tourist, Pilgrim visiting Janakpurdhan and dhanusha, Walk in customer in the east-west highway
3	Key Strength & Opportunity of Project Development & Operation	• Easy road access. • The place's brand is already established in the local community so the branding part would be more easy. • Near to terai where the population is dense . • Huge flow of traffic in east-west highway and also pilgrim places nearby. • Near to the world most emerging economy; India. • Favourable climate as compared to the nearby region.
4	Key risk and Issues of Project Development & Operation	• Local people living in the area can pose local issues. • Dry river bed on the way to pokhariya can pose challenge for access. • Hotels and resorts are growing rapidly in Bardibas-Dhalkebar roadways that can create huge competition. • Beautification and maintenance of the forest area might be costly. • A large flow of tourists may affect the fragile natural environment and local ecosystems. • Lack of skilled manpower can pose a great challenge in the operation of the facility.

1

BACKGROUND

1.1 Introduction

Nepal has huge natural and scenic splendor, as well as all-important attractions found in just a few nations throughout the globe. Natural, aesthetic, and recreational features, as well as historical, cultural, and religious qualities, are among them. These characteristics bode well for Nepal's tourism sector, and tourism projects should be seen as supporting infrastructure for attracting local and international visitors.

Entertainment is a component of several tourism settings and can be a strong incentive to visit particular places[4]. The appeal of entertainment tourism has recently increased. The tourism industry relies heavily on the entertainment industry. Leisure tourists' recreational activities are an important part of the tourism experience. The pre dominant and most popular mode of travel is still heavily entertainment featured[5] . Taylor and Francis's research 'Entertainment Tourism' is crucial since it enables tourism marketers to gain new insights and a better knowledge of travelers' experiences and satisfaction. One of the vital components of a tourism destination's offering is entertainment activities and offerings[6]. It's also one of the most important variables in defining a destination's attractiveness and appeal, as well as contributing to tourist pleasure. Entertainment will become a more essential source of attracting tourists in the short term, as well as maintaining them for a longer length of time.

In 2017, leisure travel expenditure (including inbound and domestic) accounted for 85.4% of direct Travel & Tourism GDP (NPR 144.1 billion), compared to 14.6% for business travel spending (NPR 24.6bn)[7]. Leisure travel spending is predicted to increase by 4.2% pa to NPR 226.5 billion in 2028.

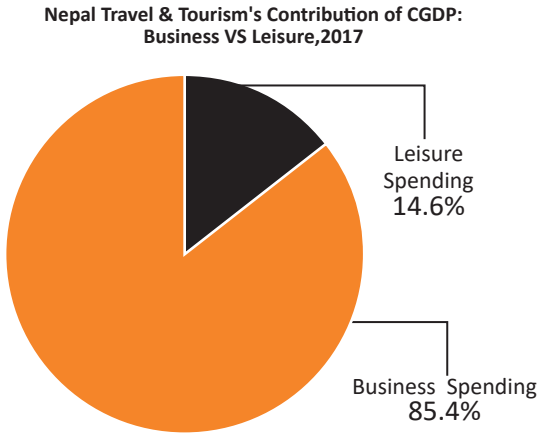
4 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

5 Taylor & Francis online, 2018, Entertainment Tourism, https://www.tandfonline.com/doi/abs/10.1080/02614367.2018.1454976? needAccess=true&journalCode=rlst20

6 Entertainment planet, 2007, The tourism and entertainment industry, http://entplanet.blogspot.com/2007/09/tourism-entertainment-industries.html

7 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

Fig 1: Leisure vs Business tourism spending



Source: World Travel & Tourism Council[8]

In the year 2019, approximately 1.2 million visitors visited Nepal. In the years 2016, 2017, 2018 and 2019, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, 25% and 2.05%[9], respectively. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists. In addition, domestic tourism is quickly expanding. Domestic tourists, in particular, from major towns like Kathmandu, Biratnagar, Bhairahawa, and Pokhara, among others, are always looking for new and exciting travel and vacation experiences.

Pokhariya in Parsa district of Madhesh Province is well suited to being promoted as a top leisure tourist destination due to its pleasant climate and warm hospitality. Also known as Mithila Sagar to locals, Pokhariya offers a tranquil and secure environment, as well as stunning and magnificent natural beauty and a unique combination of cultures. Given its accessibility and close proximity to the East-West Highway, Pokhariya has the potential to grow into a regional center for leisure tourism for both domestic and foreign visitors visiting Nepal's eastern and south-eastern borders.

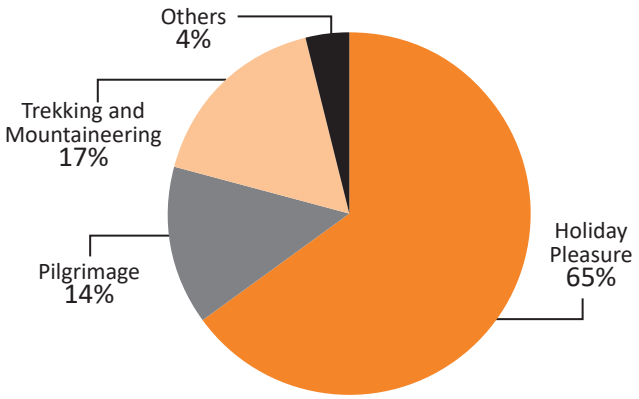
1.2 Entertainment Tourism in Nepal

Because of its snow-capped mountains, vast flora and wildlife, interesting trekking routes, and rich cultural and religious variety, Nepal has a lot of potential to become a top tourist destination. The tourism and entertainment industry has emerged as one of Nepal's most important drivers of growth in the services sector. Given the country's rich cultural and historical history, diversity in ecosystem, terrains, and natural beauty spots, tourism in Nepal has a lot of promise. Popular tourist activities in Nepal include pilgrimages/religious tours, climbing and adventure treks, luxury vacations, cultural visits, business and leisure activities.

In recent years, the number of tourists who visit Nepal has steadily increased. Since 2010, the number of tourists has climbed at a pace of 10.85% every year[10]. The average duration of stay per guest in 2019 has remained stable at around 12.7 days. In the years 2016, 2017, and 2018, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, and 25%[11], respectively. However, owing to the coronavirus epidemic, the growth rate in 2019 was 2.05%. In the year 2020, the tourism sector in Nepal was severely impacted by the epidemic. This wasn't the industry's first issue at that level; in 2015, the sector was severely impacted by a devastating earthquake and trade difficulties along the southern border. Because of the severity of the coronavirus and its health consequences, the Nepalese government had to abandon "Visit Nepal 2020," an ambitious campaign aimed at attracting two million tourists to the nation. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists. Although most visitors arrive by flight, a significant number also arrive by land. Kodari, on the Chinese border, and Bhairahawa, on the Indian border, are the two main entrance sites. Holidays/pleasure, pilgrimage, hiking and climbing, and other activities have been recognized as the main reasons for visitors visiting Nepal. The bulk of tourists come to Nepal for vacation purposes, as seen in the graph below:

8 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf
9 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
10 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
11 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

Fig 2: Purpose of visit 2019



Source: Nepal Tourism Statistics 2017[12]

Five nations account for over 53% of total tourist arrivals. India (21.2%), China (14.2%), the United States (7.8%), the United Kingdom (5.1%), and Sri Lanka (4.7%) are the nations with the highest proportion of visitors. Tourist arrivals follow a similar seasonal pattern as the previous year. The month of October had the most visitors, followed by November. In the year 2019, the age group 31-45 (32%) had the largest percentage of arrivals.

In the year 2019, the age group 31-45 (32%) had the largest percentage of arrivals. International passengers traveled by air 83% of the time and by land 17% of the time.

Tourism has been one of the most severely impacted sectors because of the pandemic. While even amid the strictest prohibitory orders other sectors; especially the one dealing in essential supplies/services were allowed to operate partially or at a reduced capacity, enterprises within the tourism sector faced debilitating consequences as all international arrivals and flights were suspended. The Organization for Economic Co-operation and Development (OECD) predicts that international tourism has declined by 60 percent in 2020. The tourism sector in Nepal faced a loss of NRs. 34 billion by July 2020 as per the Ministry of Culture Tourism and Civil Aviation (MoCTCA) states that the loss by the end of August 2020 increased to NRs. 48 billion. Based on average tourism revenue of 2019, an NTB study estimates monthly tourism loss of Rs 10 billion in the wake of the pandemic. However, the tourism sector in Nepal is bouncing back with almost 25% of Nepal's population vaccinated and over two-thirds of Nepal's population developing antibodies against the Covid-19 virus. NRB in its latest monetary policy 2021/22 has classified tourism industry as highly affected sectors, hence, has provided relief packages and special provisions for the sector such as availability of working capital loans, concessional loans, reduction in interest rates, extension of loan repayment period and extension of tax payment period. NRB has also instructed commercial banks to extend at least 15% of total loans to MSMEs and at least 7% of total loans to highly affected sectors like tourism. The government since the Covid-19 pandemic has put extra emphasis on growing and promoting internal tourism, especially targeting civil servants. The government has also announced free visas for foreign visitors and no quarantine required for fully vaccinated visitors. Nepal government has also been active in marketing and promoting positive news of Covid-19 reduction and that Nepal is safe to travel. This Sep-Oct tourist season saw a major bounce back in internal tourism as trekking routes, hotels and resorts in major tourist destinations of Nepal were operating at almost 100% capacity which has not happened since the Covid-19 pandemic started.

1.3 Domestic Tourism in Nepal

In 2018, tourism related activities contributed 7.9% to Nepal's GDP and accumulated a share of 25% in Nepal's total exports. According to the World Travel and Tourism Council's study on Travel and Tourism Economic Impact 2018 Nepal, domestic travel accounted for 57.0% of total expenditure produced through direct travel and tourism GDP in 2017, while foreign tourism accounted for 43.0%[13] . This goes to show that the domestic tourist base is a reliable consumer segment of tourism related products and services and provides significant stability to the entire sector. Domestic travel spending reached NPR 100.4 billion in 2018, and will increase by 3.4% each year to NPR 140.7 billion in 2028[14] .

12 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

13 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

14 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

1.4 Rationale of the Project

Apart from the economic benefits, there will be numerous other indirect benefits emanating from the proposed project, which are enumerated as under.

- Multiplier effect to other sectors of economy.
- Increased tourist inflow.
- Technological advancement.
- Foreign currency earning.
- Work culture improvement.
- Stemming outflow of workforce.
- Domestic technical skill enhancement.
- Enhanced industry-public relationship with implementation of CSR activities.

1.5 Objectives

By establishing a single platform at the next Investment Summit, the Provincial 2 Planning Commission (PPC) hopes to attract investment in a variety of initiatives, including tourism projects. As a result, PPC has put together a prospective Pokhariya Lake Beautification Project with Resort and Picnic Spot Facilities, which includes touristic facilities and attractions. Finally, it aspires to present the proposal at the Investment Summit (2022) in order to attract investors. As a result, the following are some of the report's main goals:

1. To determine the demand for, as well as the feasibility of, a Pokhariya Lake Beautification Project with Resort and Picnic Spot Facilities.
2. To investigate the project's technical and financial feasibility at the chosen site.

1.6 Scope of Work

The purpose of the pre-feasibility study is to represent the current situation of Pokhariya Lake at the proposed site, as well as to record the project's technical and financial feasibility. Finally, the research will aid in gaining a general understanding of investment opportunities in this particular sector and location. The following are some of the study's primary scopes:

1. To gather secondary data and other necessary information for the project's development.
2. Analyze the acquired data for many elements such as technical, economical, social, and environmental concerns.
3. Develop the most appropriate investment model, such as private, Public Private Partnership, or blended finance.
4. Also, depending on the findings, provide recommendations.

1.7 Approach & Methodology

A professional team from Invest and Infra Pvt. Ltd. produced this pre-feasibility study. After a thorough examination of market demand and business development prospects, the project's components were determined. For the purposes of determining project features/components, input collected during consultations with province-level ministries and associated stakeholders was also taken into account. Secondary and primary sources were used to obtain the necessary data, information, and facts to meet the study's goals.

Primary data was acquired by telephone and e-mail conversations, as well as a field-based research, which included a field visit. Producers, marketers, entrepreneurs, and government officials from Madhesh Province (Provincial Ministries, Rural/Municipalities, etc.) participated in stakeholder consultations and group discussions.

Secondary data was gathered from numerous publications issued by Nepalese government agencies, other similar nature projects in Nepal, and academic research papers published by various organizations and experts. An appropriate investment plan was recommended based on the conclusions of a technological, social, and environmental investigation. In addition, a thorough financial study was carried out to discover some of the key financial metrics that assure the project's financial feasibility.

2

PROJECT DETAILS

2.1 Project Background and Description

The lake is located at Mithila Municipality-7, Dhanusha District. An attractive tourist lake has been constructed in this place located in Churiya hill. There are also benches around the lake and there is a dense forest all around. To the north are beautiful Churiya hills and Pokhariya lake in the lap of the mountains. Pokhariya Lake is in Dhanusa's Mithila Municipality-7. This lake was built in the middle of a densely forested area. Churiya Hill, to the north, provides a stunning sight. It is built 30.6 kilometers towards the north of Dhalkebar Chowk (around 57 minutes by road) via East-West Highway. The Uttareshwar Mahadev Temple, which is located in the center of the lake, is accessible by a paved road built in the middle of the lake. Water from another river near the forest has been flowing into the lake 24 hours a day. Even though Pokhariya lake has been reconstructed, due to improper management it is still surrounded by weeds and mud all around, and the existing infrastructure is dilapidated. Consequently, this requires reconstruction in order to revive its tourism charm.

The Lake is spread over an area of 7 bighas on the border of Kemlipur and Pokhariya Damar Community Forests. The Uttareswar Mahadev Temple, established in the middle of the Lake. There is a paved road around the lake and flowers are planted all around.Tourists are struck by the coquelicot's cooing sound coming from the forest. The peacock, sparrow, myna, and rhinoceros in the forest near the lake have caught the attention of tourists.

Pokhariya is located 28 kilometers north of Janakpurdham without sanctifying Mithila. The road from Dhalkebar to Pokhariya has been widened. Government has started to develop physical infrastructure near the pond to attract tourists like a modern view tower, picnic spot, garden, children's park, meditation room, swimming pools and zoo. It is estimated that NPR 110 million will be spent for the construction of physical infrastructure for the tourists visiting the lake[15]. Budget of NPR 40 million for the fiscal year has been allocated for construction of the same[16]. Contract has been signed after inviting tenders for construction of physical infrastructure.

15 Notes Nepal. (2021). Mithila Sagar: Ready to welcome tourists in Dhanusha. Retrieved from https://www.notesnepal.com/archives/6031
16 Notes Nepal. (2021). Mithila Sagar: Ready to welcome tourists in Dhanusha. Retrieved from https://www.notesnepal.com/archives/6031

Pokhariya lake has been constructed in chure to connect with janakpur which is the temporary capital of Madhesh Province. Being a gateway to the Jankapur, Pokhariya lake aims to increase tourism to the Jankpurdham as well.

Pokhariya lake is basically a watershed with developed facilities and structures, in its surroundings making it a famous tourist destination. Pokhariya lake has been able to attract a lot of domestic tourists.

2.2 Project Features

Projected Redevelopment plan:

- State of the art eco friendly resort that reflects the local cultural and natural heritage.
- Boating facilities and aqua tourism.
- Earthquake resistant physical infrastructure.
- Picnic spot.
- Well managed waste management system.

2.3 Overview of the Area

Mithila is a municipality in Nepal's south-eastern Madhesh Province's Danusha District. Three VDCs were merged to form the municipality. The population of the three VDCs combined according to the 2011 Nepal census, results in a total population of 31,575 people[17].

Dhanusha District is one of Nepal's seventy-seven districts and is located in Madhesh Province. It is located in the Outer Terai. The district, which has its headquarters at Janakpurdham, has an area of 1,180 km2 (460 sq mi) and had a population of 754,777 people in 2011[18]. Maithili is the most widely spoken language in Dhanusha.

Dhanusa's tourist attractions include temples and ponds, the most of which are located in Janakpur. These include the Janaki Temple in Dhanusadham, where a piece of Shiva's bow that Lord Rama shattered is supposed to have fallen, according to Hindu legend. A tourist attraction in the vicinity is the Mithila Women's Art Center.

Dhanusha district has an airport and Nepal's only railway system, which connects Janakpurdham to Jayanagar, an Indian town. It has numerous good hotels, including the starred Hotel Rama, Hotel Sita Palace, Hotel Welcome, Sitasaran Hotel, and Happy hotel. The Janakpur Zonal Hospital, as well as other private hospitals, are located as fig 3.

Fig 3: Location map of Pokhariya Lake (in Dhalkebar)

Source: Google Map

17 Central Bureau of Statistics. (2011) Central Bureau of Statistics of Nepal: National Population and Housing Census 2011.
18 Central Bureau of Statistics. (2011) Central Bureau of Statistics of Nepal: National Population and Housing Census 2011.

Madhesh Province (also known as Madhesh or Mithila) is located in Nepal's southeastern area. It is the smallest province in terms of land area, but the second biggest in terms of people. It is bordered on the east by Province No. 1, on the north by Bagmati Province, and on the south by India. It covers 9,661 square kilometers, or around 6.5 percent of the country's total area. As of 2019, the province has a total population of 6,158,649 people, making it Nepal's most densely populated province[19]. From Saptari District in the east to Parsa District in the west, the province is divided into eight districts.

Despite the fact that Madhesh Province has no severe terrains, the region's transportation infrastructure is lacking owing to a lack of investment and negligence. In Nepal, however, Madhesh Province is the only province possessing a passenger train line. The Mahendra Highway, which runs longitudinally across the province is the province's main connecting connection with Janakpurdham(27.7 kms), Rajbiraj (15.4 kms), Birgunj(23.4 kms) & Gaur(44.6 kms) south of Mahendra Highway. Although the Tribhuvan Highway does not cover as much ground as the Mahendra Highway, it is the most essential route since it links the province to Kathmandu and India. Birgunj, the starting point of the Tribhuvan Highway, is the province's and country's most significant international gateway and trade route, and is hence known as "The Gateway of Nepal." Birgunj custom point is the largest in terms of revenue generation.

In Madhesh Province, a few railway projects are in the works. Nepal Railways is responsible for all of these projects. The Nepalese government has suggested Janakpur as the main station for a 1024-kilometer east-west metro railway project that would eventually be extended to India and China, allowing Nepalese railways to link with Indian and Chinese railways for economic and tourism purposes. Madhesh Province is served by three domestic airports, the busiest in the country. Rajbiraj Airport, Janakpur Airport, and Simara Airport are all located in Rajbiraj. Meanwhile, at Nijgadh, an international airport, Nijgadh International Airport, is being built.

2.4 Developing a Business Case

Product Mix

The product mix for this project consists of following components:

Component 1 - State of the Art Eco Friendly Resort that Reflects the Local Cultural and Natural Heritage

The resort has a dual value in terms of socioeconomics and sustainability. It practically combines sustainability with economic and recreational benefits, and improves the living conditions of local communities along the way by reflecting their culture, values. The resort will have 80 rooms, and will cater to the local as well as international tourists.

Component 2 - Boating Facilities and Aqua Tourism

Pokhariya is a beautiful lake with an area of 0.04740800 km2. Surrounded by the forest, the lake is beautiful with boating and fishing as a primary activity. Pokhariya has tremendous potential for a variety of fish farming. It can attract tourists by engaging them in fish angling and fish watching activities.

Component 3 - Earthquake Resistant Physical Infrastructure

The earthquake resistant physical infrastructure will ensure that the visitors to the area will feel safe even under the risks posed by natural calamities like earthquakes. This can serve as an additional point of value for the place.

Component 4 - Picnic Spot

Pokhariya is situated in Dhalkerbar, Janakpur. As more domestic tourists are searching for places of recreation, there is a demand for picnic spots in new sites. Pokhariya can be a site of picnic for both local people from Janakpur and nearby areas. Ticketing systems to the site can further bring monetary returns and enable the prospect of developing market mechanism in the area.

19 UNFPA. (2020). Demographic Profile of Madhesh Province. Retrieved from https://nepal.unfpa.org/en/publications/demographic-profile-Madhesh Province

Component 5 - Well Managed Waste Management System

With an increase in flow of tourists, pollution is likely to increase. Tourism-related waste, including paper and plastic, may pollute the water if not managed. In conjunction with Mithila Municipality, an effective system of waste management will be established as part of the project.

2.5 Market Assessment

In its annual "Best in Travel List," Lonely Planet, a popular travel guide, named Nepal as the best value destination for 2017. In recent years, the number of tourists who visit Nepal has steadily increased. Since 2010, the number of tourists has climbed at a pace of 10.85% every year[20] The average duration of stay per guest in 2019 has remained stable at around 12.7 days. In the year 2019, approximately 1.2 million visitors visited Nepal. In the years 2016, 2017, and 2018, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, and 25%[21], respectively. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists.

65% of the visitors registered come to Nepal for vacation or enjoyment. In addition, domestic tourism is quickly expanding. Internal visitors from major towns like Kathmandu, Biratnagar, Bhairahawa, Pokhara, and others, in particular, are continuously seeking new and exciting travel and vacation experiences, thanks in part to rising disposable income. In addition, parents want their children to have fresh learning experiences. The same surge in demand may be noticed in Indian cities along Nepal's eastern and southern borders.

Travel bugs seem to have struck Nepalese in the recent past. A large number of Nepalese are going with their friends and family to various regions of the nation as well as other countries. Apart from Pokhara, domestic visitors go to places like Sauraha (which is outside the CNP but popular with locals), Lumbini, Muktinath, Rara, Mankamana, Bandipur, Pathivara, Swargadwari, Ilam, and others. Domestic tourism has been encouraged by adventure tourist destinations (such as bungee jumping, rafting, trekking, hiking, jungle safaris, and so on), natural beauty sightseeing, and historic/religious monuments.

Domestic travelers are rising in comparison to foreign tourists, according to tourism data. Domestic travelers have proven their worth in recent years, particularly in the aftermath of disastrous earthquakes and pandemics. The most important element that has boosted domestic tourism is social media. Because of Nepal's large user base, social media has proven to be a very efficient medium for promoting destinations and properties. When a post goes viral on social media, it immediately becomes a trending topic, and everyone wants to get there. This has made it critical for us to be social media knowledgeable in order to break into the local market.

Table 2: Population of Dhanusha and neighboring districts[22]

District	Population
Dhanusha	832,772
Mahottari	700,871
Siraha	696,657
Udaypur	345,889
Sindhuli	307,494
Madhubani, Bihar	4,487,379[23]

Pokhariya lake has the potential to attract both locals and visitors from India. Domestic visitors primarily come from Dhanusha and nearby districts such as Mahottari, Siraha, Udaypur, and Sinduli. According to the Nepalese economic report for 2019, India accounted for 21.2% of all tourist arrivals in Nepal[24]. In 2019, Lumbini was visited by 1,779,086 travellers out of them 78.76% were

20 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
21 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
22 UNFPA. (2020). Demographic Profile of Madhesh Province. Retrieved from https://nepal.unfpa.org/en/publications/demographic-profile-Madhesh Province
23 Government of Bihar. (2021). Census 2011. Available retrieved https://madhubani.nic.in/census/
24 Ministry of Finance. (2019). Economic Survey. Retrieved from,https://www.mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf

Nepalese while 11.51% Indians and 9.73 % from other countries. According to a data provided by the Ministry of Culture, Tourism, and Civil Aviation, there were 2048 Indian visitors to Lumbini in 2019[25]. We may predict that roughly 150,000 visitors are likely to visit the Janaki Temple using the aforementioned statistics as a proxy estimate, with a 50% ceiling for drawing Indian travelers from adjacent Bihar. The fundamental assumption supporting the expected visitor arrival at the Janaki Temple is based on Janakpurdham's cultural, historical, and religious significance for Hindus living across the Indo-gangetic plain. In addition, there is a railway link between Dhanusha and Jainagar districts in Bihar, India, which provides for convenient cross-border travel. Many Indian pilgrims who visited the Janaki shrine are expected to visit Pokhariya lake as well.

There are only a few amusement parks and tourist attractions that can provide a one-stop leisure experience for travelers. Almost majority of these are in Kathmandu or the surrounding areas. They are unable to meet the needs of the rapidly rising populations in eastern and southern cities. Furthermore, the absence of such amenities in Madhesh Province has resulted in the province missing out on the opportunity to attract Indian visitors from nearby cities and towns.

2.6 SWOT Analysis

SWOT analysis allows for the discovery of elements that characterize a company or organization in the context of a certain goal, as well as the classification of those characteristics into four areas. As seen in the table, two of them are positive, while the other two are negative.

2.7 Examination and Evaluation of Alternatives

Pokhariya lake is a watershed that has been transformed into a tourist destination with additional amenities and activities. However, Pokhariya lake project is not about the facilities for the visitors but also about the natural beauty. There are relatively few sites that can offer guests both enticing facilities and a naturally tranquil and beautiful atmosphere.

2.8 Relevant case studies

SWOT Analysis for Pokhariya Lake Beautification Project with Resort and Picnic Spot Facility

Strength	Weakness	Opportunities	Threats
- Pokhariya is part of Mithila Municipality, which is close to the Janakpur sub-metropolitan. It may appeal to both locals and visitors from India. - There is easy access to the road on the east-west highway, where Pokhariya is located. - Pokhariya's brand has already been established in the local community. As a result, branding would be easy.	- Inadequate infrastructure, such as airports, for providing high-quality services. - A scarcity of qualified personnel and hospitality professionals. - Inadequate budget allocation by the responsible authorities.	- The location of Pokhariya is close to India, the world's most developing economy. This initiative will help the region's commercial and economic growth. - In addition to strong earnings, foreign countries have favorable exchange rates, so there is a potential of earning foreign currency. - Promote Nepal as a desirable tourist destination	- Local residents may be the source of the problem. - In Bardibas, hotels and resorts are fast expanding, and dhalkebar highways might cause a lot of rivalry. - The lake's upkeep and beautification might be pricey. - A large influx of visitors may have an adverse impact on the fragile natural environment and local ecosystem.

25 Ministry of Culture, Tourism and Civil Aviation.Nepal Tourism Statistics.(2019).Retrieved from,https://www.tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

Case Study 1

Project Name: Mayem Lake Project

Developer: Goa Tourism Development Committee
Location: Bicholim Taluka, North Goa, India

The Mayem Lake is Goa's most popular lake, set in the lovely surroundings of a tranquil Goan village. It is around 35 kilometers from Panaji. It is a famous picnic place as well as a popular tourist attraction. Even the route to the lake is scenic, taking you past thickets of cashew trees, areca nut trees, and pineapple farms on a twisting Goan road. With the addition of boating amenities to the lake, the lake's reputation grew over time. The GTDC has constructed cottages in the region for the aim of providing accommodation.

The area surrounding the lake is mountainous, with woods and wild cashews covering the hillsides. Vendors offer souvenirs and refreshments around the lake, including coconuts and coconut water. Vendors selling Goan handicrafts and beverages, including excellent coconut water, line the roadway.

The calm waters of Mayem Lake are perfect for boating, and the Mayem Lake Resort, administered by the Goa Tourism Development Corporation, provides affordable lodging in dorms and self-contained cottages. The resort aims to give guests reasonably priced, pleasant lodging as well as a variety of additional amenities and services. Birdwatchers will love the lake because it is a fantastic place to see migrating birds in Goa. The place's main tourist attractions are the scenic surroundings and paddle boating. This is Goa's most well-known lake, as well as one of the most popular tourist locations on practically all scheduled sight-seeing trips.

White water rafting facilities have been constructed on the Mhadei River for adventure sport fans to obtain their adrenaline rush. The journey begins with a gathering point at Valpoi, a few kilometers south of Mayem. If you're searching for a little adventure, this lake also provides a great option for Bungee Jumping. In 2016, the Goa Tourism Development Corporation began the process of beautifying Mayem Lake. The cost of the facelift was projected to be around INR 9 crores[26].
Facilities at Mayem Lake:

- GTDC-Mayem Lake View Resort
- Children's park
- Boating facilities
- White water rafting
- Bungee jumping
- Bird watching
- Provisions for parking
- Greenery development
- Modern restaurant
- Theater for conducting cultural programmes
- Art galleries for artists and artisans
- Stalls for eatables

Case Study 2

Project Type: Six Flags Darien Lake
Location: New York, United States

Until 1954, Darien Lake was just excavated and filled. It was just a popular swimming destination for many years. In 1964 164 acre of land bordering the lake was acquired by investors and a 23-site campground and picnic was opened. More attractions were added in the park including a set of water slides called Rainbow Mountain & amusement park which was named as Darien Lake fun country. In 1983 after 50% of shares was sold to funtime incorporation, another major improvement was added in the park. Entertainments were added to the park such as lakeside Amphitheater, concert stage, themed kids area. In 1995 park was bought by six flags and added many more attractions such as a sky coaster, miniature golf course, food stand etc.

At present, it is home to one of the largest Ferris Wheels in the world. It was voted one the best places to visit by roller coaster enthusiasts. The park has five unique adult roller coaster rides which is one of the largest selections of any local amusement park. It includes rides such as the Viper, Boomerang, Mind Eraser, Predator and Superman. The park also has three very fun water rides. The atmosphere at the Six Flags Darien Lake is loved by the visitors and seen to be very relaxed and enjoyable. With over 100 rides, shows and attractions, including five world-class coasters, a giant water park, the Laser blast laser light/fireworks show, and a Performing Arts Center showcasing top music acts, the Six Flags Darien lake offers a complete adventure to its visitors[27].

26 ItsGOA. 2016. Mayhem Lake Beautification Project: Tourist Destination. Retrieved from https://itsgoa.com/mayem-lake-goa/
27 Six Flags Darien Lake, 2010, Welcome to Six Flag Darien Lake

3

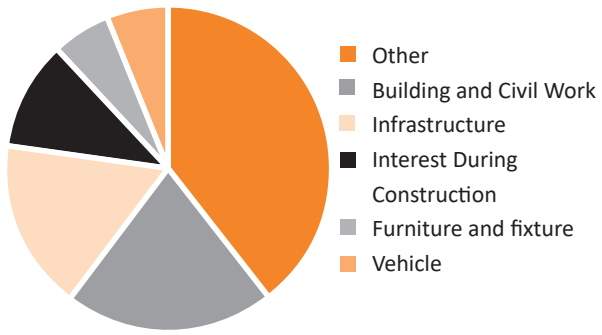
FINANCIAL ANALYSIS

3.1 Pre-Feasibility Approaches & Assumptions

Project Cost

Total cost of the project amounted to 1,209,505.00 NPR excluding Interest During Construction. The total cost including interest amounted to 1,331,208,892 NPR. Costs are assumed to occur evenly in the construction period.

Particulars	Amount in NPR
Infrastructure	215,000,000
Other	452,500,000
Building and Civil Work	343,200,000
Furniture and fixture	118,805,000
Vehicle	80,000,000
Interest During Construction	121,703,892
Total Project Cost	**1,331,208,892**



The portion of the interest during construction is capitalized in the individual assets on a proportionate basis.

Capital Structure

The Project is proposed to be financed in a 70:30 debt equity ratio on the total cost of the project including Interest During Construction (IDC). The Requirement of Working capital would be financed by internal resources itself. Based on the structure, the total investment pattern has been tabulated below:

Component	Percentage	Amount in NPR
Equity	30.00%	399,362,668.00
Debt	70.00%	931,846,225.00
	Total	**1,331,208,892.00**

Project Construction and Operation Period

The project is assumed to be built in the period of 3 years and the total operation period after the construction period would be 30 years. The project would be handed over to the government after the completion of the operation period.

Tax, Staff Bonus, and Depreciation Assumptions

The tax rate for the project is assumed at 20% on profit earned during the year. Further the loss carry forward has been taken for 12 years in due consonance with the provision of Income Tax Act 2058. Further, the Staff

bonus is assumed at 10% on taxable income earned during any year of the operation as required by the Bonus Act.

Also, the rate depreciation and basis of depreciation is in due adherence to the provisions of the Income Tax Act as follows:

Particulars	Depreciation Method	Rate of Depreciation
Infrastructure	SLM	3.33%
Other	SLM	20.00%
Building and Civil Work	WDV	5.00%
Furniture and Fixture	WDV	25.00%
Vehicle	WDV	20.00%

However, 1/3 of the additional Depreciation has not been taken into consideration as facilitated by Income Tax Act.

