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ETHNIC CUISINES FROM THE EASTERN HIMALAYA

Revitalising and sustaining mountain food systems

Published by
International Centre for Integrated Mountain Development
GPO Box 3226, Kathmandu, Nepal

ISBN 978 92 9115 9505 – print
978 92 9115 9512 – online

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Citation
Shakya, B., Liu, R., Aryal, K., Thomas, S., Shaoliang, Y., Chettri, N. (2024). *Ethnic cuisines from the eastern Himalaya: Revitalising and sustaining mountain food systems* ICIMOD.
https://doi.org/10.53055/ICIMOD.1044

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The information on various cuisines, ingredients and processes has been gathered from communities with their prior informed consent. We have not validated all the information, particularly the information on culinary use and various benefits, which is based on interactions with knowledge holders within these communities. The information – including, but not limited to, text, graphics, images, and other material – contained in this book are for informational purposes only. No material in this publication is intended as nutritional advice. Readers are solely responsible for any potentially adverse reactions or allergies associated with the consumption of these foods.

This publication is available in electronic form at
www.icimod.org/himaldoc

Ethnic cuisines from the eastern Himalaya

Revitalising and sustaining mountain food systems

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Food is more than just ingredients; it is part of the history and tradition of different communities.

Contents

Foreword

Food and nutrition insecurity remains a serious challenge in the Hindu Kush Himalayan (HKH) region; more than 30% of the population suffers from food insecurity and around 50% experiences some form of malnutrition, with women and children suffering the most. The problem is particularly severe in remote mountain areas.

Food and nutrition insecurity is a complex issue resulting from a range of factors – poverty, natural resource degradation, climate change, restricted market opportunity, narrowing of the food base, and inadequate policy and institutional support. Also, traditional mountain food systems are gradually declining amid changing dietary habits, increasing prevalence of mono-cropping and commodity crops, loss of water sources, soil degradation, and decreasing market value of traditional foods.

In this age of rapid urbanisation and technological advancement, agriculture is increasingly seen as an undesirable career choice. Youth in mountain areas are moving away from farm-based livelihoods, with negative consequences for food production and local food systems. Now, more than ever, we need efforts to protect food systems that are at the heart of mountain cultures and draw from surrounding ecosystems.

In 2021, ICIMOD organised a webinar on "Revitalising ethnic cuisines in the Hindu Kush Himalaya". Experts at the event highlighted the role of ethnic cuisines in providing safe and nutritious food and building sustainable food systems.

This book features ethnic dishes from the Far Eastern Himalayan Landscape which spans China, India, and Myanmar and the landscape around Kangchenjunga, which includes areas of Bhutan, India, and Nepal. It touches on the conservation of both biodiversity and culture, and the policy support needed to achieve this. It is aimed at general readers and specialists alike. I hope both will appreciate the diverse ethnic and local cuisines and their potential to diversify food systems, mitigate challenges around food and nutrition security, and protect agrobiodiversity.

I also hope this book will inspire many of us to document local cuisines and promote local and indigenous culinary traditions as a way of enhancing nutrition and health, preserving cultures, and contributing to environmental sustainability.

Happy reading!

Izabella Koziell

Deputy Director General, ICIMOD

◂ A Khasi-Bhoi platter with rich tapestry of diverse local ingredients and river foods, Meghalaya | Photo: Banteilang Syiem/ NESFAS

Preface

The world is dealing with the crises of food insecurity and malnutrition on the one hand, and diet-related conditions such as diabetes, cardiovascular disease, and obesity, on the other. The key to solving these crises lies in not just improving access to food but access to the right kind of food.

Ethnic cuisines are prepared using local resources and traditional knowledge passed down over generations. Often produced and consumed locally, such cuisines have low carbon footprints. They are affordable, safe and healthy, and they rely on a close relationship between humans and nature.

However, with the homogenisation of food production systems and the market dominance of energy-dense, ultra-processed foods, in many cases intake of and interest in ethnic foods is receding, along with knowledge about their preparation and nutritional values. Local food cultures are marginalised despite their tremendous importance in providing nutrition and enriching agrobiodiversity.

This book is an attempt to reverse this alarming trend. It is informed by the belief that ethnic cuisines can help transform the way the world produces, consumes, and thinks about food.

The book features selected cuisines of the ethnic communities of two transboundary landscapes – the Far Eastern Himalayan Landscape shared by China, India and Myanmar, and the Kangchenjunga Landscape shared by Bhutan, India and Nepal. We present the recipes of these cuisines and discuss their implications for biodiversity conservation, cultural preservation, and food and nutrition security. We have featured 10 ethnic communities and 31 unique recipes that use around 100 types of ingredients, both plant and animal based, farmed and wild, common and rare.

However, these dishes reflect only a fraction of the rich diversity of foods from the eastern Himalayan region. For example, a study found more than 48 types of major and minor fermented foods and alcoholic beverages in Sikkim and Darjeeling alone (Thapa and Tamang, 2020). We also feature one example from the western Himalaya to acknowledge the contributions of a rural woman entrepreneur and to encourage documentation of other cuisines from across the Hindu Kush Himalaya region.

This book recommends actions for promoting and revitalising local and ethnic cuisines of the Hindu Kush Himalaya. It calls for policy that would help reorient the region's food systems for safer, diverse, nutritious food and improved diets. There is a need to develop markets that support the consumption of local food, promote nutrition-smart food value chains and revitalise local food production systems and traditional food cultures to sustain the wider food base. The main goal of the publication is to show how ethnic cuisines can help diversify local food systems, promote agrobiodiversity, build healthy communities, and improve local economies. We hope that the book will encourage researchers, policymakers and communities to document, preserve and promote local food cultures.

◂ A basket of wild edible mushrooms | Photo: Wang Bin

Acknowledgements

This book is a joint effort of partners in the two transboundary landscapes. We would like to thank the following colleagues for contributing recipes from various localities in Bhutan, China, India, Myanmar and Nepal: Tshering Lhadon, Pema Yuden, Chimi Wangmo, and Tsheten from Bhutan; Wang Bin from China; Aseesh Pandey, Diana Ethel Amonge, Pius Ranee, Kong Dial Muktieh, Bhogtoram Mawroh, Badarishisha Nongkynrih, Rundolf Mawlieh, Bela Tikhak, Shareen Tikhak, Hoppu, and Roisan Singpho from India; Khaing Khaing Htwe, Lu Bu, and Hein Htet Zaw from Myanmar; and Yogendra Man Shrestha, Lakpa Deki Sherpa, Indramaya Gurung, Sunita Rai, Dil Kumari Limbu, and Bishnu Maya Limbu from Nepal.

Our deepest appreciation goes to local community representatives who generously shared their recipes, culinary knowledge and best practices from Ha, Paro, Gelephu and Bumthang (Bhutan); Lushui city and Gongshan and Fugong counties of Nujiang, and Baoshan (China); Arunachal Pradesh, Sikkim and West Bengal (India); Kachin (Myanmar); and Ilam and Panchthar (Nepal).

We would like to thank food entrepreneurs Neelam Awasthi and Hitul Awasthi, who provided valuable information on 'Siddus', a local delicacy from Kullu in Himachal Pradesh, India; and Diana Ethel Amonge, who shared the interesting story of 'Phalap Khah', the bitter tea of the Tangsa community of Arunachal Pradesh. We have included these two dishes as special features; one of them is from the western Himalaya and the other involves a unique processing technique.

We are grateful to all the expert panellists from the webinar on "Revitalisation of ethnic cuisines in the Hindu Kush Himalaya": Stephanie Gustavo; Tulsi Gurung from Bhutan; Zhu Jie from China; Jyoti P Tamang, Amba Jamir, and Pius Ranee from India; Khaing Khaing Htwe from Myanmar; Robin Amatya from Nepal; and Hassan Munir Bajwa from Pakistan. They shared their experience, insights and knowledge on the importance of ethnic cuisines, and how their revitalisation is important for sustainable food systems. The policy and conservation issues presented in this book are informed by the knowledge they shared at the webinar.

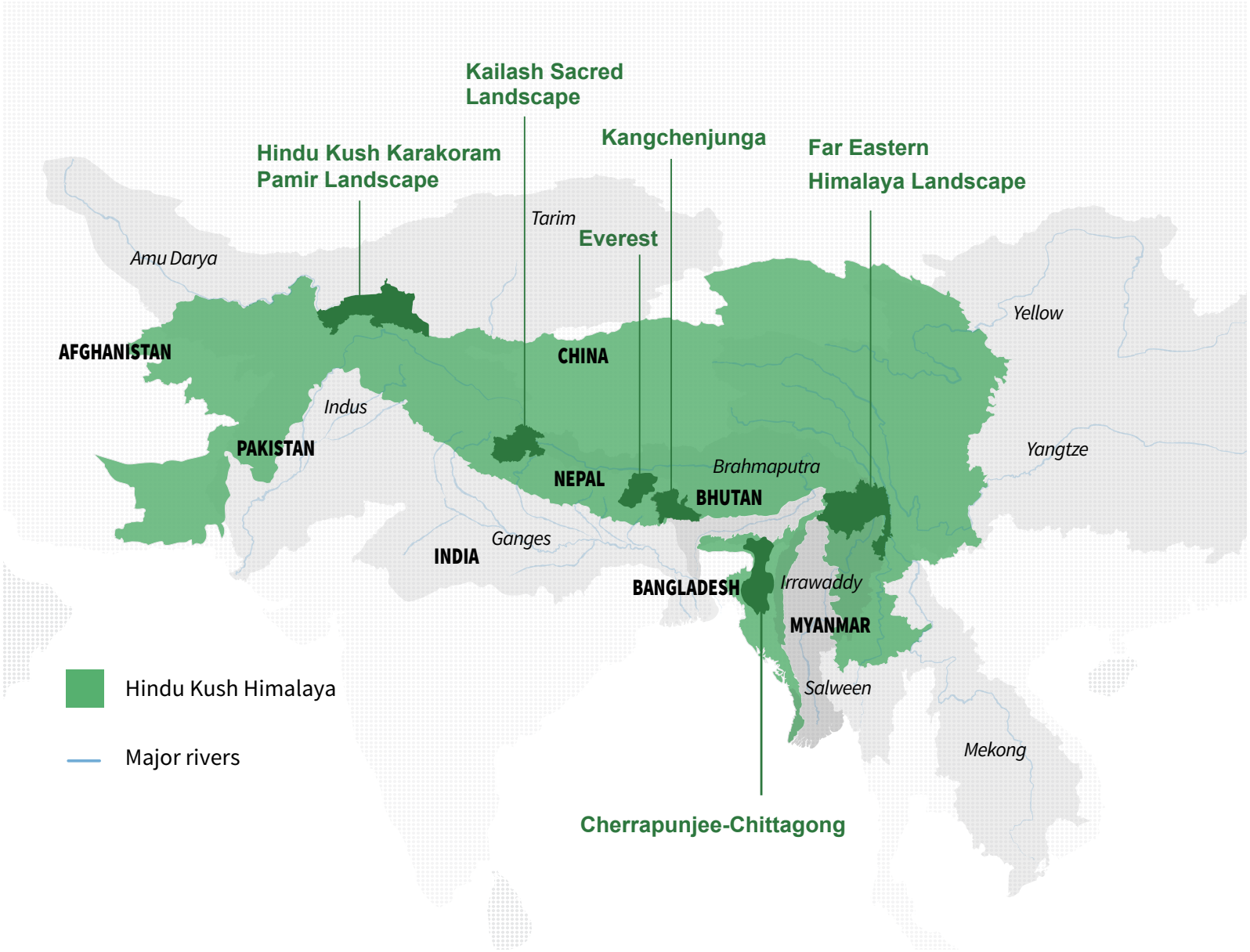
We gratefully acknowledge insights we gathered from ICIMOD colleagues Tashi Dorji, Abid Hussain, Ghulam Ali, Min Bahadur Gurung, and Kabir Uddin. We are ever grateful to Karuppusamy Arunachalam from the Kunming Institute of Botany, China for his review and to Jyoti P. Tamang, Professor, Sikkim University, India, for his critical inputs.

A special thank you to Dhrupad Choudhury for emphasising the importance of this topic and for encouraging and guiding us in bringing out this book.

We would also like to acknowledge the Government of Norway and the Green Resilient Agricultural Productive Ecosystems (GRAPE) project for supporting the production of this publication.

◂ A traditional village wood stove used for communal cooking | Photo: Bela Tikhak

Transboundary landscapes



Transboundary landscapes: Far Eastern Himalaya and Kanchenjunga

ICIMOD's work on transboundary landscapes has focused on six transboundary landscapes in the HKH – Kailash, Kangchenjunga, Far Eastern Himalaya, Hindu Kush Karakoram Pamir, Everest, and Cherrapunjee-Chittagong. The broad goal of this work is to increase social and ecological resilience to environmental change. The landscape approach defines 'landscape' in terms of broader ecosystems rather than national boundaries, thus bridging communities, histories, cultures and knowledge systems. Read more in our publication 'Beyond boundaries: Contouring transboundary landscapes in the Hindu Kush Himalaya', available at https://lib.icimod.org/record/34730

ICIMOD's Landscape Initiative for Far Eastern Himalaya (HI-LIFE) focused on one of the most biologically important places on earth. Endowed with rich biodiversity and high endemism, the Far Eastern Himalayan Landscape is home to more than 20 ethnic and linguistic groups, including the Rawang, Jingpo/ Singpho Singpho, Lisu, Nu, and Tangsa. The HI-LIFE Initiative was implemented by ICIMOD and its partners in China, India and Myanmar. The Initiative's aims were to build a common understanding of transboundary issues and provide a basis for an integrated and participatory approach for conservation, adaptation, and sustainable development in the face of global climate change. Read more at: https://lib.icimod.org/record/33909

The Kangchenjunga Landscape spreads over diverse ecological zones in Bhutan, India and Nepal. At the heart of this landscape lies Kangchenjunga (8,586m), the world's third highest mountain peak that sustains vital rivers and watersheds. ICIMOD's Kangchenjunga Landscape Conservation and Development Initiative sought to promote collaboration for conservation and sustainable use of resources, and strengthen links between people and their environments by increasing community participation in ecosystem management and resource governance, all the while helping improve the livelihoods and resilience of communities. Read more at: https://lib.icimod.org/record/34463

Benefits of ethnic cuisines

Gender and social inclusion is an important element of the production and preparation of ethnic and local foods. Women have been the custodians of local knowledge, culture and biodiversity in many communities. They play an important role in ensuring food and nutrition security for their households and communities. In most households, women decide what to grow and cook and how to prepare food for the family. With adequate support and market linkages, ethnic cuisines could be an avenue for women's empowerment. Women from different ethnic communities could start enterprises based on their distinctive cuisines and generate income for themselves and their households.

