



TAMANG'S
**Indigenous
Foods and Seeds**
in Gatlang Village in Rasuwa District



**परम्परागत बीउ संरक्षण अभ्यास तथा जातिय खानाको
परिकार विषयमा गोष्ठी कार्यक्रम**

स्थान: आमाछोदिङ्गु, गाँउपालिका, ३ गल्लाङ्ग, रसुवा
मिति : २०७७ माघ.२८, २९ र २० गते

सम्बन्धी संस्था:  FIMI
आयोजक:  Mountain Spirit



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PUBLISHED BY:

Mountain Spirit (MS), P.O. Box 10185,
Kathmandu, Nepal,
www.mountainspirit.org.np

Project Coordinator: Ms. Tuka Cheki Sherpa

The publication of this book is financially supported by the International Indigenous Women's Forum – IIWFF/FIMI.



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Acknowledgement

We are so very pleased to present this publication regarding Tamang's Indigenous Foods and Seeds in Gatlang Village in Rasuwa District. It is also our hope that this publication will give you a greater awareness and encourage farmers to get better at traditional and agro-ecological farming practices while helping to preserve native seed. It has been crystal clear that the Indigenous seeds managed by farmers have high nutritional value compared to hybrid and other industrial seeds. Indigenous knowledge on food practice holds great significance for a landlocked mountainous country like Nepal, where food security implies self-reliance on food production at community, by creating resilience against any natural disasters such as earthquake, flood and COVID-19 pandemic. We must have to unlock and use the sacred knowledge of our ancestors as a way to guide ourselves.

Mountain Spirit (MS) would like to extend its sincere gratitude to the International Indigenous Women's Forum (IIMI) for entrusting with the responsibility of undertaking "Consultation and Documentation on Indigenous seeds and food system of Tamang Indigenous Peoples." Mountain Spirit celebrate the unique heritage, diverse cultures, and outstanding achievements of Mountain communities of Nepal.

The project aimed to map out the traditional food systems of Indigenous people from Tamang community including their seeds preservation practices and at the same time, make the younger generations aware about their ancestral knowledge systems and practices relating to food by documenting the traditional food systems.

We would like to thank Ms. Tuka Cheki Sherpa for initiating this project and taking lead in organizing and concluding the workshop successfully at the local level. We would like to extend our special thanks to Mr. AngTenzji (Lama) Sherpa, Ms. Purna Devi Maharjan and Ms. Chokeyi Dolma Lama (MS staff) for assistance on program and documentation works.

Furthermore, we would also like to thank the Tamang Indigenous Peoples of Gatlang village for their valuable time in sharing information relating to their seeds and food systems. Special thanks goes to Mr. Krishna Tamang and Mr. Kami Gara Tamang for sharing information about Tamang Indigenous foods and seeds without their cooperation this study would not have come to this shape. We are also thankful to Mr. Krishna for providing pictures used in this publication.

We are highly grateful to Dr. Krishna B. Bhattachan, an eminent sociologist and Indigenous Expert, for finding time to read the draft publication and providing valuable suggestions and inputs to enrich this publication. We also thank Mr. Dean Wilson Gelling from Colombia University for proofreading the publication.

We would like to thank all the executive board members and advisers for their unending support and cooperation.



Tashi D. Hyolmo

President

Mountain Spirit, 2021

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INTRODUCTION

Indigenous Peoples are custodians of biodiversity in the world, including Nepal. They comprise 5% of the total global population, but preserve 80% of the total global biodiversity. Indigenous Peoples, especially Indigenous women, are very rich in Indigenous knowledge, skills, technology and practices in their lands, territories and resources. The government of Nepal has officially recognized 59 Indigenous nationalities, which include the Tamang. According to the national census, 2011 the population of the Tamang stands around 1,539,830 which comprises 5.8% of the total 26.4 million population of Nepal. Tamsaling, their ancestral lands and residing settlements, can be found in present day districts, namely Sindhupalchowk, Kavrepalanchowk, Makwanpur, Dhading, Nuwakot and Rasuwa.

Indigenous foods are gaining utmost interest among academics. For instance, Jyoti Prakash Tamang (2010), an expert on ethnic foods, from Sikkim, India, has published books with focus on ethnic fermented foods including vegetables, legumes, milk, cereals, fish and meat products.

As a part of project entitled, "Awareness Raising on the Rights of Indigenous Peoples and Documenting Food Systems and Practices of Tamang Indigenous Peoples in Nepal", a four days training workshop on "Consultation and Documentation on Indigenous seeds and food system of Tamang Indigenous Peoples" was organized in Gatlang Village, Aamachhodingmo Rural Municipality, Rasuwa. This workshop was conducted with the support of International Indigenous Women's Forum (IIWF) - FIMI. Likewise, consultation meetings were conducted with key stakeholders, local communities, and key knowledge holders.