Direct Income and Direct Expense

The income has been classified majorly in three categories:

1. Accommodation
2. Food and Beverage
3. Other Amenities
4. Fishing & Boating

The total units, rates and associated direct cost percentage in 100% capacity has been detailed below:

Particulars	Other Revenue Assumptions	Rate per Event/Person Amount in NPR	Unit of Measurement	% of Direct Cost
Accommodation				
Room Sales - suite (20)	20 Persons	6000.00	Annually	10%
Room Sales - standard (60)	60 Persons	3500.00	Annually	10%
Food and Beverage				
Income from Central Café/ Bar	150000 Persons	0.00	Annually	30%
Restaurant sales	150000 Persons	1500.00	Annually	30%
Bar Sales	150000 Persons	1800.00	Annually	30%
Lease Property				
Rental/ Lease charges from fitness center	12 Months	0.00	Annually	10%
Rental/ Lease charges from retail spaces (x5)	60 Months	0.00	Annually	10%
Rental/ Lease charges from food court spaces (x10)	120 Months	0.00	Annually	10%
Other Amenities				
Entry to the Park (on average- differential pricing for tourists of different nationalities)	500000 Persons	0.00	Person per day	10%
Gifts and souvenir	50000 Events	0.01	Annually	50%

The Operational Efficiency

The operational efficiency each of the component in various years has been estimated as below:

From	To	Overhead and Salary Charging	Accommodation	Food, Beverage & Banquet	Others Amenities	Lease Property
0 year	3 years	0%	0%	0%	0%	0%
4 years	9 years	60%	65%	65%	70%	90%
10 years	14 years	70%	70%	70%	75%	95%
15 years	24 years	80%	75%	80%	80%	100%
25 years	33 years	100%	80%	85%	90%	100%

Salary & Overhead Expenses

Total of the office overhead cost of per annum is NPR 28,000,000.00 and employee cost of USD shall be apportioned throughout the project period on 100% operation capacity. The details of overhead is as below

Details of Office Overhead Cost	Amount (In NPR 1)
Annual Function & General Assembly Expenses	500,000.00
Printing, Stationery & Other	2,000,000.00
Telephone, Internet, Postage and Communication	1,000,000.00
Traveling & Conveyance	5,000,000.00
Fuel	5,000,000.00
Audit Fee	1,500,000 .00
Electricity cost	6,000,000.00
Legal Fee	1,000,000.00
Meeting Fee & Expense	1,000,000.00
Hospitality Expenses	1,000,000.00
Registration & Renewal	2,000,000.00
Miscellaneous	2,000,000.00
Total	**28,000,000.00**

Details of employee cost on 100% capacity is as below:

Department	Total Number of Employees	Total Cost Amount (In NPR 1)
A. Administration	11	9,336,600.00
B. Front desk	4	1,691,760.00
C. Housekeeping	14	5,027,400.00
D. Restaurant	16	4,788,000.00
E. Business Events	2	750,120.00
F. Swimming Pool	2	909,720.00
G. Standard and Luxury Events	7	2,537,640.00
H. Kitchen	11	3,862,320.00
Total	**67**	**28,903,560.00**

The overhead is charged based on the following modality for employee cost and overhead charging is as below:

From	To	Overhead and Salary Charging
0 year	3 years	0%
4 years	9 years	60%
10 years	14 years	70%
15 years	24 years	80%
25 years	33 years	100%

Other Assumptions

Inclusive of all staff Salary and Vehicle maintenance cost but don't include the interest and depreciation cost component, the total operating expense is likely to incur at the rate of 3% of total Project Cost. It is further assumed that the total operating expenses is likely to increase at the rate of 4% with the cap of 200%. As discussed in the earlier paragraph, the project would be financed by 70% debt. The interest rate that has been taken into calculation is 12% which would be repaid in four equal installments in the period of 12 years.

Also, the revenue has been estimated to be inflated at the rate of 3% per annum which is capped at 180%. The income tax rate for the project is 20% and the loss carryforward period for the project is taken for 12 years. Further, the project is expected to give the additional income of 10% of the total direct revenue.

It is assumed that the government would provide required land for the project. Total operation period of the project is assumed to be 30 years and 3 years is considered as the period of pre-operation.

Working capital

It has been assumed that the overall working capital requirement would be financed by the equity holders. The working capital has been assumed on the following basis.

Receivable & Advance	30	Days
Payable and Liabilities	15	Days

Total number of working days has been assumed to be 360 days and 12 working months.

3.2 Financial Analysis

3.2.1 Financial Results

The cost of the Pokhariya Lake Beautification Project with Resort and Picnic Spot Facilities was calculated using data from an IBN desk research report. All of the expenses are considered to be in line with the existing cost structure. The project development cost is also supposed to have been calculated using district rates and current market rates.

The project's overall cost is NPR 1,331,208,892.00, with an interest component of NPR 121,703,892.00 during construction. The overall project, excluding working capital, was financed by loan for 70% and equity for the remaining 30%.

The project's Internal Rate of Return (IRR) is assessed to be 17.05 %, while the project's equity IRR is calculated to be 21.98%. The project's IRR and equity IRR prove the project's viability.

After the date of operation, the project has a simple payback term of 4.52 years and a discounted payback period of 9.54 years. The pay-back term appears to be enough, given the nature of the firm and the broader industry.

At 1.53 times of the project, the average debt service coverage ratio is determined. The project's equity net present value is NPR 457,069,163.67. Furthermore, the project's cost-benefit ratio is multiplied by 1.34 times whereas equity BCR is 2.14.

Major Financial Indicators

Particulars	Rate
Firm IRR	17.05%
Equity IRR	21.98%
NPV- Equity	457,069,163.67
Debt Equity Service Ratio (average)	1.53 Times
Project BCR	1.34
Equity BCR	2.14
Simple Payback Period	4.52 years
Discounted Payback Period	9.54 years

3.2.2 Sensitivity Analysis

Sensitivity analysis has been carried out on three different components: Interest Rate, O & M Cost and Project cost.

Interest Rate Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	21.98%	-
5.00%	21.44%	-2.48%
-5.00%	22.52%	2.44%

O & M Increase/Decrease by 5%

O&M Cost	Impact on Equity IRR	% of Change
0.00%	21.98%	-
5.00%	21.69%	-1.32%
-5.00%	22.27%	1.32%

Project Cost Increase/Decrease by 5%

Project Cost	Impact on Equity IRR	% of change
0.00%	21.98%	-
5.00%	21.80%	-0.85%
-5.00%	22.15%	0.78%

Based on the analysis, It seems that interest rate is highly sensitive as compared with O&M Expenses and project cost. The special focus to provide to project cost ensuring the cost remains as the as projected.

4

STATUTORY AND LEGAL FRAMEWORK

4.1 Statutory and Legal Framework

Before forming a corporation or conducting business in Nepal, foreign investors must first get clearance. Depending on the magnitude of the investment, an application should be filed to the Department of Industry or the Investment Board Nepal.

5

PRELIMINARY ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The table below summarizes the results of a preliminary desktop-based environmental and social impact assessment. It highlights some of the potential repercussions that might occur throughout the project's pre-construction, construction, and operation stages, as well as mitigation techniques for each impact. Later in the project cycle, a full evaluation will be done, if required by relevant regulations, through an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA).

Activity	Possible Environment Impact	Possible Mitigation Measure
Pre-Construction phase.	1. Distress to the micro-habitat and natural fauna due to tree felling.	1. Cutting of trees shall be avoided to the extent possible and natural vegetation present on the site shall be kept in mind while preparing the architectural and landscape designs of the project. Compensatory plantations should be carried out.
Construction Phase- Construction activities for the development of the project.	1. Air pollution due to earth work excavation and other construction activities	1. Frequent spraying of water at construction sites to suppress dust emission. Soil, muck and other construction materials should be covered during transport by vehicles.
	2. Soil contamination.	2. Preventive measures should be taken to minimize spillage of oil/diesel from the construction equipment. Appropriate measures should be taken in case of accidental contamination.
	3. Water pollution/ contamination- Impact on lake.	3. It should be ensured that the water bodies- Surface and groundwater, are not polluted due to the project. Appropriate measures should be taken in case of accidental contamination. Particular attention should be given to avoid pollution in the lake due to the project.

Activity	Possible Environment Impact	Possible Mitigation Measure
	4. Disposal of excess earth.	4. The excess earth should be transported to a designated place and shall be used for filling and covers.
	5. Disturbance to other services.	5. Any shifting of cable/utility lines should be attended to with a minimum period of disturbance.
	6. Safety of road users in the project area.	6. Provision of temporary crossings/bridges as well as warning signs wherever necessary to facilitate normal movement.
	7. Noise pollution due to the use of machinery and movement of traffic.	7. Use of less noise generating equipment and avoiding activities during night.
	8. Impacts due to hazardous waste.	8. Hazardous waste will be managed as per applicable laws of Nepal.
	9. Impacts due to construction waste.	9. Construction debris will be managed/disposed properly.
Operation Phase	1. Impact on water resources supply to nearby residents due to possible extraction of ground-water.	1. This will be a residual impact if water is sourced from well/ boring in the project area. However, possible mitigation measures can be recharging of the groundwater by installation of a well-designed rain-water harvesting system, which is already envisioned by the project as one of its components. Similarly, water saving features could be installed where feasible. In addition, wastewater treatment plants or biological treatment systems (reed-bed) could be installed, if feasible, to treat gray water with utilization of the treated water for watering plants, etc.
	2. Contribution to GHG emissions from use of machines and equipment (heating, air conditioning, etc) in the building, etc.	2. Efforts will be taken to offset carbon emissions by incorporating a green/sustainable building design, including installation of solar power and energy-efficient equipment, as well as ensuring that natural light is received for maximum duration.
	3. Increased solid waste generation, if not managed well can be a nuisance to surrounding communities and may create health hazard.	3. Segregate wastes and ensure they are collected frequently by waste collection companies/facilities. Build a compost facility, if feasible, and use the compost in the green spaces/plants inside the project compound.
	4. Water contamination- Impacts on lake.	4. Ensure that the water bodies/flowing adjacent are not contaminated. Appropriate measures should be taken in case of accidental contamination. Install a wastewater treatment plant if feasible.

The initiative will provide locals and other Nepalese with both short and long-term job opportunities. Through its spin-off economic impacts, it will help other current businesses as well as bring up new investment prospects.

6

PRELIMINARY RISK ANALYSIS

The following are some of the most significant risks linked with the PPP project:

1. Risks related to construction and project completion delays, which might lead to cost overruns.
2. This project may pose a business risk since the demand and market trend must be properly analyzed in order for the project to be financially and commercially viable.
3. According to relevant legislation, the project would need to complete either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA), which would identify possible environmental and socioeconomic implications as well as necessary mitigation measures.
4. Changes in the legislative framework and political risk might be some of the additional risks linked with the project.
5. Financial risks to the project include changes in interest and currency exchange rates, as well as changes in tax regulations.

7

PROJECT STRUCTURE AND IMPLEMENTATION MODEL

Public Private Partnerships (PPP)

A Public Private Partnership (PPP) is an agreement between public and private entities for a certain length of time in which private businesses agree to take on the risk of all or part of the funding, construction, operation, repair, and maintenance of projects under the PPP model. Such an entity may generate a fair profit by providing public services directly or indirectly through the building, operation, repair, and maintenance of public or private assets. Through legislative, legal, institutional, and economic arrangements, public institutions must establish an environment that encourages private sector investment[28].

It will be suitable to develop a project using the PPP model, which involves both public and private entities. When national treasury resources are insufficient, assets of public utility and less expensive operation of public services, as well as resources, skills, and technology accessible in the private sector, must be drawn to nation-building projects based on the PPP idea.

The PPP model is appropriate in the current context of Pokhariya Lake. According to the preliminary research done in these towns, Local Governments would give land for the construction of Pokhariya Lake Beautification Project with Resort Facility and Picnic Spot Facility.

28. World Bank, 2072, Public Private Partnership Policy

8

FINDINGS AND RECOMMENDATIONS

8.1 Findings

The following are some of the study's significant findings:

1. The Pokhariya Lake Beautification Project with Resort and Picnic Spot Facilities will provide tourists with a variety of services and attractions, as well as natural beauty and a tranquil setting.
2. According to the study, Mithila is the best place for developing the Pokhariya Lake Beautification Project with Resort and Picnic Spot Facilities because of its climate, proximity to the border, accessibility, and other factors.
3. The project's business model was determined to be a Public Private Partnership.
4. With a total cost of NPR 1,331,208,892.00 (including interest component throughout construction period). The project's internal rate of return (IRR) is assessed to be 17.05 %, while the project's equity IRR is calculated to be 21.98%. The project's IRR and equity IRR prove the project's viability.
5. After the date of operation, the project has a simple payback term of 4.52 years and a discounted payback period of 9.54 years.

8.2 Recommendations

The project appears to be technically and financially viable for a developer to invest, based on the findings. In the following step, however, environmental and social aspects, as well as a thorough examination of all other components, must be addressed.

Disclaimer

This project profile is based on preliminary study to facilitate prospective developers to assess possible scope. It is, however, advisable to get a detailed feasibility study prepared before taking a final investment decision.

9

ANNEX

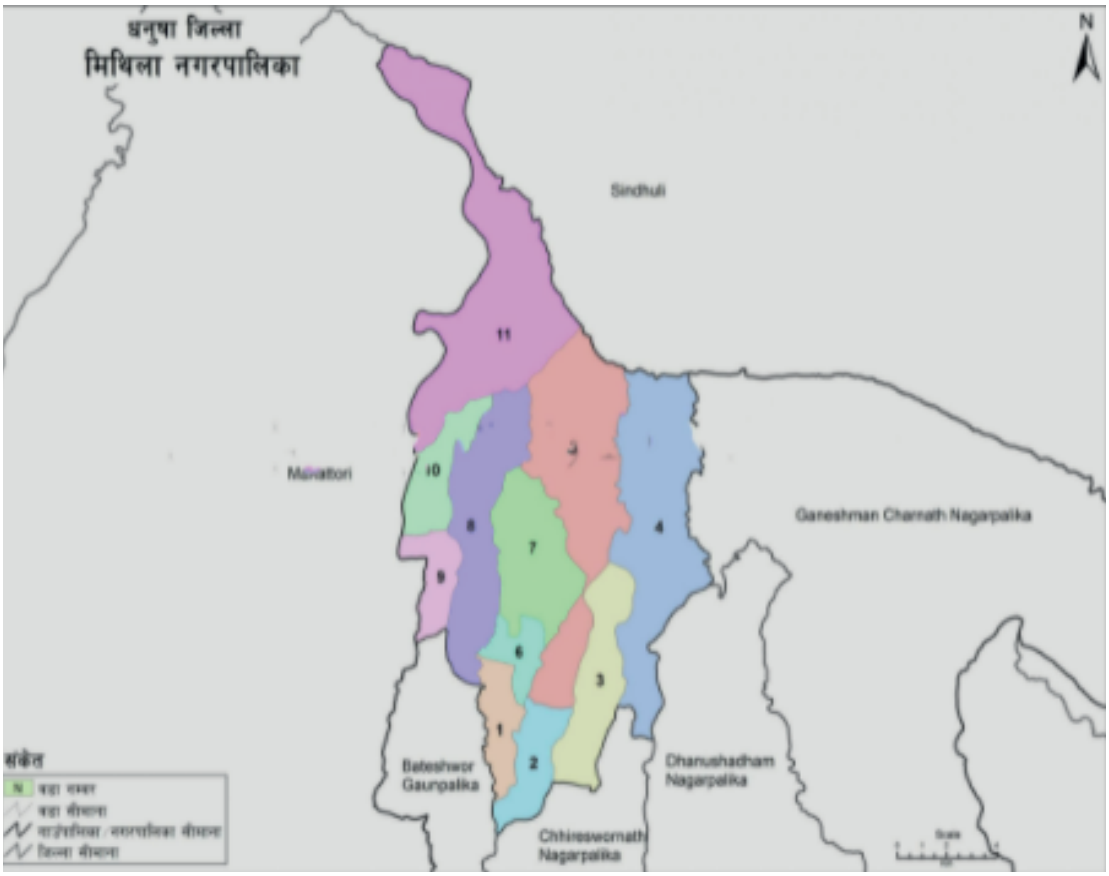
9.1 Next Steps and Useful Contacts

As part of further development of the project, the potential developer who might be interested to develop this project will be identified. Afterwards, a communication channel will be formulated for the effective execution of this project. The useful contacts of all the municipalities incorporated in this are highlighted as follows;

Table 3: Useful contact information

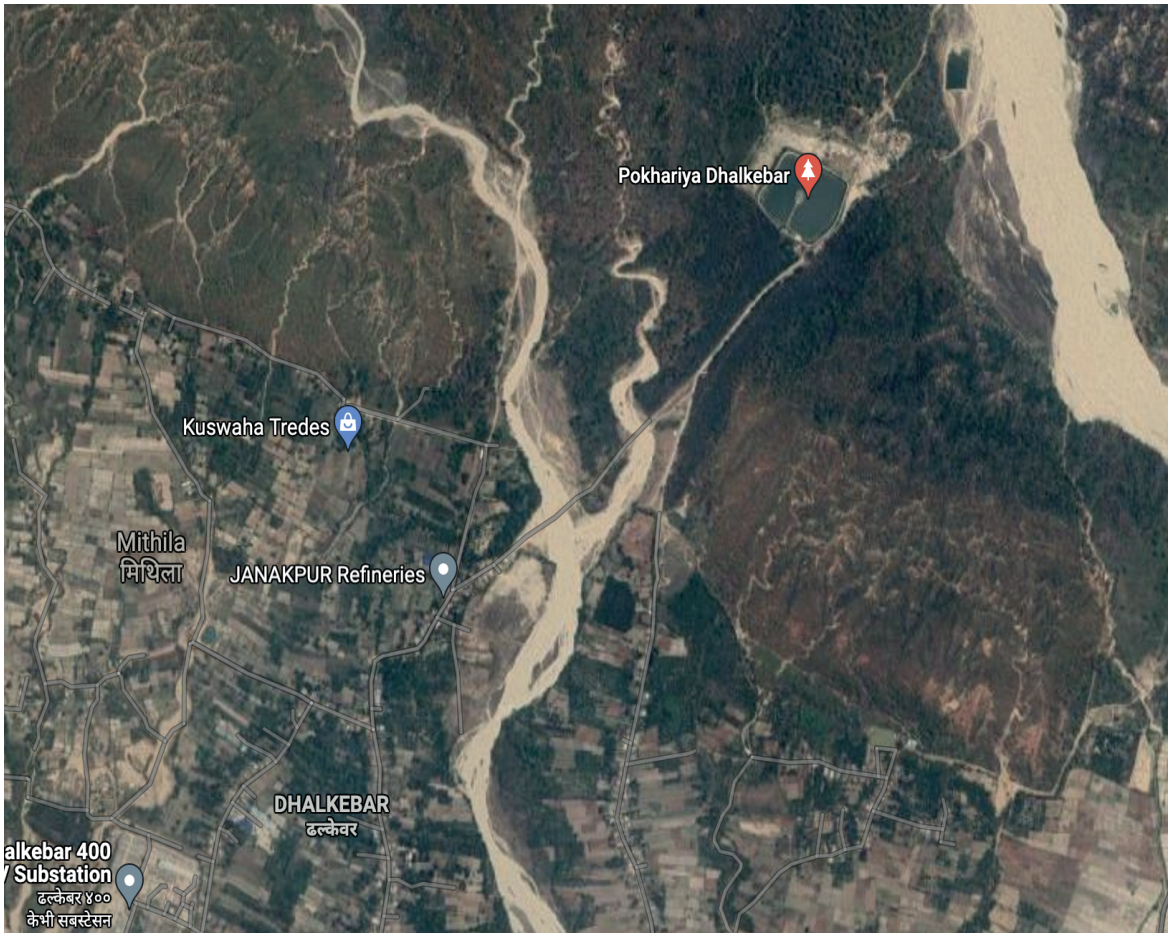
S.N.	District	Municipality	Chief Administrative Officer	Mayor
1	Danusha	Mithila Municipality	Nischal Raj Pandey	Hari Narayan Mahato

9.2 Map of Mithila Municipality



Source: Mithila municipality

9.3 Satellite map of Pokhariya Lake



Source: Google map

9.4 Financial Report

Projected Profit and Loss Statement for Initial 10 years of Operation

Amount in '000 NPR

Particulars	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Accomodation	**77,220**	**79,537**	**81,923**	**84,380**	**86,912**	**89,519**	**99,297**	**102,276**	**105,345**	**108,505**
Food, Beverage & Banquet	321,750	331,403	341,345	351,585	362,132	372,996	413,739	426,151	438,936	452,104
Lease Property	-	-	-	-	-	-	-	-	-	-
Others Amenities	49,000	50,470	51,984	53,544	55,150	56,804	62,688	64,568	66,505	68,501
Total Direct Income	**447,970**	**461,409**	**475,251**	**489,509**	**504,194**	**519,320**	**575,724**	**592,996**	**610,786**	**629,109**
Less: Direct Expenses	-	-	-	-	-	-	-	-	-	-
Accomodation	23,166	23,861	24,577	25,314	26,074	26,856	29,789	30,683	31,603	32,551
Food, Beverage & Banquet	160,875	165,701	170,672	175,792	181,066	186,498	206,870	213,076	219,468	226,052
Lease Property	-	-	-	-	-	-	-	-	-	-
Others Amenities	18,900	19,467	20,051	20,653	21,272	21,910	24,180	24,905	25,652	26,422
Total Direct Expenses	**202,941**	**209,029**	**215,300**	**221,759**	**228,412**	**235,264**	**260,838**	**268,663**	**276,723**	**285,025**
Gross Profit	**245,029**	**252,380**	**259,951**	**267,750**	**275,782**	**284,056**	**314,886**	**324,332**	**334,062**	**344,084**
Add: Other Income	44,797	46,141	47,525	48,951	50,419	51,932	57,572	59,300	61,079	62,911
Profit before overhead and interest	**289,826**	**298,521**	**307,476**	**316,701**	**326,202**	**335,988**	**372,458**	**383,632**	**395,141**	**406,995**
Operating Expenses	-	-	-	-	-	-	-	-	-	-
Depreciation	159,071	149,954	142,927	137,478	133,221	30,259	27,589	25,441	23,690	22,246
Salary Expenses	17,342	18,036	18,757	19,508	20,288	21,099	25,601	26,625	27,690	28,797
Overhead Expenses	16,800	17,472	18,171	18,898	19,654	20,440	24,800	25,792	26,824	27,897

Amount in '000 NPR

Particulars	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
O & M Expenses	41,534	43,195	44,923	46,720	48,589	50,532	52,553	54,656	56,842	59,115
Operating Profit	**55,079**	**69,864**	**82,698**	**94,097**	**104,451**	**213,657**	**241,915**	**251,119**	**260,095**	**268,940**
Interest Expenses	110,183	105,496	100,222	94,285	87,604	80,083	71,619	62,093	51,371	39,303
Profit	**(55,103)**	**(35,632)**	**(17,524)**	**(188)**	**16,847**	**133,574**	**170,296**	**189,026**	**208,725**	**229,637**
Provision for Staff Bonus-	-	-	-	1,532	12,143	15,481	17,184	18,975	20,876	
Income Tax	-	-	-	-	-	5,660	30,963	34,368	37,950	41,752
Net profit	**(55,103)**	**(35,632)**	**(17,524)**	**(188)**	**15,316**	**115,771**	**123,851**	**137,474**	**151,800**	**167,009**

Projected Balance Sheet for Initial 10 years of Operation

Amount in '000 NPR

Particulars	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Shareholders Fund	-	-	-	-	-	-	-	-	-	-
Share Capital	399,363	399,363	399,363	399,363	399,363	399,363	399,363	399,363	399,363	399,363
Reserve and Surplus	(55,103)	(90,736)	(108,259)	(108,447)	(93,131)	22,639	146,491	283,964	435,764	602,773
Loan Fund	-	-	-	-	-	-	-	-	-	-
Term Loan	894,507	852,482	805,182	751,945	692,027	624,589	548,687	463,258	367,107	258,889
Short Term Loan	-	-	-	-	-	-	-	-	-	-
Total	**1,238,767**	**1,161,109**	**1,096,285**	**1,042,861**	**998,259**	**1,046,592**	**1,094,541**	**1,146,585**	**1,202,234**	**1,261,025**
Fixed Assets (Net)	1,084,088	934,134	791,207	653,729	520,508	490,249	462,659	437,219	413,528	391,283
Investment	-	-	-	-	-	-	-		-	-
Current Assets	156,409	228,774	306,950	391,079	479,776	558,449	634,071	711,644	791,075	872,205
Sundry Debtors	24,152	24,877	25,623	26,392	27,183	27,999	31,038	31,969	32,928	33,916
Inventory	-	-	-	-	-	-	-	-	-	-
Cash & Bank Balance	132,257	203,898	281,327	364,687	452,592	530,450	603,033	679,675	758,146	838,289
Less: Current Liabilities	1,731	1,800	1,872	1,947	2,025	2,106	2,190	2,277	2,368	2,463
Net Current Assets	154,678	226,975	305,078	389,133	477,751	556,343	631,881	709,367	788,706	869,742
Total	**1,238,767**	**1,161,109**	**1,096,285**	**1,042,861**	**998,259**	**1,046,592**	**1,094,541**	**1,146,585**	**1,202,234**	**1,261,025**

Cash Flow Statement for Initial 10 years of Operation

Amount in '000 NPR

Particulars	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Cash flow from operating activity	-	-		-	-	-	-			-
Net profit before interest and tax	(55,103)	(35,632)	(17,524)	(188)	15,316	121,431	154,814	171,842	189,750	208,761
Add: Depreciation	159,071	149,954	142,927	137,478	133,221	30,259	27,589	25,441	23,690	22,246
Add: interest	110,183	105,496	100,222	94,285	87,604	80,083	71,619	62,093	51,371	39,303
Operating cash flow before working capital change	214,150	219,818	225,625	231,576	236,140	231,773	254,023	259,376	264,811	270,310
Increase/Decrease in Current Assets	(24,152)	(725)	(746)	(769)	(792)	(816)	(3,039)	(931)	(959)	(988)
Increase/Decrease in Current Liabilities	1,731	69	72	75	78	(2,749)	(12,567)	(1,615)	(1,700)	(1,806)
Payment of Tax	-	-	-	-	-	(2,830)	(18,311)	(32,666)	(36,159)	(39,851)
Net Cash flow from operating activity	**191,729**	**219,163**	**224,951**	**230,882**	**235,426**	**225,379**	**220,105**	**224,164**	**225,993**	**227,664**
Cash flow from Investing Activity	**-**	**-**	**-**		**-**		**-**	**-**	**-**	**-**
Purchase of Fixed Assets	(1,243,159)	-	-	-	-	0	(0)	-	0	-
Increase/Decrease in Investment	-	-				-	-	-	-	-
Less: Payment of Dividend	-	-	-		-	-				-
Net Cash flow from Investing Activity	**(1,243,159)**	**-**	**-**	**-**	**-**	**0**	**(0)**	**-**	**0**	**-**
Cash flow from Financing Activity	**-**	**-**								**-**
Increase in Share Capital	399,363	-	-	-	-	-	-	-	-	-
Increase in Borrowing Fund (Long Term Loan)	931,846	-	-	-	-	-	-	-	-	-
Increase in short Term Loan	-	-	-	-	-		-			-
Less: Repayment of Long Term Loan	(37,339)	(42,025)	(47,300)	(53,236)	(59,918)	(67,438)	(75,902)	(85,429)	(96,151)	(108,219)

Amount in '000 NPR

Particulars	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years
Less: Payment of interest on Short Term Loan	-	-		-	-	-	-	-		--
Less: Payment of Interest on Long Term Loan	(110,183)	(105,496)	(100,222)	(94,285)	(87,604)	(80,083)	(71,619)	(62,093)	(51,371)	(39,303)
Net Cash flow from Financing Activity	**1,183,687**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**	**(147,522)**
Increase/Decrease in Cash and Cash Equivalent	132,257	71,641	77,429	83,360	87,905	77,857	72,583	76,642	78,471	80,143
Cash & Bank Balance at the beginning of the period	-	132,257	203,898	281,327	364,687	452,592	530,450	603,033	679,675	758,146
Cash Balance At the End of the Period	**132,257**	**203,898**	**281,327**	**364,687**	**452,592**	**530,450**	**603,033**	**679,675**	**758,146**	**838,289**

PRE-FEASIBILITY STUDY OF

JANAKI HERITAGE HOTEL: MARRIAGE DESTINATION

EXECUTIVE SUMMARY

Wedding tourism is a relatively new type of tourism that is generating a lot of buzz in the tourism industry commonly known as "Marriage Tourism" or "Destination Wedding" in some situations.[1] Couples from Europe have been known to travel to places like Las Vegas, Hawaii, the Caribbean, and Cyprus to marry. India, Nepal's neighbor, is one of the countries benefiting from this new trend. Traditional Indian weddings, with all their traditional ceremonies and attractive locations, are becoming increasingly popular among both NRIs and Westerners. Following this trend, Janaki Heritage Hotel: Marriage Destination is a project that aims to cater to the destination wedding market in Nepal while building on the religious story of marriage of Ram-Sita in Janakpur.

In the next Investment Summit, the Provincial Planning Commission (PPC), Madhesh Province hopes to attract investment in a variety of initiatives including tourism projects. Janaki Heritage Hotel: Marriage Destination is one of the primary sites designated for investment. The research on the Janaki Heritage Hotel: Marriage Destination is primarily intended to document the project's technical and financial feasibility. Both primary and secondary data gathering approaches were used in the study. Primary data was acquired from field-based research, which included a field visit and stakeholder consultations and group discussions. Secondary data was gathered from a variety of sources, including published papers, journal articles, and other verified and trustworthy online sources.

This project appears to be best suited for a Public Private Partnership (PPP) approach, in which GoN will assist in obtaining the necessary land for the project. The developer will then build all of the infrastructure required for the project's smooth execution and will run it for 20 years before handing it over to GoN in good working order.

The research examined the project's technical and financial elements and determined that it is technically and financially feasible, with a total anticipated cost of roughly NPR 1,840,625,312.43 (including interest component throughout construction period). The project's Internal Rate of Return (IRR) is assessed to be 18%, while the project's equity IRR is calculated to be 22%. The project's IRR and equity IRR prove the project's viability.

1 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

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SALIENT FEATURES OF THE PROJECT

Table 1: Salient features of the project

General information of the project		
1	Name of Project	Janaki Heritage Hotel: Marriage Destination
2	Project Location	Province: Madhesh District: Dhanusha Municipality/Rural Municipality: Dhanushadham Project area/Settlement Name:
3	Project Implementation Modality	Proposed project development modality ☐ Public ■ PPP ☐ Private ☐ Others/Please Specify
4	Category of Project	☐ Short term: 5 years and below ■ Mid term: 6 – 10 years ☐ Long term: 11 – 15 years
5	Sector as per 1st 5 years Provincial Plan	Economic
6	Type of project (Sub Sector)	Tourism
7	Implementing/Facilitating Agencies	Private sector, facilitated by the Ministry of Industry, Tourism, Forest and Environment.
8	Project Management (Implementation Mechanism)	Private sector will manage the project with support from the Federal, Provincial Government and the local stakeholders

General information of the project

1	Salient Features of Project	A luxury hotel for a destination wedding. The project will build state-of-the-art halls and theaters as venues for cultural and traditional events. Build the area of Janakpur as a cultural village and museum. Promote Mithila culture all over Nepal and India as well.
2	Affected Population, Land Requirement, Acquisition & Resettlement, Materials and Ease of Access	
	Affected Population	Local communities, municipalities, provinces, businesses.
	Land Requirement	25-30 acres
	Acquisition & Resettlement	The private sector will acquire the required land with support from the province government.
	Materials and Ease of Access	Raw material has to be transported from around the provinces and kathmandu.
	Environmental and Social Management Plan (ESMP)	Employing more sustainable practices in order to promote a green image that appeals to consumers by using organic products, less toxic products, and recycling of reusable products..
3	Project Document Available	■ None (New/Rehabilitation) ☐ Concept Note/Desk Study ☐ Feasibility Study ☐ Detailed Engineering/DPR
4	Estimated Cost to Complete the Project	NPR 1,840,625,312.43
5	Estimated Time to Complete the Project	Feasibility Study/DPR: 6 months Approval and Financial Closure: 6 months Construction Period: 3 years Concession Period: 20 years
6	Project Financing Options	Majority investment of the private sector; Government to contribute for required infrastructure development.
7	Project Technology/ Components	
	Destination Wedding Luxury Hotel	Development of a world-class luxury heritage hotel with facilities for high-end luxury weddings. The hotel would have a capacity of 140 rooms and extend over an area of about 25-33 acres. The luxury heritage hotel will be based on an architectural design inspired by Janaki Mandir (Janakpurdham)
	Wedding Venue	Development of standard wedding venue well equipped with various services and facilities such as temporary structure for reception halls, catering services and event management services to cater about 3000 people and host up to three parallel events a day.
	Cultural Village and Museum	Cultural village which reflects heritage, culture and tradition of the Dhanushadham area. Some of the major infrastructure for the development of the cultural village could be: Homestay, entrance gate, community center, tourist information center, security post/booth, en-route amenities (tea house, public toilets, signage, etc.), walking foot trails or walking streets, cycling route, road network within the cultural village, etc. In addition, a museum could be developed to showcase the rich cultural and traditional legacy of Lord Ram and Sita as well folklore of Dhanushadham, a pious place where Lord Ram and Sita got married.