The webinar on "Revitalising ethnic cuisine for improved nutrition, nature positive food production, and equitable livelihoods" discussed a wide range of benefits of ethnic cuisines which are summarised below:

Ethnic cuisines improve health and immunity: Ethnic cuisines are healthy and nutritious. Fermented foods are rich in antioxidants and have many other immunity-boosting properties (Tamang et al., 2015). Ethnic communities use traditional knowledge to prepare food from locally available ingredients, creating a range of tastes, smells and textures (Chettri and Tamang, 2016). The ingredients are often rich in nutrition.

Ethnic cuisines diversify food systems: Ethnic cuisines revitalise and sustain diverse food sources and ecosystems and help tackle the homogenisation of production systems and loss of agrobiodiversity (Sarkar et al., 2020). Ethnic cuisines represent diverse 'food systems' and not only 'farming systems'.

Ethnic cuisines reveal the value of neglected food resources: Many conventional crops, livestock and fish, and non-conventional food resources such as wild edible plants, insects and animal-sourced food, as well as neglected and underutilised species are part of the diversity of ethnic cuisines. These resources are used in interesting and imaginative ways, based on years of experimentation and lived experience (Geng et al., 2016).

Ethnic cuisines promote nature-positive production: Nature-positive production is about producing diversified food whilst restoring biodiversity, soil health, water quality and overall food system resilience. Promotion of ethnic cuisines allows communities to protect native seeds and genetic resources in their fields, home gardens, and kitchen gardens (Gururani et al., 2021). This aids agrobiodiversity conservation and the management of soil, water and forest resources.

Ethnic cuisines link communities to business: Communities can meaningfully engage in food-based value chains and the hospitality industry, promoting diversified food commodities for consumers and markets. At a time when small farmers in rural areas are suffering the impacts of urbanisation and industrial agriculture, ethnic cuisines can help them enhance and diversify their livelihood options. They could engage in small enterprises based on ethnic cuisines and ecotourism initiatives that promote local foods (Kala, 2021). Authentic local cuisines can play a role in drawing tourists to a particular destination.

Ethnic cuisines offer a good adaptation strategy: Ingredients for ethnic cuisines are often locally sourced, which make them adaptable to climatic shocks. They also serve as a direct food source for communities that are food and nutrition insecure. With relatively straightforward preparation and ingredients sourced straight from farms and forests, many ethnic cuisines are a ready source of nutrition. (Majumdar et al., 2016). They incorporate food resources from a wide range of ecosystems beyond the farm, e.g., from forests, wetlands, and home gardens, and hence improve the ability of communities to cope with shocks and stress.

Ethnic cuisines help empower local communities: Ethnic cuisines allow communities to lead and own the process of food production and diversify agro-resources, thus empowering them socially and economically. By buying directly and locally, consumers can support the community's engagement in preserving food cultures and local production.

Ethnic foods promote sustainable consumption: Ethnic cuisines are easy to prepare, affordable and sustainable. People who know the ingredients and their health benefits are more likely to want to consume fresh and unadulterated foods. A growing proportion of health-conscious individuals in urban areas are opting for nutrient-rich foods that have long been staples in ethnic communities – such as gluten-free finger millet, probiotic-rich fermented milk products, and antioxidant-packed fermented foods. However, it's crucial to recognise that not all urban residents may have access to or can afford nutritious food options.

Ethnic cuisines protect cultural heritage: Ethnic cuisines are an integral part of local festivals, customs, and traditions and have evolved over generations (Baluni et al., 2021). They help reinforce cultural identities, empowering communities to create resilient food systems. Such cuisines are a mix of tangible (ingredients and cooking techniques) and intangible elements (tastes, smells, recipes and eating traditions) that contribute to the cultural values and characteristics of a particular place.

Link between traditional foods and agrobiodiversity

The 37 traditional dishes featured in this book include the use of approximately 102 different kinds of ingredients and associated materials (see Appendix 1). These include:

- **Cereals** such as red and white rice, wheat, several nutritious and underutilised species such as buckwheat and amaranth, corn and palm starch are used as base ingredients.
- **Meat** (chicken, pork, beef), fish and eggs, including dairy products such as milk, butter milk, ghee, butter and cheese, feature as ingredients in several dishes.
- **Fermented** items such as fermented rice, cheese, soybean, mustard leaves, and bamboo are major ingredients of many traditional dishes.
- **Nuts** such as peanuts, walnut, and cashews, as well as a variety of leafy green **herbs** such as mint, coriander leaves, phatphel (*Persicaria odorata*), onion and garlic leaves, are used to garnish dishes.
- **Wild edibles** such as the young shoot of *Aralia chinensis, Smilacoler caci*, foliose and fruticose lichens, wild banana inflorescence, and oyik leaves add to the uniqueness of traditional dishes.
- Various **leafy vegetables, roots, tubers and legumes** are part of many dishes.
- Fresh **spices and herbs,** such as ginger, garlic, turmeric, sesame, cumin, coriander, pepper, lemongrass and chilli are key ingredients of the majority of dishes.
- The dishes are cooked in diverse kinds of **oil** – sesame oil, mustard oil, peanut oil, processed lacquer oil and ghee.
- Both wild and farmed **mushrooms** are important ingredients.
- **Wild bananas** are part of many important dishes, especially in Northeast India. The leaves are used to wrap the food during cooking and the flower head is a delicacy.
- Some of the dishes use **seasonal ingredients** that are delicate and thus difficult to transport, handle and preserve. However, ethnic communities have devised innovative ways to preserve such foods for a long time.

Link to nutrition security

Local and indigenous communities have been preparing and eating these dishes for generations. However, the nutrient profiles and health benefits of these foods have yet to be determined through scientific research. Doing so would be necessary for promoting these dishes in the wider world and linking them to the market. Except for kinema curry (fermented soybean curry, page 87) and jhyur shyrmit (turmeric curry, page 70), no other local dish has been assessed for its nutritional value. However, one can surmise that the majority of dishes using natural ingredients may be healthy and nutritious. For example, jhur shyrmit has an energy value of 14.69 MJ kg (Gangwar and Ramakrishnan, 1989). Additionally, shiitake mushroom (*Lentinula edodes,* page 31) has also been found to be a potential source of vitamin D (Cardwell et al., 2018) and beneficial to immunity (Dai et al., 2015).

The nutritional values of some of the dishes and ingredients presented in this book (as perceived by the communities and as cited in the scientific literature) are described below:

Among the wild edibles, the rhizome of *Pouzolzia hirta* (**oyik leaves**) that is eaten as a vegetable is reported to possess good anti-helminthic (that expel parasitic worms and other parasites) properties. Also, the rhizomes are an excellent source of nutrients, antioxidants, amino acids, and minerals (Prasad et al., 2014).

Stinging nettle (*Urtica dioica,* page 81) is an excellent source of energy, proteins, fibre, and a range of bioactive compounds that are good for health (Adhikary et al., 2015).

Nutritious lunch offered in Mabu Village in northeast India | Photo: Bandana Shakya

Research by the Kunming Institute of Botany (Chinese Academy of Sciences) and Yunnan Academy of Agricultural Sciences has shown that the protein content in the alpine vegetable, **zhuyecai** (page 49) is as high as 27.44% (in dried form), and that the protein is rich in seven kinds of amino acids necessary for the human body. It also contains fat, polysaccharides, vitamins and a variety of nutritional trace elements required by the human body. Zhuyecai can help detoxify the body as well as lower sugar and blood pressure. As the glutamic acid content of zhuyecai is as high as 6681.87mg/100g, it is now mostly made into soup or stir fried for consumption. Communities mention that the tea of zhuyecai has a cooling, therapeutic effect and can reduce inflammation.

Cilongbao (page 37) is a very healthy wild vegetable – known as the "king of mountain wild vegetables", "tree ginseng" and "the first treasure in the world". They are full of nutrients including saponin and a variety of amino acids such as leucine, lysine, arginine and more than 16 kinds of inorganic nutrients that the human body needs. The young buds are good for the liver and help treat acute and chronic inflammation. These buds are also used in Chinese medicine (Wang et al., 2014).

Amaranth (page 19) is a nutritious, gluten-free grain that provides plenty of fibre, protein and micronutrients that aid weight loss and lowers cholesterol levels (Jain and Tiwar, 2012).

Buckwheat (page 17) has proteins that are particularly rich in essential amino acids. Buckwheat proteins improve the dietary amino acid balance and help lower cholesterol and hypertension. They are also good for people who suffer from constipation and obesity. (Zhang et al., 2017).

Somar sundrup (page 83) is a fermented cheese that is prepared locally without additives or preservatives. Local communities believe it is highly nutritious and boosts energy after a hard day's work. It is also believed to be very good for the bones, especially for the elderly.

Banana flowers (page 69) are a good source of vitamin A, C and E. They are packed with essential minerals such as phosphorous, calcium, potassium, copper, magnesium and iron (Salgar and Usman, 2015). They contain abundant dietary fibre and proteins, and are rich in essential amino acids such as glycine, leucine, alanine and aspartic acid (Sheng et al., 2010).

Fermented bamboo shoots (page 69) are an excellent source of probiotics and have antioxidant properties. They help reduce blood pressure, prevent cardiovascular diseases, and aid weight loss (Behera and Balazi, 2021).

Shiitake (page 31), the second most cultivated mushroom, is famous for its high nutritional value and medicinal properties. It has been valued as both food and medicine for thousands of years in Asia. China accounts for over 70% of the world's shiitake production. It has multiple bioactive properties including anticancer, antidiabetic, hypotensive, anti-inflammatory, hypocholesterolemic, and antioxidant properties. It has high polysaccharides, protein, lectins, dietary fibre, flavonoids, vitamins, essential amino acids and minerals (Li et al., 2018).

Ingredients for the preparation of stone-cooked chicken, Arunachal Pradesh | Photo: Bela Tikhak ▸

Link to cultural preservation

Ethnic cuisines reflect the heritage and culture of communities who have honed their knowledge of local environments and food sources over generations. These foods allow communities to preserve their distinct cultures and identities and help promote both cultural and biological diversity. For example, hoentay, the buckwheat dumpling from Bhutan, is made during the New Year (Lomba festival) of the Haa Valley. Likewise, Wachipa, which is made of bitter chicken and rice, is a unique traditional dish of the Rai and Limbu communities of eastern Nepal.

The desire to preserve one's culture through food practices is especially strong when one's culture is not the dominant culture in that society (Reddy & van Dam, 2020). Food is more than just ingredients; it is part of the history and tradition of different communities. For example, in China, many dishes, such as Longyuan huajiao Dulongji or the Dulong chicken stew and Laowo ham, are tied to the cultural history of specific communities and townships. Such dishes reveal how the domestication process for some crops and livestock have evolved and how the traditional method of processing and curing results in a particular taste and flavour.

Food practices are not only a symbolic but also a tangible means of preserving ethnic identities. This is especially true for migrants in multicultural societies (Reddy & van Dam, 2020). For example, the Thakali people of Nepal are known for bringing their distinctive cuisine with them wherever they go, and a number of restaurants abroad specialise in traditional Thakali food.

◂ Ja tyndong or local Khasi rice cooked in bamboo – a time-honoured cooking method, Meghalaya| Photo: Nabin Baral

Importantly, ethnic food links the culture of a certain group to the wider community. For instance, wild edible yam is a staple food of the Chepang, a highly marginalised community of Nepal. But the same food also has cultural and religious importance within wider Nepali society (Limbu & Thapa, 2011). During Maghe Sankranti (the first day of the Nepali month of Magh), people across the country consume wild edible yam and tubers of various root crops.

Actions to support local cuisines and food systems

Some of the actions necessary for preserving and promoting local foods and food systems are:

Recognise and restore traditional food systems: Traditional food systems in the landscapes are already transformative in their design and operation. Cross-learning, scaling out, and partnerships are required to diversify their scope. For this to happen, government programmes and support from external development partners must be reoriented to meet farming communities' needs in terms of inputs, capacities, investments, research and technologies, and market.

Promote and diversify home gardens: Home gardens are key to sustaining ethnic cuisines and thus improving access to food in marginalised areas and ensuring household food security. Home and kitchen gardens are not new ideas but they need greater recognition and dedicated support from governments to promote them at the household level. Home gardens are not only repositories of daily food ingredients, but also local seeds and genetic resources. They are essential spaces that allow us to

experiment on future food crops and diversify local culinary knowledge. They are a ready source of safe and nutritious food and a potential source of additional income for families.

Promote sustainable production: Sustainable production is crucial for maintaining the integrity of ethnic cuisines, which are often produced locally with ingredients free of harmful chemicals. For this, it is important to promote an integrated ecosystem approach that caters to soil health management and organic production, and water and energy resources management. Abundant agricultural resources and agrobiodiversity are critical for enhancing local livelihood and maintaining age-old food traditions. Reclaiming agriculture's true essence and nutritional roots through organic and diverse farming, especially of locally adapted and grown food, is going to be key.

Engage youth and spread awareness: It is important to involve young people in promoting local cuisines and preserving traditional knowledge and agrobiodiversity. This can be done through youth-focused trainings and fellowships. Effective packaging and branding of ethnic cuisines can also help raise the awareness of younger generations about the value of ethnic cuisines and local foods.

Promote the development of nutrition gardens in school: Developing nutrition gardens in schools, particularly focusing on the diversity of vegetables, helps raise nutrition awareness of children at an early stage. Produce from school gardens can be used for students' midday meals. School nutrition gardens can introduce children to methods of organic food-growing, allow them to experience the joys and benefits of being in nature, and teach them the value of local food culture and traditional foods and cuisines.

Strengthen gender and social inclusion perspective: As mentioned in 'Benefits of ethnic cuisines', women from many indigenous communities have been the custodians of local knowledge, culture and biodiversity. Many women play an important role in ensuring food and nutrition security for their households and communities. In most households, women decide what to grow and cook and how to prepare food for the family. With adequate support and market linkages, ethnic cuisines could become a way of empowering women, especially those from marginalised ethnic groups. Women could start enterprises based on their distinctive cuisines and generate income for themselves and their households.

