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# **BUSINESS DEVELOPMENT PLAN OF BARPAKI'S NETTLE POW-DER INDUSTRY**

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# ABSTRACT

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The study analyzes the overall situation of nettle powder production and the future of Barpaki's nettle powder after a devastating earthquake in Nepal. The main objective of this research was to develop the business plan for Barpaki nettle industry by analyzing market and others aspect of the business. The survey was carried out to find out the market situation of nettle powder in Nepal, public awareness about the benefit of nettle and the possible competitor for the Industry. Group discussion, key informant interview, field visit and direct survey were the key methods used for this study with prepared questionnaire. Moreover, the study included SWOT, PEST and market analysis for the nettle industry and suggest the best strategies for it. Public-private partnerships is found to be the most appropriate approach for the development and growth of nettle powder industry. The expected output of this interventions is to have lasting business partnerships established between private sector, local forestry groups and farmers for forest-based enterprise. Risk transfer to private sector is the major component through which Public-private Partnership (PPP) projects can generate better value-formoney. That is why, the committee seems to be more interested in Public-private Partnership (PPP) model and planning to search for a private investor. Additionally, the research proposes a business development plan for Barpaki's nettle powder emphasizing PPP model approach. All in all, the proposed plan is designed to promote sustainable as well as economic development of Barpak's people and the Nettle.

# Key words

Barpaki's Nettle Powder, Business Development Plan, Public-Private Partnership (PPP)

# **CONCEPT DEFINITIONS**

DCC	District Coordination Committee (district -level authority committee)	
DFO	District forest office (governmental office of Nepal)	
MPH	Micro- hydro project (village level small hydro project)	
HHs	Households	
NRN	Non-Resident Nepali	
HRM	Human Resource Management	
NRS	Nepali Rupees (Nepali Currency)	
GE cus on sustainable deve	Green Economy (economy which reduce environmental risk and fo- lopment)	
SME	Small and Medium-sized Enterprise	
CARE non-governmental orga	Cooperative for Assistance and Relief Everywhere (international anization)	
SSICDC governmental organizat	Shree Swanra Integrated Community Development Center (non- ion)	
CFUG forming community gro	Community Forest User Groups (in Nepal forest has protected by pups)	
CFBE	Community Forest based Enterprise	
FBE	Forest based Enterprise	
MEDEP	Micro Enterprise Development Program	
PPP and private to delivery s	Public Private Partnership (partnership between governmental/pubic services)	
NGO	Non-governmental organization	
GoN	Government of Nepal	

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### **1 BACKGROUND**

In the field of Industry, entrepreneurship is the process of designing the concept of business along with its launching and running it successfully, which is often initiated by individual people or small group of people. Those who create these businesses are called entrepreneurs. According to the Erasmus+, "Green entrepreneurship the activity of consciously addressing an environmental/ social problem/need through the realization of entrepreneurial ideas with high level risk, which has a net positive impact on the natural environment and at the same time is financially sustainable." (Erasmus 2016)

Most of the Nepalese live in rural areas and rely on natural resources for their livelihood, especially the forest resources. However, Community Forest user Groups (CFUGs) are not aware of the available potential forest resources in their forests which are highly valued for the enterprise establishment and business prospective. To sustain livelihoods, communities must perceive and realize benefits in exchange for cooperation in resource protection and conservation. Community based forest enterprises have the potential to create local economic growth, ensuring social wellbeing, and promoting sustainable management of forest resources. Development efforts must not neglect the linkage between poverty and the dependency of many communities on forest resources for their survival (Aryal & Pandey 2017,1-2).

Also, by promoting the green entrepreneurship, we can decrease the haphazard exploitation of natural resources. In Nepal, community forestry (CF) has become the flagship program for participatory forest management. Connecting CFs and Forest Based Enterprises (FBEs) with service providers and markets and creating enabling policies can be a momentous start towards developing socially, economically and environmentally sustainable forest usage and management practices. This will be a great contribution to the national effort of poverty reduction and inclusive growth (Aryal et al.2017,1-2).

Much work has been done to set up and increase the number of community forest-based enterprises (CFBE or FBE for this study) in Nepal but ensuring the survival of these enterprises over time is challenging. Hence, novel and sustainable strategies need to be adopted. The study analyzes the current situation and suggests some new strategies for the Barpaki's nettle powder Industry of Nepal. After 2015, devastating earthquake in Nepal, the industry had been ruined. However, it has now begun to restart, and the study will certainly help to rise them up (Ghale 2018).

### **2** RESEARCH METHODOLGY OF THE THESIS

### 2.1 Research objective

The main objective of this research was to prepare the business development plan for Barpaki Nettle powder Industry. In this competitive market, proper business plan can drive the industry in the right track. The Barpaki Nettle powder Industry is based on rural area, managing by rural people, so for them it will be even tough task to compete the market. The study suggests the best plan for them by analyzing the present and future market and other aspects of the business.