	Supporting Infrastructure	Beautification of the Dhanus Pond by carrying activities such as foot path development around the pond, repair, maintenance and fencing, boating facility, artisan wall to maintain water level during dry season; Renovation of Dhanus Mandir through expansion of existing structure and using local materials for roofing to maintain the aesthetics of the area; Renovation and upgradation of Dharamshala
8	Contribution to SDG and Green Growth	• Reduce waste generation by purchasing environment friendly products. • Purchasing local products can benefit the surrounding community. Above technique helps to attaining following the Sustainable Development Goals: Goal No. 9: Industry innovation and infrastructure Goal No. 11: Sustainable cities and communities
9	Project Capacity (at 100%)	140 rooms
10	Project IRR	18 %
11	Benefit Cost Ratio	1.65 Times
12	Private Sector/Consumer Committee/Beneficiary Roles	• Plan, design, finance, engineer, construct, and develop the envisioned facilities and other components of the project. • Collection of revenues from the project during the concession period. • Handover to the government after the concession period.
13	Government's Role	• Land acquisition, facilitation and project security. • Facilitating various legal approvals/permits for the smooth operations of the project. • Setting up the institutional framework for review & monitoring.

Other project information

1	Target Beneficiaries	Entire Nepali people
2	Market of Project's Service/Product	Entire Nepali people, international tourists, NGOs & INGOs.
3	Key Risk of Project Development & Operation	
	Strength & Opportunity	• Janakpur is a famous heritage site of Hindu. It is significant for the Hindu culture and Hindus worldwide • Since it is a holy place for Hindus, it can attract pilgrimage in Nepal and India as well. • Millennials are a key target segment for the hotel industry.
	Risk & Issues	• Consumer taste may change from time to time. Coping up with a changing environment is a way to solve this problem. • Shortage of experienced personnel.

1

BACKGROUND

1.1 Introduction

Nepal has huge natural and scenic splendor, as well as all-important attractions found in just a few nations throughout the globe. Natural, aesthetic, and recreational features, as well as historical, cultural, and religious qualities, are among them. These characteristics bode well for Nepal's tourism sector, and tourism projects should be seen as supporting infrastructure for attracting local and international visitors.

Entertainment is a component of several tourism settings and can be a strong incentive to visit particular places[2]. The appeal of entertainment tourism has recently increased. The tourism industry relies heavily on the entertainment industry. Leisure tourists' recreational activities are an important part of the tourism experience. The pre dominant and most popular mode of travel is still heavily entertainment featured[3]. Taylor and Francis's research 'Entertainment Tourism' is crucial since it enables tourism marketers to gain new insights and a better knowledge of travelers' experiences and satisfaction. One of the vital components of a tourism destination's offering is entertainment activities[4]. It's also one of the most important variables in defining a destination's attractiveness and appeal, as well as contributing to tourist pleasure. Entertainment will become a more essential source of attracting tourists in the short term, as well as maintaining them for a longer length of time.

In 2017, leisure travel expenditure (including inbound and domestic) accounted for 85.4% of direct Travel & Tourism GDP (NPR 144.1 billion), compared to 14.6% for business travel spending (NPR 24.6bn)[5]. Leisure travel spending is predicted to increase by 4.2% pa to NPR 226.5 billion in 2028.

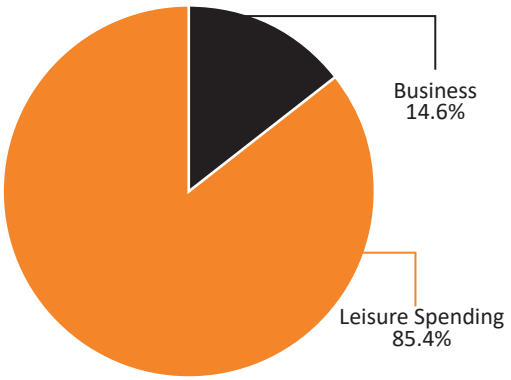
2 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

3 Taylor & Francis online, 2018, Entertainment Tourism, https://www.tandfonline.com/doi/abs/10.1080/02614367.2018. 1454976?needAccess=true&journalCode=rlst20

4 Entertainment planet, 2007, The tourism and entertainment industry, http://entplanet.blogspot.com/2007/09/tourism-entertainment-industries.html

5 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

Fig: 1 Business VS LeisureTourism Spending



Source: World Travel & Tourism Council[6]

In the year 2019, approximately 1.2 million visitors visited Nepal. In the years 2016, 2017, 2018 and 2019, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, 25% and 2.05%[7], respectively. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists. In addition, domestic tourism is quickly expanding. Domestic tourists, in particular, from major towns like Kathmandu, Biratnagar, Bhairahawa, and Pokhara, among others, are always looking for new and exciting travel and vacation experiences.

Nepal is well suited to be promoted as a top leisure tourist destination due to its pleasant climate and warm hospitality. It offers a tranquil and secure environment, as well as stunning and magnificent natural beauty and a unique combination of cultures. Given its accessibility and location as a transportation hub, Madhesh has the potential to grow into a regional center for leisure tourism for both local and foreign visitors visiting Nepal's eastern and south-eastern borders.

1.2 Wedding Tourism Industry

Wedding tourism is a relatively new type of tourism that is generating a lot of buzz in the tourist industry. It's also known as "Marriage Tourism" or "Destination Wedding" in some situations. According to a poll conducted by the bridal magazine Conde Nast Bridal Group, worldwide wedding tourism has increased by 400 percent in the last ten years[8]. One of the key causes for this tendency is undoubtedly globalization and a greater interest in each other's cultures. Couples from Europe have been known to travel to places like Las Vegas, Hawaii, the Caribbean, and Cyprus to marry.

Even though wedding tourism is a relatively new concept for Nepal, India, Nepal's neighbor, is one of the countries benefiting from this new trend. Traditional Indian weddings, with all their traditional ceremonies and attractive locations, are becoming increasingly popular among both NRIs and Westerners. With a total revenue of INR 1,10,000 crores in 2017, an annual revenue of INR 45,776 crores in 2020 (including solely destination/ luxury weddings), and a growth rate of 25% per year, the Indian wedding sector is seeking for methods to partner with prominent hotels and travel companies to court this increasing tourist market[9].

Dubai, another popular wedding location, is also growing in popularity. Dubai's wedding and tourist businesses are regarded to be among the fastest growing in the world. Dubai's tourism and leisure business has recognized that wedding tourism is "war-proof". Since most of the young population of Dubai consists of expatriates from Asia and Europe, initially this section of young population traveled back home like India to get married. With the rise in the frequency of "Cocktail Marriages," in which individuals of different nationalities marry, Dubai has emerged as the ideal wedding destination. Families and friends of the couple fly into Dubai from Asia or Europe to be a part of the wedding festivities, generating money for the relevant sectors.

The potential of wedding tourism may be seen in the fact that practically all national tourist websites discuss wedding locations as well as wedding traditions and rituals in their respective countries. A tiny country like Belize, for example, is advertising its Mayan ceremonial sites, Tropical gardens, and Private beaches as wedding destinations. The Belize Tourism Board promotes itself as “Unforgettable Location for Unforgettable Day”.

6 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf
7 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
8 Suklabaidya, P. 2008. Wedding Tourism And India. Atna Journal of Tourism Studies. Retrieved from https://www.researchgate.net/publication/325517537_Wedding_Tourism_and_India
9 http://ficci.in/spdocument/20915/wedding-tourism-Report.pdf

Non-Residential Nepalis (NRNs), and foreign tourists alike are becoming increasingly interested in Hindu weddings. Some foreign visitors feel that Hindu marriage's holy ceremonies will help their marriage continue longer. A few pages on the Ministry of Tourism's website are dedicated to diverse Nepali wedding traditions and rituals, a call to destination wedding tourism. The tourist industry would undoubtedly benefit from Nepal's appeal as a destination. The maximum ratio of foreigners to destination weddings (for instance, Indian weddings) is 7:3. This means that the wedding industry will have a lot of room to grow to serve both domestic and international wedding visitors. All wedding-related services, save accommodation, can be made available in the package including attire, jewelry, entertainment, beverage, wedding planner, tour operator, and others.

1.3 Rationale of the Project

Apart from the economic benefits, there will be numerous other indirect benefits emanating from the proposed project, which are enumerated as under.

- Multiplier effect to other sectors of economy.
- Increased tourist inflow.
- Technological advancement.
- Foreign currency earning.
- Work culture improvement.
- Stemming outflow of workforce.
- Domestic technical skill enhancement.
- Enhanced industry-public relationship with implementation of CSR activities.

1.4 Objectives

By establishing a single platform at the next Investment Summit, the Provincial 2 Planning Commission (PPC) hopes to attract investment in a variety of initiatives, including tourism projects. As a result, PPC has put together a prospective Janaki Heritage Hotel: Marriage Destination, which includes touristic facilities and attractions. Finally, it aspires to present the proposal at the Investment Summit (2022) in order to attract investors. As a result, the following are some of the report's main goals:

1. To determine the demand for, as well as the feasibility of Janaki Heritage Hotel: Marriage Destination.
2. To investigate the project's technical and financial feasibility at the chosen site.

1.5 Scope of Work

The purpose of the pre-feasibility study is to represent the current situation of Janaki Heritage Hotel: Marriage Destination at the proposed site, as well as to record the project's technical and financial feasibility. Finally, the research will aid in gaining a general understanding of investment opportunities in this particular sector and location. The following are some of the study's primary scopes:

1. To gather secondary data and other necessary information for the project's development.
2. Analyze the acquired data for many elements such as technical, economical, social, and environmental concerns.
3. Develop the most appropriate investment model, such as private, Public Private Partnership, or blended finance.
4. Also, depending on the findings, provide recommendations.

1.6 Approach & Methodology

A professional team from Invest and Infra Pvt. Ltd. produced this pre-feasibility study. After a thorough examination of market demand and business development prospects, the project's components were determined. For the purposes of determining project features/components, input collected during consultations with province-level ministries and associated stakeholders was also taken into account. Secondary and primary sources were used to obtain the necessary data, information, and facts to meet the study's goals.

Primary data was acquired by telephone and e-mail conversations, as well as a field-based research, which included a field visit. Producers, marketers, entrepreneurs, and government officials from Madhesh Province (Provincial Ministries, Rural/Municipalities, etc.) participated in stakeholder consultations and group discussions.

Secondary data was gathered from numerous publications issued by Nepalese government agencies, other similar nature projects in Nepal, and academic research papers published by various organizations and experts. An appropriate investment plan was recommended based on the conclusions of a technological, social, and environmental investigation. In addition, a thorough financial study was carried out to discover some of the key financial metrics that assure the project's financial feasibility.

2

PROJECT DETAILS

2.1 Project Background and Description

As the birthplace of Sita, Janakpur has long been a popular tourist attraction in Nepal. It has gained high-level attention in recent years, with high-profile visits from politicians from neighboring India, notably India's Prime Minister Narendra Modi and Uttar Pradesh Chief Minister Yogi Adityanath. Janakpur is significant because it is a sacred Hindu site where Ram and Sita were wedded. Every year, hundreds of visitors go to Bibaha Panchami to commemorate this wedding. Because of its religious and historical significance, the region in and around Janakpur (Dhanushadham) might be developed as a wedding destination, complete with a luxury hotel, museum, and other event facilities. Madhesh Province's provincial government has designated this as a high-priority project.

2.2 Project Features

- Destination Wedding Luxury Hotel
- Wedding Venue
- Cultural Village and Museum
- Supporting Infrastructure

2.3 Overview of the Area

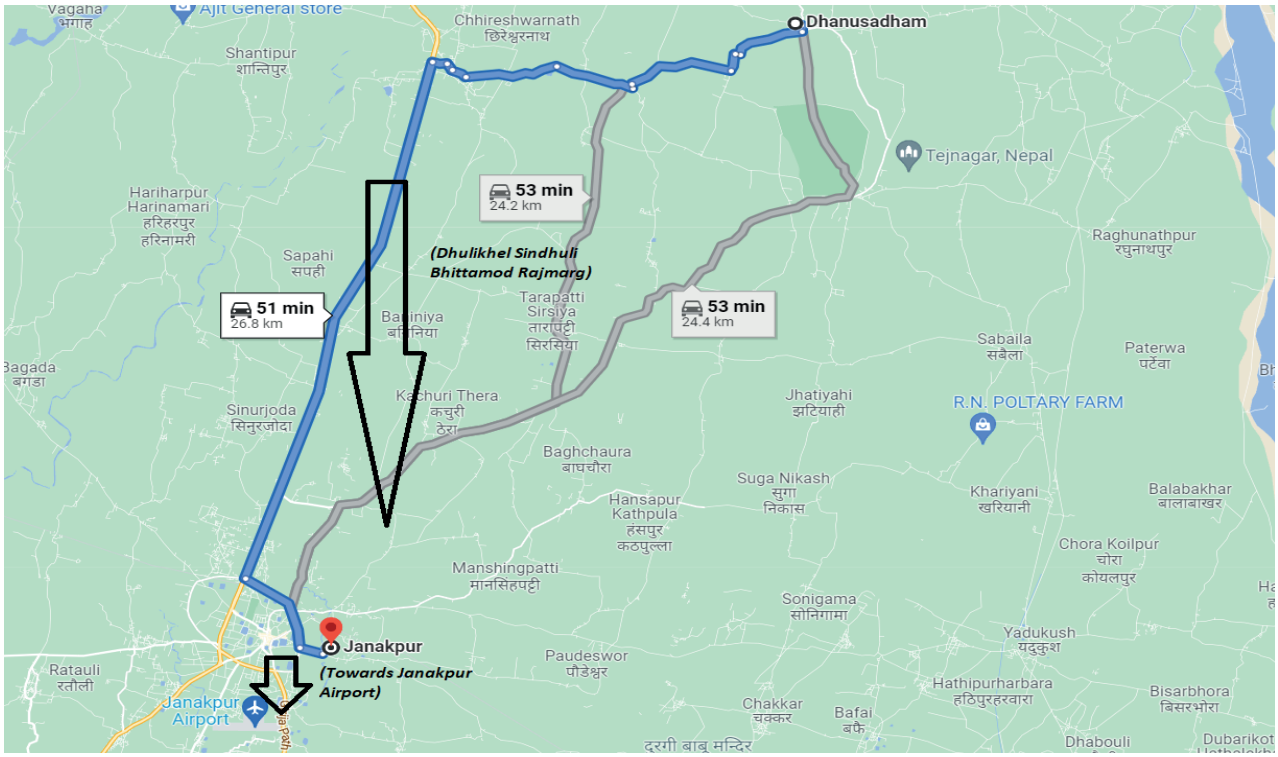
Location

The project is located in the Dhanusadham Municipality of Madhesh Province, Dhanusha district. The municipality was formed on May 18, 2014, when the village development committees of Govindapur, Umprempur, Yagyabhumi, and Dhanushadham merged. The region is generally flat, with a tiny section in the north mounting the Churiya hills' ridges. It is bordered on the east by Ganeshman Charnath Municipality, the west by Mithila and Chireshowrnath Municipality, the north by Ganesh Man Charnath Municipality, and the south by Mithila Bihari Rural Municipality and Sahidnagar Municipality.

Dhanushadham municipality covers 91.64 square kilometers consisting of 9 wards and has a population of 49,094 people as of 2075 B.S[10]. Janakpur is a Sub-Metropolitan city in Dhanusa District, Madhesh Province. The city is a popular destination for religious and cultural tourists. The city has a population of 177,945 people in 2075[11], making it Nepal's biggest Sub-Metropolitan

10 Health Management Information System 2074/75, MoHP, GoN
11 Health Management Information System 2074/75, MoHP, GoN

Figure 3: Location map of Dhanushadham



Source: Google Map

metropolis[12]. Janakpur is Terai's third-largest city and Nepal's seventh-largest city in terms of population. Dhanushadham is around 51 minutes (by road) from Janakpurdham via Dhulikhel Sindhuli Bhittamod Rajmarg and is connected by a concrete road, showing a distance of 26.8 kilometers, making it easy to draw domestic tourists from this heavily populated metropolis. The Janakpur Airport, which is located in Janakpur, can be very beneficial to tourism. The only one railway between Janakpur and Jayanagar in Nepal was shut down about a decade ago. India has aided Nepal in establishing a modern railway train service on this route, which is likely to begin in the near future, which will be useful to visitors traveling from India who would be passing via an Indian border 20 kilometers from Janakpur.

Geography and Climate

Dhanusadham has plenty of farm land. Agriculture employs the majority of the population. Floods and fires pose a serious threat to the community. Because it is located in the Terai area of the nation, it is extremely hot in the summer and extremely cold in the winter owing to cold waves that occur often throughout the day. The region's geological structure is made up of ancient and new alluvium, both of which are alluvial deposits mostly made up of sand, clay, silt, gravels, and coarse pieces. Every year, additional deposits are carried down by vigorous streams that participate in fluvial activity, renewing the alluvium. In the summer (Chaitra to Kartik), the average mean temperature in Dhanusadham village is around 24.4°C, whereas in the winter (Mangsir to Falgun), the temperature drops by approximately 4-5°C. Rainfall is common in the study area because it is located in the terai region. Asar and Shrawan have greater rainfall than the other months, hence the average precipitation is likewise higher during these months. The yearly rainfall in this area is around 1440mm.

Many public and private ponds may be found in Dhanushadham Municipality. The majority of public ponds are utilized for religious purposes, whilst private ponds are mostly used for fish farming. Similarly, three rivers flow through or along the municipality's borders: the Baluwa, Murgiya, and Banganga. A majority of the land (almost 72 percent) is farmed, according to the land use distribution. About 16.17 percent of the land is covered by forest. Built-up land accounts for only 3.51 percent of total land area.

12 Health Management Information System 2074/75, MoHP, GoN

Dhanushadham Protected Forest

The municipality's treasure is the 360 hectare forest in the center of Dhanusadham. On the 16th of Falgun 2069, the Nepalese government designated the forest area as a protected forest, which has been maintained by the Dhanusadham Protected Forest Council (DPF Council) since then. The forest's overall size includes 20 ha of national forest and 240 ha of protected forest. Environmentally and culturally, the forest is vital. Within the forest, the Banganga spring may be found. Its water creates a wetland inside the forest, which is home to a variety of reptiles, birds, and animals. The forest's primary tourist attraction is the blue bull antelope (Nilgai). Birds, snakes, civet cats, porcupines, pangolins, languors, wild rabbits, jackals, and foxes all live in the jungle.

DPF Council has been working along with DoF and MWT to enhance the forest area to assist local tourism and livelihood. A snake and turtle enclosure have been completed, while a crocodile enclosure is now being developed. They've also finished a 4.5 kilometer forest border delineation project. Two hectares of Dhanusadham pond have been restored with the help of the Department of Forestry and the Municipality. In the previous fiscal year, Ncell helped to establish a plantation on 33 hectares of land. This year, with financial assistance from Nepal Electricity Authority, planting would be undertaken on the remaining 146 hectares of barren land. The development of tourism infrastructure and the promotion of the region as a tourist attraction can help to further the forest's conservation.

Existing Physical Infrastructure

Dhanusha district has 104.14 kilometers of black topped road, 47.50 kilometers of gravelled road, and 43.50 kilometers of earthen road. 2016, according to the Department of Roads. The East-West Highway, the Dharapani-Dhanushadham-Janakpur feeder road, and the Hariharpur-Dhanushadham-Baldehi feeder road all pass through the Dhanushadham Municipality. According to the Municipal Transport Master Plan Report (2072, Draft), Dhanushadham Municipality has 68.9 kilometers of class A, B, C, and D highways (then). The road network in the newly created VDCs during local level reform is not included. Nearly 63 percent of these roads are graveled, with the balance being earthen. A new construction road of around 3.5 kilometers is also proposed in the report.

For solid waste management, no systematic techniques have been implemented. The majority of solid wastes are organic in origin. Individuals employ organic solids in agriculture and as guithaa and other cooking fuels. Other non-organic substances are disposed of in landfills or burnt. According to the national census of 2068, roughly 63 percent of households rely on a tube well or hand pump for drinking water, while the remaining 25% rely on an uncovered well. Only 6.6 percent of homes have access to running water or piped water. Since the census in 2068, the situation has remained unchanged; with the bulk of the population still relying on tube wells or uncovered wells for drinking water.

Dhanusadham has excellent communication services. Mobile phones are commonly used to communicate. Newspapers, television, radio, email, and the internet have all arrived in Dhanusadham, although in a limited form. According to CBS 2068, 7.68 percent of Dhanushadham Municipality homes have flush toilets, 9.27 percent have standard toilets, and 81.86 percent do not have toilet facilities. The energy source reveals that electricity accounts for a significant portion of the total energy. More than 1650 homes, on the other hand, rely on kerosene or other forms of energy.

Attractions and Activities

Dhanusadham is known for its various cultural and recreational sites, which draw both local and foreign visitors to the area. Dhanus Mandir and Sukh Bihar Buddha Gumba are the two most important monuments. Other attractions include the Dhanusa Protected Forest, ponds, Dhanush pond, children's park, snake park, and Banaspati Udhyan, among others.

2.4 Developing a Business Case

Product Mix

The product mix for this project consists of following components:

Component I: Destination Wedding Luxury Hotel

The Destination Wedding Luxury Hotel is the company's major offering. This will be built in a traditional style and will be roughly 15-20 Bigha (200–266 ropanis) in size. The architecture of the Janaki Mandir in Janakpurdham will be the source of inspiration. This will include rooms of varied quality, but all of them would be considered luxury. This will include a semi-permanent wedding site that

Picture: Taj Falkunama Palace

Source: Online (labelled for reuse)

may be rearranged according to the clients' preferences. According to current investment projections in the luxury hotel business, a luxury hotel might cost approximately USD 50 million.

Component II: Standard Wedding Venue

A second conventional wedding venue, in addition to a destination wedding luxury hotel, may be constructed to cater to the masses and tap into the market for regular and frequent events. According to the Hindu Panchanga calendar, there are a total of 34 auspicious days for marriage throughout the year in the year 2078 B.S. Given the high volume of weddings and over-subscription for wedding venues, occupancy should be guaranteed, at least on wedding days. Throughout the year, the facility may also be used for various religious festivals and activities.

Component III: Cultural Village and Museum

The notion of a cultural village can be created by pooling

land or establishing construction regulations to guarantee that structures adhere to cultural architecture. There may be a variety of initiatives that might be undertaken as part of the cultural village. Homestay, entrance gate, community center, tourist information center, security post/ booth, en-route amenities (tea house, public toilets, signage, etc.), walking foot trails or walking streets, cycling route, road network within the cultural village, and so on are some of the major infrastructures for the development of the cultural village. The cultural village might also be used for homestays.

This component envisions the creation of a cultural museum showcasing Mithila art, food, culture, traditional weaponry, historical artifacts, and so on. A cultural museum is a public space where members of the public congregate for group activities, social support, public information, and other objectives. The cultural museum can be utilized for a variety of purposes, including: all-community festivities for various holidays and customs, public meetings of citizens on various concerns, social gatherings of community members, and so on. The museum in this scenario is expected to accommodate tourists and visitors, and as a result, it must be designed to international standards.

Component IV: Supporting Infrastructure and Projects

Due to the nature of the area, the project will be completed without the development of supporting infrastructure and community programs. For various sub-components of this component, the provincial government, municipality, or private developer may split costs. The following infrastructure and projects might be implemented:

- Road upgradation to make it all weather and black topped in the Parikrama Route, and Dharapani-Dhanusadham Road.
- Infrastructure for collection, transportation of solid waste, including the provision of dustbins and transport vehicles such as rickshaw. Special solid waste management arrangement during Makar Mela through the provision of both organic and inorganic collection dustbins at 100 m interval.
- Provision of water tank and water taps.
- Construction of entrance gate reflecting Mithila architecture.
- Beautification of the Dhanus pond by carrying activities such as foot path development around the pond, repair, maintenance and fencing, boating facility, artisan wall to maintain water level during dry season.
- Renovation of Dhanus Mandir by making the existing structure bigger and using local materials for roofing.
- Renovation of Dharamshala through the decoration of Dharamshala through wall painting.

- Construction of public library having historical documents, e-internet facilities, newspaper and magazine, books, and journals.
- Construction of mess providing affordable quality food to large number of pilgrimage.
- Renovation of ghat by construction small dam, retention wall, and ensuring maintenance of ghat and steps.
- Park development inside Dhanus Mandir boundary and grass plantation.
- Relocation and development of market area .
- Relocation of Dhanus School.
- Construction of resting sheds for pilgrimage.
- Provision of better communication facilities such as free wi-fi facilities and free PCO services.
- Provision of guided forest safari and forest protection.
- Awareness campaign for hygiene and sanitation by motivating local to construct toilets in their house and practicing hygienic sanitation.
- Human resource development by training lodge owners, and owners of tea stalls, tour operations, and inserting tourism education in school education.

2.5 Market Assessment

Wedding tourism is gaining popularity throughout the world as millennials look for methods to make their life experiences more distinctive and memorable. This has resulted in an increase in the size of the wedding tourism industry. Looking at Nepal's Neighbour Indian FICCI's 2017 report[13] "Wedding Tourism Destination India," "the industry size is estimated at INR 45,776 Crs" and is expected to grow by 25% due to factors such as the "rise of the middle class and growth in disposable income," "lack of manpower and time for organizing," "celebrity endorsements of destination marriages," "high degree of personalization," "interest among non-residents of the home country origin," and "interest among non-residents of the home country origin Given the similarities in market demand between Nepal and the India, this is also true for Nepal. Nepal can potentially cater the Indian market because of its closeness.

Table 2: Population of Dhanusha and neighboring districts[14]

District	Population
Dhanusha	832,772
Mahottari	700,871
Siraha	696,657
Udaypur	345,889
Sindhuli	307,494
Madhubani, Bihar	4,487,379[15]

According to the same survey, wedding tourism has expanded dramatically and steadily in recent years throughout the world. Furthermore, the United States, United Kingdom, Germany, Italy, France, and Scandinavia are included as the primary worldwide source markets for wedding tourism.

On a daily basis, Dhanushadham receives only about 215 tourists. The majority of visitors to Dhanushadham are pilgrims from India. Thousands of people flock to Dhanush Mandir during the Makar Mela. Dhanushadham attracts a small number of foreign visitors. Domestic visitors also flock to the area in large numbers. Tourists come to Dhanusadham to learn about Mithila culture, customs, and values; to have fun; to learn about the flora and animals of the Dhanusadham Protected Forest; and to pray at Ram Janaki Mandir and Dhanus Mandir. The majority of pilgrims that attend Dhanusadham are adults or elderly. The majority of visitors arrive alone or with two to three pals. Children accompany their parents for the purpose of leisure. According to available statistics, male visitors account for around 58 percent of total visitors, while female visitors account for approximately 42 percent. According to the Mayor, most trips are short (10 minutes) and others last up to a day, but just a few people stay overnight.

Even though there is a considerable influx of Indian and domestic visitors, notably during the Makar and Parikrama melas, suitable lodging facilities are not available. There are no homestays, hotels, resorts, or lodges in this area. There is one inn (Dharmashala) near Dhanus temple that

13 FICCI. (2017). Wedding Tourism Destination India. Retrieved from http://ficci.in/spdocument/20915/wedding-tourism-Report.pdf
14 UNFPA. (2020). Demographic Profile of Madhesh Province. Retrieved from https://nepal.unfpa.org/en/publications/demographic-profile-Madhesh Province
15 Government of Bihar. (2021). Census 2011. Available retrieved https://madhubani.nic.in/census/

does not have a toilet or bathroom. There are no lodges or motels in the area. Tourists frequently stay at Janakpur (18 km north of Dhanushadham), which has a variety of high-end lodges and hotels such as Hotel Rama and star-hotels such as Hotel Welcome and Hotel Sitasharan.

Because of the area's religious and historical significance, it has the potential to become a worldwide tourism attraction. However, the area has remained neglected, resulting in a loss of revenue and socioeconomic development opportunities.

Janaki Heritage Hotel: Marriage Destination has the potential to attract both locals and visitors from India. Domestic visitors primarily come from Dhanusha and nearby districts such as Mahottari, Siraha, Udaypur, and Sinduli. According to the Nepalese economic report for 2019, India accounted for 21.2% of all tourist arrivals in Nepal[16]. In 2019, Lumbini was visited by 1,779,086 travelers out of which 78.76% were Nepalese while 11.51% Indians and 9.73% from other countries. According to a data provided by the Ministry of Culture, Tourism, and Civil Aviation, there were 204,825 Indian visitors to Lumbini in 2019[17]. We may predict that roughly 150,000 visitors are likely to visit the Janaki Temple using the aforementioned statistics as a proxy estimate, with a 50% ceiling for drawing Indian travelers from adjacent Bihar. The fundamental assumption supporting the expected visitor arrival at the Janaki Temple is based on Janakpurdham's cultural, historical, and religious significance for Hindus living across the Indo-gangetic plain. In addition, there is a railway link between Dhanusha and Jainagar districts in Bihar, India, which provides for convenient cross-border travel. Many Indian pilgrims who visited the Janaki shrine are expected to visit Janaki Heritage Hotel: Marriage Destination as well.

In the long run both the tourism and wedding industry will benefit. Marriages in Nepal are based on auspicious days, therefore the wedding industry is relatively free for a few months each year. During these lean months, wedding tourism can be marketed as special packages to foreigners. At the same time, we have a wide range of cultural and ceremonial variations across cultures that may be highlighted and offered to tourists. Although, while putting together the bundles, we need to keep in mind that the food and beverages could have a taste of the country of residency.

2.6 SWOT Analysis

SWOT analysis allows for the discovery of elements that characterize a company or organization in the context of a certain goal, as well as the classification of those characteristics into four areas. As seen in the table, two of them are positive, while the other two are negative:

16 Ministry of Finance. (2019). Economic Survey. Retrieved from,https://www.mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf

17 Ministry of Culture, Tourism and Civil Aviation.Nepal Tourism Statistics.(2019).Retrieved from,https://www.tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

SWOT Analysis for Janaki Heritage Hotel: Wedding Destination

Strength	Weakness	Opportunities	Threats
Ecosystem is well developed in pockets, thanks to the Big Fat Nepali weddings.	Segment based marketing not undertaken.	Homestay services are available.	Dhanusadham protected woodland causes human-wild conflict.
Janakpur is a well-known Hindu historical site. It's significant for Hindu culture and Hindus all over the world. Because it is a Hindu sacred site, it may draw pilgrims from Nepal and India.	Lack of clear cut policy around Wedding Tourism	The Parikrama route can be improved to make it even better. India-Nepal religious route Beautification of several ponds for tourism attraction places	During the rainy season, there is a flood tragedy.
The hotel industry's primary target demographic is millennials.	Only 48% of people are literate.	Boating, fisheries in several ponds	Rapid urbanization has resulted in the extinction of cultural heritages.
By road, it is located between Janakpur (25 km) and Kathmandu (250 km).	Locals' lack of knowledge about tourism	Development of recreational parks on the outskirts of the Dhanus Mandir	The 'parikrama mela' causes environmental deterioration owing to the large number of tourists.
Mahendra Highway, SRN, and village roads are all well-established road networks.	Sanitation facilities are inadequate.	Bird gazing and a guided Jungle Safari at the Dhanusadham National Park.	Due to the influx of tourists, the culture is being lost.
Because of the flat terrain, infrastructure development is simple.	There is a lack of social infrastructure, such as schools, hospitals, and parks.	Possibility of growth as a domestic tourism center a scarcity of qualified personnel.	Consumer preferences may shift over time. Adapting to a changing environment is one solution to this difficulty.
One of the 'Parikrama Mela' hotspots	Temples, ponds, and inns are not well maintained.		
The Ramayan epic 'Dhanus Mandir' is a religiously significant structure.	Human development index is low.		
Several ponds have religious significance.	In the summer, dirt roads grow dusty.		
Basic infrastructure is easily accessible: roads, communication, water supply, and power.			
In the Terai area, there is a rare Dhanusadham protected forest.			
Mithila art and culture are unique.			
Agriculture covers 75% of the land area.			
Madhesi culture's unique architecture.			
Security services that are satisfactory.			