Build trust and confidence among consumers: Increase documentation of food resources and their nutritional values through scientific research, highlighting the health and environmental benefits. With processed foods dominating the market, fewer people have been consuming ethnic foods even in local communities. Dietary awareness and food literacy programmes are necessary to rekindle interest in ethnic foods. Value addition through developing good recipes and promoting ethnic food in local cafés and restaurants can also reinforce sustainable consumption.

Research and development: Research and documentation of indigenous knowledge, along with the nutritional properties of each cuisine, is necessary for promoting ethnic cuisines on a broader scale. Various initiatives could be carried out to promote conservation and development of agrobiodiversity and the wider food base. These could include seed exchange fairs and food fairs; conserving traditional varieties in permanent plots; engaging communities in participatory plant breeding programmes; and supporting research on wild edibles and their use in ethnic cuisines. Films and documentaries about indigenous food systems, and ecotourism enterprises focused on local, indigenous cuisines could also prove useful. For long-term sustainability and growth of local and indigenous food systems, it would be essential for governments to develop policies and programmes that support communities to preserve and promote their cuisines and food traditions.

Food wrapped in leaves and left to slow cook beside a fireplace | Photo: Bela Tikhak ▸

Recipes

The five countries – Bhutan, China, India, Myanmar and Nepal – that share the two transboundary landscapes (Eastern Himalaya and Kanchenjunga) have their own distinctive food cultures. Ethnic foods from the Himalaya include more than 150 varieties of fermented foods and alcoholic beverages, more than 300 types of non-fermented foods, and about 350 wild edible plants (Tamang, 2010).

This book highlights cuisines from 25 ethnic groups in these countries – ethnic communities from across Assam and Bhutan, as well as Bai, Brahmin, Chhetri, Dulong, Dai, Galo, Han, Himachali, Jingpo, Khasi-Bhoi, Lepcha, Limbu, Lisu, Nu, Rai, Rawang, Sherpa, Singpho, Tangsa, and Yi people. Most of these communities live in areas that are remote from large towns and cities and depend on natural resources for their livelihood and cultural survival. Their cuisines use ingredients sourced from diverse ecosystems such as farmlands, forests, rivers, and wetlands.

This section presents select recipes that represent the vast diversity of food cultures and cuisines from the two transboundary landscapes. It seeks to highlight the connections that food and food practices share with cultures, festivals, ingredients, and cooking techniques.

Some dishes are mainly prepared during festivals and reflect the cultures of the communities to which they are indigenous – such as Hoentay (page 17) from Haa and Paro districts of Bhutan, Kyet Kachin Chet from Kachin state (page 73) in Myanmar, and Ngam Tok (page 55) from Miao in India . Dishes such as Wachipa (page 79), which is indigenous to Rai communities in India and Nepal and Baktsa (page 15), which originates in the eastern district of Trashigang in Bhutan, are prepared during rituals to appease deities and the spirits of ancestors.

Other dishes are prepared at times of food scarcity and use lesser-known, unconventional ingredients – like Tasshe Bay (page 61) from Puroik in Northeast India; Liangban cilongbao (page 37) from Lushui, China; Mangye from Gaselho and Puta from Bumthang in Bhutan; and Oyik Aao of the Galo people in Northeast India.

There are examples of foods that use **one key ingredient in multiple different ways.** The Limbu people in eastern Nepal, for instance, use yangben (an edible lichen page 85) in several dishes. On the other hand, there are dishes that can be made with **variations of different ingredients**. Falgi (page 89), which is indigenous to the Sherpa community of Nepal, is one such example.

Across the region, a majority of ethnic cuisines and dishes are **simple to prepare**. They require only a few ingredients – Qingjiao Yeshang xiangjun (page 31) from Lushui in China, is only one example. There are also a number of **elaborate dishes that require artistic presentation and technique-heavy preparation** as well as the use of traditional food processing techniques – examples include Somar sundrup with reeldoh (page 83) of Sherpas in eastern Nepal, Khunchang tok (page 69) of Tangsas, and Ngolum (page 57) of Galos in North east India.

Some dishes use **fermented ingredients** that have high nutritional value. Kinema (page 87) is one such ingredient consumed across the Kangchenjunga Landscape in India and Nepal. Other dishes use **medicinal plants and have healing properties**. Examples include Liangban zhuyecai from Lushui, China; Jhur Shyrmit (page 70) of the Khasi Bhois in North-east India; and Sishnu ko jhol (page 81) from India and Nepal. These dishes are consumed both for their taste and for the medicinal properties ascribed to them.

Some dishes have been modified over time, – including Tuk-tok (page 63) and Khalpi (page 67) from Sikkim, India and Kasaw from Kachin, Myanmar. They have been infused with modern ingredients and secondary farm commodities, and are now gaining wider market attention.

Ethnic cuisines from

BHUTAN

Photo: Pema Yuden

Baktsa

Sweet cheese ball

Community
Local communities in Trashigang district in eastern Bhutan

Dish profile
Dessert/snack; contains dairy and sugar

Description

This sweet dish is eaten in eastern Bhutan, mainly in Galing village in Trashigang district. People in Galing are mostly subsistence farmers; they grow rice, maize, wheat, mustard, and mandarin. This sweet delicacy is served after a meal or enjoyed as a snack on special occasions. However, in recent decades, this traditional snack has gradually been replaced by packaged biscuits and savoury snacks. Refined oils are now used instead of homemade butter. As farmers have shifted from maize and wheat to rice, wheat is now grown for brewing alcoholic beverages rather than for food. Therefore, these days one rarely comes across this dish except on New Year's Day and religious festivals.

Ingredients

Wheat flour – 500 g

Cottage cheese – 250 g

Butter – 150 g

Sugar – 250 g

Water – 100 l

Preparation

Prepare the dough with wheat flour and water and knead it till it becomes soft.

Divide the dough into small round balls of about 2 cm diameter and gently press each ball in the middle.

Dip these dough balls in boiling water for a few seconds and immediately drain them using a strainer.

In a pot, melt the butter, add shredded cottage cheese and sugar, and stir until the sugar is dissolved.

Add the blanched dough balls and fry them over medium heat for about 5 minutes until the cheese is soft and the dough is cooked.

Serve hot.

Photo: Pema Yuden

Hoentay

Buckwheat dumpling

Communities

Haap and Parop from Haa and Paro districts in Bhutan

Dish profile: Vegetarian, contains cheese, main course

Description

Hoentay is a sweet buckwheat dumpling stuffed with a mixture of turnip leaves, amaranth seeds (zimtse), cottage cheese, butter that is seasoned with chilli powder, onion and ginger. It is prepared and eaten during Lomba (the new year of Haa and Paro regions) when families in the villages gather for celebrations. They greet each other with "Lolay" ("good new year") as they share this nutritious delicacy. The dish is prepared by rolling the dough into a circle, placing the stuffing on it, sealing it, and steaming it in a huge container. The spiced veggie-and-cheese stuffing is lightly fried before it is wrapped in the dough. Hoentey can be steamed or fried and usually eaten with ezay, a chilli paste made from local dried chillies.

Ingredients

Buckwheat flour – 130 g

Turnip – 2 pcs

Dried turnip leaves – small bunch

Cheese – 50 g

Fresh butter - 30 g

Black mustard seeds – 50 g

Ginger – a small piece

Garlic – 1 clove

Chilli powder – 3 tsp

Wild pepper – 1 tbsp

Walnut

Green onion – a few sprigs

Salt to taste

Preparation

Mix sweet buckwheat flour with water and knead to make a soft but tight dough. Set it aside.

Mince the turnip leaves and cook them in water for about 25 minutes. Drain them using a sieve and put them aside in a bowl. Chop ginger, garlic and spring onion and mix them with the cooked turnip leaves. Add cheese and ground black mustard seeds and walnut, followed by chilli powder, salt and wild pepper according to taste. Pour heated butter over the ingredients and mix them together. Set aside to cool.

Roll the dough until it is 2 mm thick and cut it into round shapes with a glass/cup.

Add a tablespoon of the stuffing and seal the dough to make into a dumpling.

Place the hoentay in a steamer and cook for about 25 minutes.

Lomba festival

Lomba is the new year festival celebrated in Haa on the 29th day of the 10th month of the Bhutanese year. It is the only new year festival celebrated much earlier than in other parts of the country. The celebrations last for a week. On this special occasion, people make their special dishes and share them with friends and relatives. Hoentay has been gaining popularity and is now found on restaurant menus.

Photo: Pema Yuden

Mangye

Traditional amaranth pancake

Community
Local community from Gaselho, Bhutan

Dish profile
Contains egg and nuts

Description
Mangye is a special occasion food of the Sha Da Gey region in Bhutan. Within the Gaselo community, Mangye is prepared before paddy planting and harvest, to appease local deities for good yield and timely rainfall. Mangye has a distinctive flavour and appearance, as well as health benefits, as one of its main ingredients, amaranth, is rich in fibre, protein and micronutrients. The ingredients and cooking style may vary slightly from one community to another but the main ingredients are the same, namely rice, oil, amaranth, and eggs.

Ingredients

Boiled red/white rice – 500 g

Zemse (amaranth) – 150 g

Ginger – 100 g

Onion – 150 g

Garlic paste – 150 g

Eggs – 3

Oil, preferably pangtsi oil (*Symplocos paniculata*) - 50 ml

Cashewnuts (optional) – 100 g

Walnuts (optional) – 100 g

Salt to taste

Preparation

Cook fresh white/red rice in a rice cooker

Coarsely grind the walnuts, cashew and amaranth in a mortar and pestle and mix them to form a rough paste.

Heat about 1.5 cup/350 ml of water in a pot and add the paste.

Gently stir the mixture to prevent lumps from forming.

Crush garlic, onion and ginger into a fine paste and add to the pot.

Add eggs and keep stirring gently to achieve an even consistency.

Add salt to taste when the mixture reaches a thick consistency. Stir well and set it aside.

Knead the cooked rice into a dough.

Flatten the dough against the bowl/plate to take its shape.

While serving, place the dough in the middle of the plate, pour a generous amount of the stew over the dough. Heat some oil in a pan and pour the hot oil over the mixture-coated dough and the dish is ready to be served.

Puta

Bumthang traditional noodle

Community: Bumthaps of central Bhutan

Care statement: Plant based, use of egg, dairy ingredients

Dish profile: Plant based; contains egg and dairy; main or snack

DESCRIPTION

Buckwheat has long been a nutritious staple of the mountainous Bumthang region. Puta is buckwheat flour noodles mixed with fried egg, chilli powder, black pepper, and bunching onion. It is an ancient dish that is hugely popular in Bhutan. It is served with butter milk or milk, mostly during festive occasions.

Ingredients

Buckwheat flour – 1000 g

Egg – 3–6

Chilli powder – 10 g

Oil – 250 g

Butter – 100 g

Pepper – 20 g

Salt – 10 g

Bunching onion – 1 bundle

Black mustard seeds – 10 g

Milk/butter milk – 1 l

Preparation

Prepare the dough with buckwheat, egg, salt and water.

Make noodles with a traditional noodle machine or manually cut the dough into long thin strips.

Boil the noodles for 10-15 minutes.

Place the boiled noodles in cold water for a few minutes.

Add all the ingredients – spring onion, chilli, pepper.

Add heated oil or butter and mix thoroughly.

Serve with a glass of milk or buttermilk.

Jangbali – Bhutanese noodle

Jangbali is similar to Puta but is made from wheat flour instead of buckwheat flour. The preparation method is the same. It is best served with curd. One can add scrambled eggs and different kinds of meat to the noodle.

Ethnic cuisines from

CHINA


Photo: Wang Bin

Dulongniu

Dulong beef stew

Community
Dulong and Nu communities from Gongshan county, China

Dish profile
Animal based, stew

Description
The Dulongniu is made from meat of Dulong cattle, also known as Mithun or Gayal (*Bos frontalis*). Dulong beef is delicate and flavourful, and because of active movement, their muscle fibre cell density is significantly higher than that of domesticated cattle, and the meat naturally becomes very tender. Dulong beef is rich in calcium, iron, zinc, protein and amino acids. The meat is tender, tasty and pleasant, with low fat, low cholesterol, and no bad odour. Dulong beef is known as "a delicacy of the people of Gongshan" . The dish is generally served as a main course and an important part of Dulong culture and festivals. The Dulong are one of the smallest minority groups in Northwest Yunnan.

Ingredients

Fresh Dulong beef – 1 kg

Sliced ginger – 15 g

Chinese black cardamom (Tsao-ko) – 3 pcs

Star anise – 1-2 pcs

Sichuan pepper – 10 g

Green onion – 10 g

Mint leaves – 500 g

Dried red chilli – 10 g

Salt – 50 g or according to taste

Preparation

Clean the beef and cut it into small pieces.

Soak the meat in cold water for 1–2 hours to wash off blood, and then drain it.

Put the meat in a pot of water and bring it to boil.

Skim off the foam from the beef soup and add ginger, tsao-ko, star anise and Sichuan pepper.

Let it simmer for another 4-5 hours on low heat until the meat becomes tender.

Dry roast the dried red chilli in a pan until it is charred and releases its strong aroma. Crush them in a stone mortar using a pestle.

Clean the green onion and mint leaves and chop them into small pieces.

Pour the beef soup into a big bowl, add roasted chilli, and garnish with onion and mint.

Serve with cooked rice.

Dulong cattle

The Dulong cattle breed is one of the seven existing species of cattle in the *Bos* genus worldwide. It resembles wild cattle in appearance and habits. It has a sturdy body, well-proportioned structure, high cold resistance, rough feeding resistance, good meat production performance, and strong adaptability and resistance to adversity. It is included in China's National Livestock Breed Resource Protection List of 2006.

Dulong cattle are distributed in the Dulong and Nujiang river basins of Nujiang Prefecture, Yunnan Province, as well as in mountainous areas above 1500 metres above sea level (masl) in Assam in northeastern India, Bhutan, and Kachin State in northern Myanmar. In China, Dulong cattle are the only kind of cattle domesticated by the Dulong people, called "Abu" in Dulong language, which means large and wild.