#### 2.2 Research question

The survey was carried out to find about the market situation of Nettle powder in Nepal, public awareness about the benefits of Nettle, and the possible competitors for the Industry. In this research, there is a main part relevant to the future of Nettle's Business, which is development plan. Before to develop business plan, need to know how to develop it and how to expand market. Fix the price according to the quality is most important and challenging task in business development. For this discussion has conducted with individual and group of customers, retailers (APPENDIX 1) and with wholesalers (AP-PENDIX 2) in three main and possible markets of nettle powder of Nepal; Kathmandu, Pokhara and Gorkha.

Preparing the business plan is inevitably not easy. Much efforts were invested in finalizing the questionnaire. First, an indirect survey and discussion was done with local costumer, wholesaler and Micro Enterprise Development Program (MEDEP). On that basis a draft of questionnaire was developed which was later again consulted with related stakeholders such as District Forest Office (DFO), District Co-ordination Committee (DCC) and NGO federation committee. On one hand, the individual 200 costumers were then asked the questions by using random sampling (a random sampling is a sample that is chosen randomly) (William 2009) method with the help of two local people. On the other hand, key-Informant, survey was done with 10 supermarkets, wholesaler and market in tourist place (Thamel, Lakeside). It almost took two weeks for getting all the information. The research was carried out from June 10 to June 20, 2018.

# 2.3 Research problem

The main problem for this research was lack of data. In Nepali market, Nettle products are imported from Tibet and India, but cannot find how much. The main reasons are open border with India and poor government entry offices. Moreover, developing the business development plan for rural area committee is also a more challenging task. The company is going to start the production and distribution task soon. So, it necessary to prepare appropriate strategic plan on time for the goal accomplishment.

### **3 ABOUT NETTLE**

The herbaceous flowering plant is considered as a crossness to many people around the world because of its sharp brush but for the thousands of years, people around the world have used stinging nettle to treat a variety of health conditions. Common Nettle plant (Urtica *dioica*), stinging nettle or nettle leaf, is an herbaceous perennial flowering plant in the family Urticaceae. It is native to Asia, Europe, Northern Africa, and North America (Joseph 2018). The leaves and stems in some of the subspecies have long stinging hairs that inject an array of chemicals when touched, including histamine, formic acid, serotonin, and acetylcholine. Nettle produces an irritating, uncomfortable sensation in the skin, that is why other common names for stinging nettle are burn weed and burn nettle (Joseph 2018).



PICTURE 1. Nettle Leaf

In Nepal, it is called super food and has the power to protect the kidney and gallbladder health, lower inflammation, increase muscle mass, regulate hormonal activity, prevent diabetes, lower blood pressure,

soothe hemorrhoids and improve respiratory conditions. For many years, Nettle has been a part of vegetable in Nepali kitchen and people consume it for the health purpose as it holds within itself several health benefits. Nettle is rich in Vitamin A, C, D and K. It is a good source of iron, potassium, manganese, calcium, magnesium, silica, sodium and sulphur with the following benefits for our body;

- Detoxifies the body
- > Aids in Pregnancy
- Promotes Feminine Health
- Improves Circulation
- Prevents Kidney Stones
- Anti-inflammatory Activity
- Osteoporosis and Bone Health
- Treats Respiratory Issues
- Protect Heart Health
- Improve Prostate Health
- Skin Care (Joseph 2018)

After knowing these benefits of nettle, it is believed that anybody can be interested to buy a nettle in any form.

### 3.1 Introduction of Barpaki nettle powder industry

Earlier, Barpak Gorkha was known for its abundant natural resources but after the devastating mega earthquake of 2015, it has been most popular for Epicentre of Mega Earthquake. However, still it is the home of many large community forests as well as national forests. Ragar community forest is the largest with an area of 368.78 hectares and provides woods, grass, fodder, biomass etc. to fulfil daily needs of user committee. This community forest also provides employment and income generating opportunities for the local population helping to improve their livelihood (Bhattarai 2013).

Ragar community forest user committee had identified "Sisnu" Nettle leaves (*Utrica dioica*) Industry as potential industry to utilize the unused raw materials from the forest. To improve the livelihood of poor and marginalized community Green Forest Program started Nettle powder Industry in Barpak,

Gorkha District. Various institutions such as District Forest Office, District Agriculture Development Office, Rural Municipality, District Coordination Committee, Cottage and Small Industry Development Committee, Himalayan Agricultural and Cooperative Institute and other similar institutions are working together in collaboration to promote this industry.