2.7 Examination and Evaluation of Alternatives

Janaki Heritage Hotel: Wedding Destination has been transformed into a tourist and wedding destination with additional amenities and activities. However, Janaki Heritage Hotel: Wedding Destination Project is not about the facilities for the visitors but also about the natural beauty. There are relatively few sites that can offer guests both enticing facilities and a naturally tranquil and beautiful atmosphere.

2.8 Relevant Case Studies

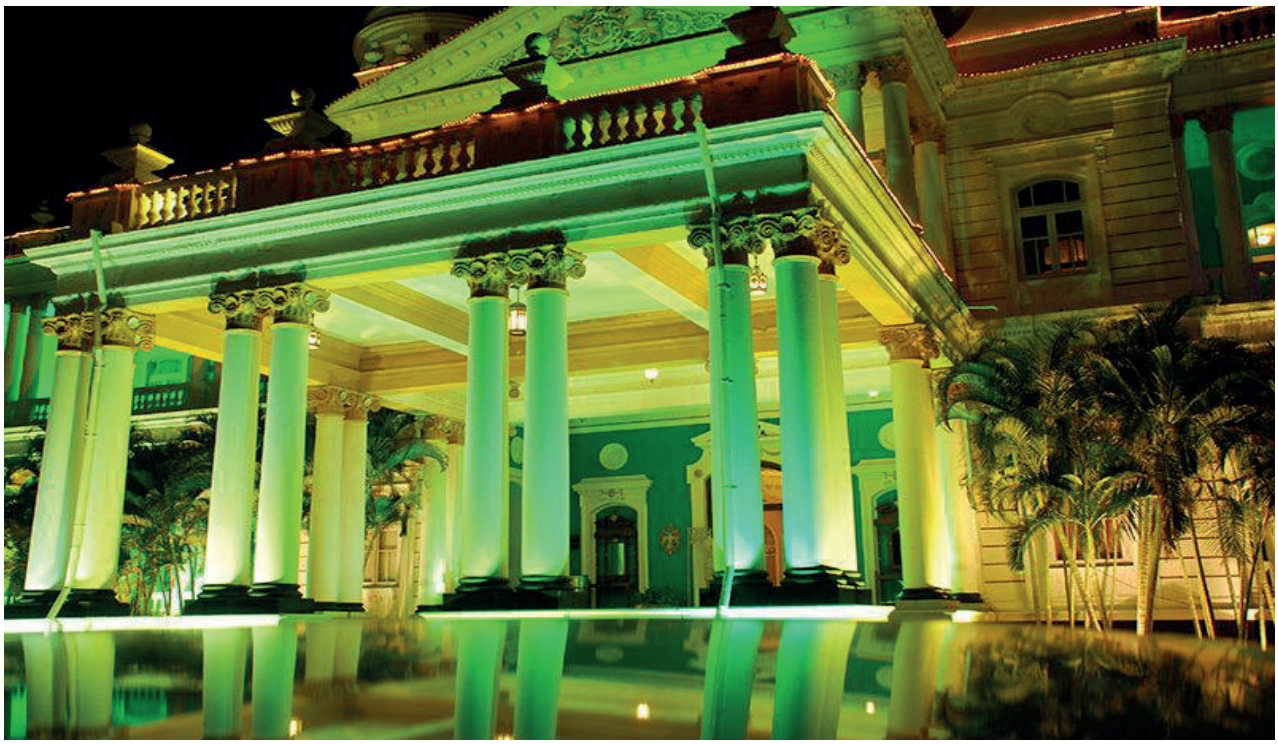
Case Study 1

Project Type: Lalitha Mahal Palace
Location: Mysore, Karnataka, India

Located on a low hill, just outside the city of Mysore is Lalitha Mahal that stands as a gleaming white palace with a spectacular Italianate Palazzo, double columned and domed and set in sprawling terraced and manicured gardens. The palace was built in Renaissance architectural style and is considered an adaptation of the St. Paul's Cathedral in London, particularly the central dome. The Palace was built by the erstwhile Maharaja of Mysore to host his most important guest, the viceroy of India. The heritage property has an inventory of 50+ rooms, all rooms are equipped with all modern amenities besides adorned with Italian marble floors and Belgian crystal chandeliers, cut glass lamps, heavy ornate furniture, mosaic tiles and a couple of exquisite Persian carpets that reflects the regal glory.

Lalitha Mahal is one of India's most ideal wedding destinations as it offers an authentic royal experience. This heritage hotel is situated on a ridge that offers a panoramic view of the gentle slopes and curving valley. At the foot of the Chamundi hill, this dream wedding destination was built in the year 1931 for special guests of the Maharajas. The building features a two-storey composition of twin ionic columns, extensive porch on the ground floor, spherical domes with lanterns and the central dome which dominates the elevation. The hotel has a large banquet hall that is done with incredible architecture and can accommodate 230 guests in Theatre Style. A pool side lawn offers accommodation to about 200 people whereas the royal terrace can hold a small and close gathering of 24 people. The hotel also allows theme weddings, which of course adds an extra edge to the best wedding venues in Mysore.

Lalitha Mahal Palace Hotel in Mysore is one of the most sought-after banqueting facilities in the city. It was set up with a view to providing an elegant and superior banqueting space to cater to the varied requirements of their clients. Whatever the celebration may be, big or small, it is their endeavor to make each celebration a grand success. They are perfect when it comes to hosting wedding ceremonies as they offer heavenly views combined with lavish hospitality. Their warm welcoming nature and hospitality make your wedding experience very special. The location adds another level of desire to this venue as it is situated on the outskirts, away from the noise and bustle of the city. The venue has indoor spaces that can accommodate up to 200 people. They have a flexible catering policy. They also provide ample parking space for the guests.



The accommodation at this Heritage Hotel consists of 54 stately suites and rooms with tariff chargeable in US Dollars. LYMPH also offers various packages to suit the needs of the discerning traveler. The show piece interiors, with immaculately polished venation marble floors, priceless carpets, ornate Rose wood furniture and the stately balustrade staircase that sweeps up to the stately upper floor is breathtaking. The central hall is adorned with life size portraits of the Royalty, lithographs portraying tippu Sultan's skirmishes with the British, decorative motifs on the walls and ceiling, stand Belgian glass dome, carved wood shutters, wall panels and myriad touches of regal embellishment.

For the sports enthusiasts there are the Swimming Pool, Billiard Room, Tennis Court, Chess, Jogging Track and Health Club to choose from. LMPH has also tied up with the local Sheri Jayachamarajendra Wadiyar Golf course for the benefit of Golf Addicts. The erstwhile Ballroom has been recreated as a Gourmet Restaurant

Glam interiors - The Lalitha Mahal

open for Breakfast, Lunch and Dinner. The stunning Durbar ambience with rich lace curtains and Jharokas. In the Balcony, fragrant magnolia and mogra flowers in lacquered brass bowls on each table, burnished silver, pictures of all the Kings in the Wadiyar Dynasty (24, down the line) in malleable gold, service staffin ethnic attire, exotic greens and more is nothing less than Nostalgia. Amongst the most sought after dishes is the "MYSORE SILVER THALI'' which brings together in several small bowls the finest array of South India's delicately spiced delights.

The hotel plans to set up an elaborate Health Club with Ayurveda and Yoga being the core competency. A large-scale renovation is also on the cards wherein besides other things the hotel will do away with the carpets in the rooms and go for parquet tiles or wooden flooring.

The hotel had earned an operational profit of Rs 27 lakh and a net profit of Rs 12 lakh during April and May of 2015, and the response for the new initiatives has been encouraging[18].

18 Kumar, T.R.S. 2015. Royal Treat: New Packages in Lalith Mahal. Deccan Herald. Retrieved from https://www.deccanherald.com/content/484752/royal-treat-packages-lalith-mahal.html

3

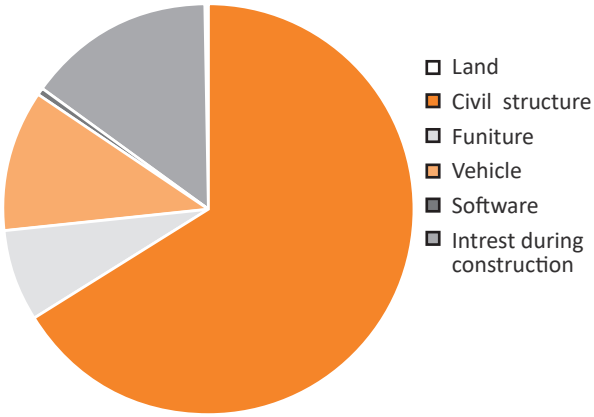
FINANCIAL ANALYSIS

3.1 Pre-Feasibility Approaches & Assumptions

Project Cost

The project's overall cost is NPR 1,840,625,312.43 with an interest component of NPR 277,685,552.43 during construction.

Particulars	Amount in NPR	Amount in NPR
Land	-	-
Civil Structure 1. Luxury Destination Hotel 2. Standard Wedding Venue 3. Cultural Museum	 1,117,500,000 76,350,000 31,200,000	 1,225,050,000.00
Furniture and Fixture 1. Luxury Destination Hotel 2. Standard Wedding Venue 3. Cultural Museum	 120,490,250 3,333,000 13066510	 136,889,760.00
Vehicle	200,000,000	200,000,000.00
Software	1,000,000	1,000,000.00
Interest During Construction		277,685,552.43
Total Project Cost		**1,840,625,312.43**



The portion of the interest during construction is capitalized in the individual assets on a proportionate basis.

Capital Structure

The project is proposed to be financed in a 70:30 debt equity ratio on the total cost of the project including Interest During Construction (IDC). The requirement of Working capital would be financed by internal resources itself. Based on the structure, the total investment pattern has been tabulated below:

Component	Percentage	Amount in NPR
Equity	30.00%	552,187,593.73
Debt	70.00%	1,288,437,718.70
	Total	**1,840,625,312.43**

Project Construction and Operation Period

The project is assumed to be built in the period of 3 Years. And the total operation period after the construction period would be 30 years. The project would be handed over to the government after the completion of the operation period.

Tax, Staff Bonus, and Depreciation Assumptions

The tax rate for the project is assumed at 20% on profit earned during the year. Further the loss carryforward has been taken for 12 years in due consonance with the provision of Income Tax Act 2058. Further, the Staff bonus is assumed at 10% on taxable income earned during any year of the operation as required by the Bonus Act.

Also, the rate depreciation and basis of depreciation is in due adherence to the provisions of the Income Tax Act as follows:

Particulars	Depreciation Method	Rate of Depreciation
Building and Civil Structure	WDV	5%
Furniture and Fixture	WDV	25%
Vehicle	WDV	20%
Others	SLM	20%

However, 1/3 of the additional depreciation has not been taken into consideration as facilitated by Income Tax Act.

Direct Income and Direct Expense

The income has been classified majorly in three categories:

1. Accommodation
2. Food and Beverage
3. Other Incomes.

Direct Income details are pre assumed as follows:

Category	No. of Room	Rate per Room	Occupancy
Suite	30	15,000.00	60%
Delux	40	10,000.00	65%
Normal	70	8,000.00	70%

Direct Expenses are estimated as follows:

Amounts in NRS.

Particulars	Bases	Remarks
Food Cost	25%	of Direct Income
Beverage Cost	30%	of Direct Income
Guest- Supplies	20.00	per guest
Cleaning- Supplies	50,000.00	lump sum/month
Cooking Exps	20,000.00	lump sum/month
Utensils	10,000.00	lump sum/month
Linen Exps	10,000.00	lump sum/month
Glassware	10,000.00	lump sum/month
Other Exps	10,000.00	lump sum/month
Outsourcing	3,50,000.00	lump sum/month

Other Assumptions

Besides salary cost and overhead cost, the total operating expense is likely to incur at the rate of 4.38% of total project cost which is likely to increase at the inflation of 3% with the cap of 150%. As discussed in the earlier paragraph, the project would be financed by 70% debt. The interest rate that has been taken into calculation is 12% which would be repaid in four equal installments in the period of 12 years.

Also, the revenue has been estimated to be inflated at the rate of 2% per annum which is capped at 150%. The income tax rate for the project is 20% and the loss carryforward period for the project is taken for 12 years. Further, the project is expected to give the additional income of 7% of the total direct revenue.

It is assumed that the government would provide required land for the project. Total operation period of the project is assumed to be 20 years and 3 years is considered as the period of pre-operative period.

Summary of Assumptions

Particulars	Assumptions	Cap
Revenue Increment (Inflation Adjustment)	2.00%	150%
Cost Increment (Inflation Adjustment)	3.00%	170%
Promotional Expenses as a percentage of Revenue	2.00%	
Royalty to Government as a percentage of Revenue	1.00%	
Loss Carry Forward. Years	12.00 years	
Income Tax rate	20.00%	
Other Income as a percentage of Revenue	7%	
Food and Beverage Sales in Event		
Human Resource Recruitment in Year 1	60%	
Insurance as a percentage of Fixed Assets	1%	
Working Capital Financing for Year 1	50,000.00	

Other income details are presume as:

Other Revenue Assumptions	No. of Guests/ Events per Annum	Rate	Annual Revenue
Business Events	80	50,000	40,00,000
Wedding Events - High End Luxury	60	15,00,000	9,00,00,000
Standard wedding events	100	5,00,000	5,00,00,000
Average Number in Events	200	-	-
Food and Beverage Sales (In Events)	48000	1,200	5,76,00,000
Swimming Pool	9000	300	27,00,000
Sports and Club Activities	4000	3,000	1,20,00,000
Entry Fee to Cultural Village and Museum	18250	100	18,25,000
Sita-Ram Flower Garden within Hotel	9125	100	9,12,500

Working Capital

It has been assumed that the overall working capital requirement would be financed by the equity holders. The working capital has been assumed on the following basis.

Particulars	Mini. Cover Period
Inventory	30 Days
Receivable & Advance	35 Days
Payable and Liabilities	35 Days

Total number of working days has been assumed to be 360 days and 12 working months.

3.2 Financial Analysis

3.2.1 Financial Results

The cost of the Janaki Heritage Hotel: Marriage Destination was calculated using data from an IBN desk research report. All of the expenses are considered to be in line with the existing cost structure. The project development cost is also supposed to have been calculated using district rates and current market rates.

The project's overall cost is NPR 1,840,625,312.43, with an interest component of NPR 277,685,552.43 during construction. The overall project, excluding working capital, was financed by loan for 70% and equity for the remaining 30%.

The project's Internal Rate of Return (IRR) is assessed to be 18%, while the project's equity IRR is calculated to be 22%. The project's IRR and equity IRR prove the project's viability.

After the date of operation, the project has a simple payback term of 6.31 years and a discounted payback period of 10.53 years. The pay-back term appears to be enough, given the nature of the firm and the broader industry.

At 0.05 times of the project, the average debt service coverage ratio is determined. The project's equity net present value is NPR 10,737,617,272.64 Furthermore, the project's cost-benefit ratio is multiplied by 1.65 .

Major Financial Indicators

Indicators	Results
Firm IRR	18%
Equity IRR	22%
NPV Equity	10,737,617,272.64
Debt Equity Service Coverage Ratio (Average)	1.52 times
Project BCR	1.65 times
Simple Payback Period	6.31 years
Discounted Payback Period	10.53 years

3.2.2 Sensitivity Analysis

Sensitivity Analysis has been carried out on three different components: Interest Rate, O & M Cost and Project cost.

Variables	Unit	Normal	Column 1	0	Column 2 in Sales by 10 %	Decrease in Sales by 10 %	Overhead Cost Increased by 4%	Interest Increase to 5%	03
Decrease in Sales by	%	0%	0%	0%	0%	10%	5%	5%	5%
Interest in Long Term Loan @	%	12.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Interest in Short Term Loan @	%	12.0%	5.0%	9.0%	9.0%	9.0%	9%	10%	9%
Short Term Loan %	%	70%	60%	70%	70%	70%	70%	70%	70%
Salary Expenses to be increased annually by	%	5%	10%	10%	10%	10%	10%	10%	10%
Income Tax Rate @	%	20%	25%	25%	25%	25%	25%	25%	25%
Overhead Expenses to be increased by	%	3%	4%	4%	4%	4%	4%	4%	4%
RESULT									
NPV	Rs.	1,125,179	13,769,620	851,230	55,893,494	22,748,707	21,326,108	21,518,272	742,366
IRR	%	17.88%	16.56%	9.52%	36.03%	21.22%	20.86%	21.88%	9.44%

Based on the analysis, It seems that interest rate is highly sensitive as compared with O & M Expenses and Project cost. The special focus to provide to project cost ensuring the cost remains as the as projected.

4

STATUTORY AND LEGAL FRAMEWORK

4.1 Statutory and Legal Framework

Before forming a corporation or conducting business in Nepal, foreign investors must first get clearance. Depending on the magnitude of the investment, an application should be filed to the Department of Industry or the Investment Board Nepal.

Dhanusadham has a large number of private land parcels. The majority of them live in the proposed project area. Private property parcels surrounding and within the study area are being utilized for agriculture or are accessible to the public as grassland. As a result, these properties might be converted from agricultural grounds to hotels and lodges. Municipalities should recognize such private property holdings through land acquisition processes. This will aid in the implementation of a tourist master plan, as well as the project's execution. If land purchase is not possible, the municipality might declare the project area a special area in its Building By-laws and set specific requirements on its usage.

5

PRELIMINARY ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The table below summarizes the results of a preliminary desktop-based environmental and social impact assessment. It highlights some of the potential repercussions that might occur throughout the project's pre-construction, construction, and operation stages, as well as mitigation techniques for each impact. Later in the project cycle, a full evaluation will be done, if required by relevant regulations, through an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA).

Activity	Possible Environment Impact	Possible Mitigation Measure
Pre-construction Phase	1. Distress to the micro-habitat and natural fauna due to tree felling.	1. Cutting of trees shall be avoided to the extent possible and natural vegetation present on the site shall be kept in mind while preparing the architectural and landscape designs of the project. Compensatory plantations should be carried out.
Construction Phase- Construction activities for the development of the project	1. Air pollution due to earth work excavation and other construction activities.	1. Frequent spraying of water at construction sites to suppress dust emission. Soil, muck and other construction materials should be covered during transport by vehicles.
	2. Soil contamination.	2. Preventive measures should be taken to minimize spillage of oil/diesel from the construction equipment. Appropriate measures should be taken in case of accidental contamination.
	3. Water pollution/ contamination- Impact on lake.	3. It should be ensured that the water bodies- surface and groundwater, are not polluted due to the project. Appropriate measures should be taken in case of accidental contamination. Particular attention should be given to avoid pollution in the lake due to the project.

Activity	Possible Environment Impact	Possible Mitigation Measure
	4. Disposal of excess earth.	4. The excess earth should be transported to a designated place and shall be used for filling and covers.
	5. Disturbance to other services.	5. Any shifting of cable/utility lines should be attended to with a minimum period of disturbance.
	6. Safety of road users in the project area.	6. Provision of temporary crossings/bridges as well as warning signs wherever necessary to facilitate normal movement.
	7. Noise pollution due to the use of machinery and movement of traffic.	7. Use of less noise generating equipment and avoiding activities during night.
	8. Impacts due to hazardous waste.	8. Hazardous waste will be managed as per applicable laws of Nepal.
	9. Impacts due to construction waste.	9. Construction debris will be managed/disposed properly.
Operation Phase	1. Impact on water resources supply to nearby residents due to possible extraction of ground-water.	1. This will be a residual impact if water is sourced from well/ boring in the project area. However, possible mitigation measures can be recharging of the groundwater by installation of a well-designed rain-water harvesting system, which is already envisioned by the project as one of its components. Similarly, water saving features could be installed where feasible. In addition, wastewater treatment plants or biological treatment systems (reed-bed) could be installed, if feasible, to treat gray water with utilization of the treated water for watering plants, etc.
	2. Contribution to GHG emissions from use of machines and equipment (heating, air conditioning, etc) in the building, etc.	2. Efforts will be taken to offset carbon emissions by incorporating a green/sustainable building design, including installation of solar power and energy-efficient equipment, as well as ensuring that natural light is received for maximum duration.
	3. Increased solid waste generation, if not managed well can be a nuisance to surrounding communities and may create health hazard	3. Segregate wastes and ensure they are collected frequently by waste collection companies/facilities. Build a compost facility, if feasible, and use the compost in the green spaces/plants inside the project compound.
	4. Water contamination- Impacts on lake/river.	4. Ensure that the water bodies/flowing adjacent are not contaminated. Appropriate measures should be taken in case of accidental contamination. Install a wastewater treatment plant if feasible.

The initiative will provide locals and other Nepalese with both short and long-term job opportunities. Through its spin-off economic impacts, it will help other current businesses as well as bring up new investment prospects.

6

PRELIMINARY RISK ANALYSIS

The following are some of the most significant risks linked with the PPP project:

1. Risks related to construction and project completion delays, which might lead to cost overruns.
2. This project may pose a business risk since the demand and market trend must be properly analyzed in order for the project to be financially and commercially viable.
3. According to relevant legislation, the project would need to complete either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA), which would identify possible environmental and socioeconomic implications as well as necessary mitigation measures.
4. Changes in the legislative framework and political risk might be some of the additional risks linked with the project.
5. Financial risks to the project include changes in interest and currency exchange rates, as well as changes in tax regulations.

7

PROJECT STRUCTURE AND IMPLEMENTATION MODEL

Public Private Partnerships (PPP)

A Public Private Partnership (PPP) is an agreement between public and private entities for a certain length of time in which private businesses agree to take on the risk of all or part of the funding, construction, operation, repair, and maintenance of projects under the PPP model. Such an entity may generate a fair profit by providing public services directly or indirectly through the building, operation, repair, and maintenance of public or private assets. Through legislative, legal, institutional, and economic arrangements, public institutions must establish an environment that encourages private sector investment.[19]

It will be suitable to develop a project using the PPP model, which involves both public and private entities. When national treasury resources are insufficient, assets of public utility and less expensive operation of public services, as well as resources, skills, and technology accessible in the private sector, must be drawn to nation-building projects based on the PPP idea.

The PPP model is appropriate in the current context of Janaki Heritage Hotel: Marriage Destination. According to the preliminary research done in these towns, the local government would give land for the construction of the Janaki Heritage Hotel: Marriage Destination.

19. World Bank, 2072, Public Private Partnership Policy

8

FINDINGS AND RECOMMENDATIONS

8.1 Findings

The following are some of the study's significant findings:

1. The Janaki Heritage Hotel: Marriage Destination project will provide tourists with a variety of services and attractions, as well as natural beauty and a tranquil setting.
2. According to the study, Dhanushadham is the best place for developing the Janaki Heritage Hotel: Marriage Destination because of its climate, proximity to the border, accessibility, and other factors.
3. The project's business model was determined to be a Public Private Partnership.
4. With a total cost of NPR 1,840,625,312.43 (including interest component throughout construction period). The project's internal rate of return (IRR) is assessed to be 18%, while the project's equity IRR is calculated to be 22%. The project's IRR and equity IRR prove the project's viability.
5. After the date of operation, the project has a simple payback term of 6.31 years and a discounted payback period of 10.53 years.

8.2 Recommendations

The project appears to be technically and financially viable for a developer to invest, based on the findings. In the following step, however, environmental and social aspects, as well as a thorough examination of all other components, must be addressed.

Disclaimer

This project profile is based on preliminary study to facilitate prospective developers to assess possible scope. It is, however, advisable to get a detailed feasibility study prepared before taking a final investment decision.

9

ANNEX

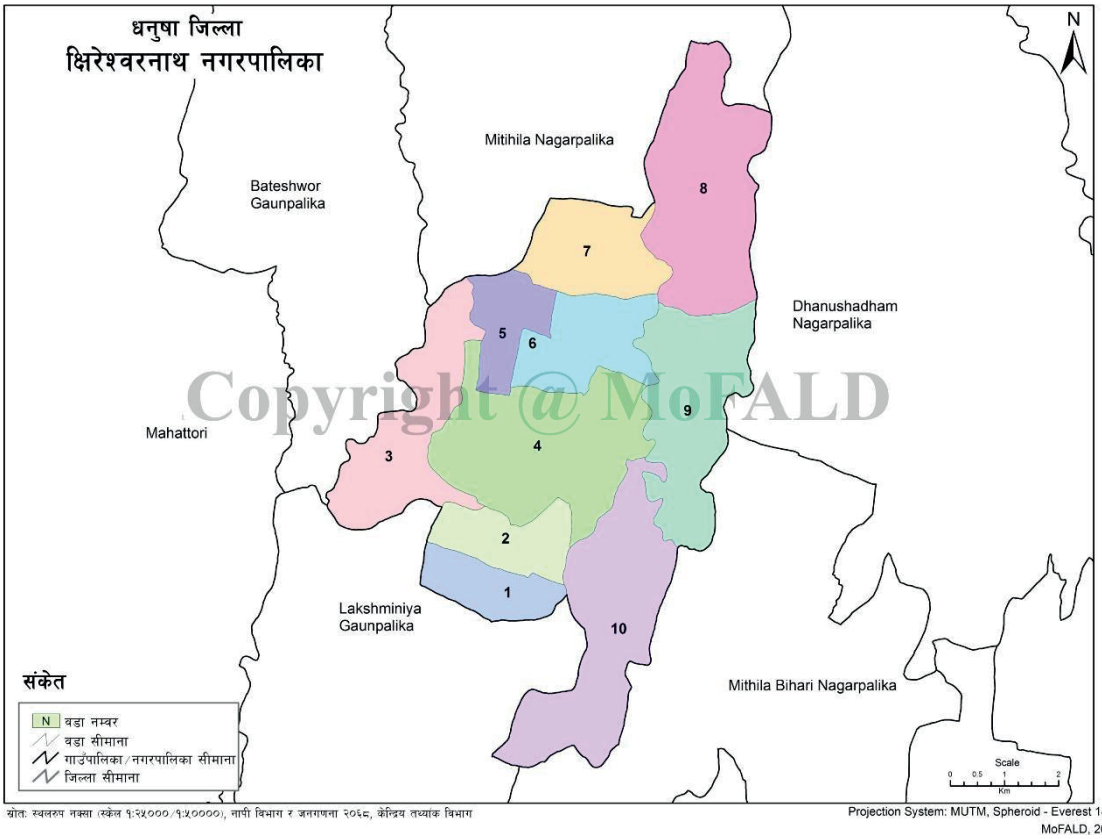
9.1 Next Steps and Useful Contacts

As part of further development of the project, the potential developer who might be interested to develop this project will be identified. Afterwards, a communication channel will be formulated for the effective execution of this project. The useful contacts of all the municipalities incorporated in this are highlighted as follows;

Table 3: Useful contact information

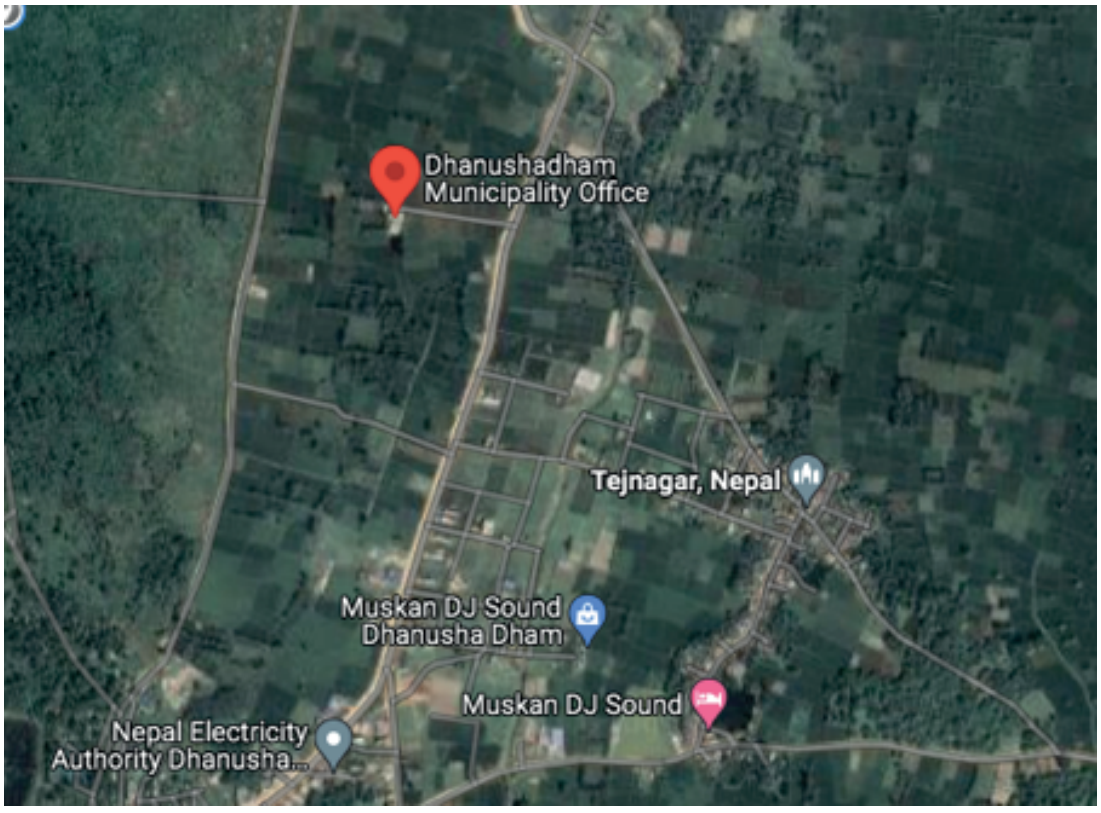
S.N.	District	Municipality	Chief Administrative officer	Mayor
1	Danusha	Dhanushdham Municipality	Ganeshraj Karki	Baleshwor Mandal

9.2 Map of Dhanushdham Municipality



Source: Dhanushadham Municipality

9.3 Satellite Map of Dhanushadham Municipality



Source: Google map

9.4 Financial Report

Projected Profit and Loss Statement for Initial 10 years of Operation

Amount in '000 NPR

Particulars	1 year	2 years	3 yearss	4 years	5 years	6 years	7 years	8 years	9 years	10 years
1. Revenue										
Service Income	346,318	441,099	528,945	539,523	568,817	621,672	634,105	768,483	783,853	799,530
Other Income	24,242	30,877	37,026	37,767	39,817	43,517	44,387	53,794	54,870	55,967
Total Revenue	370,561	471,976	565,971	577,290	608,634	665,189	678,493	822,277	838,723	855,497
2. Operating Costs	**168,945**	**211,866**	**193,621**	**198,556**	**206,295**	**215,213**	**220,834**	**240,585**	**243,123**	**245,719**
3. Operating Profit (1-2)	201,616	260,110	372,350	378,734	402,339	449,976	457,658	581,692	595,600	609,778
4. Promotional Expenses	7,411	9,440	11,319	11,546	12,173	13,304	13,570	16,446	16,774	17,110
5. Depreciation & Amortization	159,760	136,654	118,132	103,178	91,010	80,825	72,555	65,640	59,800	54,817
Repair & Maintenance	8,070	8,312	8,561	8,818	9,082	9,355	9,635	9,925	10,222	10,529
6. Profit Before Interest & Tax	26,375	105,705	234,337	255,193	290,074	346,492	361,898	489,682	508,803	527,322
7. Financial Costs	**155,959**	**148,002**	**139,303**	**128,063**	**115,636**	**101,925**	**85,867**	**69,372**	**49,058**	**26,171**
8. Profit Bef. Bonus (6-7)	**(129,584)**	**(42,297)**	**95,034**	**127,130**	**174,438**	**244,567**	**276,031**	**420,310**	**459,745**	**501,151**
9. Staff Bonus (@ 10 %)	-	-					25,094	38,210	41,795	45,559
10. Profit Before Tax (8-9)	**(129,584)**	**(42,297)**	**95,034**	**127,130**	**174,438**	**244,567**	**250,938**	**382,100**	**417,950**	**455,592**
11. Tax	-	-	-	-	511	14,537	15,811	42,044	49,214	56,742
12. Profit After Tax	(129,584)	(42,297)	95,034	127,130	173,926	230,030	235,126	340,056	368,737	398,850
13. Dividends	-	-	-	-	-	-	-	-	-	-
14. Retained Earnings	(129,584)	(42,297)	95,034	127,130	173,926	230,030	235,126	340,056	368,737	398,850
15. Retained Earning of Earlier Year(s)	-	(129,584)	(171,882)	(76,848)	50,282	224,209	454,239	689,365	1,029,421	1,398,158
16. Accumulated Earnings	**(129,584)**	**(171,882)**	**(76,848)**	**50,282**	**224,209**	**454,239**	**689,365**	**1,029,421**	**1,398,158**	**1,797,008**

