Mulyawan Brand and the Promotion of Agro-Ecological Products: Insights and Challenges from the Organic Mission in Karnali Province, Nepal

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Abstract: Organic farming is getting more attention worldwide. Consumer's concern towards food safety, health environmental conservation proved it acceptable conventional farming. Literature review suggests that organic farming practices are more relevant to the small-scale farmers, more likely they are in Karnali province of Nepal. Sloppy cultivable land, high mountainous landscape, prevalence of small holder farmers with low investment capacity, and vulnerability of the region towards climate change have forced Karnali to adopt agro-ecology based sustainable organic farming. This forced option could be transformed into opportunity through certification and branding of organic by default, local and indigenous crops as "Mulyawan" brand. The province agriculture ministry is promoting organic farming in phase wise basis based on zoning of agricultural production pockets. The certification of export potential organic products like ginger and turmeric has been started. The primary and semi processed products under organic by default, local and indigenous crops are traded in the name of "Mulyawan, Heritage of Karnali Farmers" brand. The 'Mulyawan' brand which means valuable products from Karnali has been able to assure that the products from Karnali are free from chemicals get access to national and international markets. Branding with 'Mulyawan' logo gives the impression and identity to Karnali Products that are safe and natural.

Keywords: Karnali, Organic, Certification, Smallholders, Mulyawan, Branding.

1. Introduction

Karnali province with an area of 30209 square km, and accounting to 20.52 per cent area of the country makes it the largest province in Nepal after the promulgation of the new constitution on 20th September 2015. The province is predominantly a mountainous region with diverse climatic variability from sub-tropical to tundra zone ranging from 180 m. to 7,348 m. above sea level altitude. The average annual rainfall in the province is around 1479 mm. The province is the hub for floral and faunal biodiversity. Agriculture area that accounts to almost 10 per cent is the lowest compared to other provinces. Out of 299339 hectares (9.91%) of the cultivable land only 216880 hectares is cultivated at present. The year-round irrigation facility is available to 38,033 hectares (17.53%) and seasonal irrigation water is accessible to 30,302

hectares (13.97%) [1].

The topography, sloppy terrain, small land holding size, less cultivable land, fragile landscape vulnerable towards climate change etc. are the main features that shape the agricultural development path of the province. Due to mid and high hills with sloppy cultivable land and small holder farmers, the adoption of traditional farming practice is dominant over conventional farming. The chemical fertilizer used in upper five districts (Humla, Dolpa, Jumla, Mugu and Kalikot) is almost zero and around 4000 Mt/annum is being sold in lower districts (Dailkeh, Surkhet, Salyan, Jajarkot and Rukum West) (MoLMAC annual report 2078/079). However, this amount is used mostly in the flat paddy field along the river corridors. Based on these features, the province government's decision on 18th February 2018, to create the foundation of organic agriculture and conserve and promote local indigenous crops has been the base to promote organic farming practices. Due to geophysical landscape, the adoption of organic farming practices could be regarded as the 'Forced Option' of agricultural development path in Karnali. However, this forced option could be transformed towards opportunity via organic certification and branding to harness the intrinsic value of safe, nutritious and hygienic super foods produced in Karnali. The vision of "Increased organic farming for a prosperous Karnali" put forward by the province agriculture ministry has got wider attention across the development actors within and outside the province. It wouldn't be mistake to claim that the demand for the Karnali products has gained popularity due to fact of the province's decision to transform Karnali as Organic Province.

2. Organic Farming in Karnali Province

Organic agriculture has now become an alternative option against the conventional farming system across the globe due to concern of food safety, human health and global environment sustainability. Despite, green revolution being able to respond the food security crisis across the globe, but the negative consequences from it was overwhelmed across the world after the publication of Rachel Carson' Silent spring, published in 1962 [2], [3]. Some critics emphasize OA as being an