The main objectives of the study included documentation of traditional foods and seeds of Tamang Indigenous Peoples, and raising awareness among the younger generation about their ancestral knowledge systems and practices relating to foods and seeds, respectively.

Many commonalities and differences can be found in foods and seeds used by Tamang communities, since these groups are highly populated in a large geographical area. For this particular study, Tamang community of Galang (Gatlang in Khas Nepali) was selected as sample site for the study simply due to limited time and resources. Also one of the prominent reasons for selecting Gatlang is that the Tamang of this village still maintain their customary practices, although they are increasingly influenced by other cultures including Hindu.

Field work for this study was done in Gatlang village in the month of January and February 2021. Moreover, a revisit to the village completed in late February for additional information, validation of the findings, and for taking free prior informed consent (FPIC) from the community respectively. Similarly, a meeting was also conducted with two resource persons from the village, an Indigenous expert along with the research team at the Mountain Spirit Office in Kathmandu. Necessary data were generated through community workshop, administration of a survey questionnaire about the food system of the community and traditional seed preservation practices and key informant interviews respectively.



TAMANG FOODS

The foods consumed by the Tamangs in Gatlang village are listed and described in this section.





Makee Ken

1. 'Jau Ken'

Jau Ken is a thick porridge or mush made from *Jau* (a local variety of barley with thick cover). The local Tamang Indigenous Peoples often combine this dish with *Teme* (potato curry) and sprinkle '*Sanglang*' (high land Sichuan pepper) to give it a distinct flavor. This dish is eaten on a daily basis but nowadays since cultivation of *Jau* has gradually reduced, consumption of *Jau Ken* has reduced simultaneously. It was considered daily staple food until around 2000, but with imported rice, its consumption is decreasing. Eating *Jau Ken* begins from the month of July after harvesting it in April and May. *Jau* (thick-hulled barley) produced by Tamang is different from *Jau* (barley) produced by others.

2. 'Makee Ken'

Makee Ken is a thick porridge made from corn flour. It is often served with green nettle soup seasoned with *Promu* (low land Sichuan paper), *Chongko* (chives), onion and other spices which gives it an exquisite taste. It is a daily staple Indigenous food most consumed during the month of August and September.

3. 'Mhang Ken'

There are mainly two types of *Mhang Ken* (a kind of bread), white and black. The white *Mhang Ken* is made from *Jau Ken* in a form of *Torma* (religious ritual) to drive away evil spirits. This *Mhang Ken* is usually made by 'Bompo', priests of Bon religion and by Lamas of Buddhist religion during annual (July-August) ritual worship while reading *Dhomang* (Buddhist Scripture) or when sickness prevails. On contrary, black *Mhang Ken* is made from *Sannga Ken* (thick millet or porridge).

4. 'Makee Khaja'

Makee Khaja is a type of roasted/fried corn snack. This snack is mostly eaten during winter. Nevertheless, it can also be consumed almost all year round. It is especially prepared during *Parma*, a traditional labor exchange practice that is prevalent in the Tamang Indigenous Community of Gatlang Village.



5. 'Sangga Ken with Shyokpo Khu'

Sangga Ken is a thick porridge or mush made from millet flour and is usually served with *Shyokpo Khu* that is radish curry cooked with potato, green spinach, and *Bra Teme* (Colocassia Fruit/Yam). The Yam is not sown, but is a self-grown vegetable found in the forest. This dish is eaten on a daily basis with any type of curry and is highly enjoyed by people of all age groups.

6. 'Jyeng with Teme Khu'

Jyengten Teme Khu is a dish comprised of bread made from *Uwa* (wheat) and *Teme* (potato) curry; *Teme Lamla* (fried potato curry), *Teme Khu* (potato soup curry), *Teme Dhurpla* (mashed potato curry). This dish is also a daily staple food and its consumption has been increased compared to the past. In the past, this dish was mostly eaten by poor people in the community, but nowadays, it has become a prominent choice of every people.

7. 'Karu Bra'

Karu Bra is basically roasted naked barley flour which is eaten directly with salted *Bay Jyaa* (butter tea). Likewise, it is a *Khole* (soupy dish) made from *Karu* (barley flour), salt, *Ser* (dried cheese), oil, and *Tampira* (beans). It is a traditional soup liked by people of all ages. This soup is served to the sick as an energy booster. *Karu Bra* is also served as a *prasad* (kind of boon or blessing) during religious rituals. It is consumed especially in the morning. It is eaten all year long, especially during winter.

8. 'Ne Ne Dhap'

Ne Ne Dhap is a curry made from fried *Ne Ne Dhap* (white goosefoot or lamb's quarter). This curry is best served with *Bra Ken* (thick porridge made from corn and millet). *Ne Ne Dhap* is eaten only in spring (March and April).