Projected Balance Sheet for Initial 10 years of Operation

Amount in '000 NPR

Particulars	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Fixed Assets (Net off Depreciation & Amortization	1,680,865	1,544,211	1,426,079	1,322,901	1,231,891	1,151,066	1,078,512	1,012,872	953,072	898,255
Current Assets										
a. Inventory	7,247	7,464	7,688	7,919	8,156	8,401	8,653	8,913	9,180	9,455
b. Accounts Receivable	33,670	42,885	51,425	52,454	55,302	60,440	61,649	74,714	76,208	77,732
c. Vat & Advance Tax Receivable	24,242	30,877	37,026	37,767	39,817	43,517	44,387	53,794	54,870	55,967
d. Prepaid and Other Advances	4,313	4,529	4,529	4,529	4,529	4,529	4,529	4,529	4,529	4,529
e. Cash, Bank and Investments	22,752	33,000	150,583	278,490	427,371	606,620	768,417	1,004,278	1,247,913	1,493,554
Total Assets	**1,773,090**	**1,662,965**	**1,677,330**	**1,704,058**	**1,767,066**	**1,874,573**	**1,966,146**	**2,159,098**	**2,345,771**	**2,539,492**
Owner's Equity	631,939	631,939	631,939	631,939	631,939	631,939	631,939	631,939	631,939	631,939
Reserves & Surplus	(129,584)	(171,882)	(76,848)	50,282	224,209	454,239	689,365	1,029,421	1,398,158	1,797,008
Current Liabilities										
a . Provision for Expenses	-	-	-	-	-	-	-	-	-	-
b . Accounts Payable	16,425	20,598	18,824	19,304	20,056	20,923	21,470	23,390	23,637	23,889
c. Short Term loan	37,133	45,609	57,291	58,355	61,423	67,174	68,424	82,991	84,804	86,656
d. Other Payables		-	-	-	-					
Bank Loan										
Long Term Loan	1,217,177	1,136,701	1,046,124	944,179	829,439	700,298	554,949	391,357	207,233	-
Total	**1,773,090**	**1,662,965**	**1,677,330**	**1,704,058**	**1,767,066**	**1,874,573**	**1,966,146**	**2,159,098**	**2,345,771**	**2,539,492**

Cash Flow Statement for Initial 10 years of Operation

Amount in '000 NPR

Particulars	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years
Cash flow from operating activity										
Net profit before interest and tax	(129,584)	(42,297)	95,034	127,130	174,438	244,567	250,938	382,100	417,950	455,592
Add: Depreciation	159,760	136,654	118,132	103,178	91,010	80,825	72,555	65,640	59,800	54,817
Add: Interest	155,959	148,002	139,303	128,063	115,636	101,925	85,867	69,372	49,058	26,171
Operating cash flow before working capital change	**186,135**	**242,359**	**352,469**	**358,371**	**381,084**	**427,317**	**409,359**	**517,112**	**526,808**	**536,580**
Increase/Decrease in Current Assets	(69,472)	(16,283)	(14,914)	(2,000)	(5,136)	(9,083)	(2,331)	(22,731)	(2,838)	(2,897)
Increase/Decrease in Current Liabilities	16,425	4,173	(1,774)	480	752	867	546	1,920	247	252
Payment of Tax	-	-	-	-	(511)	(14,537)	(15,811)	(42,044)	(49,214)	(56,742)
Net Cash flow from operating activity	**133,088**	**230,249**	**335,782**	**356,851**	**376,189**	**404,564**	**391,763**	**454,258**	**475,003**	**477,193**
Cash flow from Investing Activity										
Purchase of Fixed Assets	-	-	-	-	-	-	-	-	-	-
Increase/Decrease in Investment										
Less: Payment of Dividend										
Net Cash flow from Investing Activity	-	-	-	-	-	-	-	-	-	-
Cash flow from Financing Activity										
Increase in Share Capital	79,993	-	-	-	-	-	-	-	-	-
Increase in Borrowing Fund (Long Term Loan)	(71,502)	(80,476)	(90,577)	(101,945)	(114,740)	(129,141)	(145,349)	(163,592)	(184,124)	(207,233)
Increase in short Term Loan	37,133	8,477	11,681	1,064	3,069	5,751	1,249	14,567	1,814	1,851

Amount in '000 NPR

Particulars	1 year	2 years	3 years	4 years	5 years	6 years	7 year	8 year	9 year	10 year
Less: Interest	(155,959)	(148,002)	(139,303)	(128,063)	(115,636)	(101,925)	(85,867)	(69,372)	(49,058)	(26,171)
Net Cash flow from Financing Activity	**(110,336)**	**(220,002)**	**(218,199)**	**(228,944)**	**(227,308)**	**(225,315)**	**(229,967)**	**(218,397)**	**(231,368)**	**(231,553)**
Increase/Decrease in Cash and Cash Equivalent	22,752	10,247	117,583	127,907	148,882	179,249	161,797	235,861	243,635	245,641
Cash & Bank Balance at the beginning of the period	-	22,752	33,000	150,583	278,490	427,371	606,620	768,417	1,004,278	1,247,913
Cash Balance At the End of the Period	**22,752**	**33,000**	**150,583**	**278,490**	**427,371**	**606,620**	**768,417**	**1,004,278**	**1,247,913**	**1,493,554**

PRE-FEASIBILITY STUDY OF

SIMRAUNGADH TOURISM DEVELOPMENT

EXECUTIVE SUMMARY

Entertainment is a component of several tourism settings and can be a strong incentive to visit particular places[1]. It's also one of the most important variables in defining a destination's attractiveness and appeal, as well as contributing to tourist's satisfaction. Recently, entertainment tourism has grown in popularity. However, there are only a few recreational centers and amusement parks in Nepal to keep tourists entertained. Simraungadh Tourism Development is one of the projects that taps into entertainment tourism by integrating several attractions and amenities created around the Simraungadh Municipality to provide guests with a unique and one-stop travel experience.

By the next Investment Summit, the Provincial Planning Commission (PPC) - Madhesh Province hopes to attract investment in a variety of initiatives, including tourism projects. Simraungadh Tourism Development is one of those primary sites designated for investment. The research on the Simraungadh Tourism Development is primarily intended to document the project's technical and financial feasibility. Secondary data gathering approaches were used in the study. Both primary and secondary data gathering approaches were used in the study. Primary data was acquired from field-based research, which included a field visit and stakeholder consultations and group discussions. Secondary data was gathered from a variety of sources, including published papers, journal articles, and other verified and trustworthy online sources.

This project appears to be best suited for a Public Private Partnership (PPP) approach, in which GoN will assist in obtaining the necessary land for the project. The developer will then build all of the infrastructure required for the project's smooth execution and will run it for 30 years before handing it over to GoN in good working order.

The research examined the project's technical and financial elements and determined that it is technically and financially feasible, with a total anticipated cost of roughly NPR. 1,560.96 Million (including interest component throughout the construction period) and an equity IRR of 8.13 percent.

1 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

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SALIENT FEATURES OF THE PROJECT

Table 1: Salient features of the project

General information of the project		
1	Name of Project	Simraungadh Tourism Development
2	Project Location	Province: 2 District: Bara Municipality: Simraungadh Municipality
3	Project Implementation Modality	☐ Public ■ PPP ☐ Private ☐ Others / Please Specify
4	Category of Project	■ Short term: 5 years and below ☐ Mid term: 6 – 10 years ☐ Long term: 11 – 15 years
5	Sector as per 1st 5 years Provincial Plan	Economic
6	Type of project (Sub Sector)	Tourism
7	Implementing/Facilitating Agencies	Private sector, facilitated by the Ministry of Industry, Tourism, Forest and Environment of Madhesh Province.
8	Project Management (Implementation Mechanism)	Private sector will manage the project with support from the Federal, Provincial Government and the local stakeholders.

General information of the project

1	Salient Features of Project	• Developing supporting infrastructure to reach in that area easily. • Publicity of major tourist attractions such as Ranivas temples and palace, Kankali temples and Jharokhar pokhari as sites of historical, religious and archeological significance through social media. • Beautifying the tourist sites by building gardens and parks.
2	Affected Population, Land Requirement, Acquisition & Resettlement, Materials and Ease of Access	
	Affected Population	Local Communities
	Land Requirement	N/A
	Acquisition & Resettlement	N/A
	Materials and Ease of Access	There are no issues with ease of access and availability of materials in this project.
	Environmental and Social Management Plan (ESMP)	There would be no significant environmental issues associated with this project.
3	Project Document Available	■ None (New/Rehabilitation) ☐ Concept Note/Desk Study ☐ Feasibility Study ☐ Detailed Engineering/DPR
4	Estimated Cost to Complete the Project	NPR 1,560,956,174
5	Estimated Time to Complete the Project	Feasibility Study/DPR: 1 year Approval and Financial Closure: 6 months Construction Period: 3 years
6	Project Financing Options	The government will invest in supporting infrastructure in and around the tourist destinations while the private sector will build amenities such as food and accommodation to cater to the tourists and pilgrims.
7	Project Technology/Components	• Develop by bridging infrastructural gaps like provision of transportation, food, drinking water, and accommodation facilities. • Branding, marketing and promotion of major tourist sites. • Security in the major tourist destinations. • Beautification and maintenance of the sites. • Solid waste management and sanitation in the sites.
8	Contribution to SDG and Green Growth	The project will promote domestic and international tourism in the province and create gainful employment in the region and improve people's purchasing power. In particular, the project will contribute to attaining the following SDGs: Goal No. 8. Decent work and economic growth Goal No. 9. Industry, innovation and infrastructure Goal No. 11. Sustainable cities and communities
9	Project Capacity (at 100%)	100,000 tourists per year
10	Project IRR and NPV	Firm IRR 9.41% NPV = NPR. (232,818,710)
11	Benefit Cost Ratio (Project)	0.85 times

12	Private Sector/Consumer Committee/Beneficiary Roles	Planning, designing, building and financing the project.
13	Government's Role	• Building supporting infrastructure to develop tourism in the region • Supporting in legal approvals and permits.

Other project information

1	Target Beneficiaries	Local communities.
2	Market of Project's Service/Product	Domestic as well as international tourists.
3	Key opportunities and Risks of Project Development & Operation	
	Strengths and Opportunities	• Simraungadh is a town of historical, cultural and archeological significance and one of the major attraction centers for Nepali as well as Indian pilgrims and tourists. • This project would provide a much-needed boost to the development of tourism to promote one of the oldest and culturally rich civilizations in the region. • Taking advantage of an untapped area of potential would create many Job opportunities for the local people.
	Risks and Issues	• Inadequate infrastructure development to cater to tourism in Simraungadh which needs support from the private sector and local stakeholders. • Maintaining the tourist destinations will be a challenge once the flow of tourists increases significantly. This can also be a potential opportunity to gather resources to promote and maintain these sites

1

BACKGROUND

1.1 Introduction

Nepal has huge natural and scenic splendor, as well as all-important attractions found in just a few nations throughout the globe. Natural, aesthetic, and recreational features, as well as historical, cultural, and religious qualities, are among them. These characteristics bode well for Nepal's tourism sector, and tourism projects should be seen as supporting infrastructure for attracting local and international visitors.

Entertainment is a component of several tourism settings and can be a strong incentive to visit particular places[2]. The pre dominant and most popular mode of travel is still heavily entertainment featured[3]. Taylor and Francis's research 'Entertainment Tourism' is crucial since it enables tourism marketers to gain new insights and a better knowledge of travelers' experiences and satisfaction. One of the vital components of a tourism destination's offering is entertainment activities and offerings[4]. It's also one of the most important variables in defining a destination's attractiveness and appeal, as well as contributing to tourist pleasure. Entertainment will become a more essential source of attracting tourists in the short term, as well as maintaining them for a longer length of time.

In 2017, leisure travel expenditure (including inbound and domestic) accounted for 85.4% of direct Travel & Tourism GDP (NPR 144.1 billion), compared to 14.6% for business travel spending (NPR 24.6bn)[5]. Leisure travel spending is predicted to increase by 4.2% pa to NPR 226.5 billion in 2028.

In the year 2019, approximately 1.2 million visitors visited Nepal. In the years 2016, 2017, 2018 and 2019, the number of visitor arrivals increased consistently,

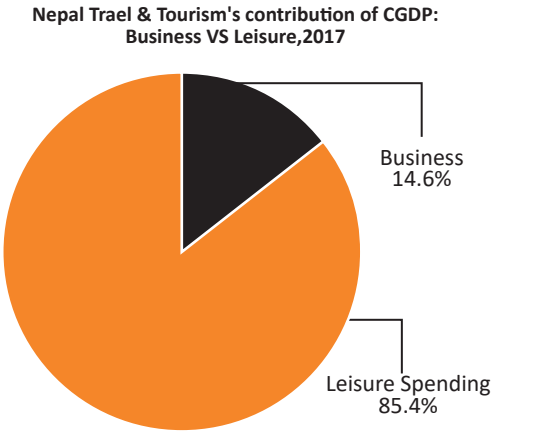
2 Sage Journals, 2015, Entertaining international Tourists: An Empirical Study of an Iconic Site in China, https://journals.sagepub.com/doi/abs/10.1177/1096348015598202?journalCode=jhtd

3 Taylor & Francis online, 2018, Entertainment Tourism, https://www.tandfonline.com/doi/abs/10.1080/02614367.2018.1454976?needAccess=true&journalCode=rlst20

4 Entertainment planet, 2007, The tourism and entertainment industry, http://entplanet.blogspot.com/2007/09/tourism-entertainment-industries.html

5 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

Fig 1: Leisure vs Business Tourism Spending



Source: World Travel & Tourism Council[6]

with significant growth rates of over 40%, 25%, 25% and 2.05%[7], respectively. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists. In addition, domestic tourism is quickly expanding. Domestic tourists, in particular, from major towns like Kathmandu, Biratnagar, Bhairahawa, and Pokhara, among others, are always looking for new and exciting travel and vacation experiences.

Nepal is well suited to being promoted as a top leisure tourist destination due to its pleasant climate and warm hospitality. It offers a tranquil and secure environment, as well as stunning and magnificent natural beauty and a unique combination of cultures. Given its accessibility and location as a transportation hub, Simraungadh has the potential to grow into a regional center for leisure tourism for both local and foreign visitors visiting Nepal's eastern and south-eastern borders.

1.2 Entertainment Tourism in Nepal

Because of its snow-capped mountains, vast flora and wildlife, interesting trekking routes, and rich cultural and religious variety, Nepal has a lot of potential to become a top tourist destination. The tourism and entertainment industry has emerged as one of Nepal's most important drivers of growth in the services sector. Given the country's rich cultural history, diversity in ecosystem, terrains, and natural beauty spots, tourism in Nepal has a lot of promise. Popular tourist activities in Nepal include pilgrimages/religious tours, climbing and adventure treks, luxury vacations, cultural visits, business and leisure activities.

In recent years, the number of tourists who visit Nepal has steadily increased. Since 2010, the number of tourists has climbed at a pace of 10.85% every year.[8] The average duration of stay per guest in 2019 has remained stable at around 12.7 days. In the years 2016, 2017, and 2018, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, and 25%[9], respectively.

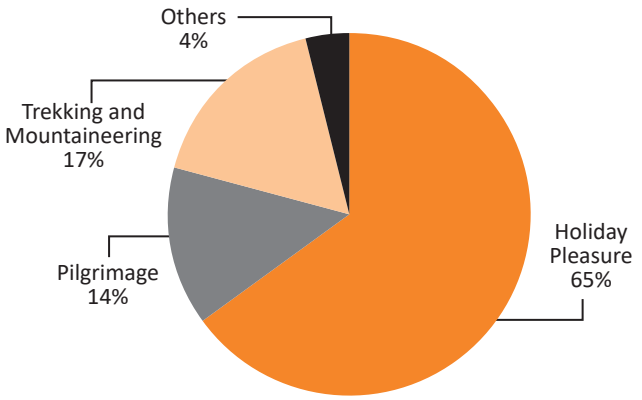
However, owing to the coronavirus epidemic, the growth rate in 2019 was 2.05%. In the year 2020, the tourism sector in Nepal was severely impacted by the epidemic. This wasn't the industry's first issue at that level; in 2015, the sector was severely impacted by a devastating earthquake and trade difficulties along the southern border. Because of the severity of the coronavirus and its health consequences, the Nepalese government had to abandon "Visit Nepal 2020," an ambitious campaign aimed at attracting two million tourists to the nation. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists.

Although most visitors arrive by flight, a significant number also arrive by land. Kodari, on the Chinese border, and Bhairahawa, on the Indian border, are the two main entrance sites. Holidays/pleasure, pilgrimage, hiking and climbing, and other activities have been recognized as the main reasons for visitors visiting Nepal.

The bulk of tourists come to Nepal for vacation purposes, as seen in the graph below:

6 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf
7 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf
8 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf
9 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

Fig 2: Purpose of visit 2019



Source: Nepal Tourism Statistics 2017[10]

Five nations account for over 53% of total tourist arrivals. India (21.2%), China (14.2%), the United States (7.8%), the United Kingdom (5.1%), and Sri Lanka (4.7%) are the nations with the highest proportion of visitors. Tourist arrivals follow a similar seasonal pattern as the previous year. The month of October had the most visitors, followed by November. In the year 2019, the age group 31-45 (32%) had the largest percentage of arrivals.

In the year 2019, the age group 31-45 (32%) had the largest percentage of arrivals. International passengers traveled by air 83% of the time and by land 17% of the time.

Tourism has been one of the most severely impacted sectors because of the pandemic. While even amid the strictest prohibitory orders other sectors; especially the one dealing in essential supplies/services were allowed to operate partially or at a reduced capacity, enterprises within the tourism sector faced debilitating consequences as all international arrivals and flights were suspended. The Organization for Economic Co-operation and Development (OECD) predicts that international tourism has declined by 60 percent in 2020. The tourism sector in Nepal faced a loss of NRs. 34 billion by July 2020 as per the Ministry of Culture Tourism and Civil Aviation (MoCTCA) states that the loss by the end of August 2020 increased to NRs. 48 billion. Based on average tourism revenue of 2019, an NTB study estimates monthly tourism loss of Rs 10 billion in the wake of the pandemic.

However, the tourism sector in Nepal is bouncing back with almost 25% of Nepal's population vaccinated and over two-thirds of Nepal's population developing antibodies against the Covid-19 virus. NRB in its latest Monetary Policy 2021/22 has classified the tourism industry as highly affected sectors, hence, has provided relief packages and special provisions for the sector such as availability of working capital loans, concessional loans, reduction in interest rates, extension of loan repayment period and extension of tax payment period. NRB has also instructed commercial banks to extend at least 15% of total loans to MSMEs and at least 7% of total loans to highly affected sectors like tourism. The government since the Covid-19 pandemic has put extra emphasis on growing and promoting internal tourism, especially targeting civil servants. The government has also announced free visas for foreign visitors and no quarantine required for fully vaccinated visitors. The Nepal government has also been active in marketing and promoting positive news of Covid-19 reduction and that Nepal is safe to travel. This Sep-Oct tourist season saw a major bounce back in internal tourism as trekking routes, hotels and resorts in major tourist destinations of Nepal were operating at almost 100% capacity which has not happened since the Covid-19 pandemic started.

1.3 Domestic Tourism in Nepal

In 2018, tourism related activities contributed 7.9% to Nepal's GDP and accumulated a share of 25% in Nepal's total exports. According to the World Travel and Tourism Council's study on Travel and Tourism Economic Impact 2018 Nepal, domestic travel accounted for 57.0% of total expenditure produced through direct travel and tourism GDP in 2017, while foreign tourism accounted for 43.0%[11]. This goes to show that the domestic tourist base is a reliable consumer segment for tourism related products and services and provides significant stability to the entire sector. Domestic travel spending reached NPR 100.4 billion in 2018, and will increase by 3.4% each year to NPR 140.7 billion in 2028[12].

10 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

11 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

12 World Travel and Tourism Council. (2018). Travel and Tourism Economic Impact 2018 Nepal. Retrieved from,https://nepalindata.com/media/resources/items/12/bNepal2018.pdf

1.4 Rationale of the Project

Apart from the economic benefits, there will be numerous other indirect benefits emanating from the proposed project, which are enumerated as under.

- Multiplier effect to other sectors of economy.
- Increased tourist inflow.
- Technological advancement.
- Foreign currency earning.
- Work culture improvement.
- Stemming outflow of workforce.
- Domestic technical skill enhancement.
- Enhanced industry-public relationship with implementation of CSR activities.

1.5 Objectives

By establishing a single platform at the next Investment Summit, the Provincial 2 Planning Commission (PPC) hopes to attract investment in a variety of initiatives, including tourism projects. As a result, PPC has put together a prospective Simraungadh Tourism Development, which includes touristic facilities and attractions. Finally, it aspires to present the proposal at the Investment Summit (2022) in order to attract investors. As a result, the following are some of the report's main goals:

1. To determine the demand for, as well as, the feasibility of Simraungadh Tourism Development.
2. To investigate the project's technical and financial feasibility at the chosen site.

1.6 Scope of Work

The purpose of the pre-feasibility study is to represent the current situation of Simraungadh Tourism Development at the proposed site, as well as to record the project's technical and financial feasibility. Finally, the research will aid in gaining a general understanding of investment opportunities in this particular sector and location. The following are some of the study's primary scopes:

1. To gather secondary data and other necessary information for the project's development.
2. Analyze the acquired data for many elements such as technical, economical, social, and environmental concerns.
3. Develop the most appropriate investment model, such as private, Public Private Partnership, or blended finance.
4. Also, depending on the findings, provide recommendations.

1.7 Approach & Methodology

A professional team from Invest and Infra Pvt. Ltd. produced this pre-feasibility study. After a thorough examination of market demand and business development prospects, the project's components were determined. For the purposes of determining project features/components, input collected during consultations with province-level ministries and associated stakeholders was also taken into account. Secondary and primary sources were used to obtain the necessary data, information, and facts to meet the study's goals.

Primary data was acquired by telephone and e-mail conversations, as well as a field-based research, which included a field visit. Producers, marketers, entrepreneurs, and government officials from Madhesh Province (Provincial Ministries, Rural/Municipalities, etc.) participated in stakeholder consultations and group discussions.

Secondary data was gathered from numerous publications issued by Nepalese government agencies, other similar nature projects in Nepal, and academic research papers published by various organizations and experts. An appropriate investment plan was recommended based on the conclusions of a technological, social, and environmental investigation. In addition, a thorough financial study was carried out to discover some of the key financial metrics that assure the project's financial feasibility.

2

PROJECT DETAILS

2.1 Project Background and Description

The Nepalese government has selected 100 locations with high tourism potential and has initiated a campaign to promote them as tourist attractions. Simraungadh in Bara district has been chosen as one of the 100 new tourist places to be promoted as part of this initiative by the Ministry of Culture, Tourism, and Civil Aviation. According to a press release from the Indian Embassy, the Government of India has funded Terai roads and India has assisted in post-earthquake reconstruction projects, including the Tamagadhi-Simraungadh Road (19.75 kilometers), which has already been completed.[13] These projects are expected to improve connectivity between India and Nepal, particularly in border areas, by promoting people-to-people contact, trade, and economic activities between the two countries.

Simraungadh is a town in Nepal's south-central region, east of Birgunj. Simraungadh lies 20 kilometers southeast of Kalaiya, Bara's district headquarters. It is 4.5 kilometers east-west and 6.5 kilometers north-south. It encompasses roughly 26 square kilometers at an average altitude of 300 to 500 meters above sea level. It is a popular tourist destination that attracts a large number of international and domestic visitors each year. Deutal Pond of 52 Bighas, Kankali Temple, Raniwas Temple (Palace), Hariharpur Column (Pillar), Gadhimai, Baba Parasnath, Kamaleswornath Mahadev, Kotwali, and others are among the major tourist attractions. The temples here are the second most important part of Simraungadh's cultural legacy.

However, because of a lack of preservation, these heritages and idols here, which have succeeded in epitomizing the whole art and culture of Mithila, Nepal, are in danger of extinction. During the Muslim conquest, the majority of the idols were disfigured and destroyed. The idols that are left are still being stolen and lost. Nonetheless, these objects of archeological and historic importance can be housed in a museum to be preserved for future generations— creating a potential for enormous local tourism. This requires conducive and collaborative interventions from the Nepalese government, local bodies, local people, and private organizations.

13 https://www.indembkathmandu.gov.in/docs/1583735309_7776_Press%20Release%20-%208%20March%202020.pdf

2.2 Project Features

- Develop a bridging infrastructure gap like provision of transportation, foods, drinking water and accommodation facilities.
- Branding, marketing and promotion of Simraungadh as a major tourist site.
- Security in the major tourist destination.
- Beautification and maintenance of site.
- Solid waste management and sanitation in the site.

2.3 Overview of the Area

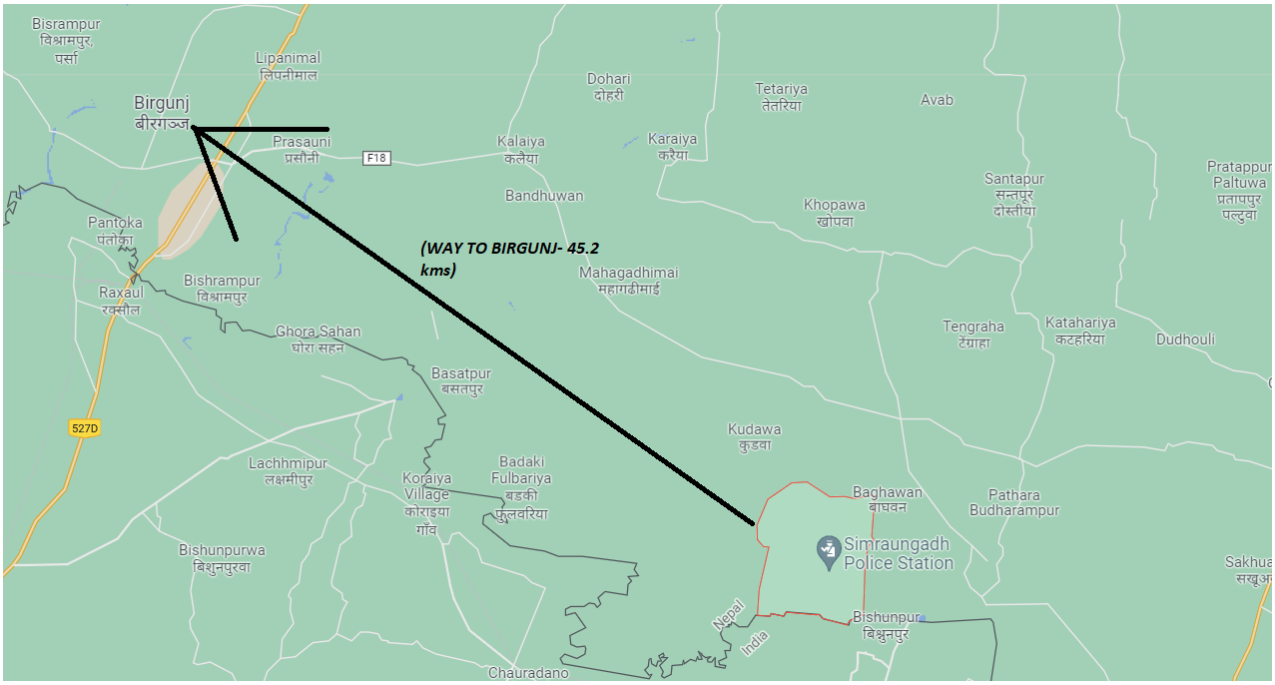
Simraungadh is a municipality of Nepal, located in Bara District, Madhesh Province. Kalaiya is the district's headquarters. The district's total area is 1,190 square kilometers, split into two Sub-Metropolitan cities, five urban municipalities, and nine rural municipalities, which are further divided into 99 VDCs. The municipality has a population of 55,212 residents, while the district has a population of 7,89,842. It is located near the crossroads of the east-west Mahendra Highway and the north-south Tribhuvan Highway, making it a growing town. Because the settlement was located on the modern-day border, archeological examinations of the fort have shown that a portion of the walls stretched into Bihar, India.

The town is situated on the border between India and Nepal. It is located 90 kilometers south of Kathmandu along the East-West Highway and 28 kilometers east of Birgunj along the Birgunj-Kalaiya Road. Simraungadh is located on the Terai's flat and fertile plain. The town borders Bijlani in the Indian state of Bihar to the south, and Adarsh Kotwal to the north.

Bara district, after Kathmandu and Morang, is Nepal's third richest district, accounting for 3.3 percent of the country's total GDP and having the highest per capita income in Madhesh Province. Regular domestic flights from Kathmandu to Simara airport, as well as buses from other regions of the nation, connect the Bara district to the rest of Nepal. Bara district, which has its headquarters in Kalaiya, is well-served in terms of communication, transportation, health, and clinical facilities. Since the Mithila kingdom of prehistoric times, the district has been one of Nepal's richest cultural districts in terms of economy, socio-culture, history, and nature, with altitudes ranging from 152 to 915 m.

Madhesh Province (also known as Madhesh or Mithila) is located in Nepal's southeastern area. It is the smallest province in terms of land area, but the second biggest in terms of people. It is bordered on the east by Province No. 1, on the north by Bagmati Province, and on the south by India. It covers 9,661 square kilometers, or around 6.5 percent of the country's total area. As of 2019, the province has a total population of 6,158,649 people,

Fig 3:- Location map of Simraungadh



Source:- Google Maps

making it Nepal's most densely populated province.[14] From Saptari District in the east to Parsa District in the west, the province is divided into eight districts.

Despite the fact that Madhesh Province has no severe terrains, the region's transportation infrastructure is lacking owing to a lack of investment and negligence. In Nepal, however, Madhesh Province is the only province possessing a passenger train line. The Mahendra Highway, which runs longitudinally across the Province is the Province's main connecting connection with Janakpurdham (27.7 kms), Rajbiraj (15.4 kms), Birgunj (23.4 kms) & Gaur (44.6 kms) south of Mahendra Highway. Although the Tribhuvan Highway does not cover as much ground as the Mahendra Highway, it is the most essential route since it links the province to Kathmandu and India. Birgunj, the starting point of the Tribhuvan Highway, is the province's and country's most significant international gateway and trade route, and is hence known as "The Gateway of Nepal." Birgunj custom point is the largest in terms of revenue generation.

In Madhesh Province, a few railway projects are in the works. Nepal Railways is responsible for all of these projects. The Nepalese government has suggested Janakpur as the main station for a 1024 kilometer east-west metro railway project that would eventually be extended to India and China, allowing Nepalese railways to link with Indian and Chinese railways for economic and tourism purposes. Madhesh Province is served by three domestic airports, the busiest in the country. Rajbiraj Airport, Janakpur Airport, and Simara Airport are all located in Rajbiraj. Meanwhile, at Nijgadh, an international airport, Nijgadh International Airport, is being built.

History of Simraungadh

Simraungadh was founded as a hindu cultural center in the ancient Bideha or Mithila area during the Upanishad and Puranic periods. After a lengthy break, Nanyadeva, the commander of the Chalukya king of Karnataka, invaded Mithila in 1097 and established his capital in the forest of Simal, which is now known as Simraungadh.

A famous myth about Simraungadh is that it is connected to the Simal forest, which is referenced in Gopalar genealogy. This location is referred to as 'Simrawangarh' in that genealogy, which means 'fort in the Simal forest.' Simaravangarh appears to have been renamed Simraungadh, a wooded region near Simal. The Italian monk Casiano, who visited the Kathmandu Valley from 1739 to 1754, mentions the term 'Simanagarh.'

The Karnataka dynasty appears to have governed here from 1097 until 1327 when Nanyadev declared Simraungadh the capital of Mithila. After Nanyadev, the final kings were Ganga Singh Dev, Narasimha Dev, Ram Singh Dev, Shakti Singh Dev, Bhupal Singh Dev, and Harisingh Dev. This time is known as the Golden Age in Mithila's history. The growth of religious, cultural, and artistic writings peaked during this time.