The Dulong cattle production area in China is around the Dulong River in Gongshan County. It is the traditional home area of the Dulong people. According to local folklore, the Dulong cattle were captured in the wild and domesticated over nearly two centuries. The breed's characteristics are thus shaped by local ecological and social conditions. The locals take the cattle for grazing in the ancient forest around the Dulong River, helping maintain the ecological balance as well as meeting their livelihood needs.

Piao Niu Wu (Chinese: 剽牛舞, literally "slaughter cattle dance") is a traditional ceremony of the Dulong People unique to Gongshan County. It is performed during Dulong New Year. Traditionally, during the ceremony, a cow decorated with ornaments is tied to a sacrificial pole with a traditional Dulong rope. The host of the ceremony recites a prayer, and another man pierces the cattle's heart with a bamboo spear. The host then performs a ritual fortune telling, after which people sing and dance. In modern times, the festival is rarely celebrated, and is more for entertainment than for cultural and religious purposes.

A Dulong cattle farm in Gongshan County in northwest Yunnan Province in China | Photo: Wang Bin

The Dulong chicken

The Dulong chicken is native to the Dulong community, an ethnic minority in Dulongjiang Township, Gongshan County, Yunnan Province, China. Dulong chicken is small and compact, with multicoloured plumage. It is mainly found in the northernmost part of the Dulong River Basin, at the junction of northern Myanmar and the borders of Yunnan and Tibet. A small number of them are also distributed downstream of the Dulong River along the China-Myanmar border. The main production areas are Dizhengdang, Longyuan, Bapo and Maku villages in Dulongjiang township. The Dulong chicken grows in a harsh environment and exists in a semi-wild state. It is adapted to high-altitude conditions and has strong foraging ability and resistance to diseases. It can fly well, and its meat is known to be delicious. In 2010, the Dulong chicken was included in the National Livestock and Poultry Genetic Resources Catalogue of China.

Photo: Wang Bin

Longyuan huajiao Dulongji

Stewed Dulong chicken with Chinese prickly ash

Community
Dulong community from Dulongjiang township, Gongshan county, China

Dish profile
Animal based; stew; contains alcohol

Description
This dish uses a special breed of local free-range chicken called Dulong chicken. It has a strong aroma of Chinese prickly ash, often known as Sichuan pepper or Chinese pepper. When eaten it produces a tingling, numbing effect due to the presence of *hydroxy-alpha-sanshool* the peppercorn. The pepper is commonly used in Sichuan dishes such as mapo tofu and Chongqing hot pot, and is often added together with chilli peppers to create a flavour known as málà (Chinese: 麻辣; "numb-spiciness"). Chinese prickly ash was introduced to Longyuan village decades ago as a cash crop. Due to the favourable climate and soil, local people were able to grow good quality prickly ash and use it in this dish, which is named after the local community.

Ingredients

Fresh Dulong chicken – 1 whole chicken

Sliced ginger – 15 g

Garlic – 4 cloves

Chinese prickly ash – 10 g (fresh green leaves and seeds)

Soy sauce – 10 g

Cooking wine – 10 ml

Salt – 50 g or to taste

Preparation

Clean the chicken and cut the chicken into small pieces.

Marinate the chicken for 10-15 minutes in cooking wine, half of the sliced ginger and salt.

Heat the oil, lightly fry the ginger and garlic and add the chicken.

Stir fry the chicken till it turns golden yellow. Add soya sauce and some cooking wine. Add water till the chicken is submerged.

Let the soup simmer for 15-20 minutes on low heat until the chicken becomes tender.

Add fresh green leaves and seeds of the Chinese prickly ash and let it simmer for 2 more minutes to release the aroma.

Serve hot with boiled rice.

Photo: Wang Bin

Shou zhua fan with Tongxin jiu

Winnowing basket rice with wine

Community
Lisu community from Lushui city, China

Dish profile
Animal based; assortment of various dishes

Description
In Lisu culture, serving shou zhua fan (winnowing basket rice) and Tongxin wine to guests is the ultimate expression of hospitality. Shou zhua fan typically includes steamed rice, fire-roasted chicken and pork, ham, fried potatoes, boiled pumpkin, corn, sweet potatoes, taro, cucumbers and/or other seasonal vegetables. The meal is spread on a large winnowing basket for sharing. All the items are arranged carefully to make an attractive presentation. The hosts and guests wash their hands, sit around the basket and pick the items they want to eat with their hand. The host sings and raises a toast to each guest as they drink homemade Tongxin wine. Modern-day restaurants also offer the experience of this traditional dining custom. A full set of shou zhua fan can cost from 40$ up to 250$. It is also popular among tourists.

Ingredients

Steamed rice

Fire-roasted chicken and pork

Cooked ham

Fried potatoes

Boiled pumpkin, corn, sweet potatoes, taro, cucumbers and/or other seasonal vegetables

Preparation

The fragrant steamed rice is spread on a big round winnowing basket.

Sometimes the cooked rice is mixed with boiled and chopped carrots and beans, and some salt, pepper, and oil.

Carefully arrange the rest of the ingredients over the rice – fire-roasted chicken, pork, cooked ham, cooked sausages, fried potatoes, boiled pumpkin, corn, okra, sweet potatoes, soybeans, bamboo shoots, and sliced cucumbers.

Note

The quantities depend on the size of the dish, the number of guests, and the types of ingredients.

Photo: Wang Bin

Qingjiao yesheng xiangjun

Stir-fried shiitake mushroom with green chilli peppers

Community
Lisu, Nu, Bai, Han, Dai, Yi, and Jingpo communities from Lushui city, China

Dish profile
Plant based; contains wild mushroom

Description
Wild shiitake mushrooms can be eaten in various forms – stir fried, roasted, grilled, or as a soup. They can also be cooked with chicken, beef or pork. Stir fried wild shiitake mushroom with green chilli peppers is a home-style dish from Lushui city. Locals make and eat this dish regularly during the wild fungi harvest season. It is delicious, nutritious, and has a pleasant aroma.

Caution
Not all wild mushrooms are edible and some can be poisonous

Ingredients

Yesheng xiangjun (wild shiitake mushrooms) – 200 g

Green and red chilli peppers (chopped) – 20 g

Chopped dried red chilli – 10 g

Sliced garlic – 10 g

Mustard oil – 15 ml

Salt – 3 g or to taste

Preparation

Wash mushrooms.

Heat the oil and stir fry dried red chilli, fresh green and red chilli peppers, and garlic to release the aroma.

Add the mushrooms and quickly stir fry the ingredients until the mushrooms become soft.

Serve hot with steamed rice.

The queen of fungi

Yesheng Xiangjun (*Lentinula edodes*) belongs to the phylum Fungi (class: Agaricomycetes, order: Agaricales, family: *Omphalotaceae*, genus: *Lentinula*). It is a fungus that grows on wood. Because of its pleasant aroma and ample nutrients, shiitake mushroom is ranked above straw mushroom, flat mushroom, and white mushroom, and is known as the "the queen of fungi". Wild shiitake mushroom can be dried and preserved for a long time. However, many people prefer to eat them fresh for their intense aroma and taste. As they are only available in certain seasons, dishes made of fresh wild mushrooms are considered a delicacy in homes and restaurants.

Jizong mushroom

Jizong is one of the most precious edible mushrooms. It is a rare, delicious and nutrient-rich fungi. It contains essential amino acids, protein and fat, as well as vitamins, calcium and phosphorus.

Jizong mushrooms are found on the floor of coniferous forests, wastelands and graveyards, where they grow above termite nests. They have a symbiotic relationship with termites, which depend on them for food and allow them to reproduce by aiding in spore transfer. Locals call the termite nest “jizong pot”.

To pick the mushroom, locals first pry and loosen the soil with a stick and gently pull the fat, tender fungus to avoid destroying the mycelium. Cleaning the jizong mushroom is also a delicate task. You place the mushrooms in a large pot and rinse them with clean water. Then you pick them up one by one and gently remove the mud with a new soft-bristled toothbrush or fresh tea leaves. Then you spread out the clean jizong in a winnowing basket and let them dry in the sun. Afterwards, you manually tear each mushroom into fine and thin slices so that the aroma of the jizong can be completely released when cooked.

Every year during harvest season, many people collect and sell jizong in the county and countryside. Some business-minded people have installed jizong processing plants and process dry jizong, oil jizong and wet jizong. Jizong is also given as a special gift to friends and relatives. Despite technological advancements, it is still impossible to grow jizong artificially. Perhaps for this reason, it still retains its high cultural and spiritual value.

Source: baidu.com/ Jizong mushroom

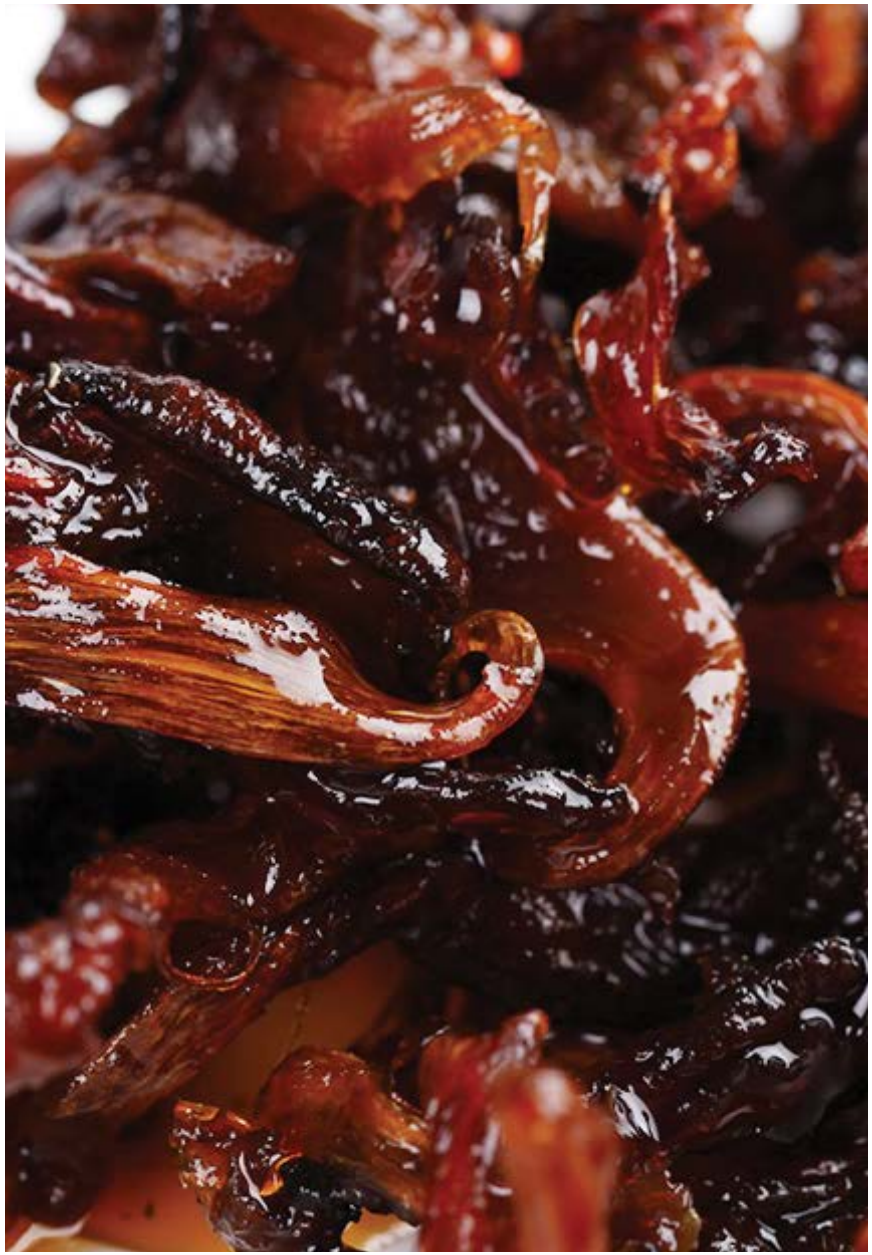


Photo: Wang Bin

You jizong

Oiled chicken leg mushroom

Community
Plant based; contains wild mushroom

Dish profile
Communities of Longyang district of Baoshan city, China

Description
This dish is made with a special kind of mushroom called jizong, or chicken leg mushroom (*Termitomyces albuminosus*). It is a rare species with a unique taste and high nutrient value. During harvest season, local people consume it in various forms such as jizong salad, fried jizong with green pepper, jizong stew with eggs, and boiled jizong.

Caution
Not all wild mushrooms are edible and some can be poisonous

Ingredients

Fresh jizong mushroom – 1 kg

Dried chilli pepper – 50 g

Sichuan pepper – 10 g

Star anise – 30 g

Vegetable oil – 500 g

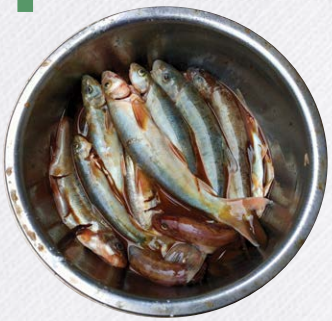
Preparation

Remove the soil from the jizong mushrooms and wash them with water; slice them diagonally along the stalks and drain the water.

Cut the dried chilli pepper into small pieces and set aside.

Over a high heat, heat some vegetable oil in a pan and when it starts smoking, add Sichuan pepper, dried chilli pepper and star anise. Stir them.

Add the mushroom and reduce the heat to low. Sauté them till the water in the mushrooms evaporates and they turn yellow (but not crisp).



Sustainable fishing

To protect the local ecosystem and biodiversity, including wild fish, the local government of Gongshan county has banned destructive fishing tools such as explosives, electricity, and poison. Fishing is prohibited from April to August each year. Only a few people use a fishing rod to catch fish for recreational purposes, and the caught fish is usually sold to local restaurants or used for self-consumption. Sometimes, villagers from Myanmar also come to sell their catch from downstream stretches of the Dulong River to local guesthouses and restaurants. Since the fish lives in fast-flowing torrents, local people who use a fishing rod usually tie a rock to the fishing line to help anchor the hook in the river. Fresh fish is not always available. In local guesthouses and restaurants, Dulong fish is sold by weight, and 500 grams cost around USD 26.

Photo: Wang Bin

Dulongyu

Dulong fish

Community
Dulong communities of Dulong River Valley, Gongshan county, China

Dish profile
Fish based; stew; contains alcohol

Description
This dish is typically made with fresh fish from the Dulong River. Dulong fish belong to the genus *Schizothorax* and are endemic to the highlands of Asia. They occur in the rapids and gravelly substrate and grow very slowly. Their meat is very tender and is either fried or made into stew.