inefficient approach to food security and it will become less relevant in the future [4]. However, some Literatures suggest that the organic farming practices are more relevant to the small-scale farmers due to the fact of self-reliance for food and inputs, greater self-confidence and increase labor diversity, thus spreading risks in the agronomic as well as financial sense [5], [6]. The small holder farmers in developing countries can easily accept OA due to their nature of production system (i.e. low agri-input) but they may face problems in certification. Likewise, the organic farming is more appropriate in the hilly and mountain region of Nepal as the forest coverage is high and rearing 4-5 cows can produce 1 kg of urea which is sufficient for 12-15 Ropani of land [6]. Studies conducted in some parts of Nepal have also suggested that the organic farming can be successful in the hilly region [7]. This is true that about 2/3rd of Nepal's geographic area is comprised with the mountain agriculture system that integrates crops and livestock based on the traditional knowledge and local available resources. This type of farming is organic by default and can be transformed towards organic agriculture. This is also equally applicable for the Karnali province where most of the landscape is covered with mid and high hills and encompasses sloppy agro-terrain.

The organic farming got popularity when the Jumla, a high hill district, was declared as Organic in 2009 A.D. for the first time in Nepal. The certification process in apple farming was started until 2014. After the initiation of provincial government under new constitution, the organic certification of dried ginger and turmeric from a private company, The Organic Valley (TOV), in Chhinchu, Surkhet has started to export to European markets. The data provided from the company shows that approximately 257 Mt of dried ginger and turmeric was exported in the year 2021/022 and the demand is still increasing. The province agriculture ministry is supporting the company in certification of the products exported. Besides this, there are numerous agricultural and livestock products like apple, walnut, bean, indigenous crops, citrus, sheep, goat, yak etc. that are being grown and/or farmed without using chemical inputs. These products could be brought into market as Organic Certified based on the market demand.

The certification cost in organic farming is one of the major hurdle for the smallholder farmers like in Karnali province. So, in order to have a common understanding among the development actors, a national stakeholder's dialogue was conducted in September, 2022. The workshop concluded that the organic certification should be location and product specific and the organic farming should be promoted in phase-wise basis based on the Organic Zoning of the production pocket. The workshop further highlighted on scope of branding Karnali products as safe and nutritious. Thereafter, MoLMAC been supporting organic certification in ginger and turmeric, identifying the chemical free pocket via organic zoning and branding organic by default and indigenous crops as "Mulyawan, Heritage of Karnali Farmers". The word Heritage has been included in the logo to disclose the tradition and culture associated with the farming practices being adopted by the farmers in Karnali Province.

3. Materials and Methods

The research article on organic farming conducted in Nepal were searched as much as possible to support the argument of organic product certification and branding. The programs and policies regarding organic farming and branding of Karnali products as 'Mulyawan' were studied. A Visit to The Organic Valley Company was done to get the information regarding certification of ginger and turmeric. Since the province agriculture ministry has adopted two way approach i.e. third party certification for organic products and branding as 'Mulyawan' for the organic by default & indigenous crops for agricultural marketing, the information has been collected how the both approaches has impacted agriculture marketing and value addition. Likewise organic zoning of the all 42 local bodies (Municipalities) was done based on four criteria namely i) Number of agro-vets and the chemical fertilizer and pesticide sold, ii) organic matter content of the soil (secondary data used from digital soil map from

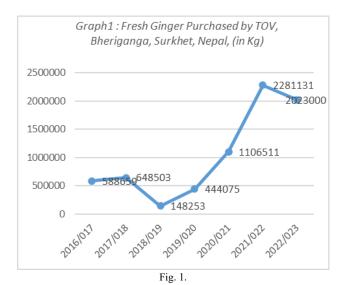
https://soil.narc.gov.np/soil/soilmap/) [10],

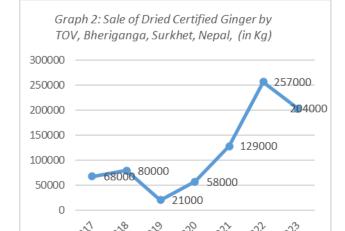
iii) chemical fertilizer sold in all local bodies from Salt Trading Corporation Ltd and Agriculture Input Company Ltd of the Karnali Province and iv) traditional/sustainable farming practices adopted by the farmers. The Focused Group Discussion (FGD) was done in all local bodies to verify the secondary data and the gather information on organic plans and policies adopted by the respective local level.