The Nettle industry just started to produce their first product but a few days later all things were gone together with earthquake. After getting support from different organizations the committee succeeded to build a new building and planned to produce a nettle powder soon. This business of nettle powder production is targeted to family under poverty, Dalit community and families' dependent on forest for their livelihood and is run by collective fund from community forest development program. The industry is focused on Underprivileged, Dalit and Forest dependent communities and families. Among them 11 families have been selected to operate and run this industry (Ghale 2018). Short information about the industry is presented here;

- Company Name: Barpaki Sishnu Powder Industry.
- Address: Barpak, Gorkha, Nepal
- Business Type: Agricultural and Forest product based
- Household involved :11 household from marginalized and Dalit Community
- Contact Person: Dhan Bahadur Ghale

# 3.2 Scope of business

The main objective of this industry is to increase income of targeted underprivileged, Dalit and forest dependent families and to provides fundamental education for the children of targeted families from generated income. By creating opportunity for farmers to maximize their production of cash crops and company believe that it helps to reduce the deforestation and thus protect the environment.

### **4 BUSINESS ENVIRONMENT**

This agro based business "Barpak Sisno Powder Udhyog" was formed as a small-scale industry for agricultural products processing specially nettle powder. The raw materials i.e. fresh nettle leaves are collected from Ragar community Forest and the electricity required will be provided by Barpak MHP. With the use of electrical drying process, this enterprise will bring premium products especially nettle powder in Nepalese consumer market.

# 4.1 Business norms and modality

The aim of this enterprise upgrade is for innovative end use of alternative energy and to produce quality agricultural products that meets desired standards. The products from this industry will grab the market share by establishing a brand name in the market and expanding its operations through business in domestic as well as international market.

The industry generates revenues through delivery of agricultural dried products ordered by customers from various locations within the country and outside the country. The products are delivered from theproduction facility to wholesalers and outlet store depending upon the locations and availability. This Agro Business earns revenue by adding value to the locally produced raw materials using drying technology.

The dried products can be stored for 2 to 3 years and can be sold at the time of high demand and good price. By providing quality services, reasonable prices and efficient delivery of products ordered, this enterprise is focused on establishing itself as a quality and a reliable business in case of agricultural product supplier.

### 4.2 SWOT Analysis

S.W.O.T stand for strength, weakness, opportunity and threat. A SWOT analysis is an organized list of business which helps to analyze the strength and weakness part of business and make it easier to develop strategy of business (Fallon 2018). An existing company can do SWOT analysis at any time

to track their progress and improve them. Nettle Powder Industry is a new company in the market so in this research it is used as a planning process form.

### 4.2.1 Strengths

After Mega Earthquake 2015, Barpark has been the centre of attraction in national and international platform due to which it is easy to shine. The industry uses modern tools and equipment that's are more reliable and efficient (Ghale 2018). This place has a good quality of nettle leaves to promote this business. In addition, there is enough raw materials as well as human resources in the Barpark with active participation of women and marginalized people. Several trainings are provided by Green forest program from the very beginning of running the business. Active participation of women in cash crop production, marketing and decision making is one of the achievements for Barpaki's women. Nettle has a good market in local, national and international markets.

### 4.2.2 Weakness

The industry is located at the remote area and the people are lacking new emerging business ideas and knowledge. Since the industry comprise new tools and equipment, technical manpower to operate and promote these modern technologies are lacking. Moreover, insufficient capital investment amount required to run the industry is less and it is even difficult to manage the funds from community (Ghale 2018).

# 4.2.3 Opportunity

Due to the Epicenter of Earthquake, Barpak is a popular name in Nepal so this name can be used in marketing (Ghale 2018). The price of nettle is attractive in national market as compared to the production costs because of its medicinal value. Government and local development banks are supporting to provide various facilities and opportunities to the farmers/traders. This has led to high involvement of farmers in the production of cash crops. As government is emphasizing forest-based enterprise, there are opportunities of potential government support in future (Maharjan 2018).

# 4.2.4 Threat

Climate change can be the threat to nettle plant causing several diseases and negative impacts on its qualitative production (Bhattarai 2013). After the production there might be another risk of marketing in between community and private sector to sell and buy their products in cheaper price. The nettle has competitive international Markets and there is possibility of oversupply of such products from China.

From the catastrophic earthquake, the Barpak village has been affected badly but now it is time to reform. The name Barpak is being brand in Nepal so Industry can use this name for the marketing and it will be easy to sell the product in Nepal. The SWOT analysis revealed that there are many opportunities as well as challenges which must be faced very carefully. The strengths provided by the new modern technology for effective and efficient drying can overcome the threats of high market cover by Tibetan and Indian product and to compete with International market, if properly utilized. It can be concluded that the organic Nettle product produced by using electric system has the huge market in Nepal. Beside the unstable economic condition of Nepal, there is no other major threats for this Industry. To exit in to the market, the company should apply a suitable strategic plan which can be Public-private partnership.

### 4.3 PEST Analysis

A PEST analysis is an analysis of the external macro-environment that affect all firms. P.E.S.T is stand for Political, Economic, Social and Technological factors of external environment of the country or world (Friesner 2010). These factors effect directly and indirectly to the company, so it should be analysed properly and need to develop a plan accordingly. In this research, PEST analysis is done to know the macro environment factors which can affect the Nettle Powder Industry.