Ingredients

Fried fish

Fresh Dulong fish – 1 kg

Soy sauce – 10 g

Cooking wine – 10 g

Starch – 10 g

Vegetable oil – 500 g

Salt – 50 g (or to taste)

Fish stew

Dulong fish – 1 kg

Chopped onion

Ginger, Garlic, Green onion leaves

Preparation

Fried fish

Clean the fish and cut them into large pieces. Small fish can be left whole.

Marinate the fish for 10–15 minutes in cooking wine, starch, soy sauce and salt.

Heat the oil and deep fry the fish for 10–15 mins, till the bones are crispy.

Fish stew

Clean the fish and cut them into large pieces. Small fish can be left whole.

Heat a little oil in a pan. Then lightly pan fry the fish until the skin turns skin golden. Set the fish aside.

In the oil remaining in the pan, add chopped onion, ginger and garlic and stir them until they release an aroma.

Add boiling water to the mixture along with the panfried fish and continue to boil until the soup becomes milky.

Garnish with chopped green onion leaves and serve hot.

Photo: Wang Bin

Liangban cilongbao

Aralia bud salad

Community
Lisu, Nu, Bai and Han from Lushui city, China

Dish profile
Plant based; contains nuts; snack

Description
Liangban cilongbao is a popular dish made with the young shoots of *Aralia chinensis* trees, locally known as cilaoya, cilongya, or citoucai. Cilongbao resembles Chinese Mahogany (*Toona sinensis*), locally known as xiangchun. It is fragrant and slightly bitter in taste. The edible part is the fresh young buds whose leaves have not yet unfolded. They are usually picked between March and May. They can be used in a salad, stir fried with preserved pork, or made into soup with chicken or fava beans and ham. The most common among these is cilongbao salad – (liangban cilongbao). This nutrient-rich dish is good for people suffering from fatigue, weakness, cough, sore throat, dysentery and malnutrition. It is only available during a certain time of year and therefore features as a seasonal delicacy in local restaurants and markets.

Ingredients

Blanched cilongbao (*Aralia chinensis* tree buds) – 200 g

Walnut – 50 g (optional)

Peanut – 50 g (optional)

Chopped green onion – 10 g

Chopped red chilli – 10 g

Chopped garlic – 10 g

Soy sauce – 15 ml

Sesame oil – 15 ml

Salt – 3 g or to taste

Preparation

Quickly boil the buds and rinse them with cold water.

Squeeze out the water, cut the buds into small pieces, and put them on the plate.

Add soy sauce, sesame oil, chopped green onion, red chilli and garlic, and salt. Mix well and serve.

Note

Cilongbao can also be stir fried with preserved pork (cilongbao chaolarou) or added to soup with chicken or with fava beans and ham (cilongbao zhuji, cilongbao zhudoumi).

Blanched cilongbao (*Aralia chinensis* tree buds)

The art of curing Laowo ham

Generally, local people of Laowo start slaughtering pigs around winter solstice to cure ham. The curing process broadly consists of selecting the legs, trimming the legs, salting them with local liquor, curing (about 20 days), pressing with wooden boards (to fully squeeze out the liquid in the meat), shaping, drying (in a ventilated place), and forming the ham legs. Most of the hams are hung for 1–2 years, but some have been hung for 3–4 years. Ham that is more than three years old can usually be eaten directly. No flavouring agent is added during the curing process. The ham is hung in a ventilated place to let it ferment and mature naturally. Sometimes it is hung in the kitchen over the cooking area, where it gets smoked and acquires a distinctive flavour. Laowo ham is a bit darker than other hams as it goes through an additional smoking process.

The ham is cured in high-altitude areas with a dry climate that is suitable for fermentation. In addition to the timing and location, the ingredients are also key. The local, native, black-haired Gaoligong pigs guarantee the good taste of Laowo ham. The local people of Laowo mostly raise these pigs on free range farms, feeding them small amounts of corn, greens and wild vegetables for more than two years. The pigs are slaughtered each year around winter solstice before the Chinese New Year. The ham is cured by the farmers themselves. First, they gently press the freshly slaughtered leg with a grinder to squeeze out the blood and water from the meat, and then smear it with "peach blossom salt" and local corn liquor, repeatedly pressing it for 15 to 30 days. Then they put it in a cool place to let it cool off and dry, and finally hang it over their woodfire stove, where it gets smoked all year long. The longer the ham stays, the more delicious it tastes. As no preservatives are added, and because of the long breeding cycle, the meat is soft and delicate, low in salt, and has a bright colour and a nice strong aroma. Curing and ageing of Laowo ham is an art that has been perfected over many generations.

Photo: Wang Bin

Laowo ham

Ham with braised kidney beans

Community
Bai community from Laowo town in Lushui city, China

Dish profile
Animal based; snack

Description
Laowo ham is a local delicacy of Lushui city and is prepared through a special fermentation process. The combination of kidney beans and Laowo ham makes a delicious, protein-rich dish. Laowo ham resembles a blend of different kinds of cured meats. It has a mellow taste and strong aroma, and when cut open, it has a bacon-like flavour and heavy oil content. Smoked Laowo ham, with its creamy white fat and deep red texture, can be sliced and steamed, diced and made into soup with eggs, or directly stewed. Good Laowo ham can be eaten raw. Laowo ham that is more than three years old can be eaten directly.

Ingredients

Laowo ham – 400 g

Kidney beans – 200 g

Water– 1 l

Preparation

Clean the ham and slice it into small pieces.

Place the ham in a pot of water and let it simmer over low heat for 1 hour. Meanwhile, cook the kidney beans in another pot.

Pour the kidney beans into the ham stew pot and mix. Let it sit for ten minutes before serving.

Note

Do not add salt

Photo: Wang Bin

Zha zhiliao

Fried cicadas

Community
Lisu from Lushui city

Dish profile
Insect based

Description
Cicadas are called zhiliao in Chinese. Fried cicadas (zha zhiliao) is a local speciality in Nujiang, especially in summer when plenty of cicadas are found near the Nu River. Cicadas are rich in protein and low in fat, and are a popular local food ingredient. Fried cicadas taste light and crunchy with smoky, nutty undertones.

Ingredients

Living cicadas – 500 g

Oil – 100 ml

Sliced ginger – 15 g

Garlic – 15 g

Dried red chilli – 10 g

Salt – 50 g (or to taste)

Preparation

Clean the cicadas, cut the wings, and rinse them with clean water.

Heat the oil and add the cicadas.

Stir fry the cicadas for 1–2 minutes and add ginger, garlic and dried red chilli

Continue stir-frying over mild heat until the cicadas become golden and crispy.

Take out the fried cicadas, sprinkle salt and mix.

Serve hot.

Catching cicadas for a meal

People in Nujiang use a special technique to catch cicadas during summer evenings. Cicadas are usually found near the riverbank, and Nujiang people like to catch cicadas on a bridge. Before catching cicadas, they tie one or two small tree branches to the bridge rail. In addition, they also tie small electric torches under the tree branches and light up the tree branches. Then they put some small stones or sand in an empty tin. People shake the tin to create sounds that attract cicadas. When the cicadas land on the tree branch because of the light and sound, the cicada catcher quickly grabs the insect and puts it in a plastic bag. Skilled catchers can easily catch around 50–100 cicadas in an hour or so, enough for a plate of fried cicadas later to go with beer or liquor and pass the humid and hot evenings in the valley. Eating insects is a longstanding tradition among mountain communities. In Nujiang valley, in addition to cicadas, people also eat fried bee pupa, which are flavourful and rich in protein. Cicada nymphs have been recorded in *Compendium of Materia Medica* or *Bencao Gangmu* (Chinese: 本草纲目), a Chinese herbology volume written by Li Shizhen during the Ming dynasty; its first draft was completed in 1578 and printed in Nanjing in 1596. The book mentions that fried cicada nymphs have a palatable aroma and can cure many diseases.

Photo: Wang Bin

Huoshao qiyouji

Chicken stew with lacquer seed oil

Community
Nu and Lisu communities from Lushui city and Fugong county, China

Dish profile
Animal based; may contain alcohol; main or snack

Description
Huoshao Qiyouji is a traditional dish of the Lisu and Nu people of Nujiang, and an integral part of the meal served during social gatherings. Its special feature is that it is made with local chicken cooked in lacquer oil. The soup has a golden colour and a mild aroma. The meat, after being stir fried in lacquer oil, becomes tender, crispy and delicious. The stew is said to be very nutritious, especially for women after childbirth as it can boost the recovery process and helps to build stamina.

Ingredients

Local chicken – 500–1000 g (half or whole), prepared using the Huoshao method (feathers are burnt off over a fire)

Lacquer oil – 200 g

Ginger – 5 g

Dried tsao-ko (Chinese black cardamom) – 5 g (4 pieces)

Salt – 50 g (or to taste)

Preparation

Cut the Huoshao chicken into small pieces.

Heat the lacquer oil and stir fry Tsao-ko and ginger to release the aroma.

Add the chicken, quickly stir fry the ingredients, add a little salt and cook until the chicken becomes golden yellow and semi-cooked.

Add hot water that covers the chicken, boil for about 40 minutes.

Lightly roast some Tsao-ko and grind it to powder.

When the chicken is fully cooked, add the remaining salt and sprinkle it with the roasted tsao-ko powder.

Serve hot with rice

Note

The broth can be used for making noodles and vegetables

Photo: Wang Bin

Making of lacquer oil

Lacquer oil is an edible vegetable oil extracted from the seeds of the lacquer tree. It is not certain for how long the people of the Nujiang valley have been consuming lacquer oil. The cultivation of lacquer trees and the use of lacquer oil as cooking oil is now only found among the Lisu, Nu and Dulong ethnic groups living on both sides of the Nu River. Local residents usually hang lumps of solidified lacquer oil on a string in their kitchens, and whenever they have guests, they take it off and melt it in a hot pan to use it for frying. According to Lisu villagers, although mechanically produced lacquer oil is clean and using it saves time and labour, many people still prefer to make it themselves. In Nujiang, after harvesting lacquer seeds, villagers remove the shells using a manually operated wooden rice grinder. After shelling, the seeds are ground into white flour-like powder and roasted in a pot to extract the oil. The freshly pressed oil is translucent, and after cooling, it gradually solidifies into a lump and sets in a mould to become the familiar brown sugar shape. Traditionally, the pounded lacquer seed powder is stir fried in an iron pot, and after about 20 minutes, the fried lacquer seed powder is wrapped in palm leaves and pressed using the lever principle, and soon the yellowish lacquer oil flows out, and the air is filled with the special smell of the oil mixed with the leaves.

Xiala : Photo: Wang Bin

Another variant of chicken stew is the dish xiala, where chicken is simmered with alcohol or baijiu. Xiala, in the Nu language, means meat (xia) cooked in liquor (la). It is made with local chicken meat and good baijiu/shaojiu (a clear liquor that typically has 35–60% alcohol). To make Xiala, the chicken is first cut into small pieces and fried in lacquer oil till they turn crispy and golden. Then you reduce the heat and pour baijiu, cover the pot and cook until the liquor starts boiling. The dish is then ready to eat. It is sweet and spicy with a strong aroma. The Nu people eat this dish to nourish the body, strengthen the bones and treat rheumatism and gynaecological diseases. It is also served to guests during festivals and gatherings. The soup is especially recommended, as ancient folk saying goes, "The meat nourishes the body for three days and the soup for ten days and ten nights."

Xiala is similar to 'drunken chicken' found in Shaoxing, Zhejiang Province of China, although the two are made in different ways. Xiala is made using freshly slaughtered chicken with baijiu, while for Zhejiang drunken chicken, chicken is first boiled and then marinated in wine.

Photo: Wang Bin

Xiangmaocao kaoyu

Grilled fish with lemongrass

Community
Dai community of Mangkuan Yi-Dai Township in Lushui city, China

Dish profile
Fish based; main; contains animal fat

Description
Typically made with tilapia fish and grilled on charcoal, this is an important traditional dish of the Dai community of Mangkuan Yi-Dai Township, Yunnan. It is fragrant and crispy, slightly spicy and sweet. It requires a special cooking method. As the fish is clamped between two pieces of sliced green bamboo and roasted over an open fire, it has the fragrance of bamboo. Since it uses lemongrass and coriander grown in tropical rainforest, it also has the fresh and light scent of these local herbs.. The dish is served with the Dai people's special sauce called "tomato nammi", made with small tomatoes and charcoal-grilled small chilli, and mixed with wild coriander, garlic, green pepper and other seasoning.

Ingredients

Tilapia fish – 1

Coriander– 10 g

Lemongrass – 20 g

Green onion – 10 g

Ginger – 10 g

Garlic – 5 g

Red and green chilli – 20 g

Salt to taste

Preparation

Remove the scales of the fish, cut the back of the fish with a knife, remove the intestine and belly debris and wash it.

Finely chop onion, ginger, garlic, green and red chilli, and coriander. Mix the ingredients with salt to make the sauce.

Put the sauce in the belly of the fish, close the belly, tie it with two or three lemongrass leaves, clamp it with a bamboo piece and put it on charcoal fire and grill.

When the fish is 80 percent cooked, smear with lard (animal fat), and continue to grill for about 5 minutes. The dish can then be served.

Photo: Wang Bin

Liangban zhuyecai

‘Bamboo leaf’ salad

Community
Lisu, Nu, Bai and Han from Nujiang, China

Dish profile
Salad; plant based

Description
Zhuyecai means bamboo leaves in Chinese as this plant has bamboo-like stems and leaves. However, unlike the real bamboo, it is only about a foot tall and the stem is as thick as a thumb with three or five leaves. Communities in Nujiang have been eating this delicious and nutrient-rich vegetable for centuries. It can be easily cooked. If the pistil is not removed, it might be bitter but still retains its sweet and cooling aftertaste. Some people also dry the pistils and use them to make tea. The leaves can simply be boiled in water to make clear green, fragrant soup.

Ingredients

Zhuyecai – 300 g

Chopped dried red chilli – 10 g

Soy sauce – 15 ml

Vinegar – 5 ml

Sesame oil – 15 ml

Salt – 3 g or to taste

Preparation

Remove the old leafy part of zhuyecai and slice it along the middle into two halves.

Remove the flower pistil (the pistil is edible but very bitter).