Regular Gangpo Khole



Gangpo Khole

9. 'Gangpo Khole'

Gangpo Khole is a soupy mixed-vegetable dish made from various ingredients such as *Makee Gangpo* (steamed and dried baby corn), *Shyokpo* (radish), *Mode* (soybean),

Tampra (beans) *Bra Teme* (wild grown colocassia fruit/Yam), *Kharpa Shya* (dried meat), and *Karu* (Naked Barley). It is specially eaten on the occasion of New Year and for the Tamang Indigenous Peoples of Gatlang Village, their New Year is celebrated on 1st Magh (Mid-January) which is called as *Maghe Sankranti*. The *Gangpo Khole* that is eaten during the New Year must contain nine ingredients but on normal days, the number of ingredients may vary from three or more depending on their choice and availability of ingredients. This soup is prepared one day before the New Year and is consumed on New Year after taking a bath. It is a very special traditional food that is mostly eaten in New Year, and winter seasons.

10. Kampa Dhap (Wild Leafy Vegetables)

Kampa Dhap; It is a wild green leafy plant found in high land at an altitude of 2300 to 2500 m above the sea level. It has a bitter taste and is basically found in the month of January, February and March. It is often used fresh as a vegetable, but most of the time it is used to prepare *Gundruk* (dried leafy vegetables).

Shyau Dhap; It is leafy vegetable grown on and around the manure, and near the livestock herding areas. It is fried and eaten with *Bra Ken* (thick porridge of corn and millet), *Jyeng* (bread) and *Mama Ken* (rice). It is basically found and eaten in the month of January, February and March.



Kaampa Dhap



Saa Dhap

Sa Dhap; It is a green vegetable which is found near and at the corner of the farmland and Kharka (high land livestock rearing area). It is basically found and eaten in the month of January, February and March.

Mangen Dhap, *No Shyam Dhap*, and *Natar Dhap* are high altitude wild leafy vegetables found above 3000m. They are generally found in the month of May, June, and July. They are fried and eaten with *Bra Ken* (thick porridge or mush of corn and millet), *Jyeng* (bread) and *Mama Ken* (rice). *Mangen Dhap* and *Natar Dhap* is also dried and preserved for winter. While, *No Shyam Dhap* smells like garlic, and it is used as spices while preparing lentils.

Similarly, *Mendo Dhap* (Amaranth) is a wild grown leafy vegetable. It is fried and eaten with *Bra Ken* (thick porridge or mush of corn and millet), *Jyeng* (bread) and *Mama Ken* (rice).

Mendo (Amaranth Seed):

Mendo is used in various forms in different dishes like *Nge Ten Mendo* (fried Amaranth seed mixed with milk or tea), *Mendo Ken* (a dish prepared by fried Amaranth seed, then made into thick mush or porridge and made in round ball), and fried *Mendo* (Amaranth seed) is eaten directly. Moreover, the seeds are basically used for *Largyal* which is a religious ritual done during worship, while placing prayer flag, and used by Lama during religious ceremonies.

11. Shyamo (Mushroom):

The different varieties of mushroom used by locals are;

Ola Shyamo - It is a red mushroom which is soft and slippery. It

looks like a human palm, and it is found especially in rainy season. It is found around altitude of 2300-2700m above sea level.

Marmo Shyamo - It is a white button and oyster mushroom which is specially found in cut off trees in the forest. It is found during the months of July & August 2300-2700 m above sea level.

Kalta Kurum Shaymo - It is a type of wild mushroom found under a particular Sal tree above 2700 m. It is usually quite large and white in color.

Playmo Shyamo - It is type of mushroom which looks like an umbrella and is brown on outside and white in inside and has a slippery surface. It is found at the altitude of around 2500-2600 m above sea level.

All these varieties of mushrooms are either prepared as curry, gravy soup or fried, and it is eaten with *Bra Ken* (thick porridge of corn and millet), *Jyeng* (bread) and *Mama Ken* (rice).



Ser Khole

12. 'Ser Khole'

Ser Khole is a type of soup made from *Karu* (Naked Barley) flour, or *Makee* (Corn) flour mixed to pieces of *Ser* (dried cheese). It is served as breakfast and usually consumed during the winter season.

'Teme Aalum': *Teme Aalum* is a soupy dish made with pieces of dough made from flour of choice, potato, onion, tomato, and spices like chili powder, and *Sanglang* (high land Sichuan pepper) and *Promo* (low land Sichuan pepper). Red meat can also be added to this dish. It is also served as breakfast. It is eaten in all seasons.