### 4.3.1 Political

Before the earthquake, the village was popular for Gurung culture and it was the part of Manaslu trek also. After the Earthquake, the village was highlighted nationally and internationally along with plenty of opportunities for business. The most positive part for this business is the unity of local people and political parties.

#### 4.3.2 Economic

Every year, the government of Nepal allocates its budget towards funds that can support and capacitate new entrepreneurs. However, many entrepreneurs may not be aware of such funds that are currently in operation. Among the different funds program, Barpaki Nettle powder industry can get the funds from the Economic Rehabilitation Fund program. The fund was allocated by Government of Nepal to provide refinancing facility and interest subsidy for the sectors including earthquake and blockade affected residential home, agriculture, business and tourism (Maharjan 2018). Thus, from the economic part, the industry is secure and can run their business.

### 4.3.3 Technical

The electricity for the proposed drier is obtained from a micro-hydro power at local level and is produced on renewable form without affecting the environment. The electric-based cash crops drying system is technically feasible with the first system in commercial operation to produce ginger in Gulmi, Nepal, following years of research and development of drying system. The technology is also feasible for nettle and nettle leaves

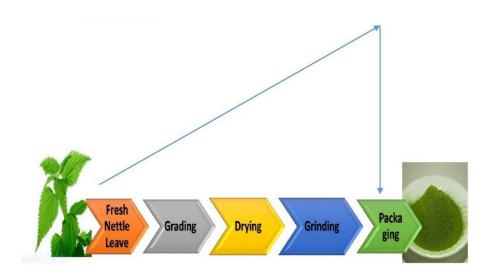
### 4.3.4 Social

Gorkha district is a historic place famous for its tourism value both domestic and international. These agricultural products can be sold as souvenir to tourists as well as visitors. The nettle leaves are freely available in wild in forest and requires manpower for collection. The local manpower can earn their livelihood by collecting fresh nettle leaves. It has been found that selling dry powder can generate profit for the business and community.

### **5 PRODUCT AND PRODUCTION PROCESS**

### 5.1 **Production process of nettle powder**

In the traditional procedure, the process used to make nettle powder goes through the stages of collecting, grading, drying, grinding and packaging. These processes are described as follows.



GRAPH 1. Production process of Nettle Powder (adapted from WWF Nepal 2014, 24)

First, local people collect fresh nettle leaves from the community forest. Nettle has stings, so the collector must wear gloves while plucking the leaves of nettle plant. Then, the leaves are brought to a factory where they are graded to remove other plant and are cleaned for drying. The leaves then are spread evenly in trays and are dried in collector. The drying process time may depend upon the intensity of the sun and the weather conditions. The dry nettle leaves are then grinded to fine powder using a grinder. When the Nettle powder is ready then it is packaged in bags and then packed in a paper box (Khanal & Bhattarai 2014).

### 5.2 Production by electric drier

The Electric Drier uses the following principle. The Electric Drier essentially consists of two parts: the first is a chamber fitted with perforated trays where the agricultural product to be dried is placed. The

number of trays varies with the quantity of agricultural product to be dried and the size of the equipment. On bottom is housed the second part - the heat exchanger with blower, which continuously feeds dry hot air into the chamber.

The removal of moisture is based on the principle of absorption and diffusion. Different products are dried at different temperatures to maintain their oil and other essential contents only removing the moisture. These Electric Driers are based on modern technology and incorporate cross flow air distribution pattern through the trays to optimize drying capacity and time. The Electric Driers can handle 50 kg to 150 kg of agricultural products per 2 hrs, depending upon the model used. The technical specification of the Electric Nettle drying System are as follows

- Cross flow air drying type
- Three phases, 440 Volts, 18 kW max power
- 13 trays with 4 kg fresh leaves capacity.
- Total 50 kg fresh per batch
- Drying time 2 hrs per batch
- Capacity per day is 150 kg fresh
- Dry product output is 15 kg per day.
- Automatic temperature controller and timer
- Well insulated and efficient design (Khanal & Bhattarai 2014)

# 5.3 Out sourcing

Since Earthquake, the company is not started to produce the products and the main objectives of this project is to enhance the lifestyle of dalit and marginalized households (HHs). After the earthquake the company succeeded to manage all the required tools and equipment from different organizations. Now, the main challenge is starting the production so for this committee has decided to collect the money from the committee members and money will collect on the base of economic status.

### 6 MARKET ANALYSIS

Nepal is a developing nation with an estimated GDP of \$24.49 billion in fiscal year (FY) 2016/17. According to the world bank, Nepal's economy might grow by 7.5 percent in FY 2016/17. Nepal estimated populations is 28.71 million (males 14.21 million, and females 14.50 million), with a per capita annual income of \$853.Political instability, a landlocked country, challenging topography, poor infrastructure, lack of trained and educated workforce and a weak policy and regularity are the major causes of low economic growth (World bank 2018).