Wash the zhuyecai.

Quickly boil the washed zhuyecai and rinse it with clean water.

Drain the water and put it on a plate.

Add vinegar, soy sauce, sesame oil, chopped dried chilli, and salt. Mix well and serve.

Zhuyecai, an alpine vegetable

Zhuyecai (*Maianthemum oleraceum*) is an alpine wild vegetable that grows between May and July in high-altitude areas (above 3000 masl) in the Gaoligong Mountains and Biluo Snow Mountains in western Yunnan province. It starts sprouting as the snow melts. It is found in Lijiang, Diqing, and parts of Tibet, though zhuyecai from Nujiang is known to have the best taste. There are various ways of cooking zhuyecai, among which zhuyecai tang (soup), zhuyecai chao larou or chao rou (stir fried with preserved or fresh pork), and Liangban zhuyecai (salad) are the most common. It can also be processed as a dried vegetable or stored in the freezer. Dried zhuyecai is soaked in water before it is cooked, and in a frozen state, it can be cooked directly without thawing.

Photo: Wang Bin

Chong Lou Dun ji

Stewed chicken with Chong Lou

Community
Nu and Lisu communities in Lushui

Dish profile
Animal based; stew; main

Description
Chong Lou Dun ji (stewed chicken with Chong Lou) is made of local chicken with a precious traditional Chinese medicinal herb called Chong Lou (*Rhizoma paridis*). Chong Lou is the special ingredient in this dish, which is a dried root and rhizome often used in traditional Chinese medicine, particularly in Yunnan Baiyao. It is used in formulations for wound healing, as a pain reliever, and to stop bleeding.

Ingredients

Local chicken – 500 g

Dried chonglou roots and rhizome – 20 g

Ginger – 5 g

Dried tsao-ko (Chinese black cardamom) – 4 pieces

Sliced ham – 10 g (optional)

Sliced pig stomach – 20 g (optional)

Mustard oil – 20 g

Salt – 3 g (or to taste)

Preparation

Clean the chicken and cut it into pieces. Wash ginger and chonglou root and rhizome.

Heat the oil and stir fry tsao-ko and ginger to release the aroma.

Add the chicken, ham and sliced pig stomach and quickly stir fry the ingredients until the chicken is semi-cooked.

Add hot water that covers the chicken, and then add dried chonglou and bring the broth to a boil.

Put the dish in a clay cooking pot and let it simmer over low heat till the meat becomes tender.

Serve hot with boiled rice and other vegetables.

Chonglou, a valuable medicinal herb

Medicinal herbs are used as an ingredient in many dishes across China. Besides Chong Lou, other herbs used in Chinese cooking include sanqi (*Panax notoginseng*), tianma (*Gastrodia elata*) and chong cao (*Ophiocordyceps sinensis*). Slow growth and overharvesting in recent decades have led to a significant decline in Chong Lou populations. It is now listed as a vulnerable species by the IUCN. Given the favourable environment of Nujiang valley and high market demand, local governments have been encouraging villages to grow Chong Louas a cash crop since 2012. Between 2016 and 2020, more than 200 hectares of Chong Lou have been planted in Nujiang Prefecture, which increased the incomes of local villagers by more than CNY 3 million.

Photo: Jitendra Bajracharya

Zhutongfan or bamboo tube rice of the Dai community

Bamboo is integral to the life and culture of various ethnic groups. Communities like the Dai, Hani, Lahu, Bulang, Kino, and Jingpo use young bamboo stalks to make delicious and nutrient-rich bamboo rice. There are two kinds of bamboo rice – ordinary bamboo rice and fragrant bamboo glutinous rice. The Dai people like to eat the fragrant rice while other ethnic groups prefer the ordinary bamboo rice. To make bamboo rice, place soaked rice in a fragrant bamboo tube, add the required amount of water, tightly plug the mouth of the tube with fresh leaves, and then put it over a fire and grill it.

Bamboo is rich in vitamins and essential amino acids. Xiangnuo bamboo (*Cephalostachyum pergracile*) is one of the best bamboos for cooking bamboo rice. It is a rare and valuable species unique to Yunnan.

In the mountains, when people go to work or go hunting, they often cut down a section of a bamboo and fill it with rice, add some spring water, and place it over a fire to boil the rice. After the rice is cooked, they cut the bamboo tube into two or four equal sections and eat the rice out of each section. In this way the bamboo tube serves as a cooking pot as well as multiple rice bowls. When cooked well, the rice is soft and palatable, and has a distinctive aroma.

Ethnic cuisines from

INDIA

Photo: Bela Tikhak

Ngam tok

Stone-cooked chicken

Community
Tangsa from Arunachal Pradesh in India

Dish profile
Animal based; spicy; requires a special cooking technique using stones

Description
Ngam tok is an ethnic dish known for its earthy and smoky flavour. It is prepared with rich traditional spices. It is indigenous to the Tangsa tribe of Changlang district in Arunachal Pradesh. The stones are collected from the riverbeds of the Noa-Dihing and the herbs are organically grown in kitchen gardens. The dish is made especially during festivals. It is often served as a main course and sometimes as an appetiser with locally brewed rice beer. Preparation involves a special, traditional cooking technique using stones, as well as time, labour and patience.

Ingredients

Wuh (chicken) – 200 g

Tapan (basil) – 3 g

Pangkho (hot mint) – 3 g

Pinchi nibii (long coriander) – 3 g

Singko (onion) – 3 g

Tsang (ginger) – 2 g

Sikhu (garlic) – 4 g

Machang/tsigok (Sichuan pepper) – 2 g

Machang/ tsigok jaq (Sichuan pepper leaves) – 3 g

Wiq maihai (bamboo shoot) – 5 g

Siim (Salt) – 2 tbsp

(Chilli flakes) – 2 tbsp

Longpoh (stones) – 4– 5 medium-sized from river banks

Leaf for wrapping

Preparation

Wash all the ingredients properly and chop the chicken into small or medium-sized pieces.

Clean the stones and place them on a fire until they are burning hot.

Grind all the herbs and spices to paste in a mortar and pestle.

In a bowl, marinate the chicken in the paste.

Add bamboo shoot and mix well.

Put the marinated chicken on the leaf of *Phrynium pubinerve* (sometimes known as ‘packing leaf’ or ‘Ekkam’ in the Adi language of Arunachal Pradesh), and place the hot stones over the chicken mixture. Wrap it quickly with the leaf to prevent the steam from evaporating.

In a traditional fuelwood oven, bake the chicken near the fire for 45 minutes, occasionally turning it to let it heat from all sides. Serve hot with rice or as a snack with local beer.

Photo: Banteilang Syiem/ NESFAS

Ngolum

Steamed fish

Community
Galo from Arunachal Pradesh in India

Dish profile
Fish based; snack

Description
Ngolum is fish cooked in a bamboo tube and has a unique and subtle flavour. It is the dish of the Galo tribe in Arunachal Pradesh.

Ingredients

Local fish – 6–8 pieces (small, 6-10 inches)

Dry bamboo shoot – 4 tbsp

Ginger – 1 tbsp (crushed)

Garlic – 1 tbsp (crushed)

Green chillies – 5–6

A hollow green bamboo tube

Banana leaf – 1–2

Water – 50 ml

Salt to taste

Preparation

Marinate the fish with ginger, garlic, salt, chilli and dry bamboo shoots.

Place the marinated fish on the banana leaf and roll in such a way that the hard stem faces up and the pointed leaf at the other end is folded and the bottom is sealed.

Insert the rolled leaf into the hollow bamboo tube.

Add water and seal with another banana leaf.

In a traditional fuelwood oven, place the bamboo near the fire for 20–30 minutes.

Turn the bamboo every 5–10 minutes ensuring that the bamboo is not burnt or charred.

Split open and serve the fish with steamed rice.

Photo: Amba Jamir

Oyik aao

Leafy greens

Community
Ao from Nagaland, Galo from Arunachal Pradesh, India

Dish profile
Main; plant based; curry

Description
This leafy green vegetable dish is very popular among the Ao community from Nagaland and the Galo community from Arunachal Pradesh. The main ingredient *Pauzolzia hirta*, locally known as 'Oyik', is a wild shrub that grows naturally across the Tani belt of Arunachal Pradesh, Nagaland and other Northeast Indian states. It has a slippery texture and a distinct flavour similar to the stinging nettle. Oyik is also mixed with smoked beef, Mithun (Dulong cattle, *Bos frontalis*), and pork meat along with dried bamboo shoots, and served on special occasions and festivals, especially during Mopin, a harvest festival.

Ingredients

Oyik leaves – 500 g

Dried red chilli flakes and black sesame seeds (ground together) – 1 tbsp

Hanyir leaves (*Houttuynia cordata*) leaves – 3–4

Salt to taste

Water – 50 ml

Preparation

In a pot, add salt and water and bring to a boil.

Add Oyik leaves and cook over medium heat until soft.

Add hanyir leaves, mix and cook for 2–3 minutes until water is reduced (do not let it dry too much).

Remove from heat and add the mixture of black sesame and dried chilli flakes. Mix well.

Serve with hot rice.

Photo: Bandana Shakya

Tasshe bay

Tasshe pancake

Community
Puroik from Northeast India

Dish profile
Plant based; snack

Description
Puroiks are one of the most marginalised communities in Arunachal Pradesh of Northeast India. Although rice is their staple food, Puroiks in remote mountains rarely have adequate access to it. Adapting to this situation, they have developed an alternative food source called tassh, which is made from the starchy pith of the sago palm found inside the trunk. The natural starch from the sago palm contains several neurotoxins which can be extremely hazardous to health. It is essential to follow the correct process for preparing tasshe, which is both intricate and laborious, in order to remove the toxins and ensure that the product is edible. This rare food item has long helped Puroiks survive food scarcity. Nowadays, some foods that use tasshe are available in local markets. Tasshe bay is a type of pancake and a popular snack, especially eaten for breakfast.

Caution
Due to the natural toxicity of the sago palm, extreme care should be taken when preparing this dish.

Ingredients

Powdered tasshe – 300 g

Water - 250 ml

Granulated sugar – 6–7 tbsps

Preparation

Heat a flat pan over a medium flame.

Add water to powdered tasshe to create a batter.

Thinly spread the sticky batter on the pan in the shape of a pancake.

Flip over and cook until the pancake is crispy and brown.

Fold the pancake and serve.

Sugar can be added to enhance the taste

Processing of sago palm
The pith of the sago palm (*Metroxylon sagu*) is shredded and beaten into coarse flour. It is then soaked in water. The filtered starch is hardened into a powdery substance locally called tasshe. It is mostly eaten when traditional crops are scarce. It has a short shelf life but can be stored underground for up to a month.

Photo: Assesh Pandey

Tuk-tok

Rice porridge

Community
Lepcha from Sikkim, India

Dish profile
Plant or animal based; main

Description
Tuk-tok is a traditional dish of the Lepcha community, a type of porridge made from local rice. It is especially made during the festival of Namsoong which is celebrated during December–January and marks the New Year for the Lepchas. The Bhutia and Sherpa communities also have their own versions of this dish. Tuk-tok can be vegetarian or non-vegetarian. Vegetarian Tuk-tok is often served as breakfast to monks during Buddhist ceremonies. Non-vegetarian Tuk-tok is served during Lepcha festivals. The consistency of the porridge can be changed by adding more or less water. This simple porridge makes for a warm, wholesome, and nutritious meal.

Ingredients

Vegetarian Tuk-tok

Local rice (Zuhue) – 250 g

Water (Oong) – 800–1000 ml

Curd (Nyirmaak)– 150 ml

Salt (Vom) – to taste

Pure ghee (Mor) – 20-30 g

Coriander (Ushu) – a few leaves

Non-vegetarian Tuk-Tok

Local rice – 250 g

Water – 800–1000 ml

Meat (Man) – 100–200 g

Salt – to taste

Turmeric (Manga) – 1 tsp

Preparation

Rinse the rice in cold water.

Cook the rice in water and salt for 1–2 hours over low heat until it thickens into a creamy mixture.

Add fresh curd to therice mixture and boil for a few minutes.

Add ghee and garnish with coriander leaves and serve hot.

Rinse the rice in cold water.

Bring the rice to a boil and while it is boiling, add meat pieces, turmeric and salt. Let it cook for 1–2 hours over low heat until it thickens into a creamy mixture.

Add ghee and garnish with coriander leaves and serve hot with fresh chutney.

* The consistency of the porridge will depend on the amount of water you add.

Phalap khah

Bitter tea of the Tangsas

Community

Tangsa community of Miao in Arunachal Pradesh, India

Description

Phalap or felap is handmade organic tea obtained through traditional processing of young tea leaves and shoots of *Camellia sinensis* var. *assamica*. It is the traditional beverage of the Tangsa community of Miao in Arunachal Pradesh, India. Originally introduced by the Singpho community, the tea is known for its smoky and complex flavours. The Tangsas and Singphos believe that the tea has healing properties and can cure many ailments such as diabetes, heart problems, hypertension, and even cancer. It is consumed especially after meals as it is also believed to help in digestion.

The tea is cultivated in a unique way; the tea plants are grown in small gardens without using chemical pesticides or fertilisers, and are trimmed to maintain a short height. Pruning allows the growth of new shoots. Only fast-growing new shoots with soft young leaves are plucked.

The Tangsas have rich knowledge about their environment and the use of local food resources, though their knowledge is not documented properly. However, several foods that are prepared with traditional methods, such as Phalap Khah, are now promoted in tourist homestays. This meticulously handcrafted tea can only be produced in a limited quantity. Currently the local market price of this tea is about INR 500 per kg. More research is needed to learn about its multiple health benefits. Concerned entities should support the local communities to produce and market this special tea.

Steeping

Boil 1.5 litre of water in a kettle and add 50–70 g of solid Phalap (cut into small pieces). Boil for another 15–30 mins until it becomes Khah (bitter). The Tangsas love to sip bitter tea without any additives such as milk, sugar, salt or butter.

Traditional processing of phalap includes the following steps:

Heat treatment: Freshly collected tender tea leaves are boiled in a ‘mokhang’ or ‘dekchi’ (a flat-bottomed cooking pot) and stirred continuously until they become soft and discoloured (chlorophylls denatured).