Aalum

'Nupu Aalum': *Nupu Aalum* is a soupy dish prepared with round shaped pieces of dough that are made from flour, potato, onion, tomato, and spices. It is specially prepared on the occasion of *Bhai Tika* during the *Tihar Festival*. *Bhai Tika* is a festival where sisters ask blessing of longevity from god for their brothers and put colorful *Tikas* on their brothers' forehead. So, on this auspicious occasion, brothers prepare this special dish as an offering to their sisters. It is normally eaten as snack.

'Guku Aalum': *Guku Aalum* is basically a soupy dish made with pieces of dough from flour produced from the seeds of *Ne Ne Dhap* (white goosefoot and lamb's quarter). The dish is comprised of a mixture of various other ingredients such as potato, meat, onion, tomato, and spices. It is usually consumed during the month of October, November, and December.

13. 'Bre Jyeng'

Bre Jyeng is a bread made from buckwheat flour which is served with a curry. This dish is served in religious rituals like worship. In the past, it was prepared on pan of stone in circle shape. But nowadays, stone pan is not available so they prepare it on metal pan. This dish is eaten mostly in winter.

14. 'Kosho'

Kosho is a mix soup prepared from *Uwa* (wheat flour) or *Sannga* (millet flour), sugar, milk, salt and water. It is prepared during times of celebration. It is basically prepared with lots of milk. It is prepared and consumed all year round.

After the presentation and discussion with the community people, MS Team went for field visit around the Gatlang village for observing stored seeds.



Kosho



Kosho

Local Crops and Vegetables

The participants came up with lists of names of crops and vegetables. They are:

i. Traditional Crops: Crops – *Bre* (Buckwheat), *Jau* (Barley), *Karu* (Naked Barley), *Neche* (a kind of barley), *Sannga* (Millet), *Gahu* (Wheat) *Makee* (Maize), *Tampra* (Beans), *Mode* (Soybean), *Musuroo Dal* (Red Lentil), *Mas Dal* (Slit Black Gram), *Latte Sag* (Amaranth), *Neche* (one kind of barley), *Teme* (Potato), *Tampra* (Green Peas), *Goyo* (Chickpea Lentil)

New Seeds – *Shin* (Rice). Though these crops have been cultivated in the past, they mentioned that these seeds were later brought from other places.

ii. Chhugu (Oilseed) Crop: *Chhugu* (Oilseed Crop) grown in the region are *Nam Nam* (Mustard), and *Alas* (Linseed). They informed that these oil producing seeds were also brought from other places and then cultivated in the region. Besides, the local also produce oil from *Melong*. *Melong* is a wild-grown plant. Its seed looks like grape. Its seed is green in color when fresh, but after ripening it turns black. Oil from *Melong* is used for cooking.

Similarly, *Mamra* is also a wild grown plant and an oil seed producing crop. It looks like black pepper. The locals collect it from the forest and oil is produced from its seeds. Oil produced from *Mamra* is used as a medicine to treat burns. *Mode Chhugu* (Soyabean Oil); *Mode Chhugu* is also produced from the *Mode* (soyabean) and used as cooking oil.



iii. Vegetables:

Traditional Vegetables: *Labu* (Radish), *Fersi* (Pumpkin), *No* (Garlic), *Chongko* (Chives), *Rayo* (Mustard Green), *Teme* (Potato), *Kampa Dhap*, *Latte sag* (Amaranth) and *Ri Dhap* (wild leafy vegetables)

New or Imported: *Banda* (Cabbage), *Kauli* (Cauliflower), *Gajar* (Carrot), *Daniya* (Coriander), *Golbeda* (Tomato), *Chamsur* (Garden Cress), and *Lange* (Cucumber)

List of selected crops, vegetables, and seeds, their cultivation time, process and use are shown in Table 1.

Table 1: List of crops, vegetables, and seeds, their cultivation time, process and use

S.N	Name of the crops/Vegetables	Sowing Time	Harvesting time	Uses/ Pur-poses	Seed Preservation Process	IPs Seed/ Imported
1	Teme (Potato) & Bra Teme (Coccoloba Fruit)	April/May	Aug/Sept	Food and for selling	Seeds are preserved in bamboo baskets	IP Seeds
2.	Makee (Maize)	April/May	Aug/Sept	Food	Good ones are kept for seed. The seeds are stored in a small cloth bag or in a wooden box. Some also hang the dried corn directly.	IP Seeds
3	Sanga (Millet)	Nursery: June/July Sowing: July/Aug	Nov/Dec	Food	The seeds are stored in a cloth bag	IP seed
4	Karu (Naked Barley), Jau (Barley), Neche (a kind of Barley), Gahu (Wheat)	Nov/Dec	April/May	Food	The good ones are stored as seeds in a cloth bag	IP seed
5	Bre (Buckwheat)	Aug/Sept	Nov/Dec	Food	Best ones for seed are directly collected from the Buckwheat field. Then it is stored in a cloth bag.	IP Seed
6.	No (Garlic), Chongko (Chives)	Aug/Sep	April/May	Food	The best one selected and hanged from the ceiling for seed.	IP seed
7	Oil seed crop: *Namnam (Mustard) *Alas (Linseed) * Melong *Mamra *Mode Chhugu	Aug/Sept Aug/Sept Wild April Wild April Feb/Mar	Nov/Dec Nov/Dec June/July June/July Aug/Sep	*Food/Massage *Pickle * Food * Massage *Food	The clean and dried seeds are stored in cloth bag	Imported IP seeds