The global community including Nepal has entered in Green Economy and accepted the concept of Green Economy (GE). It can be an important strategy to achieve the goal of sustainable development. Green entrepreneurship in Nepal is at the establishment phase and many groups, organizations and youth in Nepal has now attracted towards the entrepreneurship and mostly in agriculture, forest and environmental sector. In Nepal, in the past few years, Small and Medium-sized Enterprise have been carried out to improve the lifestyle of urban community and create job opportunity for them. By taking the lesson learn from the Community Forest User Groups (CFUGs), Nepal government has implemented SME program in village areas. According to the expert and government agencies, SMEs managed by groups can be the best way to enhance the lifestyle and improve the economy of the nation. Besides that, there are many things to be done from the government level (GoN 2015).

There are several reasons to conduct Voice of Market. It is important to a business and industry and it lays the foundation for the strategy. Voice of Market is often carried out as first step to develop the market strategy or the company strategic plan. Understanding the customers and their interest helps to develop the products and plan. Voice of Market gives us an inside look into the mind of our customer. So most importantly it answers the questions of what, why, How and when? What are the data and the depth of "why" provides additional details and context for us to develop market campaigns from this we can measure awareness, perception of the markets? (Reidenbach 2009)



PICTURE 2. Group discussion with committee member

In these days with the acceptance and the growth of technology the way of market research has changed. Surveys can be conducted more quickly, less expensively and more efficiently.

In the context of Nepal, gathering the people together and meeting them individually is the best way to know the voice of customer and market. The survey was carried out three different level research to know the customer voice. Conversations were arranged with customers, wholesalers and retailers including individual questionnaire discussion with 200 (age between 20-50) customers of Gorkha, Pokhara and Kathmandu and one group discussion with the management committee (APPENDIX 4). After getting the data, it was categorized on five different tittles; Name of Barpak, used of Nettle (how often they used?), Benefit of Nettle, Nettle powder (powder as a product), and how much they are interested to buy? The main purpose to combine the data in five different titles were to specify it. Which helps to analysed the data and to figure out the real situation of the market.

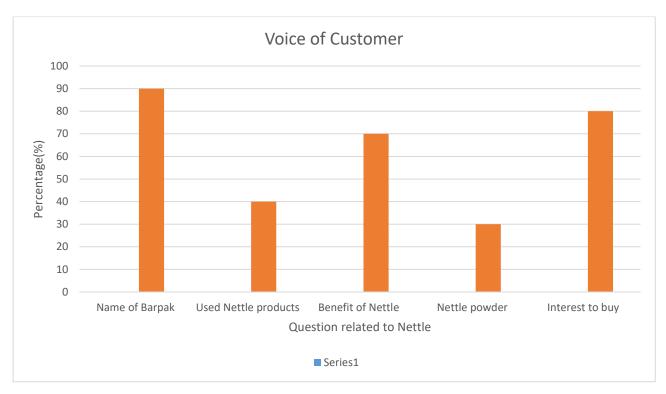


FIGURE 1. Market analysis

In the research it was found that 90% people know about the Barpak. However, the use of the Nettle products was found only 40% and only 30% people heard about the Nettle powder's products. The reason behind this was Earthquake of 2015. Despite that 80% people are interested in Nettle powder, it was found that there can be high demand for this product. On the other hand, only 40% of whole sellers are selling the Nettle related products and 60% products are imported. The main customers are belonging to upper family and few from middle class as per the settlement of community in Barpak.

Even though Barpaki Nettle powder is not available now, 90% whole sellers are interested to sell Nettle product if they get the products from the company. After analyzing all these results, the market of Nettle powder has been segmented.

# 6.1 Market segmentation

Since the product is still in its infancy there are various challenges for the marketing of the product. Barpak was famous for homestay before the earthquake and many domestic tourists used to spend some days in Barpak atleast once. After the earthquake, these days many foreign and domestic tourists are interested to visit Barpak once. The Village is famous tourist destination. Tourist along with visitors take nettle powder as souvenir. In addition to this, the organic nettle powder is supplied to various departmental stores as well as medical and Ayurveda shop of cities like Pokhara, Kathmandu. After few years company will export the product abroad as well.

### 6.2 Market trend

According to the global data the market of organic products has been increasing every year (Statista 2016). In the scenario of Nepal, the people who lives in city area are being more interested in organic products. Tourist who are visiting in Nepal, they are also more interested about organic products of Nepal. If we see the data of Nepal, 2014, our major foods market is covered by India. We import 57.9% from the south Asian country, mostly from India. It is tried to explain the market trend of Nettle here

### 6.3 Market supply

The inconsistent supply of fresh foods, periodic shortages and price hikes leading to inconvenience for customers has increased in demand for dried Agro products. The dried Agro products having capacity of storage and convenience for transportation can be made readily available to desired customers.