4. Organic Agriculture Marketing

Studies conducted revealed that there is significant difference in terms of consumer's additional willingness to pay for the organically labeled and unlabeled inorganic products in the Kathmandu market [8]. The organic market in Nepal in increasing day by day due to the fact that the consumer's awareness towards organic product, higher education and income level increases the demand and willingness to pay more for the organic products [8]. There are numerous sales outlet, supermarket and informal traders being involved in marketing of Karnali products like local beans, apple (fresh & dried products, cider), indigenous crops (porso-millet, buckwheat, barley, marshy rice) etc. in major cities like Kathmandu, Narayangarth, Surkhet. There are other numerous products like vegetables, cereals, fruits and livestock in Karnali that are produced without using chemicals. The only gap is to increase the trust and market relationship between producers and consumers via branding, labelling and organic certification. One of the options adopted by Karnali province is the branding of Karnali products as Mulyawan to local indigenous crops. Likewise, the certification of organic ginger and export to EU markets has been continuously increased since 2017 onward (Graph 1 & 2). The company has been purchasing the fresh ginger @ 40-45/kg from the farmer's field. The organic premium price received by the company from buyers across Europe has been invested in community activities like supporting public schools. The products besides certification has been branded as 'Mulyawan' to assure that these products are free from chemical, safe for consumption and the farming

practices is environment friendly and sustainable. This branding has been implemented from the year 2022 and is being advertised and provided for the interested traders, processor from all ten districts of the province.





Source: Record of The Organic Valley (TOV), Bheriganga, Surkhet, Nepal, 2023

5. Mulyawan Logo Standards

The use of "Mulyawan'-heritage of Karnali farmer" logo is to assure that the agriculture products from Karnali province are safe, naturally produced, nutritious, embedded with traditional knowledge and tradition, and do no harm to the agro ecological landscape. The logo has the legal identity as it has been decided from the ministerial cabinet meeting on 3rd June 2021 and has been developed as per the provision mentioned in Karnali Province Organic Act, 20769. The section 6 of the paragraph 3 of the Act has clearly outlined that the province government will promote organic farming through commercialization, diversification and marketing. Likewise the section 16 of the paragraph 5 has provisioned for organic certification and market promotion through product labelling and branding.

Thus, this logo has been brought into action to maintain the identity of Karnali product as 'organic'.

6. Essence of Mulyawan Brand

Literally, Mulyawan means valuable, i.e. any agricultural product with intrinsic value of nutrition, health benefit, free of chemical residues and produced with sustainable farming practices. Since Karnali has less cultivable land, it cannot produce huge amount of agricultural produce but whatever amount is produced has high value due to its intrinsic value as aforementioned. That is why the agriculture ministry has put forward the slogan that "Karnali Sells Value, not the Product". The logo was finalized after having an open competition from the public to submit idea on the design of the logo. The logo has been designed in both English and Nepali language (Figure 3). The notion 'Heritage of Karnali Farmers' claims that the farming in Karnali is based on local cultural norms & practices and is related with identity of the society and region. For eg. Marshy Rice.



Fig. 3. Mulyawan logo in English & Nepali language

Similarly, each and every items or symbols of the logo has some meaning that describes the features of Karnali and its farming practices as mentioned in the box.

<u>Symbols</u>	Meaning/Representation
Mountains and Rivers	-Province is mostly features With Mountains and rivers (Karnali)
Ten leaves	-Ten districts of the province
Five green leaves	- Agriculture sector
Five blue leaves	-Livestock sector
Green Fields	-Sloppy cultivable land
Mulyawan/मूल्यवान	-High Value
Heritage of Karnali Farme	ers -Farming in Karnali is Based on local tradition & culture
Box 1: Meaning of Mulyawan-Heritage of Karnali Farmer logo	

7. Mulyawan Logo: Standards and Operating Mechanism

The implementation and supervision of the logo is governed

by the nine members committee lead by the Secretary of the province agriculture ministry. The implementation procedure is detailed in the Mulyawan, Heritage of Karnali Farmers Operating Standards 20219. It includes the application process, required documents and the standards that needs to be met by the users. The approval for the use of logo by the traders for marketing of the produced is given after meeting the standards and verified by the committee members through field visits. A separate sub-committee is formed in each district to facilitate the application and approval process for the use of logo. The standards as mention below should be strictly followed or maintained by the users once given approval for the use of the logo.