8	Rayo Dhap (Mustard Green) / Labu (Radish)	June/July	Nov/Dec	Food; fresh mustard greens are eaten or dried for later use Radish is also eaten fresh or dried for later use	Seeds are brought from outside	IP seeds
9	Daniya (Coriander)	April/May		For garnishing and pickle	Seeds are brought from outside	Imported
10	Latte Sag (Amaranth)	Grows naturally in June/ July		Fresh green Amaranth are eaten with food	Wild vegetable	IPs Crop
11	Banda (Cabbage), Kauli (Cauliflower)	July/Aug	Oct/Nov	Food	Seeds are brought from outside	Imported
12	Sa Dhap	Grows naturally in Dec/Jan		Food	Wild Vegetable	
13	No Shyam Dhap	Grows naturally in July/Aug		Food	Wild Vegetable	
14	Ne Ne Dhap	Grows naturally in Mar/April		Food	Wild Vegetable	

Source: Field work, 2021.



According to the discussion conducted with the community, it was found that the traditional seeds are being cultivated along with the commencement of new seeds. It was found that in the past locals used to cultivate *Jau* (Barley) more than *Teme* (potato). However, there is now a good market for the potatoes, so locals are drawn towards cultivating *Teme* (potatoes) more than *Jau* (Barley). Moreover, crops like Bre (Buck wheat), and Nam Nam (Mustard) are at the face of extinction. There has been a decrease in cultivation of buckwheat due to low production and lack of knowledge of its importance. Over the past ten years, the cultivation of buckwheat has immensely reduced and now the locals have stopped sowing it. Whereas during the cultivation of Nam Nam (Mustard), the crop field are open and fences are not made due to which the livestock damages the crops. So, there is diminishing trend in the cultivation of Nam Nam (Mustard).

Besides, Ne Ne Dhap is not consumed anymore because it is known to cause stomach disorder.



SEEDS

**Key problems faced by the
locals while preserving the
seeds are as follows;**



Makai



Aalu

Makee (Maize): Corn seeds are often damaged by the grain moths found in the stored maize's.

Teme (Potato): Potatoes stored in the baskets often get stolen and eaten up by mice

Uwa (Wheat): Wheat usually gets ruined or damaged by weevils.

Sanga (Millet): If the millet seeds are not well covered with the soil then it does not germinate and grow.

Labu (Radish): According to the locals, seeds of radishes are often damaged by harmful pests. **No (Garlic):** Garlic seeds are usually ruined when packed or wrapped with plastic or clothes.

Musuro Dal (Red Lentil): Stored red lentil is often ruined and damaged by weevil and cowpea bruchids.

Chilly: Chilly seeds are damaged by pest like storage pest and tropical warehouse moths.

The following measures have been applied by the locals in solving the problems witnessed during storing and preserving seeds:

Teme (Potato): In order to solve the problem of potato being ruined and attacked by mice, locals first select the good and fresh potatoes and then put them into airy bamboo baskets. Then a nettle is placed around to prevent it from being stolen and eaten by mice.

Labu (Radish): When the seed of radishes are ready, seeds are separated and hung in a clot in order to prevent it from getting ruined.

Makee (Maize): Maize is stored by placing only grain in a sack or by making piles of corn one after another and hung from the ceiling or door respectively.

Jau (Barley) and Uwa (Wheat): Locals keep well dried barley and wheat grain in sacks and if pest is seen, then it is again dried in the sun and nettle is kept around the sacks to prevent it from mice.

In this way, they store and preserve the grains and seeds from pest and other damaging factors.

The process of storing seeds of crops and vegetables are as follows:

Teme (Potato): Initially, full-grown potatoes are taken out from the ground and then placed aside. After doing so, good ones are carefully selected and stored in a bamboo basket with proper air conditioning.

Makee (Maize): After harvesting, the ripen maize corn grains are taken out and dried well. Afterthat, it is placed in a piece of cloth and hung from a height. Besides some locals also pile up the corns and hang them from the ceiling or door.

Sanga (Millet): Finest millet grains are collected, dried well, and stored in sacks.

Tampra (Beans): Bean cloves are carefully selected from the finest beans. After that, they are dried well and stored.