#### 6.4 Easy to use and time saving

Dried spices make cooking easy and fun from its range of products all in hand ready to be used at any time. The cleaned and readied products can be used directly without any tedious preparation saving much of cooking time for preparations helpful in the busy life of city dwellers and students.

### 6.5 Health consciousness

Nepalese especially in city areas have become more health conscious and dried Agro products supported this goal as dried Agro products are inherently healthy and tastier then the commercially produced and chemically treated fresh products. Nettle powder possess medicinal properties making it Ideal for people looking for healthy food.

### 7 STRATEGY

# 7.1 Promotional strategy

The single objective is to position "Barpak Sisno Powder Udhyog" as a quality product producer. The marketing strategy will seek to first create customer awareness regarding the quality of the product and its health benefits and work toward building customer loyalty.

Agro business seeks to communicate the message that they are sellers of international standard products. This message will be communicated through a variety of methods. The first method will be advertisements. Some of the advertisements will be co-branding with the Farmer's Market. Other advertisements will be solely product advertisements. The advertisements will be published in the local newspaper as well as on television and the radio/FM.

The message will also be communicated to the different restaurants through networking with the owners and managers and Kathmandu-based restaurant association which is a formal group of restaurateurs. Agro Business will communicate their message through informal gatherings and networking with restaurant owners.

### 7.2 Pricing strategy

A business can use a variety of pricing strategies when selling a product or service. The price can be set to maximize profitability for each unit sold or from the market overall. It can be used to defend an existing market from new entrants, to increase market share within a market or to enter a new market (India times 2018).

Maximum retail price will be based on the scale and profit margin of the product. The contribution margin will be from 20% to 30% based on type of the product. Discounts can be given to customers (Stores) paying in cash and buying in volumes. Special discounts can be given to restaurants purchasing the products on contract. The frequent going household products can be bundled with new products to increase the sales. Payment can be done in cash or by bank accounts after obtaining of products. For regular bulk purchaser the credit can be paid on regular amount basis.

# 8 PARTNERING STRATEGY

Nepalese living in rural areas rely on natural resources for their livelihood, especially the forest resources. However, Community Forest User Groups (CFUGs) are not aware of the available potential forest resources in their forests which are valued for the enterprise establishment and business prospective. To sustain livelihoods, communities must perceive and realize benefits in exchange for cooperation in resource protection and conservation. Community based forest enterprises have the potential to create local economic growth, ensuring social wellbeing, and promoting sustainable management of forest resources. Development efforts must not neglect the linkage between poverty and the dependency of many communities on forest resources for their survival ((Aryal & Pandey 2017, 2-3).

Nettle Powder Agro business can have high demand if properly marketed and managed. To meet the demand of these products proper suppliers is needed. Hence, Public Private Partnership (PPP) model can be the best option for its development. First, it is important to note that there is no single definition of PPP. Nonetheless, a useful conceptualization is provided in the Asian Development Bank's (ADB's) PPP handbook (Felsinger 2008), which sees PPP as a mechanism for improving the delivery of public goods and services by partnering with the private sector while retaining an active role for government to ensure that national socio-economic objectives can be achieved. PPPs are thus defined as: a framework – *that while engaging the private sector* – *acknowledge and structure the role for government in ensuring that social obligations are met, and successful sector reforms and public-sector investment achieved (Felsinger 2008).* 

In simple words, PPP refers to the blending of resources and assets from both public and private sectors for the benefits of all parties and with an objective of providing a more efficient and cost-effective means of the service at a savings to the public. Some major benefits include reduced cost, better quality service, greater productivity and better leverage of the limited government resources to fulfill high cost and high needs projects. Also, there are some common elements defining PPP in Nepal:

- > A contractual agreement between a public entity and private entity
- A substantial transfer of appropriate risk to the private party
- > Focus on service delivery to meet public service or infrastructure needs
- Private parties have investments at risk, although private capital investment is not required in all PPPs • Value for money is demonstrated

Remuneration of the private party may be directly from user charges, by payments from public agencies in the case of availability-based PPPs, through exploitation of other assets or rights (Srivastav & Shakya 2012)

Public-private partnerships complement trends in conservation financing by utilizing market-based mechanisms as the entry point to tap into emerging national markets. By linking Nettle power enterprise operating in Barpak to local producers who practice sustainable forest management, partnerships can help both parties by ensuring the long-term and reliable supply of sustainably harvested nettle reach the market.

For quality maintenance and monitoring partnership with farmers is important. This can be done by choosing proper partners with high potential of variety of products. Agro-business will promote partnerships with marketing firms and other exporters. Other partnership can be done with departmental stores chain such as Bhat Bhateni who can create common goal of higher sales. This will create higher brand value and greater increase in sales. The profit can be shared based on sales volume from the related stores.