When the emperor of Delhi, Gayasuddin Tukalak, devastated Simraungadh during the reign of Harisinghdev, the last monarch of Tirhut, in 1326, the king and his nobles retreated north. At a site named Tinpatan in Sindhuli, King Harisinhdev died as he entered the Kathmandu Valley. Gayasuddin Tughlaq's representative relocated from Simraungadh, Mithila's capital, to Darbhanga, India, after his death.

Lohang Sen, the youngest son of King Mukunda Sen of the Palpali Sen dynasty, conquered the region in the 16th century AD, and Tirhut was subsequently ruled by the Sen monarchs of Makwanpur. The Gorkhali army then defeated Sen Raja Digvardhan Sen and seized the province during Prithvinarayan Shah's struggle for Nepal's unity. Simraungadh has been included in Nepal since that time.

Major Tourist Attractions in the Area

Ranivas Temple and Palace

The Ranivas Complex, which includes the 'Ranivas Temple,' also known as 'Ram Mandir,' 'Ram Janaki Mandir,' 'Ranivas Palace,' and 'Mahal Sarai,' is located 1 km north of the Simraungadh market area and 2 km north of the Indian border. The compound is 600 bighas in size. It is one of Simraungadh's most popular tourist destinations, both domestic and international. Jagat Jung Rana, son of Jung Bahadur Rana, constructed the current Ram Janaki temple in 1878 AD. Jung Bahadur Rana, the then-Prime

14 UNFPA. (2020). Demographic Profile of Madhesh Province. Retrieved from https://nepal.unfpa.org/en/publications/demographic-profile-Madhesh Province

Minister of India, died in Patharghat, Rautahat, while returning from a hunting camp in Simraungadh in 1877 AD. In 1878 AD, his son erected this temple in response to his queen Hiranyagarbha Devi's desire while on a trip to Sati.

This temple and the current building of Ranivas Palace are supposed to be built on the foundations of the Karnat dynasty's old palace. After the collapse of the Karntas, the Oiniwar dynasty rose to prominence and reigned over Mithila from 1353 until 1527 AD. During his reign, the Maharaja of the Oinwar dynasty, Siva Singh (r. 1412 - 1416), is said to have erected this palace for his daughter Isri Devi.

Kankali Temple

Kankali Temple is a Hindu temple in the Simraungadh market area's southern corner. The shikhara style of architecture is used to construct this temple. The temple has the idol of Kankali Mai, which is made of black stone and is said to have been mangled by Tughlaq forces. The date L.S. 119 is etched on the Ghanta in front of this temple (which must be in Vikram Samvat: 1340 and Common era: 1283). The ruin of this temple was called as "Kankali Mai Sthaan" before it was renovated. Mansaram Baba repaired the temple in a minor scale about 1816 AD, and his pupil, Ram Sewak Das, built the current edifice in 1967 AD. Thousands of devotees from Nepal and India attend the Rama Navami celebrations in Chaitra.

Jharokhar Pokhari

Jharokhar Pokhari, also known as 'Deutaal Pokhari' or 'Kachorwa Pokhari,' is a 52-hectare manmade pond (87 acres). Due to a lack of upkeep and human encroachment, the pond has been reduced to 22 bighas (36 acres) as of 2020 AD. The Jharokhar pond, which is located in Baswariya, Simraungadh, and is connected to the Nepal-India border via Dasgaja, is said to be around 800 years old. Jharokhar, an Indian town about 200 meters south of the pond, may be found. This is one of Nepal's biggest man-made spring ponds.

Ishara Pond

In front of the Kankali Temple sits Ishara Pond. Ishwori Singh, King Shiv Singh's daughter, is supposed to have been the inspiration for the pond's name.

Gadhimai Temple

Gadhimai Temple is a Hindu temple dedicated to the great goddesses of might. The temple is located in Mahagadhimai Municipality, Bara District, south-central Nepal, some 160 kilometers south of Kathmandu and about 8 kilometers east of the Bara district headquarters, Kalaiya city, in southern Nepal, close to the Indo-Nepal border, bordering Bihar. The Gadhimai festival is a centuries-old custom in which the world's largest animal sacrifice is performed every five years at the Gadhimai Temple in Bariyarpur, Bara District, where millions of people attend. Animals are slaughtered as part of the Hindu event in the hopes that the goddess would grant the requests of the sacrificial animals. The ceremony comprised the mass sacrificial murder of animals such as water buffaloes, pigs, goats, chickens, Pigeons, and others in order to appease Gadhimai, the goddess of power.

2.4 Developing a Business Case

Product Mix

The product mix for this project consists of the following components:

Component 1, Develop a bridging infrastructure gap like provision of transportation, foods, drinking water and accommodation facilities

A place can be developed as a tourist destination only with the development of its infrastructure. To reach the destination, the existing roadway from Kalaiya to Simraungadh has 26km. As per press release dated 8 March 2020, India and Nepal review GOI funded Terai road and India assists post earthquake reconstruction project,Indian Government has committed for construction of 10 roads with the length of 306 km in the terai region and it includes Tamagadhi-Simraungadh Road: Package-II - Bara district– (19.75 km).It is one of the strength for this project. Proper Hotel facilities should be developed to facilitate the tourists.

Component 2, Branding, marketing and promotion of major tourist sites

Simroungadh has an ancient history. Archaeologists have already proved that Simroungadh has been the capital of one of such splendorous states among those dozen very prosperous and splendorous states. During the administrative structure in Nepal, due attention has not been paid to giving identity to the Simraungadh. Visiting place in Simraungadh includes Deutal pond of 52 Bighas, Kankali Mandir, Raniwas Mandir, Hariharpur Column (Pillar), Gadhimai, Bab Parasnath; place where Brunt rice

are found, Kamaeleswornath Mahadev, Kotwali. Social Media coverage should be given for these places. We can use paid vlogs to promote the places.

Component 3, Security in the major tourist destination

Security and safety are the factors that can be decisive while choosing the travel destination. It may not be the primary factor. However, it may determine that tourists choose one destination over another, or alternatively consider the destination that poses the least risk. Simraungadh has to establish a mechanism to communicate with the tourists in case a security issue arises like a complaint box, and increase police stations in tourist localities.

Component 4, Beautification and maintenance of site

Beautification and maintenance helps to grow the tourism industry. Beautification and maintenance is not a one time process. It is advisable to form a committee for its beautification and maintenance. Local participation should be involved, which serves as a tool for the locals to be voluntarily involved in the beautification and maintenance activities.

Component 5, Solid waste management and sanitation in the site

With the increase in flow of the tourist, pollution also increases. Tourists consequently produce a substantial amount of waste and pollution. To manage the waste, request the tourist not to carry the plastic and follow the 4R, Refuse, Reuse, Reduce and Recycle. Establishment of clean public toilets and dustbins throughout the area.

2.5 Market Assessment

In its annual "Best in Travel List," Lonely Planet, a popular travel guide, named Nepal as the best value destination for 2017. In recent years, the number of tourists who visit Nepal has steadily increased. Since 2010, the number of tourists has climbed at a pace of 10.85% every year.[15] The average duration of stay per guest in 2019 has remained stable at around 12.7 days. In the year 2019, approximately 1.2 million visitors visited Nepal. In the years 2016, 2017, and 2018, the number of visitor arrivals increased consistently, with significant growth rates of over 40%, 25%, and 25%[16], respectively. Many Indian visitors who come to Nepal by land are not included in the number of entering tourists.

65% of the visitors registered come to Nepal for vacation or enjoyment. In addition, domestic tourism is quickly expanding. Internal visitors from major towns like Kathmandu, Biratnagar, Bhairahawa, Pokhara, and others, in particular, are continuously seeking new and exciting travel and vacation experiences, thanks in part to rising disposable income. In addition, parents want their children to have fresh learning experiences. The same surge in demand may be noticed in Indian cities along Nepal's eastern and southern borders.

Travel bugs seem to have struck Nepalese in the recent past. A large number of Nepalese are going with their friends and family to various regions of the nation as well as other countries. Apart from Pokhara, domestic visitors go to places like Sauraha (which is outside the CNP but popular with locals), Lumbini, Muktinath, Rara, Mankamana, Bandipur, Pathivara, Swargadwari, Ilam, and others. Domestic tourism has been encouraged by adventure tourist destinations (such as bungee jumping, rafting, trekking, hiking, jungle safaris, and so on), natural beauty sightseeing, and historic/religious monuments.

Domestic travelers are rising in comparison to foreign tourists, according to tourism data. Domestic travelers have proven their worth in recent years, particularly in the aftermath of disastrous earthquakes and pandemics. The most important element that has boosted domestic tourism is social media. Because of Nepal's large user base, social media has proven to be a very efficient medium for promoting destinations and properties. When a post goes viral on social media, it immediately becomes a trending topic, and everyone wants to get there. This has made it critical for us to be social media knowledgeable in order to break into the local market.

15 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

16 Ministry of Culture, Tourism and Civil Aviation. 2020. Nepal Tourism Statistics. Retrieved from tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

Table 2: Total Population of Madhesh Province (District wise)[17]

District	Headquarters	Population (2019)
Sarlahi	Malangawa	881,413
Dhanusa	Janakpur	832,772
Bara	Kalaiya	814,084
Rautahat	Gaur	826,635
Saptari	Rajbiraj	703,219
Siraha	Siraha	696,657
Mahottari	Jaleshwar	700,871
Parsa	Birgunj	702,998

Simraungadh has the potential to attract both locals and visitors from India. Domestic visitors will not only primarily come from Bara and nearby districts, but also from all over Nepal as Simraungadh has the potential to be a major tourist attraction of Nepal. According to the Nepalese economic report for 2019, India accounted for 21.2 % of all tourist arrivals in Nepal.[18] In 2019, Lumbini was visited by 1,779,086 travelers out of whom 78.76% were Nepalese while 11.51% Indians and 9.73 % from other countries. According to a data provided by the Ministry of Culture, Tourism, and Civil Aviation, there were 204,825 Indian visitors to Lumbini in 2019[19] . We may predict that roughly 150,000 visitors are likely to visit the Janaki Temple using the aforementioned statistics as a proxy estimate, with a 50% ceiling for drawing Indian travelers from adjacent Bihar. The fundamental assumption supporting the expected visitor arrival at the Janaki Temple is based on Janakpurdham's cultural, historical, and religious significance for Hindus living across the Indo-gangetic plain. In addition, there is a railway link between Dhanusha and Jainagar districts in Bihar, India, which provides for convenient cross-border travel. Many Indian pilgrims who visited the Janaki shrine are expected to visit Simraungadh as well.

There are only a few amusement parks and tourist attractions that can provide a one-stop leisure experience for travelers. Almost majority of these are in Kathmandu or the surrounding areas. They are unable to meet the needs of the rapidly rising populations in eastern and southern cities. Furthermore, the absence of such amenities in Madhesh Province has resulted in the province missing out on the opportunity to attract Indian visitors from nearby cities and towns.

2.6 SWOT Analysis

SWOT analysis allows for the discovery of elements that characterize a company or organization in the context of a certain goal, as well as the classification of those characteristics into four areas. As seen in the table, two of them are positive, while the other two are negative.

17 UNFPA. (2020). Demographic Profile of Madhesh Province. Retrieved from https://nepal.unfpa.org/en/publications/demographic-profile-Madhesh Province

18 Ministry of Finance. (2019). Economic Survey. Retrieved from,https://www.mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf

19 Ministry of Culture, Tourism and Civil Aviation.Nepal Tourism Statistics.(2019).Retrieved from,https://www.tourism.gov.np/files/NOTICE%20MANAGER_FILES/Nepal_%20tourism_statics_2019.pdf

SWOT Analysis for Simraungadh Tourism Development

Strength	Weakness	Opportunities	Threats
- Simraungadh has a long and illustrious history. - Simraungadh is rich in culture, history, and religious sites to see. - Road transportation is easily accessible. There is an existing road 26 kilometers from Kalaiya. Furthermore, India has contributed funds to the building of road transit in the Terai region, which includes the Tamagadhi-Simraungadh Road: Package-II – Bara district (19.75 km). - It is situated on the Nepal-India border. As a result, it has a lot of potential to attract Indian tourists and pilgrims.	- A lack of complementary high-quality infrastructure, such as airports and other transportation hubs. - The likelihood of project plan implementation being challenging owing to a lack of hospitality sector experience and competent staff. - Infrastructure development is insufficient to bring tourists to Simraungadh, which necessitates the involvement of the private sector and local residents.	- If an untapped prospective region is researched, job possibilities will be developed. - By emphasizing one of the world's oldest and most culturally rich civilizations, this initiative would help to stimulate tourism growth. - Project aimed at boosting the region's economic and commercial growth. - A good source of income, hard money may also be obtained since their countries provide competitive exchange rates. - Promote Nepal as a desirable tourist destination.	- As the number of tourists increases, pollution levels may grow as well. - Community peace may be disturbed by the movement of different types of people. - Maintaining tourism locations will become more challenging as the number of visitors grows.

2.7 Examination and Evaluation of Alternatives

Simraungadh is an area that has been transformed into a tourist destination with additional amenities and activities. However, Simraungadh is not about the facilities for the visitors but also about the natural beauty. There are relatively few sites that can offer guests both enticing facilities and a naturally tranquil and beautiful atmosphere.

2.8 Relevant Case Studies

Case Study 1

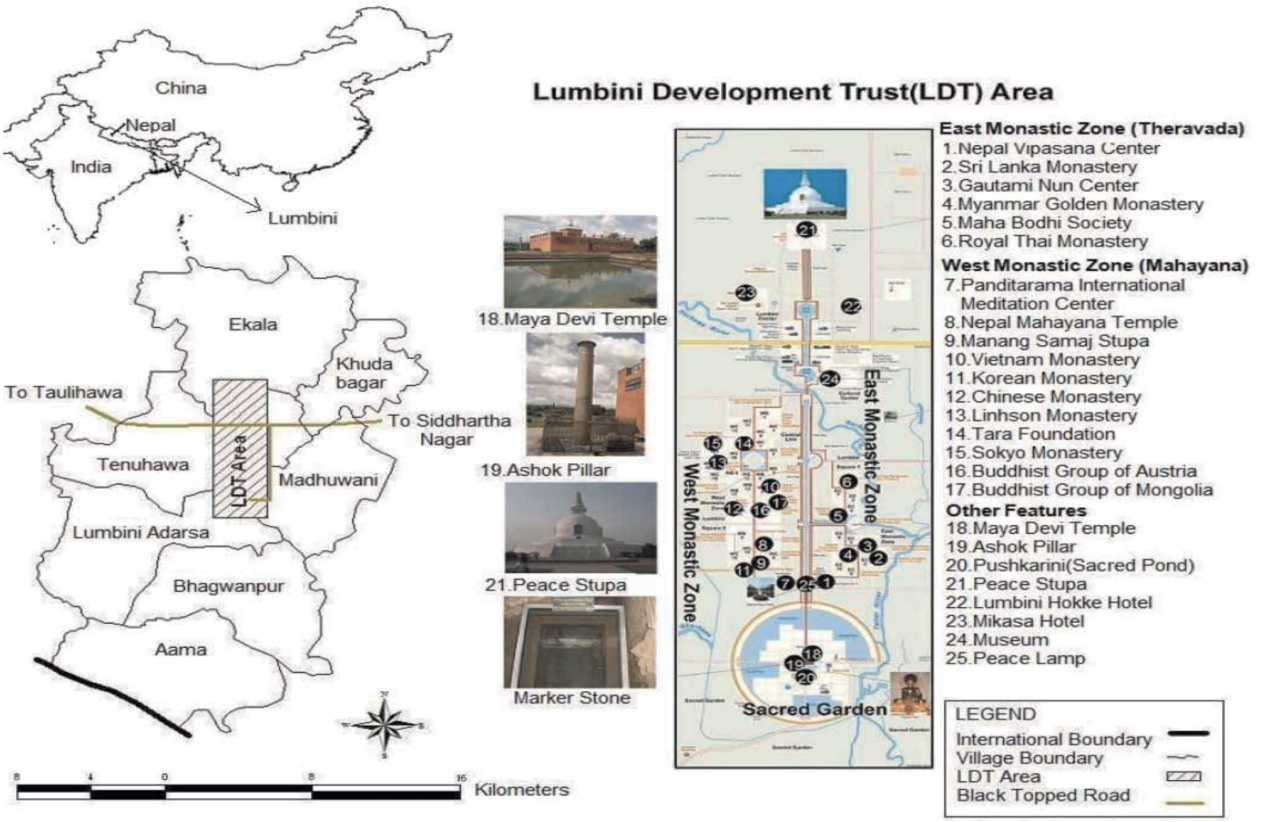
Project Type: Lumbini Tourism Development
Location: Lumbini, Nepal

Lumbini, the birthplace of Siddhartha Gautam, is located in Nepal's southern plains, in the Rupandehi District. Siddhartha Gautam, a prince of the Shakyamuni dynasty and afterwards known as Gautam Buddha, is the founder of Buddhism.

Lumbini's religious significance has drawn pilgrims since ancient times. The archeological relics, which have been unearthed during the last century and are now protected at the site, bear witness to these pilgrimages, which date back to the 3rd century BC. Lumbini was listed on the World Heritage List in 1997 for these reasons.

For millennia, Lumbini and its surroundings have been pilgrimage destinations. The archeological relics in the Greater Lumbini Area, some of which were discovered in the last century, disclose not only the exact spot where Lord Buddha was born, but also evidence of pilgrimages dating back to the 3rd century BC. Lumbini has been the subject of periodic national and international initiatives to transform it into a significant tourist and pilgrimage destination for Buddhists from all over the world. However, this vision has yet to be completely fulfilled, and archeological research and excavations have yet to take place in many of the Greater Lumbini Area's areas. Lumbini's tourist attraction is largely based on the world's enduring fascination with the Buddha and

Figure 4: Map of Lumbini Development Trust Area



(Source: Lumbini Development Trust)

Buddhism. From a cultural standpoint, Lumbini is one of Nepal's most important locations. The place has been frequented by tourists from ancient times, according to history. It is still not developing as planned due to a lack of appropriate planning and implementation, qualified tourist personnel, and knowledgeable local hosts.

The Lumbini Sacred Garden, which encircles the historic history of Buddha's birthplace and is the major item that people come to see, is the first tourism resource in this area. The Ashokan Pillar, constructed by the Indian emperor Ashoka and with a Brahmi script inscription, is a must-see historic site for travelers. The cultural centre is another point of interest. The cultural center is committed to international peace. It is made up of three of the most important structures in the Lumbini development. The Lumbini Museum, Auditorium, and Lumbini International Research Institute are all part of the Lumbini International Research Institute complex. These structures are meant to add to the cultural richness of Lumbini's activities. The Lumbini Museum houses artifacts from Lord Buddha's life as well as the discoveries of archeological excavations. Mauryan Kushana coins, religious writings, terra-cotta, stone and metal work, and icons are among the items on display. The auditorium will serve as a multi-purpose venue for national and international conventions.

Over 7,500 volumes are housed at the Lumbini International Research Institute's Library. The tomes are written in Nepal Bhasha (Newari), Nepali, Hindi, Japanese, English, French, German, Italian, Sinhalese, Burmese, Thai, and Pali, among other languages. Along the center connection, two monastic enclaves, one each for the Mahayana and Hinayana schools of Buddhism, are divided by a green zone. Within these zones, land is accessible for religious institutions to build facilities. The Monastic Complex has 42 plots of varied sizes, with 13 for Hinayanists on the east side of the central canal and 29 for Mahayanists on the west side. In such enclaves, guests have access to meditation facilities. Another attraction may be a crane sanctuary, which would shelter hundreds of cranes. This refuge, as well as the surrounding foliage, may pique the curiosity of nature enthusiasts. It has given gold a new dimension by incorporating a natural draw with the cultural destination.

Furthermore, there are several other aspects of Buddha's life that are just as important as the Lumbini. The next archeological site, Tilaurakot, is 27 kilometers west of Lumbini. Ararakot is located around 9 kilometers northeast of Tilaurakot. Gotihawa is located 5 kilometers southwest of Taulihawa. There are historic dwelling ruins, stupas, and monasteries in the area. On the approach to Gotihawa, Kudan lies 2 kilometers southwest of Taulihawa. Niglihawa is a small village located 7 kilometers northwest of Tilaurakot. The town of Sagarhawa is located 3.5 kilometers north of Tilaurakot and west of the Banganga River. Devadaha is located 34 kilometers northeast of Lumbini, near Khairhani. Near the settlement, there are many big ancient mounds. Ramgram is located in the Nawalparasi district, 4 kilometers south of Parasi town.

3

FINANCIAL ANALYSIS

3.1 Pre-Feasibility Approaches & Assumptions

Project Cost

Total cost of the project amounted to NPR. 1,386 Million excluding Interest During Construction (IDC). The total cost including interest amounted to Dollars NPR. 1,560.96 Million.

Particulars	Amount in NPR
Road Infrastructure	200,000,000
Civil Infrastructure	600,000,000
Furniture Infrastructure	300,000,000
Machinery Infrastructure	200,000,000
Other Assets	86,000,000
Interest During Construction	174,956,174
Total Project Cost	**1,560,956,174**

The portion of the Interest During Construction (IDC) is capitalized in the individual assets on a proportionate basis.

Capital Structure

The Project is proposed to be financed in a 70:30 debt equity ratio on the total cost of the project including Interest During Construction (IDC). The requirement of working capital would be financed by internal resources itself. Based on the structure, the total Investment pattern has been tabulated below:

Component	Percentage	Amount in NPR (000)
Equity	30.00%	4,68,287
Debt	70.00%	10,92,669
	Total	**15,60,956**

Project Construction and Operation Period

The project is assumed to be built in the period of 3 years. And the total operation period after the construction period would be 30 years. The project would be handed over to the government after the completion of the operation period.

Tax, Staff Bonus, and Depreciation Assumptions

The tax rate for the project is assumed at 20% on profit earned during the year. Further the loss carry forward has been taken for 12 years in due consonance with the provisions of Income Tax Act 2058. Further, the staff bonus is assumed at 10% on taxable income earned during any year of the operation as required by the Bonus Act.

Also, the rate depreciation and basis of depreciation is in due adherence to the provisions of the Income Tax Act as follows:

Particulars	Rate	Basis
Road Infrastructure	3.33%	Straight Line Method (SLM)
Civil Infrastructure	5.00%	Written Down Value (WDV)
Furniture Infrastructure	25.00%	Written Down Value (WDV)
Machinery Infrastructure	20.00%	Written Down Value (WDV)
Other Assets	20.00%	Straight Line Method (SLM)

However, 1/3 of the additional depreciation has not been taken into consideration as facilitated by the Income Tax Act.

Direct Income and Direct Expense

The income has been classified majorly in three categories:

1. Accommodation
2. Food, Beverage and Banquet
3. Lease Property
4. Other Amenities

The total units, rates and associated direct cost percentage in 100% capacity has been detailed below:

Particulars	Category	100% Capacity	Rate per Event/ person Amount in NPR 1000	Unit of Measurement	% of Direct Cost
Room Sales - suite/ villa	Accomodation	30 Persons	8.00	Person per day	10%
Room Sales - deluxe	Accomodation	50 Persons	7.00	Person per day	10%
Room Sales - standard	Accomodation	50 Persons	4.00	Person per day	10%
Restaurant sales	Food, Beverage & Banquet	50000 Persons	1.00	Annually	40%
Café Sales	Food, Beverage & Banquet	20000 Persons	0.50	Annually	40%
Small hotels land lease out- 5 Space	Lease Property	60 Months	50.00	Annually	10%
Entry	Others Amenities	1000000 Persons	0.10	Annually	10%
Gift and souvenir shop - Lease out 20 outlets	Others Amenities	120 Months	20.00	Annually	10%

The Operational Efficiency

The operational efficiency of each component in various years has been estimated as below:

From	To	Overhead and Salary charging	Accomodation	Food, Beverage & Banquet	Others Amenities	Lease Property
0 year	3 years	-	0%	0%	0%	0%
5 years	9 years	60%	50%	50%	50%	80%
10 years	14 years	70%	60%	60%	60%	90%
15 years	24 years	80%	70%	70%	80%	95%
25 years	34 years	100%	75%	80%	90%	95%

Other Assumptions

Particulars	Base	Maximum Cap
Additional O & M cost incl. Insurance (of Project cost)	3.00%	200.00%
Inflation Rate of the Cost	4.00%	200.00%
Inflation Revenue Growth Inflation	3.00%	180.00%

Working Capital

It has been assumed that the overall working capital requirement would be financed by the equity holders. The working capital has been assumed on the following basis.

Receivable & Advance	30	Days
Payable and Liabilities	15	Days

Total number of working days has been assumed to be 360 days and 12 working months.

3.2 Financial Analysis

3.2.1 Financial Results

The cost of the Simraungadh Tourism Development was calculated using data from an IBN desk research report. All of the expenses are considered to be in line with the existing cost structure. The project development cost is also supposed to have been calculated using district rates and current market rates.

The project's overall cost is NPR 1,560,956,174, with an interest component of NPR 174,956,174 million during construction. The overall project, excluding working capital, was financed by loan for 70% and equity for the remaining 30%.

The project's Internal Rate of Return (IRR) is assessed to be 9.41%, while the project's equity IRR is calculated to be 8.13%.

After the date of operation, the project has a simple payback term of 9.36years and a discounted payback period of 0 years. The pay-back term appears to be enough, given the nature of the firm and the broader industry.

At 0.81 times of the project, the average debt service coverage ratio is determined. The project's equity net present value is (232,818,706.42) NPR. Furthermore, the project's cost-benefit ratio is multiplied by 0.85.

Major Financial Indicators

Indicators	Result
Firm IRR	9.41%
Equity IRR	8.13%
NPV- Equity(Amount in NPR)	(232,818,706.42)
Debt Equity Service Ratio (average)	0.81 Times
Project BCR	0.85 Times
Equity BCR	0.50 Times
Simple Payback Period	9.36 Years
Discounted Payback Period	-

3.2.2 Sensitivity Analysis

Sensitivity Analysis has been carried out on three different components: Interest Rate, O & M Cost and Project cost.

Interest Rate Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	8.13%	-
5.00%	7.83%	-3.70%
-5.00%	8.43%	3.74%

Operation Cost increase/Decrease by 5%

O & M Cost	Impact on Equity IRR	% of Change
0.00%	8.13%	-
5.00%	8.13%	-0.00%
-5.00%	8.13%	0.00%

Project Cost Increase/Decrease by 5%

Project Cost	Impact on Equity IRR	% of Change
0.00%	8.13%	-
5.00%	7.96%	-2.03%
-5.00%	8.29%	2.02%

Based on the analysis, It seems that interest rate is highly sensitive as compared with O & M Expenses and Project cost. The special focus is to provide project cost ensuring the cost remains as projected.

4

STATUTORY AND LEGAL FRAMEWORK

4.1 Statutory and Legal Framework

Before forming a corporation or conducting business in Nepal, foreign investors must first get clearance. Depending on the magnitude of the investment, an application should be filed to the Department of Industry or the Investment Board Nepal.

5

PRELIMINARY ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The table below summarizes the results of a preliminary desktop-based environmental and social impact assessment. It highlights some of the potential repercussions that might occur throughout the project's pre-construction, construction, and operation stages, as well as mitigation techniques for each impact. Later in the project cycle, a full evaluation will be done, if required by relevant regulations, through an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA).

Activity	Possible Environment Impact	Possible Mitigation Measure
Pre-construction Phase	1. Distress to the micro-habitat and natural fauna due to tree felling.	1. Cutting of trees shall be avoided to the extent possible and natural vegetation present on the site shall be kept in mind while preparing the architectural and landscape designs of the project. Compensatory plantations should be carried out.
Construction Phase- Construction activities for the development of the project .	1. Air pollution due to earth work excavation and other construction activities	1. Frequent spraying of water at construction sites to suppress dust emission. Soil, muck and other construction materials should be covered during transport by vehicles.
	2. Soil contamination.	2. Preventive measures should be taken to minimize spillage of oil/diesel from the construction equipment. Appropriate measures should be taken in case of accidental contamination.
	3. Water pollution/ contamination- Impact on lake.	3. It should be ensured that the water bodies- surface and groundwater, are not polluted due to the project. Appropriate measures should be taken in case of accidental contamination. Particular attention should be given to avoid pollution in the lake due to the project.

Activity	Possible Environment Impact	Possible Mitigation Measure
	4. Disposal of excess earth.	4. The excess earth should be transported to a designated place and shall be used for filling and covers.
	5. Disturbance to other services.	5. Any shifting of cable/utility lines should be attended to with a minimum period of disturbance.
	6. Safety of road users in the project area.	6. Provision of temporary crossings/bridges as well as warning signs wherever necessary to facilitate normal movement.
	7. Noise pollution due to the use of machinery and movement of traffic.	7. Use of less noise generating equipment and avoiding activities during night.
	8. Impacts due to hazardous waste.	8. Hazardous waste will be managed as per applicable laws of Nepal.
	9. Impacts due to construction waste.	9. Construction debris will be managed/disposed of properly.
Operation Phase	1. Impact on water resources supply to nearby residents due to possible extraction of ground-water.	1. This will be a residual impact if water is sourced from well/ boring in the project area. However, possible mitigation measures can be recharging of the groundwater by installation of a well-designed rain-water harvesting system, which is already envisioned by the project as one of its components. Similarly, water saving features could be installed where feasible. In addition, wastewater treatment plants or biological treatment systems (reed-bed) could be installed, if feasible, to treat gray water with utilization of the treated water for watering plants, etc.
	2. Contribution to GHG emissions from use of machines and equipment (heating, air conditioning, etc) in the building, etc.	2. Efforts will be taken to offset carbon emissions by incorporating a green/sustainable building design, including installation of solar power and energy-efficient equipment, as well as ensuring that natural light is received for maximum duration.
	3. Increased solid waste generation, if not managed well can be a nuisance to surrounding communities and may create health hazard	3. Segregate wastes and ensure they are collected frequently by waste collection companies/facilities. Build a compost facility, if feasible, and use the compost in the green spaces/plants inside the project compound.
	4. Water contamination- Impacts on lake/river	4. Ensure that the water bodies/flowing adjacent are not contaminated. Appropriate measures should be taken in case of accidental contamination. Install a wastewater treatment plant if feasible.

The initiative will provide locals and other Nepalese with both short and long-term job opportunities. Through its spin-off economic impacts, it will help other current businesses as well as bring up new investment prospects.

6

PRELIMINARY RISK ANALYSIS

The following are some of the most significant risks linked with the PPP project:

1. Risks related to construction and project completion delays, which might lead to cost overruns.
2. This project may pose a business risk since the demand and market trend must be properly analyzed in order for the project to be financially and commercially viable.
3. According to relevant legislation, the project would need to complete either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA), which would identify possible environmental and socioeconomic implications as well as necessary mitigation measures.
4. Changes in the legislative framework and political risk might be some of the additional risks linked with the project.
5. Financial risks to the project include changes in interest and currency exchange rates, as well as changes in tax regulations.

7

PROJECT STRUCTURE AND IMPLEMENTATION MODEL

Public Private Partnerships (PPP)

A Public Private Partnership (PPP) is an agreement between public and private entities for a certain length of time in which private businesses agree to take on the risk of all or part of the funding, construction, operation, repair, and maintenance of projects under the PPP model. Such an entity may generate a fair profit by providing public services directly or indirectly through the building, operation, repair, and maintenance of public or private assets. Through legislative, legal, institutional, and economic arrangements, public institutions must establish an environment that encourages private sector investment.[20]

It will be suitable to develop a project using the PPP model, which involves both public and private entities. When national treasury resources are insufficient, assets of public utility and less expensive operation of public services, as well as resources, skills, and technology accessible in the private sector, must be drawn to nation-building projects based on the PPP idea.

The PPP model is appropriate in the current context of Simraungadh. According to the preliminary research done in these towns, the Local Government would give land for the construction of Simraungadh Tourism Development.

20. World Bank, 2072, Public Private Partnership Policy

8

FINDINGS AND RECOMMENDATIONS

8.1 Findings

The following are some of the study's significant findings:

1. Simraungadh Tourism Development will provide tourists with a variety of services and attractions, as well as natural beauty and a tranquil setting.
2. According to the study, Simraungadh is an attractive place for developing the Simraungadh Tourism Development because of its climate, proximity to the border, accessibility, and other factors.
3. The project's business model was determined to be a Public Private Partnership.
4. With a total cost of NPR 1,560,956,174 (including interest component throughout the construction period) and an equity IRR of 8.13%, the project may be completed.
5. Payback period has been determined as 9.36 years.