Labu (Radish): Once the radishes are grown, their seeds are collected and dried well. The dried seeds are then stored carefully.

Karu (Naked Barley): The long and large grains of naked barley are collected from the farm. After that, it is hung in the air from the ceiling till it is dried. Once the grains are dried up, they are taken and stored in sacks

Jau (Barley): Barley grain are collected and dried. Then it is stored in the sacks which does not contain the smell of meat and salt.

The seeds/crops/vegetables grown in Tamang Indigenous Community of Gatlang village can be broadly categorized into two broad groups. These are: (1) Cereals which include *Bre* (Buckwheat), *Jau* (Barley), *Karu* (Naked Barley), *Sangga* (Millet), *Uwa* (Wheat), *Makee* (Maize), *Kodo* (Finger Millet), *Shin* (Rice), and *Mode* (Soyabean); and (2) Legumes which include *Masko Dal* (Slit black gram), *Tampra* (Green Peas), *Musuroo Dal* (Black Beans), *Tar Tampra* (White Beans), and *Dang Dang Tampra* (Chasmese Dal).

The seeds/crops/vegetables grown in Tamang Indigenous Community of Gatlang Village can be further categorized into following ways:

Cultivated					Wild	
Cereal	Legumes	Vegetables	Oil	Fruits	Vegetables	Oil
<i>Bre</i> (Buckwheat), <i>Jau</i> (Barley), <i>Karu</i> (Naked Barley), <i>Sangga</i> (Finger Millet), <i>Uwa</i> (Wheat), <i>Makee</i> (Maize), <i>Shin</i> (Rice), <i>Neche</i> (a kind of Barley),	<i>Mas Dal</i> (Slit black gram), Musuroo Dal (Black Beans), <i>Tar Tampra</i> (White beans), <i>Dang Dang Tampra</i> (Phaseolus vulgaris or Pinto beans), <i>Mode</i> (Soyabean), Goyo (Chickpea Lentil)	<i>Teme</i> (Potato), Tampra (Green Peas), <i>Labu</i> (Radish), <i>Fersi</i> (Pumpkin), <i>No</i> (Garlic), <i>Chongko</i> (Chives), <i>Rayo</i> (Mustard Green), <i>Latte</i> (Amaranth), <i>Banda</i> (Cabbage), <i>Kauli</i> (Cauliflower) <i>Gajar</i> (Carrot), Daniya (Coriander), Golbeda (Tomato), Chamsur (Garden cress), <i>Lange</i> (Cucumber), Chili	Nam Nam (Mustard), Alas (Lin Seed), Mode (Soyabean), <i>Mendo</i> (Amaranth Seed),	Apple Apricot Pear Plum	Sa Dhap, Kampa Dhap, Ne Ne Dhap, Shyau Dhap, No Shyam Dhap, Mangen Dhap, Natar Dhap, Ola Shyamo, Marmo Shyamo, Kalta Kurm Shyamo, Playmo Shyamo	Melong Mamra Mendo (Amaranth)

Source: Field work, 2021.

According to the locals, due to good demand of highland organic potatoes in the market, the cultivation of *Teme* (Potato) has largely increased and the locals have also started selling *Dang Dang Tampra* (Phaseolus vulgaris or Pinto beans) and *Tar Tampra* (White Beans).



CHANGES IN THE TRADITIONAL FOOD SYSTEMS AND PRESERVATION OF SEEDS



Changes in the traditional food systems and preservation of seeds among the Tamang's in Gatlang village are visible. Key knowledge holders, elders, age ranging from 65 to 91 years, of Tamang Indigenous Community shared information about food trend, seed, and its changes from the past to the present. They mentioned that in the past, approximately sixty-five years ago, food and vegetables grown were not sufficient for the local people. So, people used to work as potters for the Tibetan businessmen and Newar Indigenous Peoples of Chhumche (Trishuli). From these earnings, they would then be able to purchase the required materials.

Moreover, they also shared that in the course of famine and hard times, women of Tamang Indigenous Peoples used to make flour from dried wild *Kal* (a kind of poisonous wild plant but when dried its poison are removed). The flour prepared was mixed with Bre (buckwheat) flour and a thick porridge was made out of it. This porridge was served with milk. Also, the crops and vegetables harvested would hardly last for six months. Due to this reason, they used to work as potters for other in the past. Then, with the little money earned, they used to buy required materials from capital city, Kathmandu and other nearby cities. During those days, the journey from their villages to the capital cities was quite long, and it would take them nearly eighteen days to reach their own place. In this duration, some people would also lose their lives simply due to illness and lack of basic health services and treatments.

Besides, it was also found that due to the high-altitude

cash crops like rice were not grown in the region. However, after the construction of roads and availability of transportation, rice was imported from other places. Similarly, they also informed that seeds of other vegetables like mustard greens, cabbage, cauliflower, and many other vegetables were brought from outside. Since then, these vegetables are being cultivated in these areas.