Drying: The boiled tea twigs are then transferred to a ‘phey’ (spaced bamboo mat with raised margins) and spread evenly. The phey is then hung 120 cm above a fireplace for roughly 24 hours for drying. It is tossed time and again to allow for proportionate drying of the tea twigs inside and ensure a smoky flavour permeates throughout.

Photo: Diana Ethel Amonge

Cutting: The fully dried twigs are then placed on a ‘daam’ (a bamboo mat) and softly crushed by hand.

Stuffing and roasting: The dried and crushed tea is stuffed tightly into a bamboo container (a container made of fresh green bamboo is preferred as green bamboo smells nice and does not easily catch fire during heating or roasting.) The close end of the stuffed bamboo container is then directly placed over a fire to create more compaction for further stuffing till the container is completely filled and the content becomes almost solid. The leaves of *Macaranga denticulata* (Chahhao-jaak) are temporarily used to seal the bamboo container. After the container is full, the mouth is tightly closed with thin, flat and broad bamboo slips before final roasting.

Thinning of the container wall: After the roasting process is complete, the outer wall of the bamboo container is scraped slowly till a thin layer of bamboo tissue is retained. This is done to facilitate the use of Phalap as the bamboo tissue layer can be easily broken and removed.

Storing: After roasting, the ‘Phalap’ can be stored for 8–10 years in a dry and warm place but produces the best results in fourth and fifth year after production. It is stored in Kharang (a loft made over a fireplace).

Photo: Assesh Pandey

Khalpi

Pickled cucumber

Community
Nepali and Nepali-origin communities in Nepal and India

Dish profile
Plant based; pickle

Description
Khalpi is a popular dish among different communities in Nepal and Nepali-origin communities in India. The pickle is made from a local variety of large cucumber, which has a thick golden-brown skin when fully ripe. It is harvested in August, September and October. Khalpi is made at least 4–5 days before the main festival days, to allow ample time for pickling. It is hot and sour and juicy with a slight crunch. It is said to contain probiotics, which are good for digestion.

Ingredients

Large ripe cucumber – 1

Round red chillies – 10–20
(or a handful of green chillies)

Coarsely ground mustard seeds – ½ cup

Cumin powder – ½ tbsp

Coriander powder – ½ tbsp

Red chilli powder – 1 tbsp

Turmeric powder – 1 tsp

Fenugreek seed – 1 tsp

Salt – 1 tbsp (or to taste)

Vegetable oil (preferably non-refined mustard oil) – ½ cup

Preparation

Wash the cucumber with clean water and let it dry.

Cut the whole cucumber into elongated slices and scrape out pulp and seeds using a knife.

Cut into square chunks and make chequered incisions on each chunk. These incisions help absorb the spices. Cut the chillies in half to help release the heat during pickling.

Dry the cucumber chunks and chillies in direct sunlight for 1–2 days.

In a large bowl, mix the partially sun-dried cucumber and chillies, coarsely ground yellow mustard, coriander powder, cumin powder, red chilli powder and salt.

In a small pan, heat around 5 tbsps of vegetable oil, fry fenugreek seed and add turmeric powder and pour over the pickle mix.

Transfer the mixture into clean, dry and airtight glass jars. Pack the cucumber pieces tightly using a spatula or spoon and add some vegetable oil so that the top layer is partly submerged. Seal the jars and place them in the sun for at least 4–5 days.

Siddu

Snack from the Indian Western Himalaya

Community
Kullu, Himachal Pradesh, India

Dish profile
Plant based; snack

Description
Kullu is a lush green valley of pines and deodar in Himachal Pradesh, India. The valley is part of the Indian Himalaya and is rich in natural beauty and biodiversity. Over generations, the locals of Kullu have developed a variety of dishes made with ingredients sourced from the mountain environment. One such traditional dish is 'siddu'. The outer covering of siddu is made of wheat flour dough and the stuffing is a mixture of poppy seeds, walnut, coriander, chillies and salt. Siddus are steamed and served hot.

These days, due to the unavailability of poppy seeds at reasonable prices, the filling is made with other ingredients such as chickpea, soybean or black gram. However, the authentic taste of siddu comes from the poppy seed paste.

People of Kullu Valley prepare siddus in the winter, especially during the also known as Dashain or Dasara, a major Hindu festival. In Kullu Valley, Dusshera marks the victory of good over evil and is celebrated with great joy also known as Dashain or Dasara, a major Hindu festival. When people make siddus at home, they may offer some to their neighbours. This delicious and highly nutritious snack is an emblem of hospitality and goodwill in the valley.

As siddus are a specialty of Himachal Pradesh, tourists who come to the valley often make it a point to try them. Local women can earn some income by selling this traditional Himalayan snack.

Ingredients

Yeast: 1 tbsp

Wheat flour: 400 g

Poppy seeds soaked for one hour: 200 g

Coriander: 20 g

Walnut: 10 pieces

Salt: 1 tbsp

Green chillies: 2 pieces

Coriander: 20 g

Ghee: 250-500 g

Preparation

Mix one tablespoon of yeast, 400 g of wheat flour and water to make the dough. Leave for three hours. Cover the dough with a piece of cloth so that the heat is conserved and fermentation is accelerated.

To make the stuffing, grind the poppy seeds, walnut, green chilli, coriander and salt into a paste.

Press the dough into small circles and fill around two tablespoons of paste into it. Shape it as you would a flattened dumpling.

Steam for 30 minutes and serve with ghee or chutney.

Khunchang tok

Banana blossom and bamboo pickle

Community
Tangsa from Arunachal Pradesh in India

Dish profile
Plant based; uses a special stone cooking technique; pickle/side dish

Description
This dish belongs to the Tangsa tribe of Changlang district of Arunachal Pradesh, Northeast India. It uses blossoms of the banana plant and is prepared using an elaborate and special method. It is eaten as a pickle or side dish with a meal of rice.

Ingredients

Banana blossom – 500 g

Fermented bamboo shoot – 2 tsp

Garlic – 10–15 cloves (chopped)

Green chilli – 5–6 or as desired (chopped)

Local sesame seeds (Nam) – 1 tsp

Local pepper (Changyong seeds) – 5–6

Salt to taste

3 medium-sized stones from a riverbank

Preparation

Prepare a large bowl of salt water.

Take a firm banana blossom and remove the bracts (exterior reddish sheath).

Delicate, yellow-tipped florets are seen beneath the bracts. Remove these florets and immediately soak them in salt water. This prevents discoloration and bitterness.

Peel away the remaining bracts, remove the florets and put them in the salt water.

Repeat the process until the tender bracts are visible and there are no more yellow florets.

Chop the conical soft heart of the blossom into small pieces and soak them in the same salt water.

After some time, rinse the blossom in cold water 2–3 times. Squeeze and drain excess water.

Roast local pepper and sesame seeds in a pan and set them aside.

In a bowl, put yellow florets, bamboo shoots, pepper, garlic and chilli, and mix well. Set aside.

In the meantime, heat the river stones in a traditional oven. Once they are red hot, transfer them to a saucepan along with the banana blossom mix.

Heat water in a saucepan and cover it. Then place the other saucepan (with the the hot stone–banana blossom mix) on top of it and leave for 20 minutes.

Remove the stones at the 20-minute mark but let the blossoms cook for another 15 minutes.

Garnish with sesame seeds and serve with rice.

Banana blossom
Banana blossom is a fleshy, purple-skinned flower that grows at the end of a banana fruit cluster. The heart of the blossom can be eaten raw or cooked. It is also made into dehydrated vegetables, pickles and canned food (Gogoi and Borah, 2014). It has a neutral flavour and a chunky, fibrous texture, which makes it an ideal, plant-based substitute for fish.

Jhur shyrmit

Turmeric and vegetable

Community
Khasi-bhoi from Meghalaya, India

Dish profile
Fish based; main

Description
The dish is made of raw turmeric, dried fish, ground sesame seeds, fresh bamboo shoots, and some condiments and spices. It is a rare dish only eaten in Ri Bhoi district of Meghalaya State, India, particularly within the Khasi-Bhoi community. It is prepared with locally sourced ingredients and known to have several health benefits, including anti-inflammatory effects and as a an antioxidant Hewlings and Kalman (2017).

Ingredients

Raw turmeric – 1 kg

Water – 2 litres

Bamboo shoot – 100 g

Dried fish – 50 g

Garlic – 10 cloves

Black sesame seeds – 50 gm

Green chillies – 15

Salt – 1.5 tsp

Preparation

Grind raw turmeric in a mortar and pestle.

Put the turmeric in an aluminium pot.

Add bamboo shoot, dried fish, garlic, black sesame seeds and salt.

Add boiled water, cover, and cook over medium heat in a traditional wood stove till it turns into gravy.

Serve hot with a bowl of sticky rice.

Ethnic cuisines from

MYANMAR

Photo: Khaing Khaing Htwe

Kyet Kachin chet

Kachin chicken

Community
Rawang from Kachin State in Myanmar

Dish profile
Animal based; spicy; stew

Description
Although the recipe originates in Kachin, the indigenous communities have brought it to other parts of the country, and we can see several variants of the dish. Cooked in a traditional kitchen, the chicken is fully allowed to bathe in its own juices and becomes tender and succulent. The herbs phatphel (*Persicaria odorata*), black pepper (*Piper nigrum*), garlic (*Allium sativum*) and ginger (*Zingiber officinale*) add to its peculiar taste. The skin removed at the beginning of the preparation is added later while cooking which releases its fat and flavour. The skin is then discarded before serving. The bamboo shoot adds a nice hint of sourness. The dish is mainly served with boiled rice.

Ingredients

Chicken cut into small pieces – 650 g

Pickled bamboo shoot – 2 tbsp

Garlic – 3–4 cloves

Ginger – 5 g

Black pepper – 1 tsp

Salt to taste

Red chilli seeded and chopped – 1–2

Ground coriander seed – 1 tbsp

Water – 50 ml

Peanut oil or vegetable oil – 1 tbsp

Chopped phatphel leaf – 2 tbsp

Green coriander leaf – 2 tbsp (optional)

Preparation

Remove skin from the chicken and put it aside for later use.

Coarsely pound the garlic, ginger, pepper, red chilli, phatphel leaf and coriander leaf in a pestle.

Marinate the chicken in the paste. Add salt, ground coriander and a little water. Cover and let it sit for 10 minutes.

Take a wide heavy pot with a tight-fitting lid. Remove the lid and heat the pot over a medium flame.

Add cooking oil, and a few seconds later, add the chicken skin and stir.

Add the marinated chicken, cover and cook over medium-low heat for 5 minutes.

Reduce the heat to low, add bamboo shoot, and cook for an hour, or until the chicken is thoroughly cooked.

Serve hot with a bowl of white rice.

Photo: Khaing Khaing Htwe

Sweet egg kasaw

Fermented rice pudding with eggs

Community
Communities of Kachin and Shan states, Myanmar

Dish profile
Contains dairy and egg; contains a fermented ingredient; dessert

Description
This dish is of huge cultural significance to communities of Kachin and Shan states. Over time they have modified it by using some modern processed ingredients. It is a sweet, lightly fermented rice porridge that contains milk and egg. The main ingredient is fermented rice locally called 'kasaw', and the dish has a slightly alcoholic flavour.

Ingredients

Eggs – 2

Kasaw (fermented sticky rice) rolled into small balls – 5–10 balls

Sugar – ½ tbsp

Condensed milk – 1 tbsp

Powdered milk or creamer – 1 tbsp

Ghee – 1 tsp

Water – ½ litre

Preparation

Boil water in a pan.

Add kasaw balls and cook for 5–10 minutes over a medium flame.

Add condensed milk, milk powder and ghee. Stir and let it simmer over low heat for a few minutes.

At the final stage, crack two eggs into the simmering mixture, gently without breaking the yolks. Let it simmer for a few minutes.

Let it cool for some time. The dish is ready to serve.

Preparing kasaw (fermented rice)
Wash sticky rice in cold water and steam it. After draining the water, add yeast to the rice and cover it with a cloth. Make a small hole in the cloth for ventilation. Store the rice in a warm place for 3–4 days to allow it to ferment.


SOMAR
SERGUM

Ethnic cuisines from

NEPAL

◂ Ingredients for the preparation of somar sundrup – a delicacy of the Sherpa community in Nepal | Photo: Bandana Shakya

Photo: Bandana Shakya

Wachipa

Bitter chicken rice

Community
Rai from Nepal and India

Dish profile
Animal based; snack; has a bitter, smoky flavour

Description
The dish is also known as 'Titey', which means bitter in Nepali. Its key ingredient is the cinders obtained after burning the small, soft feathers of a chicken. 'Wa' in the Rai language means 'chicken' and 'chippa' means black. A local chicken, preferably a rooster, is ideal for preparing this dish. The dish uses various body parts of the chicken, including internal organs, and is very rich in protein. It is made and served as a snack during festivals and religious events. It has a unique and unconventional bitter-sour-savoury taste.

Ingredients

Chicken organ meat (minced or cut into tiny pieces) – 500 g

Powdered burnt small feathers – 5 gm

Chicken blood – 2–3 tbsp

Ginger-garlic paste – 3 tbsp

Onion – 2 small, chopped

Fenugreek seeds – 1 tsp

Spice mix (cumin, coriander, dried chilli powder) – 2 tbsp

Rice (cooked) – 250 gm

Tomato (chopped) – (2 medium-sized)

Oil – 2 tbsp

Lemon juice – 1 tsp

Salt to taste

Preparation

Kill a rooster and burn it over flames till all its feathers are burnt. Once the tiny soft feathers attached to the skin are burnt, scrub them down into a bowl and crush it to powder.

Mix the powder with chicken blood.

Heat some oil in a wok till it starts smoking.

Add fenugreek seeds and wait till turns brown.

Add onion and sauté until light brown.

Add chicken meat and fry until brown.

Lower the heat to medium and add ginger-garlic paste and spice mix and stir.

Add tomato and salt, mix, cover and cook for 10 minutes, stirring and adding a little water at intervals to prevent the spices from getting burnt.

Once thoroughly cooked, add lemon juice, add rice and powdered burnt feathers. Cook well for 5 more minutes. Serve with a traditional beverage.

Photo: Bandana Shakya

Sishnu ko jhol

Stinging nettle soup

Community
Rai and many other communities in eastern Nepal and India

Dish profile
Plant based; stew; main

Description
Sishnu ko jhol (stinging nettle soup) is prepared with the young leaves of edible varieties of wild nettle (*Urtica dioica*). It has a subtle, spinach-like flavour and a thick texture. It is served with cooked rice and said to have good nutritional and medicinal values; in particular, it helps lower hypertension or high blood pressure.