8.2 Recommendations

The project appears to be technically and financially viable for a developer to invest, based on the findings. In the following step, however, environmental and social aspects, as well as a thorough examination of all other components, must be addressed.

This is a project of Simraungadh tourism project.. Since the project is of a different nature, the IRR is 7% around and NPV is also negative by NPR. 232,818,706. So, either Viability Gap Funding or Interest Subsidization is required for the project.

Disclaimer

This project profile is based on preliminary study to facilitate prospective developers to assess possible scope. It is, however, advisable to get a detailed feasibility study prepared before taking a final investment decision.

9

ANNEX

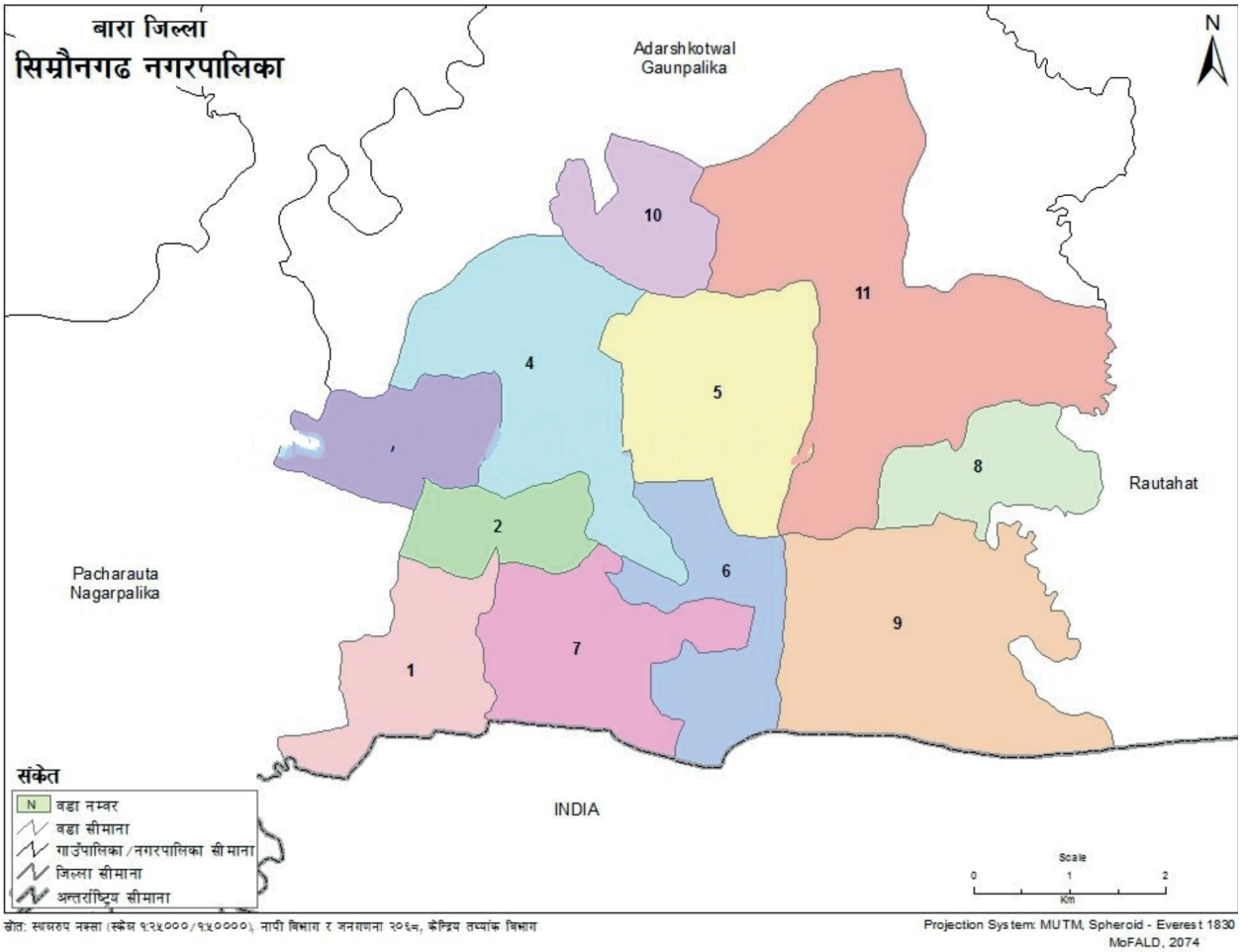
9.1 Next Steps and Useful Contacts

As part of further development of the project, the potential developer who might be interested to develop this project will be identified. Afterwards, a communication channel will be formulated for the effective execution of this project. The useful contacts of all the municipalities incorporated in this are highlighted as follows;

Table 3: Useful contact information

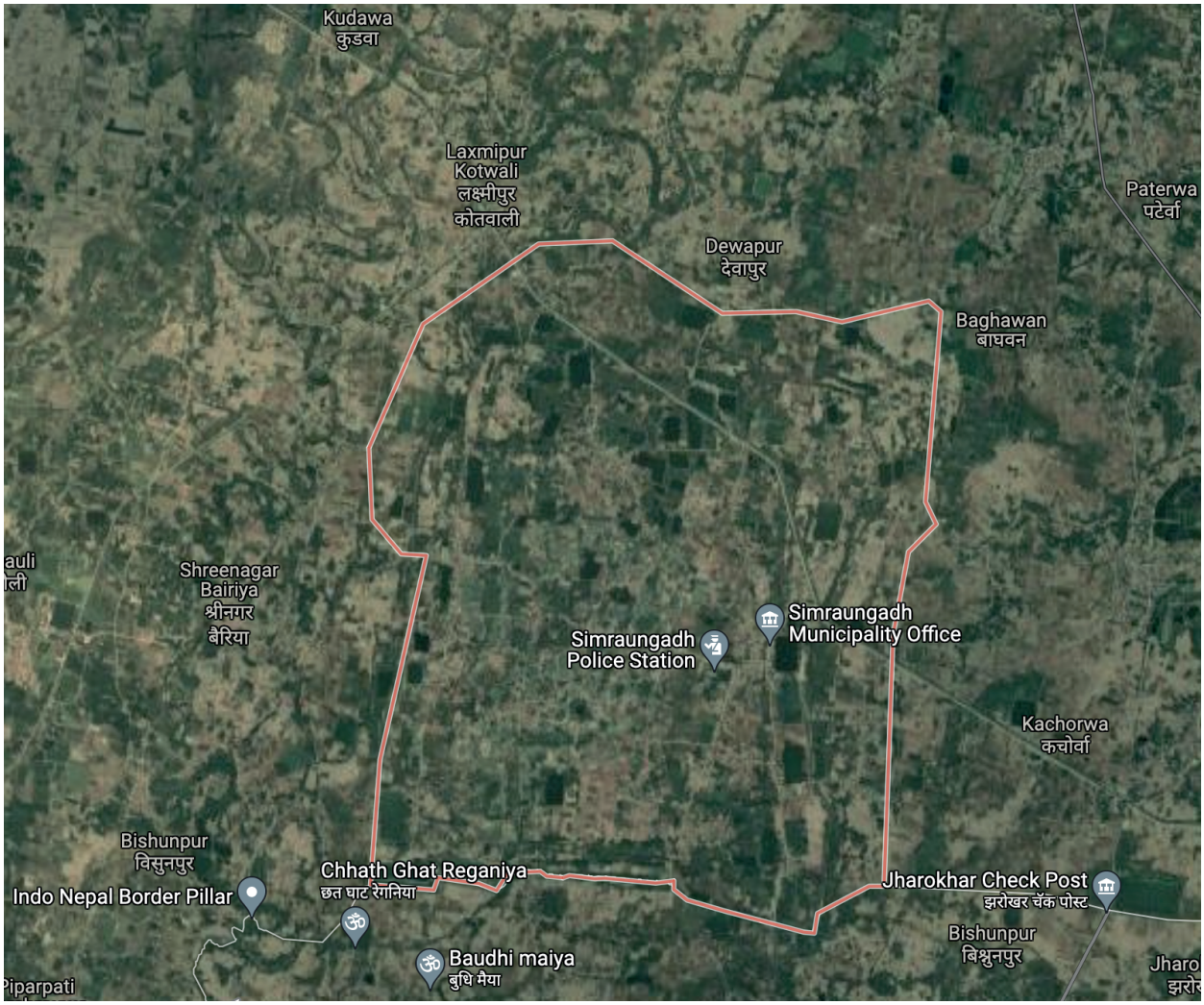
S.N.	District	Municipality	Chief Administrative officer	Mayor
1	Bara	Simraungadh Municipality	Hariom Prasad Jaiswal	Vijay Shankar Yadav

9.2 Map of Simraungadh Municipality



Source: Simraungadh Municipality

9.3 Satellite Map of Simraungadh Municipality



Source: Google map

9.4 Financial Report

Projected Profit and Loss Statement for Initial 10 years of Operation

Amount in NP R'000'

Particulars	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years
Accomodation	142,200	146,466	150,860	155,386	160,047	197,819	203,753	209,866	216,162	222,646
Food, Beverage & Banquet	30,000	30,900	31,827	32,782	33,765	41,734	42,986	44,275	45,604	46,972
Lease Property	4,320	4,450	4,583	4,721	4,862	5,634	5,803	5,977	6,157	6,341
Others Amenities	51,200	52,736	54,318	55,948	57,626	71,226	73,363	75,563	77,830	80,165
Total Direct Income	**227,720**	**234,552**	**241,588**	**248,836**	**256,301**	**316,412**	**325,905**	**335,682**	**345,752**	**356,125**
Less: Direct Expenses										
Accomodation	14,220	14,647	15,086	15,539	16,005	19,782	20,375	20,987	21,616	22,265
Food, Beverage & Banquet	12,000	12,360	12,731	13,113	13,506	16,694	17,194	17,710	18,241	18,789
Lease Property	4,320	4,450	4,583	4,721	4,862	5,634	5,803	5,977	6,157	6,341
Others Amenities	5,000	5,150	5,305	5,464	5,628	6,956	7,164	7,379	7,601	7,829
Total Indirect Income	**35,540**	**36,606**	**37,704**	**38,836**	**40,001**	**49,065**	**50,537**	**52,053**	**53,615**	**55,223**
Gross Profit	192,180	197,945	203,884	210,000	216,300	267,347	275,368	283,629	292,137	300,902
Add: Other Income	-	-	-	-	-	-	-	-	-	-
Profit before overhead and interest	**192,180**	**197,945**	**203,884**	**210,000**	**216,300**	**267,347**	**275,368**	**283,629**	**292,137**	**300,902**
Operating Expenses										
Depreciation	170,812	138,996	114,345	95,176	80,206	68,458	59,187	51,825	45,937	41,191
Salary Expenses	24,199	25,166	26,173	27,220	28,309	34,348	35,722	37,151	38,637	40,182
Overhead Expenses	17,700	18,408	19,144	19,910	20,706	25,124	26,129	27,174	28,261	29,391
O & M Expenses	48,702	50,650	52,676	54,783	56,974	59,253	61,623	64,088	66,652	69,318

Amount in NP R'000'

Particulars	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years
Operating Profit	**(69,232)**	**(35,275)**	**(8,455)**	**12,911**	**30,105**	**80,164**	**92,706**	**103,390**	**112,650**	**120,819**
Interest Expenses	129,199	123,703	117,519	110,557	102,723	93,905	83,980	72,809	60,237	46,086
Profit	**(198,431)**	**(158,978)**	**(125,973)**	**(97,646)**	**(72,618)**	**(13,741)**	**8,726**	**30,581**	**52,414**	**74,733**
Provision for Staff Bonus	-	-	-	-	-	-	793	2,780	4,765	6,794
Income Tax	-	-	-	-	-	-	-	-	-	-
Net profit	**(198,431)**	**(158,978)**	**(125,973)**	**(97,646)**	**(72,618)**	**(13,741)**	**7,933**	**27,801**	**47,649**	**67,939**

Projected Balance Sheet for Initial 10 years of Operation

Amount in '000' USD

Particulars	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years
Sources of Fund										
Shareholders Fund										
Share Capital	468,287	468,287	468,287	468,287	468,287	468,287	468,287	468,287	468,287	468,287
Reserve and Surplus	(198,431)	(357,409)	(483,382)	(581,029)	(653,647)	(667,388)	(659,455)	(631,654)	(584,005)	(516,066)
Loan Fund										
Term Loan	1,048,886	999,608	944,145	881,721	811,462	732,385	643,383	543,210	430,465	303,570
Short Term Loan										
Total	**1,318,742**	**1,110,486**	**929,049**	**768,979**	**626,102**	**533,284**	**452,215**	**379,843**	**314,747**	**255,790**
Fixed Assets (Net)	1,293,289	1,154,293	1,039,948	944,771	864,565	796,107	736,920	685,094	639,157	597,966
Investment										
Current Assets	27,483	(41,696)	(108,703)	(173,510)	(236,090)	(260,355)	(282,137)	(302,581)	(321,633)	(339,288)
Sundry Debtors	16,015	16,495	16,990	17,500	18,025	22,279	22,947	23,636	24,345	25,075
Inventory	-									
Cash & Bank Balance	11,468	(58,192)	(125,694)	(191,010)	(254,115)	(282,633)	(305,085)	(326,217)	(345,978)	(364,363)
Less: Current Liabilities	2,029	2,110	2,195	2,283	2,374	2,469	2,568	2,670	2,777	2,888
Net Current Assets	25,454	(43,807)	(110,898)	(175,793)	(238,464)	(262,823)	(284,705)	(305,251)	(324,410)	(342,176)
Total	**1,318,742**	**1,110,486**	**929,049**	**768,979**	**626,102**	**533,284**	**452,215**	**379,843**	**314,747**	**255,790**

Cash Flow Statement for Initial 10 years of Operation

Amount in '000' USD

Particulars	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years
Cash flow from operating activity										
Net profit before interest and tax	(198,431)	(158,978)	(125,973)	(97,646)	(72,618)	(13,741)	7,933	27,801	47,649	67,939
Add: Depreciation	170,812	138,996	114,345	95,176	80,206	68,458	59,187	51,825	45,937	41,191
Add: interest	129,199	123,703	117,519	110,557	102,723	93,905	83,980	72,809	60,237	46,086
Operating cash flow before working capital change	**101,580**	**103,721**	**105,890**	**108,087**	**110,311**	**148,622**	**151,100**	**152,435**	**153,823**	**155,216**
Increase/Decrease in Current Assets	(16,015)	(480)	(495)	(510)	(525)	(4,254)	(668)	(688)	(709)	(730)
Increase/Decrease in Current Liabilities	2,029	81	84	88	91	95	99	103	107	111
Payment of Tax		-								
Net Cash flow from operating activity	87,594	103,322	105,480	107,665	109,877	144,463	150,530	151,850	153,221	154,597
Cash flow from Investing Activity										
Purchase of Fixed Assets	(1,464,100)	-	-	-	-	-	-	-	-	-
Increase/Decrease in Investment										
Less: Payment of Dividend										
Net Cash flow from Investing Activity	(1,464,100)	-	-	-	-	-	-	-	-	-
Cash flow from Financing Activity										
Increase in Share Capital	**468,287**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Increase in Borrowing Fund (Long Term Loan)	1,092,669									
Increase in short Term Loan										
Less: Repayment of Long Term Loan	(43,783)	(49,278)	(55,463)	(62,424)	(70,259)	(79,077)	(89,002)	(100,173)	(112,745)	(126,896)
Less: Payment of interest on Short Term Loan										

Amount in '000' USD

Particulars	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years
Less: Payment of Interest on Long Term Loan	**(129,199)**	**(123,703)**	**(117,519)**	**(110,557)**	**(102,723)**	**(93,905)**	**(83,980)**	**(72,809)**	**(60,237)**	**(46,086)**
Net Cash flow from Financing Activity	1,387,974	(172,982)	(172,982)	(172,982)	(172,982)	(172,982)	(172,982)	(172,982)	(172,982)	(172,982)
Increase/Decrease in Cash and Cash Equivalent	**11,468**	**(69,660)**	**(67,502)**	**(65,316)**	**(63,105)**	**(28,519)**	**(22,451)**	**(21,132)**	**(19,761)**	**(18,385)**
Cash & Bank Balance at the beginning of the period	-	11,468	(58,192)	(125,694)	(191,010)	(254,115)	(282,633)	(305,085)	(326,217)	(345,978)
Cash Balance At the End of the Period	**11,468**	**(58,192)**	**(125,694)**	**(191,010)**	**(254,115)**	**(282,633)**	**(305,085)**	**(326,217)**	**(345,978)**	**(364,363)**

PRE-FEASIBILITY STUDY OF

PROVINCIAL LEVEL SKILLS DEVELOPMENT AND TRAINING CENTER PROJECT

EXECUTIVE SUMMARY

Technical Vocational Education and Training (TVET) or skill systems struggle to stay at the forefront of understanding the emerging needs of the stakeholders and may lack the financial, physical, and human resources (e.g. Trainers) to provide young people with the skills they need. One of the recognized market failures is the lack of industry-institute interaction leading to a demand-supply mismatch. It is well understood that nobody knows better than the private sector themselves what skills are needed on the labor market. Hence, a strong and institutional relationship between the VET system and the private sector is a necessary precondition for a successful VET system.

The programme will focus on five high growth sectors with potential for employment namely tourism; agriculture; hydropower; ICT and light manufacturing. The models of partnership may include employer-led training, apprenticeships, mentoring, management skills, soft skills, in-person and on-the-job, mobile based and career counseling and placement.

By establishing a single platform at the next Investment Summit, the Provincial 2 Planning Commission (PPC) hopes to attract investment in a variety of initiatives. Provincial level skills development and training centers in Madhesh Province is one of the primary projects designated for investment. The research on the Provincial level skills development and training centers in Madhesh Province is primarily intended to document the project's technical and financial feasibility. Both primary and secondary data gathering approaches were used in the study. Primary data was acquired from field-based research, which included a field visit and stakeholder consultations and group discussions. Secondary data was gathered from a variety of sources, including published papers, journal articles, and other verified and trustworthy online sources.

This project appears to be best suited for a Public Private Partnership (PPP) approach, in which GoN will assist in obtaining the necessary land for the project. The developer will then build all of the infrastructure required for the project's smooth execution and will run it for 30 years before handing it over to GoN in good working order.

The research examined the project's technical and financial elements and determined that it is technically and financially feasible, with a total anticipated cost of roughly NPR 276,171,680 (including interest component throughout the construction period) and an equity IRR of 22.06 percent.

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SALIENT FEATURES OF THE PROJECT

Table 1: Salient features of the project

General information of the project		
1	Name of Project	Establish Provincial Level Skills Development and Training Centers
2	Project Location	Province: 2 District: Birgunj, Jnakpurdham and Rajbiraj
3	Project Implementation Modality	☐ Public (GoN) ■ PPP ☐ Private ☐ Others/Please Specify
4	Category of Project	■ Short term: 5 years and below ☐ Mid term: 6 – 10 years ☐ Long term: 11 – 15 years
5	Sector as per 1st 5 years Provincial Plan	Social Development
6	Type of project (Sub Sector)	Education
7	Implementing/Facilitating Agencies	Private Sector, facilitated by the Ministry of Social Development of Province 2
8	Project Management (Implementation Mechanism)	Majority investment will be done by the private sector and the government will contribute for required infrastructure development and course accreditation.

General information of the project

1	Salient Features of Project	• The training center will design, plan and execute curricula for vocational training on various skills that are unique to the opportunities available in the province. • Training centers to be built in all districts of the province. • Different vocational and skill development training to the local people of the province. • Vocation/skill based training to uplift the living standard of the local people.
2	Land Requirement, Acquisition & Resettlement, Materials and Ease of Access	Land Requirement, Acquisition & Resettlement, Materials and Ease of Access
	Land Requirement	1 bigha per location
	Acquisition & Resettlement	No issue of resettlement
	Materials and Ease of Access	There are no issues with ease of access and availability of materials.
	Environmental and Social Management Plan (ESMP)	There would be little to no environmental issues associated with the project.
3	Project Document Available	■ None (New/Rehabilitation) ☐ Concept Note/Desk Study ☐ Feasibility Study ☐ Detailed Engineering/DPR
4	Estimated Cost to Complete the Project	NPR 276,171,680
5	Estimated Time to Complete the Project	Feasibility Study/DPR: 6 months Approval and Financial Closure: 6 months Construction Period: 2 years Concession Period: 30 years
6	Project Financing Options	Majority investment of the private sector; Government to contribute for required infrastructure development.
7	Project Technology/Components	• State-of-the-art classrooms, training halls, auditoriums and labs. • Modern tools, equipment and IT for effective training. • Research and development for identifying, designing and executing courses and curricula to fulfill the gaps in the available skills in the local market.
8	Contribution to SDG and Green Growth	This project will fulfill the gaps left by the central CTEVT to train youths in skills that meet the unique needs of the province and to create a substantial pool of skilled labor force in the province. In addition, the training center will also include the principles of green growth and sustainable development into its curricula. In particular, the project will contribute to achieving the following Sustainable Development Goals. Goal No. 1: No poverty Goal No. 4: Quality education Goal No. 8: Decent work and economic growth Goal No. 11: Sustainable cities and communities
9	Project Capacity (at 100%)	N/A
10	Project IRR and NPV	17.21
11	Benefit Cost Ratio	1.36

12	Private Sector Roles	Plan, design, operate and maintain the project.
13	Government's Role	• Legal approvals and set up necessary framework for the development of the project. • Provide grants, technical assistance and assistance with foreign technology transfer. • The Province Government will ensure that the training modules and courses meet national and global standards.

Other project information

1	Target Beneficiaries	Local People of Province 2
2	Market of Project's Service/Product	Local Community
3	Strengths and Opportunities of Project Development and Operation	• There is a huge need for robust training centers in the province since Province 2 sends the largest proportion of workforce for foreign employment, majority of whom are unskilled and semi-skilled workers. • The market for skill-based training is growing. • The project will assist in improving the living standards of the people of the province by creating purchasing power in the province and by preventing brain drain.
4	Key Risks and Issues of Project Development and Operation	• Skilled local manpower for designing and executing training is relatively low in supply. • The project must ensure that it meets the unique needs of the labor of the province rather than emulating the models used by institutions such as CTEVT.

1

BACKGROUND

1.1 Introduction

The Government of Nepal faces numerous challenges to put the country on a higher economic growth trajectory. Education and training will play a major role in promoting inclusive and sustainable growth. Nepal's young population provides an opportunity, but this window of demographic dividend is available only for the next 3–4 decades. Preparing the youth with appropriate education and skills to meet emerging demands through partnership approaches will be crucial.

According to the Nepal Labour Force Survey (NLFS) 2010–2011, the country's labor force participation rate was 80.1%, up from 77.2% in 2003–2004. Although unemployment was estimated at 5% in urban areas and 2% in rural areas, youth unemployment may be much higher. Underemployment is estimated at 43%. Of the total employed in agriculture and non-agriculture sectors, 15.4% were engaged in wage employment and 74% were self-employed. Meanwhile, 64.1% of those employed worked in agriculture, compared with 25.1% in non-agriculture. Every year, about 450,000 youth enter the labor market, most of them lacking marketable skills. A large proportion of them seek employment in India, Malaysia, or the Middle Eastern countries, mostly in low-skilled jobs. Remittances from migrant labor constitute 23% of GDP.

The migration of workforce has badly affected the development projects due to lack of skilled manpower. So a vocational training institute focused on the skill requirement of Province 2 and the expertise of the local people (especially those who have returned from India with some specific skills). So, the institute shall be focused on increasing skill and employment opportunities for the development paradigm of the province. Also a systematic study of the requirement of skilled and semi- skilled human resources for the agriculture, industry, tourism and construction services over the coming 25 years shall be conducted. The Government of Nepal, since many years has given high priority in promoting the production of vocationally trained manpower in different disciplines of engineering, agriculture, hospitality and so on. The Provincial Government has allocated a budget for the scholarship for vocational training and also prioritized opening for its own technical institute.

Active involvement of employers in the ecosystem can enhance employability and productivity and reduce the demand supply mismatch. The private sector in Nepal has been contributing to about 80% of the country's gross fixed capital formation since 2016, which is equivalent to about 17% of its Gross Domestic Product (GDP). There is potential for and interest in further private sector investments from both domestic and foreign

sources especially in such sectors of Nepal's comparative advantage as hydropower, agriculture, and tourism.

1.2 Objectives

The project will help the government implement key aspects of the Technical and Vocational Education and Training (TVET) Policy to develop mid level skilled technical manpower for Province 2 and overall country through high quality courses. The project also aims to contribute to the economic growth of Nepal through the development of the skilled workforce to meet the needs of various industries and increasing their employability. The project will help the Madhesh Pradesh Government:

- Ensure vocational training levels in different sectors and training modules preparation
- Ensure quality and capabilities of the vocational training in the province.
- Improve reach and availability of the vocational training courses in the province.
- Promotion of new and market oriented vocational courses as per the needs of the industry and market.
- Increase private sector engagement in training delivery and job placement.
- Promote the private sector involvement in skill training at a required basic and mid-level for the labor market of Nepal with the target of private sector involvement in skills training.

Each intervention has been designed to increase the efficiency and results orientation of TVET, making it more market-driven. The project will focus on skills development for the construction, manufacturing, and services sectors where large skill gaps exist.

1.3 Scope of Work

This study will help to get an overall idea of possibilities of investment in this specific sector and area. Some of the major scopes of the study are:

- To gather secondary data and other necessary information for the project's development.
- Analyze the acquired data for many elements such as technical, economical, social, and environmental concerns.
- Develop the most appropriate investment model, such as private, Public Private Partnership, or blended finance.
- Also, depending on the findings, provide recommendations.

1.4 Approach & Methodology

After a thorough examination of market demand and business development prospects, the project's components were determined. For the purposes of determining project features/components, input collected during consultations with province-level ministries and associated stakeholders was also taken into account. Secondary and primary sources were used to obtain the necessary data, information, and facts to meet the study's goals.

The study included secondary data collection methods. Secondary data was collected from different sources like published reports, journal articles and other verifiable and credible internet sources. Also, Financial, technical, social and environmental analysis were carried out and based on the analysis, a suitable investment model has been recommended.

2

PROJECT DETAILS

2.1 Project Background and Description

Technical Vocational Education and Training (TVET) or skill systems struggle to stay at the forefront of understanding the emerging needs of the stakeholders and may lack the financial, physical, and human resources (e.g., Trainers) to provide young people with the skills they need. One of the recognized market failures is the lack of industry-institute interaction leading to a demand-supply mismatch. It is well understood that nobody knows better than the private sector themselves what skills are needed on the labor market. Hence, a strong and institutional relationship between the VET system and the private sector is a necessary precondition for a successful VET system.

The programme will focus on five high growth sectors with potential for employment namely tourism; agriculture; hydropower; ICT and light manufacturing. The models of partnership may include employer-led training, apprenticeships, mentoring, management skills, soft skills, in-person and on-the-job, mobile based and career counseling and placement.

It will help overcome the skills mismatch, for the youths of Rajbiraj, Janakpurdham and Birgunj also reaching over 90,000 Nepalis with the potential for an increase in income, as well as according greater employment opportunities for women, Disadvantaged Groups (DAGs) and Persons with Disabilities (PwDs). The programme will also help increase migrants' skills; lower financing and other costs of traveling abroad; and, increase savings and investment of remittances.

International skills partnerships are increasingly recognized by governments and industry as a powerful and highly cost-effective way of building skills, hence, along with national training models, international training models will be analyzed to address market failures. The unique innovative designs drawn from the international partnerships will benefit organizations in a number of ways, from improving their offer to learners and building staff capacity, to gaining exposure to new markets. The project will draw on national and international resources and expertise to provide co-investment and technical advisory support to the private sector. It will use a Challenge Fund (CF) mechanism to collaborate with the private sector to bring in innovative training models in the above-mentioned sectors to address key gaps while also leveraging private sector resources. A challenge fund is a financing mechanism to co-invest matching programme funds for specific partnerships with the Nepalese private sector. A challenge fund invites proposals from companies, organizations and to meet specific objectives such as skills training for employment; as a means

of triggering investment to stimulate innovation for effective employment opportunities for the programme beneficiaries.

2.2 Project Features

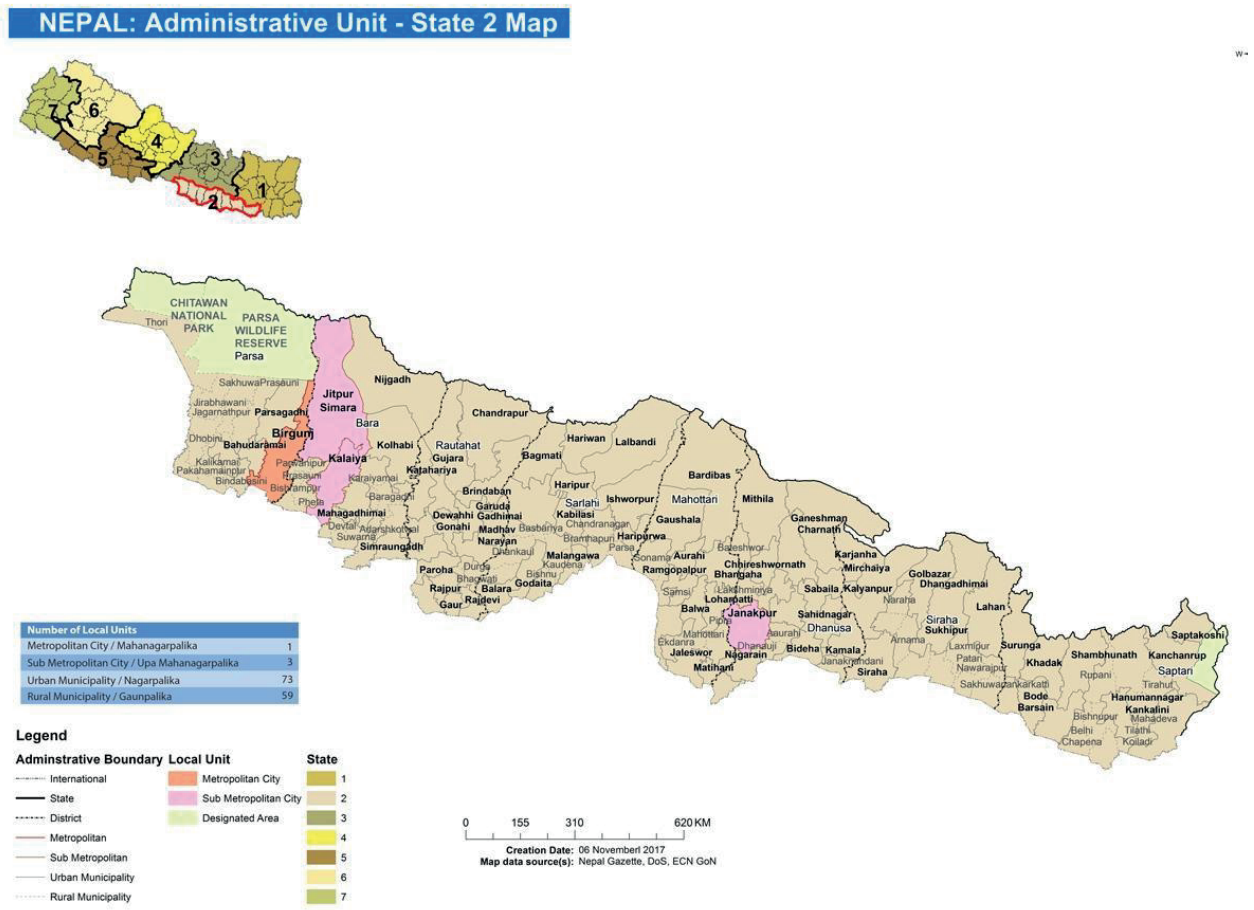
Key Features of the Project

- The training center will design, plan and execute curricula for vocational training on various skills that are unique to the opportunities available in the province.
- Training centers to be built in Janakpurdham, Rajbiraj and Birgunj districts of the province.
- Different vocational and skill development training to the local people of the province.
- Vocation/skill based training to uplift the living standard of the local people.
- Modern tools, equipment and IT for effective training.
- Research and development for identifying, designing and executing courses and curricula to fulfill the gaps in the available skills in the local market.