In regard to gender roles, the elders shared that men used to travel a lot for business purposes, taking livestock's to High Mountain in the summer, and other purposes. While women were mostly confined to household chores. During their free time, they weave handmade woolen clothes and blankets.

Interpretation of the Finding:

Tamang is one of the 59 Indigenous Peoples who have been formally recognized by the Nepal government. Their ancestral lands also known as *Tamsaling*, which now are in Rasuwa, Nuwakot, Sindhupalchowk, Kavrepalchok, Makwanpur, and Dhading surround the Kathmandu Valley. The crops and vegetable used as foods and seeds stored and preserved by Tamang clearly show distinct food culture of Tamang and their Indigenous knowledge relating to seed storage and preservation. Some of these food items, such as *Jau Ken*, *Mhang Ken*, *Makee Ken*, *Makee Khaja*, *Sangga Ken*, *Jyeng with Teme Khu*, *Karu Bra*, *Ne Ne Dhap*, *Gangpo Khole*, *Ser Khole*, *Teme Aalum*, *Nupu Aalum*, *Guku Aalum*, *Bre Jyeng*, *Kosho*, food served with *Ri Dhap* (wild leafy



Nam Nam (Mustard), *Alas* (Linseed), *Mode Chhugu* (Soyabean Oil), *Banda* (Cabbage), *Kauli* (Cauliflower), *Gajar* (Carrot), *Daniya* (Coriander), *Golbeda* (Tomato), *Chamsur* (Garden Cress), and *Lange* (Cucumber) are influenced from other cultures.

Although Nepal has ratified ILO Convention no. 169 and adopted the United Nations Declaration on the Rights of Indigenous Peoples (UN-DRIP), its meaningful implementation is conspicuously lacking. For example, according to the Preamble of the UNDRIP, “Recognizing that respect for Indigenous knowledge, cultures and traditional practices contributes

vegetables) as *Kampa Dhap*, *Shyau Dhap*, *Sa Dhap*, *Mangen Dhap*, *No Shyam Dhap*, *Natar Dhap*, and *Mendo Dhap* and seeds, such as *Bre* (Buckwheat), *Jau* (Barley), *Karu* (Naked Barley), *Sanna* (Millet), *Gahu* (Wheat), *Makee* (Maize), *Tampra* (Beans), *Mode* (Soybean), *Musuroo Dal* (Red Lentil), *Mas Dal* (Slit Black Gram), *Latte Sag* (Amaranth), *Neche* (one kind of barley), *Teme* (Potato), *Tampra* (Green Peas), *Goyo* (Chickpea Lentil), *Melong*, *Mamra*, *Labu* (Radish), *Fersi* (Pumpkin), *No* (Garlic), *Chongko* (Chives), *Rayo* (Mustard Green), *Kampa Dhap*, *Latte sag* (Amaranth) and *Ri Dhap* (wild leafy vegetables) are unique to their lands, territories and resources. Other food items, such as food items made from flour, rice dishes, Shinand seeds, such as, *Shin* (Rice)

to sustainable and equitable development and proper management of the environment”, but such recognition from the government is lacking. Similarly, Article 20 of the UNDRIP, states “Indigenous Peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities.” and “Indigenous Peoples deprived of their means of subsistence and development are entitled to just and fair redress”, but the Tamang’s lands, territories and resources are grabbed by the state and outsiders resulting in dwindling production of Tamang’s Indigenous foods and seeds.



Article 22 (2), States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular attention shall be paid to the rights and special needs of Indigenous elders, women, youth, children and persons with disabilities.

Livelihood: Livelihood of the Tamang is in crisis. Livelihood means, following a slightly revised version of the original definition of Chambers and Conway is used here: “A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now

and in the future, while not undermining the natural resource base.” (IRP and UNDP 2010: 1).

Food Security: Furthermore, Tamang’s food insecurity is also visible. Following the UN Food and Agriculture Organization (FAO), “Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The four pillars of food security are availability, access, utilization and stability. The nutritional dimension is integral to the concept of food security.” (FAO 2009: 1). Kuhnlein, Erasmus, Spigelski and Burlingame (2013, p. 6) have identified several importance of traditional food systems to Indigenous Peoples. These are equally true with the Tamang Food Systems. For example,

Tamang foods provide “a reality check and assurance that outsiders with diverse expertise value local foods and practices in the social contexts” where Tamang experience them. It helps Tamangs to “realize the importance of maintaining their connections with nature and their own cultures, and between heart and mind, to reaffirm” their Tamang identity. Where Tamangs “identify themselves with their culture and natural environment, knowledge and use of traditional food systems to improve health builds community support and engagement for holistic health and well-being”. Tamang food systems “affects the many aspects of physical, emotional, mental and spiritual health – for adults, children and elders, individually and in community and cultural collectives – in recognizing

continuity from the past, into the present and towards the future”.