### 8.1 Procedure

For the Nettle Powder Industry, public sector comprises of community forest user groups of Ragar CF where 11 members are given the main responsibility to run the Industry in agreement with all the CFUGs (Ghale 2018). On the other hand, private sector will be the individual and or group entrepreneur to finance the enterprise. The main reason to promote this green enterprise is to create local economic growth, ensuring social wellbeing and promoting sustainable management of forest resources. Hence, the priority for Nettle plantation will be given to poor, vulnerable and underprivileged group with low economic condition. As the plantation requires land, some households might not have that enough space. In such cases the Nettle committee can arrange land in lease for those poor people. Once the Nettle is planted, it should be handled with care. The risk of its survival is all upon community. Hence, proper monitoring, technical guidance and proper care is very necessary. Here, the role of Nettle committee, entrepreneur, government and technical experts to minimize the risk of diseases and its quality.

As nettle is harvested, each household collect those nettles and will go through their nettle cooperatives. The Cooperatives in rural Nepal are very much relevant and popular nowadays. Once the community sell their Nettle to private entrepreneur, they will do some savings in cooperatives. Moreover, all the Nettle producers are the members of cooperatives. If there is profit from the enterprise, they will also have it. Once the community hands the qualitative nettle over to the entrepreneur, their worries end whereas the risk of marketing and productivity now comes to the entrepreneur and the community gets high money from outside and they sell their products to others? Similarly, what if the private entrepreneur does not buy nettle from the community and buys it from outside? For minimizing such risk, both the parties will do contract farming at the beginning where both must ensure their commitment to each other. The entrepreneur will pay as per the government rate and the quality of nettle. After receiving the nettle, the enterprise will now go through the processing and finally products are ready.

Marketing is one of the important parts in an enterprise and the private sector has the main responsibility of it in PPP. The entrepreneur needs to identify the potential markets for the products. Various ways can be adopted to identify it such as stakeholder consultation and meeting, direct visit/interaction to the market, mass media mobilization, brochure, pamphlets mentioning its advantages and medicinal values. The entrepreneur as well as committee should be careful with their products in terms of sanitation of the processing machine and the processing room, the products and its quality.

Different forest policies of Nepal highlighted the forest-based enterprise development for poverty alleviation through sustainable forest management. Forest Policy (2000) and Nepal's Tenth Five-Year Plan (2002–2007) focuses on the sustainable use of potential forest resources for poverty alleviation as well as income and employment generation through the promotion of forest-based micro enterprises. Similarly, the strategy also highlighted Public Private Partnership (PPP) co-operation model for the promotion of forest-based enterprise. It aims to "increase investment of private sector like farmers, entrepreneurs and financial institutions to crease/increase jobs in the forestry sector". The expected output of these interventions is to have "Lasting business partnerships established between private sector, local forestry groups and farmers for forest-based enterprise"(Felsinger 2008).

Public-private partnerships, a combined approach also recognizes both development challenges and development opportunities in forest conservation that are attractive to public sector and development agencies as a means of leveraging both the technical and financial resources of the private sector to

help build local capacity and to promote sustainable management practices. The development challenge for the international community remains one of linking local industry and community participation to these expanding market opportunities.

Risk transfer is one of the major components through which PPP projects can generate better valuefor-money. Without enough transfer of appropriate risks from the public to the private sector, it is unlikely that a PPP project will achieve better value for money than traditional public procurement and delivery. In principle, risk in a PPP should be allocated to the party who is best able to mitigate and manage that risk. As PPP Projects normally last for a long period of time (full lifecycle), the project and project parties are exposed to different risk over a considerable period. As such, risk should be correctly identified and allocated between parties during the procurement of the PPP project with consideration of the implications of these risks over the full project life (Srivastav & Shakya 2012).

# 9 MANAGEMENT COMMITTEE

Barpaki Sisno Powder Udhyog is managed by committee consisting of 11 members. They are also supported by Ragar Community Forest User Committee.

Chairperson	Dhan Bahadur Ghale
Secretary	Ghamrani Ghale
Treasurer	Sanokanchi B.K.
Members	Santa Kumari B.K.
Members	Jamuna Ghale
Members	Dambar Bahadur Ghale
Members	Laxmi B.K.
Members	Gomati Ghale
Members	Gita Ghale
Members	Sukmaya B.K.
Members	Chalimaya B.K. (Ghale 2018)

### **10 FINANCIAL PLAN**

The financial feasibility of any project depends on the financial analysis. It covers all the queries related to the finance. Based on the assumptions and analysis, the business has a compounded payback period of less than 2 years. In addition, the electric drier has greater efficiency than conventional drying systems. For the financial analysis, assumptions on the financial terms like investment, revenue, expenses, operation of the project have been made.