2.3 Overview of the Area

The project incorporates Janakpurdham, Birgunj and Rajbiraj district of Province 2 and is located in Terai plain of the eastern development region. Headquarter of the district is Janakpurdham. The total area covered by the Madhesh Pradesh is 9,661 km2. It is Nepal's second most populous province, and smallest province by area. It has a population of 5,404,145 as per the 2011 Census of Nepal, making it the most densely populated province of Nepal. The province includes eight districts from Saptari District in the east to Parsa District in the west. The majority of the province's population speaks Maithili, Bhojpuri, Bajjika and Nepali. The province is located on flat plains of Terai, and Chure (Churiya) or the Shivalik Hills are the natural border of the province which falls on the northern side. The southern side has an international border with India. Koshi River on its eastern side acts as a natural border with Province No. 1. Province No. 2 has eight districts in a series (parallel). Koshi River, Bagmati River, Kamla River, Lakhandei River and Bishnumati River are the main rivers of the province.

Figure 1: Map of Province 2 (Madhesh Pradesh)



2.4 Market Assessment

Market system for skills development is categorized as regulated and unregulated. Regulated skills market system is a system, which needs to go through a certain governmental process and the certificates are nationally recognized. On the other hand, an unregulated skills market system is that which is based on targeting certain people and the certificates are not part of the national system.

The regulated (formal and non-formal) is governed by the Government of Nepal. The Technical and Vocational Certificates is regulated by Council for Technical Education and Vocational Training (CTEVT); Apprenticeships is regulated by Council for Technical Education and Vocational Training (CTEVT); University Degrees is regulated by the Ministry of Education and offered by Universities and SLC or SEE is regulated by the Ministry of Education and offered by Schools.

The unregulated (Non-formal and In-formal) market is driven mainly by national and international private stakeholders.

Market System for Skills Development:

Regulated (Formal sector)

- Technical and Vocational Certificates
- Apprenticeships
- University Degrees
- School Leaving Certificate or School Exit Examination (General Education)

Unregulated (Non-formal and informal sector)

- Non-certificate or In-house certificate
- External certificate not part of national system
- Migration focused training

2.5 SWOT Analysis

SWOT analysis allows for the discovery of elements that characterize a company or organization in the context of a certain goal, as well as the classification of those characteristics into four areas. As seen in the table, two of them are positive, while the other two are negative:

SWOT Analysis for Province Level Skills Development and Training Center Project

Strength	Weakness	Opportunities	Threats
- Skill Training to 47500 individuals - 65 % employment. - Infrastructure development - Equipped tools, equipment and furniture in class and lab. - Strengthening standards of QIP schools. - Encouraging private sector involvement. - Developing the market linkage concept. - Developing GESI sensitization.	- Zero transparency in procurement of new building and tools and equipment. - Petty contracts for skill trainings. - No strong collaboration with local government and private sector players such as potential employers. - No strong market and demand intensive approach. - Network based trainees' collection missing. - Process, inputs and cost inefficiency - No occupational training Market mismatch: Beautician training in Jumla (employment not possible).	- Output and outcome and institutionalization potentials. - Institutionalization of GESI and enterprises linkages. - Emerging private sector in skill development training. - Linkage between curriculum and instructor's incentive institutionalization of QIP for output oriented and quality training though it needs additional inputs.	- Targets not met for the placement of trainees after training. - No linkages with Graduates and market demand - No concerning indicators and, standards. - Unsustainability concerns. - Possibilities for cartels to be formed.

3

FINANCIAL ANALYSIS

3.1 Pre-Feasibility Approaches & Assumptions

Project Cost

Total cost of the project amounted to 260,000,000 NPR Excluding Interest During Construction. The total cost including interest amounted to 276,171,680 NPR. Costs are assumed to occur evenly in the construction period.

Particulars	Amount in NPR
Land	-
Civil Structure	125,000,000
Furniture and Fixtures	90,000,000
Machinery Equipment	30,000,000
Others	15,000,000
Interest During Construction	16,171,680
Total Project cost	**276,171,680**

The portion of the interest during construction is capitalized in the individual assets on a proportionate basis.

Capital Structure

The project is proposed to be financed in a 70:30 debt equity ratio on the total cost of the project including Interest During Construction (IDC). The requirement of working capital would be financed by internal resources itself. Based on the structure, The total Investment pattern has been tabulated below:

Component	Percentage	Amount in NPR
Equity	30.00%	82,851,504
Debt	70.00%	193,320,176
	Total	**276,171,680**

Project Construction and Operation Period

The project is assumed to be built in the period of 2 years. And the total operation period after the construction period would be 30 years. The project would be handed over to the government after the completion of the operation period.

Tax, Staff Bonus, and Depreciation Assumptions

The tax rate for the project is assumed at 25% on profit earned during the year. Further the loss carryforward has been taken for 12 years in due consonance with the provision of Income Tax Act 2058. Further, the staff bonus is assumed at 10% on taxable income earned during any year of the operation as required by the Bonus Act.

Also, the rate depreciation and basis of depreciation is in due adherence to the provisions of the Income Tax Act as follows:

Particulars	Depreciation Method	Rate of Depreciation
Land	-	-
Civil Structure	WDV	5%
Machinery	WDV	15%
Furniture And Fixture	WD	25%
Others	SLM	20%

However, 1/3 of the additional depreciation has not been taken into consideration as facilitated by Income Tax Act.

Direct Income and Direct Expense

The income is mainly from the sale of agricultural machinery.

The total units, rates and associated direct cost percentage in 100% capacity has been detailed below:

Particulars	100% Capacity	Sales Rate	% of Direct Cost
Construction Training	3000 Person	12000	35%
Hospitality Training	3000 Person	15000	35%
Machinery Training	3000 Person	20000	35%
Electrical and Electronic Training	3000 Person	15000	35%

The Operational Efficiency

The operational efficiency of each component in various years has been estimated as below:

From	To	Overhead and Salary Charging	Processing Efficiency
0 year	1 year		0%
3 years	9 years	70%	60%
10 years	14 years	80%	70%
15 years	24 years	90%	80%
25 years	32 years	100%	90%

Salary Expenses

Details of employee cost on 100% capacity is as below:

Department	Total Number of Employees	Total Cost Amount in NPR
A. Administration	16	9,703,680.00
B. Educational	20	11,172,000.00
C. Quality Control	2	1,436,400.00

The overhead is charged based on the following modality for employee cost and overhead charging is as below:

From	To	Overhead and Salary Charging
0 year	4 years	0%
5 years	9 years	70%
10 years	14 years	80%
15 years	24 years	90%
25 years	34 years	100%

Basis of Revenue and Inflation

The project has mainly two streams of revenue module:

1. Through Training Costs.
2. Revenue from sale of training materials

Other Cost of Operations

Besides salary cost and overhead cost, the total operating expense is likely to incur at the rate of 2% of total project Cost which is likely to increase at the inflation of 3% with the cap of 200%. As discussed in the earlier paragraph, the project would be financed by 70% debt. The interest rate that has been taken into calculation is 12% which would be repaid in four equal installments in the period of 12 years.

Also, the revenue has been estimated to be inflated at the rate of 2% per annum which is capped at 180%. The income tax rate for the project is 20% and the loss carry forward period for the project is taken for 12 years.

It is assumed that the government would provide required land for the project. Total operation period of the project is assumed to be 30 years and 2 years is considered as the period of pre-operative period.

Working Capital and Other Assumptions Used

It has been assumed that the overall working capital requirement would be financed by the equity holders. The working capital has been assumed on the following basis.

Receivable & Advance	30	Days
Payable and Liabilities	15	Days

Total number of working days has been assumed to be 360 days and 12 working months.

3.2 Financial Analysis

3.2.1 Financial Results

The overall cost of the project is 276,171,680 NPR with an interest component of NPR 16,171,680 throughout construction. The overall project, excluding working capital, was financed by loan for 70% and equity for the remaining 30%.

Projections are created utilizing several methodologies in the examination of the project's pre-feasibility. The project's Net Present Value (NPV) was found to be 97,257,961.43 NPR based on the analysis.

Furthermore, the Project IRR is assessed to be 17.21%, which is higher than the project's needed rate of return. The project's equity IRR is 22.06%. The project's IRR and equity IRR prove the project's viability. The Benefit Cost Ratio (BCR) for a project is 1.36 times, whereas the BCR for equity is 2.17 times.

The project payback period is 4.84 years, while the equity payback period is 9.61 years. The pay-back term appears to be enough, given the nature of the firm and the broader industry.

The average DSCR is calculated to be 1.49. Although the DSCR was initially low, it has steadily grown.

Indicators	Results
Firm IRR	17.21%
Equity IRR	22.06%
NPV Equity	97,257,961.43
Debt Equity Service Coverage Ratio (Average)	1.49
Project BCR	1.36
Equity BCR	2.17
Simple Payback Period	4.84 Years
Discounted Payback Period	9.61 Years

3.2.2 Sensitivity Analysis

Sensitivity Analysis has been carried out on three different components: Interest Rate, O & M Cost and Project cost.

Interest Rate Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	22.06%	-
5.00%	21.55%	-2.30%
-5.00%	22.58%	2.33%

O & M Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	22.06%	-
5.00%	21.87%	-0.88%
-5.00%	22.26%	0.88%

Project Cost Increase/Decrease by 5%

Percentage of Change	Impact on Equity IRR	% of Change
0.00%	22.06%	-
5.00%	22.03%	-0.16%
-5.00%	22.10%	0.16%

Based on the analysis, It seems that the project cost is highly sensitive as compared with O & M Expenses and Interest rates. The special focus to provide to project cost ensures the cost remains as projected.

The financial statement of the first 10 years of operation has been separately annexed in the report.

4

STATUTORY AND LEGAL FRAMEWORK

4.1 Statutory and Legal Framework

Before forming a corporation or conducting business in Nepal, foreign investors must first get clearance. Depending on the magnitude of the investment, an application should be filed to the Department of Industry or the Investment Board Nepal.

5

PRELIMINARY ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

The table below summarizes the results of a preliminary desktop-based environmental and social impact assessment. It highlights some of the potential repercussions that might occur throughout the project's pre-construction, construction, and operation stages, as well as mitigation techniques for each impact. Later in the project cycle, a full evaluation will be done, if required by relevant regulations, through an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA).

Activity	Possible Environment Impact	Possible Mitigation Measure
Pre-construction Phase.	1. Distress to the micro-habitat and natural fauna due to tree felling.	1. Cutting of trees shall be avoided to the extent possible and natural vegetation present on the site shall be kept in mind while preparing the architectural and landscape designs of the project. Compensatory plantations should be carried out.
Construction Phase- Construction activities for the development of the project.	1. Air pollution due to earth work excavation and other construction activities.	1. Frequent spraying of water at construction sites to suppress dust emission. Soil, muck and other construction materials should be covered during transport by vehicles.
	2. Soil contamination.	2. Preventive measures should be taken to minimize spillage of oil/diesel from the construction equipment. Appropriate measures should be taken in case of accidental contamination.
	3. Water pollution/ contamination- Impact on lake.	3. It should be ensured that the water bodies-surface and ground water, are not polluted due to the project. Appropriate measures should be taken in case of accidental contamination. Particular attention should be given to avoid pollution in the lake due to the project.

Activity	Possible Environment Impact	Possible mitigation measure
	4. Disposal of excess earth.	4. The excess earth should be transported to a designated place and shall be used for filling and covers.
	5. Disturbance to other services.	5. Any shifting of cable/utility lines should be attended to with a minimum period of disturbance.
	6. Safety of road users in the project area.	6. Provision of temporary crossings/bridges as well as warning signs wherever necessary to facilitate normal movement.
	7. Noise pollution due to the use of machinery and movement of traffic.	7. Use of less noise generating equipment and avoiding activities during night.
	8. Impacts due to hazardous waste.	8. Hazardous waste will be managed as per applicable laws of Nepal.
	9. Impacts due to construction waste.	9. Construction debris will be managed/disposed properly.
Operation Phase	1. Impact on water resources supply to nearby residents due to possible extraction of ground-water.	1. This will be a residual impact if water is sourced from well/ boring in the project area. However, possible mitigation measures can be recharging of the groundwater by installation of a well-designed rain water harvesting system, which is already envisioned by the project as one of its components. Similarly, water saving features could be installed where feasible. In addition, wastewater treatment plants or biological treatment systems (reed-bed) could be installed, if feasible, to treat gray water with utilization of the treated water for watering plants, etc.
	2. Contribution to GHG emissions from use of machines and equipment (heating, air conditioning, etc) in the building, etc.	2. Efforts will be taken to offset carbon emissions by incorporating a green/sustainable building design, including installation of solar power and energy-efficient equipment, as well as ensuring that natural light is received for maximum duration.
	3. Increased solid waste generation, if not managed well can be a nuisance to surrounding communities and may create health hazard .	3. Segregate wastes and ensure they are collected frequently by waste collection companies/facilities. Build a compost facility, if feasible, and use the compost in the green spaces/plants inside the project compound.
	4. Water contamination- Impacts on lake/river.	4. Ensure that the water bodies/flowing adjacent are not contaminated. Appropriate measures should be taken in case of accidental contamination. Install a wastewater treatment plant if feasible.

The initiative will provide locals and other Nepalese with both short and long-term job opportunities. Through its spin-off economic impacts, it will help other current businesses as well as bring up new investment prospects.

6

PRELIMINARY RISK ANALYSIS

The following are some of the most significant risks linked with the PPP project:

1. Risks related to construction and project completion delays, which might lead to cost overruns.
2. This project may pose a business risk since the demand and market trend must be properly analyzed in order for the project to be financially and commercially viable.
3. According to relevant legislation, the project would need to complete either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA), which would identify possible environmental and socioeconomic implications as well as necessary mitigation measures.
4. Changes in the legislative framework and political risk might be some of the additional risks linked with the project.
5. Financial risks to the project include changes in interest and currency exchange rates, as well as changes in tax regulations.

7

PUBLIC PRIVATE PARTNERSHIPS (PPP)

Public Private Partnerships (PPP)

A Public Private Partnership (PPP) is an agreement between public and private entities for a certain length of time in which private businesses agree to take on the risk of all or part of the funding, construction, operation, repair, and maintenance of projects under the PPP model. Such an entity may generate a fair profit by providing public services directly or indirectly through the building, operation, repair, and maintenance of public or private assets. Through legislative, legal, institutional, and economic arrangements, public institutions must establish an environment that encourages private sector investment[1] .

It will be suitable to develop a project using the PPP model, which involves both public and private entities. When national treasury resources are insufficient, assets of public utility and less expensive operation of public services, as well as resources, skills, and technology accessible in the private sector, must be drawn to nation-building projects based on the PPP idea.

The PPP model is appropriate in the current context of the provincial level skills development and training centers in Madhesh Province. According to the preliminary research done in these towns, Local Governments would give land for the construction of the provincial level skills development and training centers in Madhesh Province.

1 World Bank, 2072, Public Private Partnership Policy

8

FINDINGS AND RECOMMENDATIONS

8.1 Findings

The following are some of the study's significant findings:

1. Based on the study, Janakpur, Rajbiraj and Birgunj are the most suitable locations to develop provincial level skills development and training centers.
2. The Public Private Partnership business model was found to be suitable for the project.
3. The project can be completed with a total cost of NPR 276,171,680. (including interest component during construction period) and Equity IRR of 22.06%.
4. Payback period has been calculated as 4.84 years.

8.2 Recommendations

The project appears to be technically and financially viable for a developer to invest, based on the findings. In the following step, however, environmental and social aspects, as well as a thorough examination of all other components, must be addressed. Some of the recommendations could be:

To boost employment rates in basic and mid-level skills training, it is essential that the labor market-related aspects of the training cycle are incorporated into the requirements for training providers. This should include accurate labor market assessments with the involvement of local employers, greater use of on-the-job training, more effective EAPCs, greater coverage of entrepreneurship (including sources of business financing), and better employment counseling. Increased support for graduates to establish their own businesses would further spread the benefits of training.

An expanded, market-led level training program should be developed. Current level programs should be revised to address the reasons for the high failure rate under the project and offered to private providers using the performance-based approach. The diploma program is too academic in focus. It should be reoriented toward preparation for the labor market, with a more practical focus and active involvement of enterprises through the EAPCs. Comprehensive curriculum reform is needed, as well as incentives that reward schools for graduate employment rather than university entrance.

To accelerate implementation, more attention should be paid to ensuring an appropriate procurement method. Also, government agencies overseeing large-scale outsourcing should have the capacity, skills, and experience to contract and manage private contractors.

Disclaimer

This project profile is based on preliminary study to facilitate prospective developers to assess possible scope. It is, however, advisable to get a detailed feasibility study prepared before taking a final investment decision.

9

ANNEX

Figure 2: Google Map of Janakpurdham

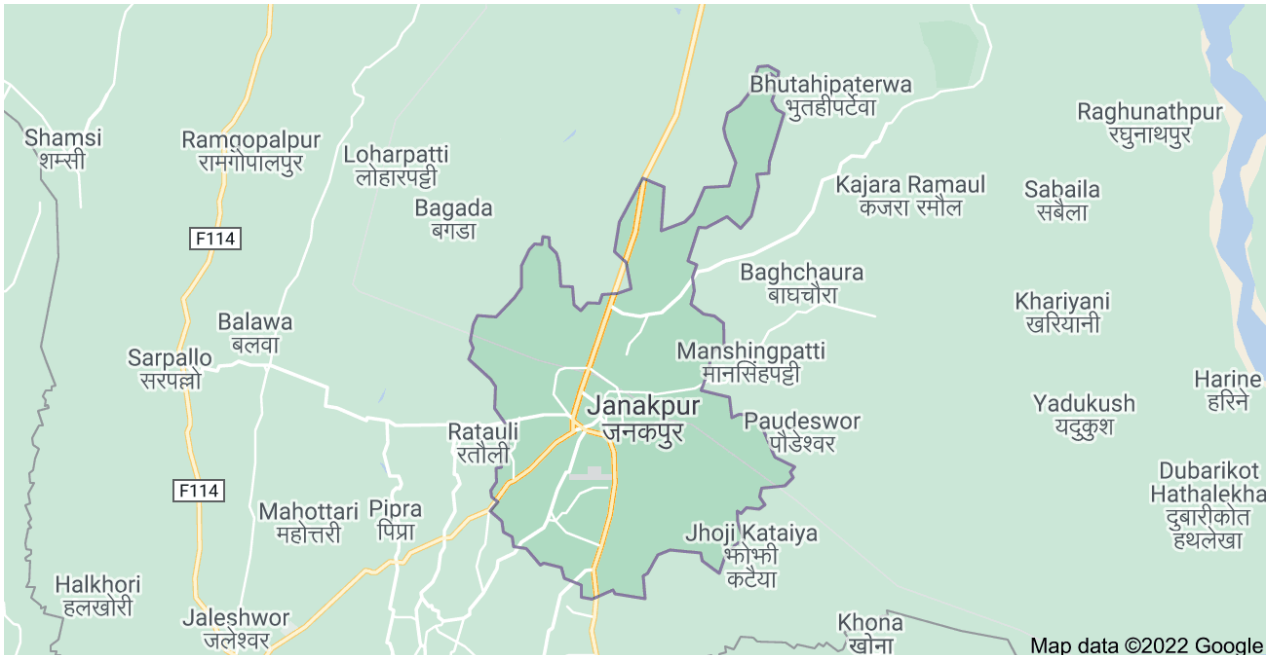
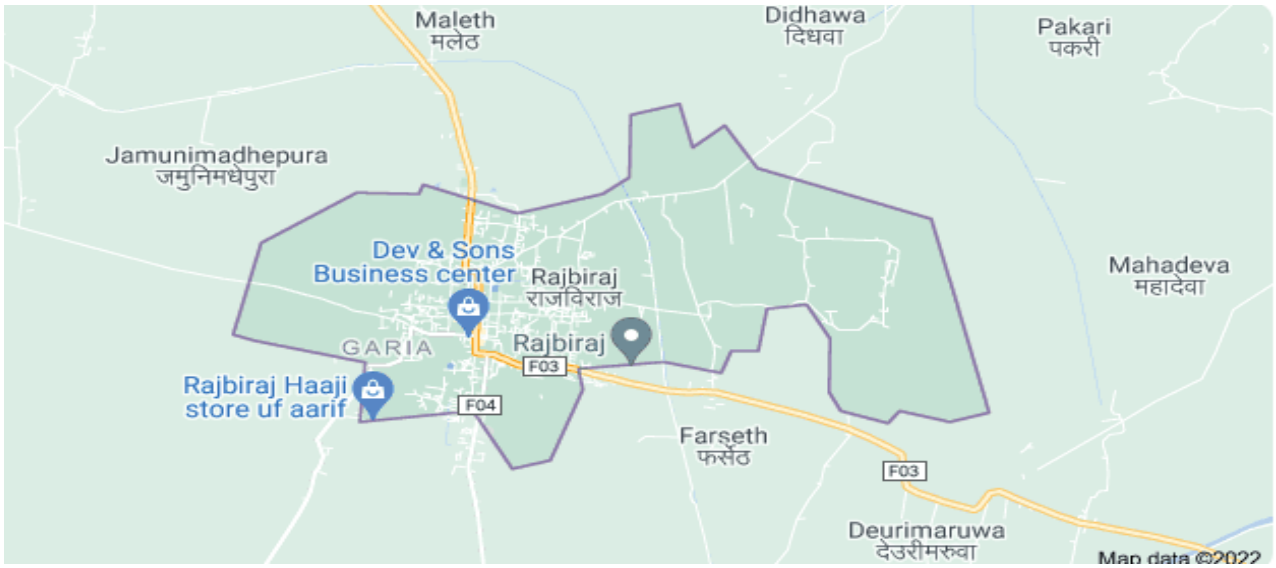


Fig 3: Map of Rajbiraj Municipality



Google Map of Rajbiraj

Fig 4: Map of Birgunj Municipality

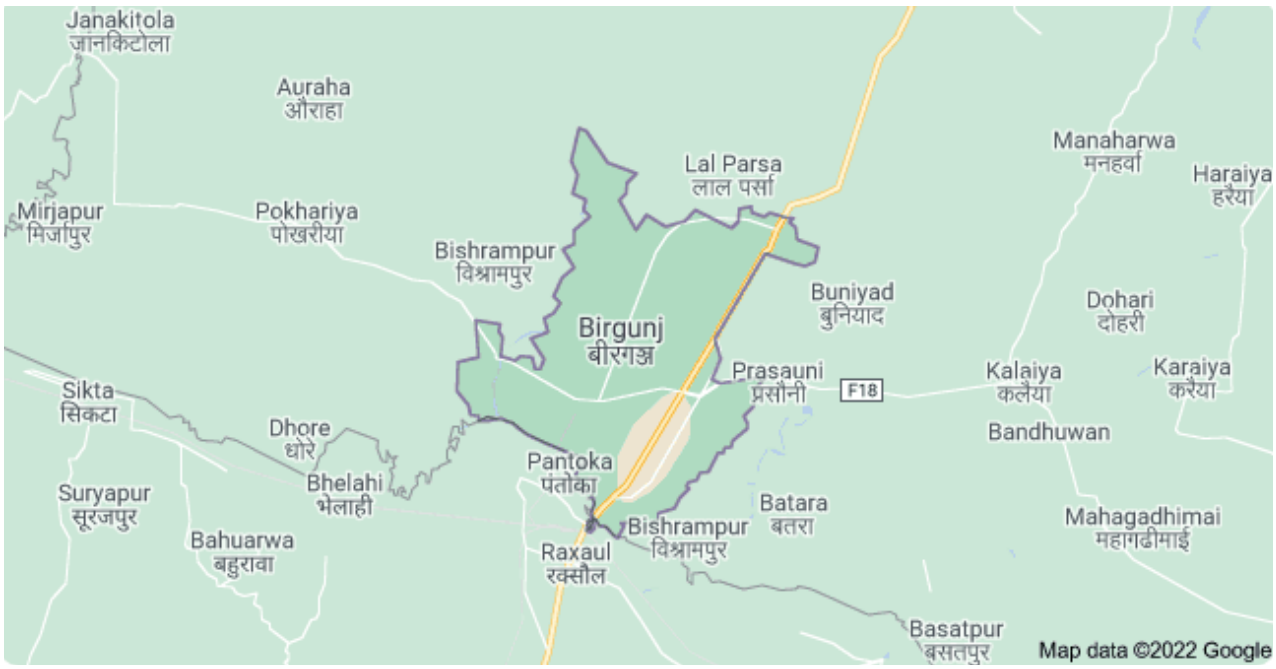


Figure 3: Google Map of Birgunj

5 Annual Financial Statement

Projected Profit and Loss Statement for Initial 10 years

Amount in NPR

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years
Training Fees	111,600,000	113,832,000	116,108,640	118,430,813	120,799,429	123,215,418	125,679,726	149,558,874	152,550,051	155,601,052
Total Direct Income	111,600,000	113,832,000	116,108,640	118,430,813	120,799,429	123,215,418	125,679,726	149,558,874	152,550,051	155,601,052
Less: Direct Expenses	-									-
Trainer fees and other direct expenses	39,060,000	39,841,200	40,638,024	41,450,784	42,279,800	43,125,396	43,987,904	52,345,606	53,392,518	54,460,368
Total Indirect Income	39,060,000	39,841,200	40,638,024	41,450,784	42,279,800	43,125,396	43,987,904	52,345,606	53,392,518	54,460,368
Gross Profit	72,540,000	73,990,800	75,470,616	76,980,028	78,519,629	80,090,021	81,691,822	97,213,268	99,157,533	101,140,684
Profit before overhead and interest	72,540,000	73,990,800	75,470,616	76,980,028	78,519,629	80,090,021	81,691,822	97,213,268	99,157,533	101,140,684
Operating Expenses	-									-
Depreciation	36,911,407	29,329,964	23,513,761	19,037,556	15,579,699	12,896,757	10,804,372	9,162,831	7,866,167	6,833,943
Salary Expenses	15,618,456	16,087,010	16,569,620	17,066,709	17,578,710	18,106,071	18,649,253	21,952,835	22,611,420	23,289,763
Overhead Expenses	5,180,000	5,335,400	5,495,462	5,660,326	5,830,136	6,005,040	6,185,191	7,280,853	7,499,279	7,724,257
O & M Expenses	5,689,137	5,859,811	6,035,605	6,216,673	6,403,173	6,595,269	6,793,127	6,996,920	7,206,828	7,423,033
Operating Profit	9,141,000	17,378,616	23,856,168	28,998,765	33,127,911	36,486,885	39,259,879	51,819,828	53,973,839	55,869,688
Interest Expenses	22,858,422	21,886,192	20,791,939	19,560,347	18,174,180	16,614,036	14,858,081	12,881,738	10,657,347	8,153,775
Profit	(13,717,421)	(4,507,576)	3,064,229	9,438,418	14,953,731	19,872,849	24,401,797	38,938,090	43,316,492	47,715,913
Provision for Staff Bonus	-	-	278,566	858,038	1,359,430	1,806,623	2,218,345	3,539,826	3,937,863	4,337,810
Income Tax	-	-	-	-	1,683,837	4,516,557	5,545,863	8,849,566	9,844,657	10,844,526
Net profit	(13,717,421)	(4,507,576)	2,785,663	8,580,380	11,910,464	13,549,670	16,637,589	26,548,698	29,533,972	32,533,577

Projected Balance Sheet for Initial 10 years

Amount in NPR

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years
Sources of Fund	-									-
Shareholders Fund	-								-	-
Share Capital	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504	82,851,504
Reserve and Surplus	(13,717,421)	(18,224,997)	(15,439,334)	(6,858,955)	5,051,510	18,601,179	35,238,768	61,787,466	91,321,438	123,855,015
Loan Fund	-				-					-
Term Loan	185,573,869	176,855,332	167,042,542	155,998,160	143,567,611	129,576,918	113,830,271	96,107,280	76,159,898	53,708,944
Short Term Loan	-	-								-
Total	**254,707,951**	**241,481,839**	**234,454,711**	**231,990,709**	**231,470,624**	**231,029,602**	**231,920,543**	**240,746,250**	**250,332,840**	**260,415,463**
Fixed Assets (Net)	223,327,291	193,997,328	170,483,566	151,446,010	135,866,311	122,969,554	112,165,182	103,002,351	95,136,183	88,302,240
Investment	-									-
Current Assets	31,617,707	47,728,670	64,222,628	80,803,727	95,871,112	108,334,850	120,038,409	138,035,438	155,496,941	172,422,516
Sundry Debtors	6,045,000	6,165,900	6,289,218	6,415,002	6,543,302	6,674,168	6,807,652	8,101,106	8,263,128	8,428,390
Inventory										
Cash & Bank Balance	25,572,707	41,562,770	57,933,410	74,388,725	89,327,810	101,660,682	113,230,757	129,934,332	147,233,814	163,994,126
Less: Current Liabilities	237,047	244,159	251,484	259,028	266,799	274,803	283,047	291,538	300,285	309,293
Net Current Assets	31,380,660	47,484,511	63,971,145	80,544,699	95,604,313	108,060,048	119,755,362	137,743,900	155,196,657	172,113,223
Total	**254,707,951**	**241,481,839**	**234,454,711**	**231,990,709**	**231,470,624**	**231,029,602**	**231,920,543**	**240,746,250**	**250,332,840**	**260,415,463**

The cash balance is seen as negative in initial years, the amount has to be injected by the equity holders

Projected Cash Flow for Initial 10 years

Amount in NPR

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years
Cash flow from operating activity	-									-
Net profit before interest and tax	(13,717,421)	(4,507,576)	2,785,663	8,580,380	13,594,301	18,066,226	22,183,452	35,398,263	39,378,629	43,378,103
Add: Depreciation	36,911,407	29,329,964	23,513,761	19,037,556	15,579,699	12,896,757	10,804,372	9,162,831	7,866,167	6,833,943
Add: interest	22,858,422	21,886,192	20,791,939	19,560,347	18,174,180	16,614,036	14,858,081	12,881,738	10,657,347	8,153,775
Operating cash flow before working capital change	46,052,407	46,708,580	47,091,363	47,178,283	47,348,180	47,577,019	47,845,906	57,442,833	57,902,143	58,365,821
Increase/Decrease in Current Assets	(6,045,000)	(120,900)	(123,318)	(125,784)	(128,300)	(130,866)	(133,483)	(1,293,454)	(162,022)	(165,263)
Increase/Decrease in Current Liabilities	237,047	7,111	7,325	7,545	(834,147)	(1,408,356)	(506,409)	(1,643,360)	(488,800)	(490,926)
Payment of Tax	-	-	-	-	(841,918)	(3,100,197)	(5,031,210)	(7,197,714)	(9,347,112)	(10,344,592)
Net Cash flow from operating activity	40,244,455	46,594,791	46,975,369	47,060,043	45,543,814	42,937,601	42,174,804	47,308,304	47,904,210	47,365,041
Cash flow from Investing Activity	-									
Purchase of Fixed Assets	(260,238,698)	-	-	-	-	-	-	-	-	-
Increase/Decrease in Investment										
Less: Payment of Dividend	-									-
Net Cash flow from Investing Activity	(260,238,698)	-	-	-	-	-	-	-	-	-
Cash flow from Financing Activity	-									-
Increase in Share Capital	82,851,504	-	-	-	-	-	-	-	-	-
Increase in Borrowing Fund (Long Term Loan)	193,320,176									-

Amount in NPR

Particulars	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years
Increase in short Term Loan	-				-			-		-
Less: Repayment of Long Term Loan	(7,746,307)	(8,718,537)	(9,812,790)	(11,044,382)	(12,430,549)	(13,990,692)	(15,746,648)	(17,722,991)	(19,947,382)	(22,450,954)
Less: Payment of interest on Short Term Loan	-					-				-
Less: Payment of Interest on Long Term Loan	(22,858,422)	(21,886,192)	(20,791,939)	(19,560,347)	(18,174,180)	(16,614,036)	(14,858,081)	(12,881,738)	(10,657,347)	(8,153,775)
Net Cash flow from Financing Activity	245,566,951	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)	(30,604,729)
Increase/Decrease in Cash and Cash Equivalent	25,572,707	15,990,062	16,370,641	16,455,314	14,939,085	12,332,872	11,570,075	16,703,576	17,299,481	16,760,312
Cash & Bank Balance at the beginning of the period	-	25,572,707	41,562,770	57,933,410	74,388,725	89,327,810	101,660,682	113,230,757	129,934,332	147,233,814
Cash Balance At the End of the Period	25,572,707	41,562,770	57,933,410	74,388,725	89,327,810	101,660,682	113,230,757	129,934,332	147,233,814	163,994,126

The Equity shareholders need to inject additional cash for serving Working capital in initial years as assumed in the report Earlier