Fig. 4.

Standards to be met the users:

- -Logo to be used by processors and traders.
- -Need to pay Nrs. 500 and renew every year.
- -Should be used only on the agri-products from Karnali.
- -Should assure and sign that the products are free from chemical residue and are organic certified or organic by default.
- Quality should be assured with regards to processing, labelling and packaging.
- -Products should clearly indicate the weight, origin, packed date, storability duration etc.
- -Users should develop some mechanism for product traceability.
- -Agree to liable for penalty in the case of misuse.

8. Key Learnings

Till date there are 14 traders, processors and marketing cooperative who have applied and got approval to use it on the products being brought in the market. The importance and the use of logo and its implication on marketing is getting momentum. It has been disseminated to the various stakeholder through trainings, workshops, presentation and discussion for its advertisement. The learning from Mulyawan logo has been shared with the stakeholders in Sikkim, Shimla, Coimbatore of India and Bhutan during the official visit and programs. The wider advertisement and dissemination about the logo has been done in various forum within and outside the country (Figure 5).



a) Mulyawan-Heritage of Karnali Farmer Logo



b) Logo handed to elected members of Karnali province assembly



c) Logo handover to Y. S. Parmar Horticulture University, Solan, India Fig. 5. Dissemination of Mulyawan logo

9. Learnings

- The political willingness and commitment through acts, 1) strategic document, programs and policies was the pushing factors to bring the logo into action.
- The slogan "Karnali sells value, not the product" and branding it as Mulyawan has clearly focussed the value of the Karnali Product. Karnali does not have huge area for scale of production but whatever amount is produced has greater value in terms of nutrition, sustainability farming practices and excludes chemicals residues within the products.
- 3) Mulyawan logo has received some momentum across development actors, government and non-government entities.
- 4) Almost 50 plus organizations (present in the stakeholder dialogue on organic farming in 26th September 2022), and Organic discourse dialogue conducted with province assembly members, ministers and chief minister in the year 2024, have committed to adopt organic farming as the major approach for agriculture development and use of Mulyawan logo for organic by default products to create a brand for Karnali product.

10. Key Challenges

Nevertheless, the mission of transforming Karnali towards organic is a historic movement. Identifying organic products and getting it certified for export market, using Mulyawan logo for the organic by default and indigenous products as a brand of Karnali province are the promising approach for value addition of the local product. However, there are several challenges, especially promoting organic farming and branding the Karnali products as Mulyawan. Some of the challenges faced in branding the Karnali products as Mulyawan are listed below.

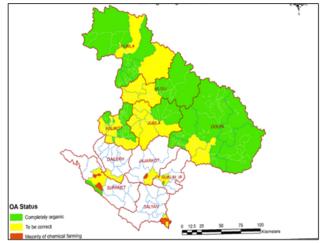
- The consumer's awareness matters a lot in agricultural marketing. Although Mulyawan brand assures the products from Karnali are safe and free from chemicals but the consumers are not aware of brand and organic product. So, they don't find any difference in brand and non-brand agro-products.
- The major challenge is how to assure that Mulyawan brand products from Karnali pays more price than others products. At superficial level, the consumers observes no differences between the safe or organic products and in-organic products.
- The brand users (traders) feel that using Mulyawan brand is adding up the cost in the marketing. They don't recognize the intrinsic value of Karnali products. Neither the consumers recognize this too.
- Generally, the upper five districts are the hub for indigenous/organic by default products. Ten years prior to Karnali highway construction there was huge amount indigenous products but less demand. Now, ten years after Karnali highway linkage to districts, there is huge demand for the indigenous/organic products but decreasing amount of supply at farm level. This supply-demand phenomenon has created a

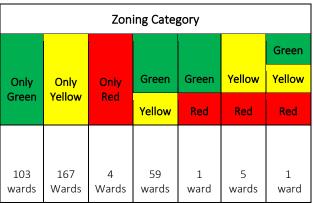
- situation of indifference in Mulyawan branding of the product in the consumer market.
- The trader's misbehaviour in adulteration of Karnali products with Indian as well as other province products has reduced the quality of products. There is immense chance of misuse of the logo and great challenge in maintaining the standards of Mulyawan.