# **10.1 Investment**

The previous structure of Nettle industry was destroyed completely by the earthquake (Ghale 2018). At that time CFUG member did not have hope to run the Nettle powder industry again but when they thought it could be a life changing industry then they started to talk with different NGOs, INGOs and government offices. There were nearly 100 organizations who were working in recovery and rebuilding of Gorkha. The committee talked to the Green Forest Program (Hariyo ban Program, Nepal), who helped them in the beginning. After getting the support from Green Forest Program (Hariyo Ban Program, Nepal), the committee succeeded to start the Nettle powder Industry again. Nearly 9000 euro is invested in this industry and details about investment is shown in the table below:

<b>S.</b> N	Organizations	Amount (€)
1	CARE International, Nepal	4000
2	Green Forest Program/SSICDC	1600
3	Ragar CFUG	1600
Total		7200

The money which they received from the CARE International Nepal and Green Forest Program/SSICDC was invested in building construction and support for machines. Ragar Community Forest User Group manage 1600 euro for office management. When they recovered this amount then the company will be in a profit after excluding all the expenses of the year.

### **10.2 Operational plan**

For the operation of the plant, separation was done to the time of operation into two periods. For 8 months a year, it can be run at full capacity drying the available nettle leaves. The plant will produce nettle powder for these 8 months. A total of 150 kg of fresh nettle leaves are consumed per day to produce 15 kg of dried nettle powder. This means, in these 8 months the plant needs 30,000 kg of fresh leaves to produce 3000 kg of dried nettle powder. The total electricity consumed by nettle leaves in 8 months is 12000 units. The electricity is purchased from the community micro-hydro power at a rate of NRs. 5 per Unit.

For the ensuing 4 months nettle leaves are not available. This results in the ease of procurement of manpower in the plant. The operation of the plant is 25 assumed to run 8 hours a day, 6 days a week as per the international labour law. The plant operates 300 days per year after deducting 52 off days and 13 factory holidays.

# 10.3 Revenue

The products are prepared by processing the fresh nettle leaves. The fresh nettle leaves are purchased from farmers at the rate Rs. 18 per kg as a raw material for first year. The raw material is then processed with the value added in it so that the dry nettle leaves (nettle powder) can be sold at a rate of Rs. 600 per kg due to high quality. From this, total sale could be NRs. 18, 00,000 of nettle powder in the time of six months with the raw material cost of NRs. 7, 50,000.

It has been assumed here that the selling rate of the dried product is increased annually as a market increase price and consecutively, the raw material price is also increased annually to provide higher value to the farmers and for their encouragement.

### **10.4 Expenses**

The expense of the plant is projected to project the cost of plant operation. Depreciation is a flat rate of 20%, assuming the plant's effective life of 5 years after deducting salvage value. All other expenses, office expenses, telephone, rent, vehicle, maintenance, repair, miscellaneous etc., are based on costs

from the existing plant and is increased accordingly each year. The company also provides bonus to its manpower at the rate of I month equivalent of pre-tax earnings. The company pays tax to the government of Nepal at the rate of 10% of gross income taking the tax rebate scheme for rural agricultural industry. We assume an interest rate of 15% for operating capital.

#### **11 CONCLUSION**

In a nut shell, the research tries to analyze the overall situation of Barpak's Nettle powder and then propose a business development plan for the Industry. After market surveys and analysis, the report has been prepared. During the research, it was found that most of the committee member are not known about how to find the market, how to set the price, how to do promotion, and how to find right whole-saler. However, in 3P model, all those risks are transferred to private sector, only community needs to worry on the production as marketing risk will be then transferred to private sector. That is why to develop the business of Nettle powder, the committee seems to be more interested in 3P model and planning to search for private investors. However, it was realized that they should focus on strength-ening technical knowledge and institutional development before going to 3P model. Since the business development plan is proposed for now, if they do not find this model beneficial, they can change it. All in all, the proposed business development plan is designed to promote sustainable as well as economic development of Barpak's people and the nettle.

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# **APPENDIX 1**

# Questioner for Voice of Market

Name.....

Age.....

Address.....

- 1. Have you heard about Nettle?
- 2. Do you know the benefit of Nettle?
- 3. Do you know the uses of Nettle?
- Do you know about the Nettle powder?
   Yes No
- 4.1 If yes, how?
- Have you tasted Nettle powder?
   Yes No
- 6. How did you have?
- 7. How was the taste?

Good Medium Bad

- 8. Are you still taking the Nettle powder?
- 9. Do you recommend others?

Yes No

10. Have you heard about the Barpaki nettle Powder?

# Yes No

- 11. Have heard Barpak?
- 12. Do you want to buy Barpaki Nettle powder?

Yes, I don't know

# **APPENDIX 2**

Questioner for the wholesaler and retailer

Name: ..... Age: ..... Address..... 1. Have you heard about the Nettle' product? Yes No 2. Do you have any products of Nettle in yours shop? Yes No 3. If yes, 3.1 what are the products? Powder medicine Soap 4. Who are more interested to buy Nettle products? Rich family middle class 5. Have you heard about Barpak? Yes No 6. Have heard about Barpaki Nettle powder? Yes No 7. Do you sell if the products are available in your shop? Yes No If yes, why?.....

If no, why.....?