Swiderska, Krystyna and Philippa Ryan (2020) have noted,

“Indigenous representatives stressed that their ancestral food systems, based on centuries of accumulated wisdom, are not only crucial for food security and food sovereignty, but also for cultural identity, spiritual wellbeing, and land stewardship. Indigenous Peoples conserve about 80% of the world’s biodiversity and represent most of the world’s cultural diversity.”

As the right to adequate food is recognized by the international community as a fundamental human right that must be safeguarded, therefore, FAO approaches Indigenous Peoples “in a way that answers to, interacts with and learns from their unique food and agriculture practices, livelihood systems and specific socio-cultural circumstances, thus building on their potential contributions and actively encouraging, development with identity.” (FAO 2015).

Kuhnleinn.d., writes, these stories included in the book shows,

“How Indigenous Peoples’ food systems contain treasures of knowledge from long evolved cultures and patterns of living in local ecosystems. The dimensions of nature and culture that define a food system of an Indigenous culture contribute to the whole health picture of the individual and the community – not only physical health but also the emotional, mental and spiritual aspects of health, healing and protection from disease. However, these food systems

which are intricately related to the complexities of social and economic circumstances are becoming increasingly more affected by the forces of globalization. Within the larger society in which they live, despite the wealth of knowledge rural Indigenous Peoples have of their local environment and food system, they often face vulnerabilities derived from extreme poverty, discrimination and marginalization. This can mean that access to their resources becomes limited, causing unnecessarily poor health outcomes.”

Swiderska, Krystyna and Philippa Ryan (2020) write,

The food systems of the world’s 476 million Indigenous Peoples are often branded as backward or unproductive – but evidence shows they are highly productive, sustainable and equitable. These systems preserve rich biodiversity, provide nutritious food and are climate resilient and low carbon. And they are already achieving zero hunger for many Indigenous Peoples, as research by the Food and Agriculture Organization of the United Nations (FAO) has shown.

Due to a lack of meaningful implementation of UNDRIP and ILO Convention no. 169 by the government, wrong government policies, including land grabbing, non-recognition of collective ownership and control over lands, territories and resources, and also of customary self-government systems and customary laws, lack of mechanism to obtain free, prior and informed consent (FPIC), scaling up of development aggression, criminalization of customary knowledge, skills, technology and practices, and imposition of dominant people’s language (Khas Nepali) are threatening Tamang Indigenous Food Systems and ultimately their survival.

CONCLUSION

The use of traditional foods and seeds for livelihood and food security are still persistent among the Tamang community in Gatlang village. Nevertheless, additional research are needed on issues related to land grabbing by the state and private business companies, development aggression, and non-implementation of ILO Convention no. 169 and the UNDRIP because of which Tamang Indigenous Peoples are facing food insecurity and problem in making their livelihoods. Therefore, they are adopting foods and seeds imported from other cultures making their own foods and seeds less important and this might even lead to its extinction. For this, the government of Nepal should recognize collective ownership of Tamang's ancestral lands, territories and resources, stop development aggression and work together with the Tamang's by obtaining their free, prior and informed consent (FPIC) to preserve and promote Indigenous food systems and seeds for food security and better livelihood.

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Mountain Spirit (MS)

Mountain Spirit is a member-based non-governmental organization that advocates for social justice, human rights, and environmental conservation by supporting Indigenous mountain communities. It was registered in 1996 under the laws of Nepal by a group of like-minded people from different mountain districts. The organization aims to improve livelihoods, protect the environment, and conserve mountain cultures through capacity building, awareness, empowerment, and sustainable development initiatives with the participation of local communities. The strength and spirit of this organization lies in its members. Mountain Spirit consists of more than one hundred members that represent 16 different mountain districts of Nepal. Members hold diverse expertise in issues related to health, education, gender sensitization, conservation, eco-tourism, community-based planning, and entrepreneurship. (<http://www.mountainspirit.org.np>)



International Indigenous Women's Forum (FIMI)

The International Indigenous Women's Forum (FIMI) is a global network of Indigenous women leaders that articulates local, national and regional organizations from Asia, Africa, Arctic, Pacific and the Americas. FIMI's mission is to bring together Indigenous women leaders and human rights leaders from different parts of the world to coordinate agendas, build capacities and develop leadership roles. FIMI encourages Indigenous women's participation in international decision-making processes by ensuring the consistent and substantive inclusion of Indigenous women's perspectives in all discussions regarding human rights. Since its founding in 2000, FIMI has grown as a network and as an institution, playing the role of facilitator in areas of dialogue and consensus. (<http://www.fimi-iiwf.org>).