11. Way Forward

The Mulyawan brand is the province government owned step to promote a separate identity to Karnali Products. Branding Karnali products as Mulyawan will obviously add on value and there is increasing demand from the consumers in the major cities in Nepal. However, the Mulyawan brand creation will not be successful unless and until the whole value chain actors across Karnali products are aware of the pros and cons of the branding and labeling of the products. Following actions should be duly taken into consideration for its effectiveness.

A. Organic Pocket Zoning and Mulyawan Branding





Source: Organic Zoning Report, MoLMAC, 2022

Fig. 6. Organic mapping of 41 Palikas of Karnali province

The local bodies (palikas) should strictly make a provision of not sending the agricultural produce from their area without any label, brand and proper packaging by the traders. The province agriculture ministry has categorized the production zones of 41 Palikas as Green, Yellow and Red based on the chemical use 11 (Fig. 6). The Palikas with their ward/area lying in Green zones

could declare as organic food production area and provide incentives to those traders who are ready to trade the products in the name of Mulyawan brand. The zoning report of reveals that there are 103 wards which are free from chemical. The products from these wards could be labelled as Mulyawan. The province government and palikas of the respective green zones should work closely for branding and marketing of the produce.

B. Awareness and Incentive Programs

Awareness program and prohibition of chemicals in the yellow zone (As per zoning report) area from the respective palikas should be started without any delay. Again, incentives to the farmers as well as traders who purchase the products from the yellow zone after 1-2 years after prohibition of chemicals should be provided. The agriculture products from the Yellow Zone (167 wards) after some years of chemical prohibition, could be labelled as Mulyawan and brought into market. The provincial agriculture ministry has policy to provide incentive based on production of agro-products from the green zone after recording the farmers and their product with special identification number.

C. Market Facilitation

The traders and processors who meets the standards of Mulyawan logo and are ready to use the logo should be supported in marketing cost like packaging materials, logo sticker and some minor packaging instruments. The amount of produced marketed from Karnali province in the brand of Mulyawan should be incentivized with various programs like opening of sales outlet at major market centers in Kathmandu, Pokhara, Narayangarth etc. Due care should be taken from government side to maintain the quality of the produce as per the Mulyawan standards. In order to trace back the origin of the product with information related to producers, the initiation QR code application on it is utmost important. Facilitation to prepare and use this should be taken into consideration.

12. Conclusion

Organic agriculture has got priority across the globe and is indeed indispensable especially when addressing to meet the sustainable goals. The adoption of OA is more applicable to developing countries where the topography is embedded with hills and mountain and have sloppy land for farming. The majority of the smallholder farmers in developing countries like Nepal are adopting the traditional farming practices and the produce from it are organic by default. The topography, soil, climate and the farmer's practices in agriculture of Karnali are

the major foundation to proceed for organic farming. Karnali province is coming up with the vision to transform the whole state as Organic and the agriculture interventions are being implemented accordingly. There is increasing demand for Karnali product within national market due to safe, free of chemicals and nutritious value. So, Karnali province has initiated to brand the Karnali products as Mulyawan. This will create a separate identity of Karnali products as natural, safe, organic by default and nutritious products. The Mulyawan brand is getting momentum across the development actors. At least the brand has been able to maintain the quality and assure that the products are from Karnali region. There is need of collaboration between all three tiers of government for its effective implementation. The zoning of the cultivated land based on the chemical use (fertilizer and pesticide) is the entry point from promotion of safe agro-products and label them with Mulyawan-Heritage of Karnali Farmer to assure that products comes from organic by default area (Green zone). The province agriculture ministry has completed the organic zoning of 41 palikas. The production pocket are categorized green, yellow and red based on the chemicals used for farming. This will be the foundation for promotion of Mulyawan brand in the coming days throughout the province.

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