Ingredients

Nettle leaves – 20–25 leaves (young shoots and inflorescence – cluster of flowers)

Rice – 50 g

Sliced garlic – 4 flakes

Turmeric powder – ½ tbsp

Ghee or edible vegetable oil – 1 tbsp

Salt to taste

Preparation

Make sure to use tongs or rubber gloves and avoid touching the nettles, as they can cause skin irritation.

First, clean the nettle leaves by sprinkling them with some wheat flour to remove bugs and insects. Rinse them in a colander.

Boil rice until cooked.

Add cleaned nettle leaves, turmeric powder and salt, and continue cooking until the nettle is cooked.

Stir and mash the rice-nettle mixture. The rice lends a thick, creamy texture to the soup.

Heat oil and sauté garlic flakes, and add them to the nettle soup.

Serve with steamed rice or roti.

Nettle
Nettles are very rich in nutrients, vitamins and minerals, especially iron. They are a great option for vegans. They have been used as a natural remedy in many cultures for thousands of years. They help detoxify the body, regulate hormones, act as an anti-inflammatory agent, and help improve circulation and alleviate allergies. Many varieties of nettle grow in the wild and most of them are edible, such as *Urtica dioica, Laportea terminalis*, and *Girardinia diversifolia*.

Note: Always cook nettles to destroy the stinging chemicals. Nettles are not suitable for salads. Neutralising the stinging chemicals in nettles is a must to make them safe to eat. Like spinach, fresh nettles shrink to about a quarter the amount after cooking. Avoid touching the nettles. To pick them, use rubber gloves or tongs and pinch off the tender leaves and shoots at the tip.

Photo: Bandana Shakya

Somar sundrup with reeldoh

Fermented butter milk with potato

Community
Sherpa from eastern Nepal

Dish profile
Plant based; contains dairy; stew

Description
This is a special delicacy of the Sherpa community of eastern Nepal. Its key ingredient is somar, which is made from fermented buttermilk and has a strong pungent flavour. The stew is usually eaten with a special potato dish called reeldoh.

Ingredients

Somar – 50 g

Onion medium-sized – 1–2 (chopped)

Tomato medium-sized – 1–2 (chopped)

Green chilli – 1–2 (cut into small pieces)

Jwano (carom seeds)

Turmeric

Salt

Oil – 1 tbsp

For reeldoh: boiled potato

Preparation

Heat oil in a pan.

Add carom seeds and onion and fry until golden brown.

Add somar and fry until light brown.

Add tomato, salt, turmeric and stir fry for some time.

Add water and boil to the desired consistency.

Add green chilli and serve.

For reeldoh, mash boiled potato in a stone grinder until it becomes soft and sticky.

Roll mash into small round balls and serve with somar stew.

Process of making reeldoh using a traditional stone grinder | Photo: Bandana Shakya

Photo: Bandana Shakya

Yangben sumbak

Lichen and pork curry

Community
Rai, from eastern Nepal

Dish profile
Animal based; contains lichen; requires a special preparation method; main or snack

Description
Yangben sumbak is named after one of its key ingredients, yangben, which is wild edible lichen. Three to four species of 'fruticose' lichen are chosen for this dish, which are characterised as those that have a shrubby, bushy or stringy growth structure. Collected from trees in nearby forests, yangben is a fully organic ingredient. The texture is hard, and it requires special treatment before cooking. The dish is a delicacy and often eaten with rice, millet or wheat bread. Yangben can be mixed with other ingredients to make different dishes.

Ingredients

Yangben (lichen) – 500 g

Pork blood – 500 g

Ash – 10 g

Onion – 2 medium-sized

Tomato – 4 medium-sized

Green onions

Ground cumin and coriander

Green coriander

Water – 200 ml

Oil - 2 ml

Salt

Turmeric

Preparation

Boil water in a cooking pot and put yangben in boiling water. Add two spoonfuls of ash (from a traditional woodfire stove).

Boil for 10 minutes so that the lichen absorbs water and softens (this also neutralises the acid content in lichen).

Wash the softened lichen many times in cold water and drain.

Cook pork blood thoroughly, mixing it with other ingredients for 30 minutes.

Add boiled lichen to the pork curry and cook for 10 minutes.

Serve with steamed rice and *Philinge ko chhop* (dry pickle made from ground nigerseed).

Use of yangben (lichen) in other dishes

Boiled and chopped yangben is mixed with minced pork meat and stuffed in pork intestine to make yangben sausage. For a vegetarian dish, stir fry boiled and chopped yangben with tomato, onion and red chilli. Yangben can also be added to chopped and fried pork intestines, or to pork curry.

Photo: Bandana Shakya

Kinema curry

Fermented soybean curry

Community
Most communities across Bhutan, northeast India, and Nepal in the eastern Himalaya

Dish profile
Plant based; fermented; main

Description
Kinema curry is a delicious and nutritious dish made with fermented soybeans. This protein-rich super food is also a good source of soluble fibres and vitamins. The dish has a sticky texture and is similar to Japanese natto. The dish has an acquired taste due to its powerful smell, strong flavour, and sticky, slimy texture.

Ingredients

Fermented soybean (moist or dried) – 250 g

Chopped onion – 1

Sliced tomato – 1

Red or green chillies – 2–3

Vegetable oil – 2–3 tbls

Turmeric powder – 1tsp

Fresh coriander leaves

Salt to taste – 1 tsp

Preparation

Heat oil in a pan, add chopped onion and sauté until tender and light brown.

Add kinema and fry until brown. A strong aroma might fill the kitchen at this point.

Add tomato, salt, turmeric powder and chilli.

Add a little water and cook for 5–7 minutes as the curry reaches a thick consistency.

Garnish with green coriander leaves.

Serve hot with steamed rice.

Photo: Abu Hang Samuel

Fermenting soybean the traditional way

The common word kinema is derived from ‘Kinambaa’ of the Limbu language, where ‘ki’ means fermentation and ‘nambaa’ means flavour. Thus it is assumed that kinema originated in Limbu communities of the eastern Himalayan region – Dhankuta, Ilam, Panchthar, Taplejung and Tehrathum districts of Nepal. It then spread to communities in northeastern India, Bhutan and Myanmar.

Kinema is made through a natural fermentation process. Fermented soybean is safe and healthy. It has more protein than unfermented soy, making it an even better protein substitute for vegans and vegetarians. The fermentation helps break the proteins into easily digestible amino acids.

To make kinema, local varieties of soybean are cleaned/washed and soaked overnight in water. The soybeans are then drained and boiled in clean water until cooked. Excess water is drained and the beans are slightly cracked in a large wooden mortar and pestle. The beans are then placed in a bamboo basket lined with fresh fern fronds or banana leaves and covered with a jute bag. The basket is hung over a woodfire for warmth and the soybeans are allowed to ferment for 2–3 days. In some communities, fresh firewood ash is also added during its production. Fermented soybeans can be consumed within 2–3 days in summer and within a week in winter without refrigeration. They can also be sun-dried and stored for several months.

Falgi

Traditional corn stew

Community
Sherpa from eastern Nepal

Dish profile
Animal based, stew

Description
Falgi is a nutritious stew made with corn, meat and vegetables. The corn used in this dish is prepared using a special method. Young, milky corncobs are first boiled with the husk intact. The kernels are then collected and put out to dry in the sun. The dried corn can be stored in an airtight jar for a long time.

Falgi is a popular dish among the Sherpa people, an indigenous mountain community of eastern Nepal. This warm, wholesome dish has delicate flavour that appeals to people of all generations. The recipe is simple and different vegetables can be used depending on their availability.

Ingredients

Corn (preboiled and dried) – 150 g

Bone-in meat (traditionally beef or pork but can be replaced with chicken) – 100 g

Fresh vegetables (radish, peas, potato, beans, squash, leafy greens) – 50 g each

Oil – 2 tbsp

Onion (chopped) – 50 g

Tomato (cut into small pieces) – 50 g

A few garlic leaves (chopped)

Chilli

Coriander

Carom/caraway seeds (jwano)

Preparation

Heat oil in a kasaudi (a traditional pot with a thick, rounded base).

Fry jwano seeds in the hot oil, add onions and fry until brown.

Add meat and stir until the meat starts to change colour.

Add vegetables and cook for 5 minutes.

Add tomato and turmeric powder and cook for some time.

Add the preboiled and dried corn and cook over low heat for 20 min.

Add chilli and salt.

Add water, cover and let it simmer for another 20 minutes.

Challenges to food systems in the Hindu Kush Himalaya

The food systems in the Hindu Kush Himalaya face several challenges. These include deteriorating local production systems; changing diets with an inclination towards low-nutrient, energy-dense fast foods; abandonment of farmlands due to climate-induced risks, high outmigration and labour shortages; rapid urbanisation and the resulting loss of agricultural land and degradation of water and soil; reduced supply of wild edibles and other forest foods; reduced livestock production; and inadequate food supply chains and market infrastructure (Rasul et al., 2019). These challenges are interrelated and cut across different sectors (See Figure 1)

On the environmental front, productive lands are being converted into intensive farming systems that cater to the market demand for a few major crops, resulting in a loss of agrobiodiversity. With the degradation of land and biodiversity resources, ecosystem services such as water, soil and nutrition are steadily declining. On the sociocultural front, there is a gradual loss of traditional knowledge with diminishing interest among the younger generation in diversifying agroecosystems. The narrowing of the food base has reduced food and nutrition security and given rise to health issues such as malnutrition, diabetes, and obesity. On the economic front, more and more people in mountain areas are opting out of farm-based livelihoods. Fast-moving consumer goods dominate the market, leaving little or no space for healthy food-based value chains. As traditional and local foods are neglected by the tourism industry, smallholder farmers in mountain villages hardly benefit from the tourism market and remain trapped in a cycle of poverty. In terms of governance and policy, most interventions are isolated and narrowly confined to a particular sector rather than addressing the crosscutting nature of the problem – e.g., initiatives in agriculture are incompatible with forestry interventions.

FIGURE 1

CHALLENGES AROUND FOOD AND NUTRITION WHEN ETHNIC CUISINES ARE IGNORED

HEALTH

MALNUTRITION, OBESITY, DIABETES AND OTHER HEALTH CONSEQUENCES

FOOD

NARROWED FOOD BASE AND FOOD INSECURITY

NUTRITION

UNHEALTHY DIETARY HABITS

CULTURE

LOSS OF TRADITIONAL KNOWLEDGE AND DIMINISHING INTEREST IN LOCAL FOODS

ECOSYSTEM

LOSS OF BIODIVERSITY AND ECOSYSTEM SERVICES

ENVIRONMENT

ENVIRONMENTAL DEGRADATION

LAND/WATER

HAPHAZARD LAND USE CONVERSION, WATER INSECURITY

LAND/WATER

SOIL HEALTH DEGRADATION, INTENSIVE AGRICULTURE, LOSS OF AGROBIODIVERSITY

EDUCATION

LACK OF AWARENESS ABOUT NUTRITION

TOURISM

INEQUITABLE ENGAGEMENT AND PROMOTION

INCOME

POVERTY AND INEQUITABLE ACCESS TO FOOD RESOURCES

MARKET

DOMINANCE OF FAST-MOVING CONSUMER GOODS

Why promote ethnic cuisines?

One way to holistically address the challenges facing local food systems is to promote and revitalise ethnic cuisines (Figure 2).

Ethnic and local cuisines are inseparable from local cultures and surrounding ecosystems. They are prepared using local resources and traditional knowledge passed down over generations. Often produced and consumed locally, such cuisines have a low carbon footprint. They are affordable, safe and healthy, and are based on communities' lived experiences and their close relationship with nature.

Further, ethnic cuisines can help improve the local economy. If promoted well, such cuisines could significantly enhance ecotourism and become the highlight of tourists' homestay experience. If proper market linkages are established, ethnic foods can even reach high-end hotels and restaurants, where consumers are often willing to pay extra for an authentic culinary experience. Food value chains and enterprises based on ethnic cuisines could make great use of local skills, local knowledge, and local resources.

Promoting ethnic cuisines can also raise awareness about the links between local foods, health and environment, and thus lead to positive nutritional outcomes. It would allow different actors – farming communities, private sector, academics, development practitioners, and government – to pursue a shared vision of equitable, resilient, and sustainable food systems.

FIGURE 2

DIVERSE CO-BENEFITS FROM PROMOTION OF ETHNIC CUISINES

HEALTH

HEALTHY HOUSEHOLDS AND COMMUNITIES

FOOD

DIVERSIFIED FOOD BASE WITH MIX OF GRAINS, LEGUMES, TUBERS, OILSEEDS, ANIMALS, AND INSECTS

NUTRITION

NUTRITION-ORIENTED DIETARY HABITS

CULTURE

PROSPECTS TO PROMOTE TRADITIONAL KNOWLEDGE AND CULTURAL PRACTICES

ECOSYSTEM

SUSTENANCE OF A RANGE OF ECOSYSTEM SERVICES

ENVIRONMENT

GREENER, SAFER AND HEALTHIER LOCAL ENVIRONMENT

AGRICULTURE

OPTIMAL USE OF LAND AND WATER RESOURCES

AGRICULTURE

REGENERATIVE AGRICULTURE WITH INTEGRATION OF DIVERSE AGRO BIODIVERSITY AND WILD EDIBLES

EDUCATION

BEHAVIOURAL CHANGE AND NUTRITION AWARENESS

TOURISM

ENGAGEMENT OF INDIGENOUS PEOPLE AND LOCAL COMMUNITIES IN TOURISM

INCOME

INCREASED INCOME THROUGH FOOD-BASED VALUE CHAINS

MARKET

DIVERSIFIED MARKET AND CONSUMERS FOR LOCAL FOODS

Challenges to preserving ethnic food traditions

While documenting the ethnic dishes described above, we identified several challenges in the promotion, use and sustenance of local cuisines. They are summarised below:

Changing food habits and choices	Some of the lesser known crops such as buckwheat and millet that were earlier considered as the food of the poor are now gradually becoming food for high-income people in the cities, whereas fast-moving consumer goods are making their way to even the remotest rural mountain areas. This has had drastic impacts on people's food choices and affinity for local and traditional foods and cuisines.
Ingress of modern commodities	There is a selection of readymade food and desserts in the market, which are diminishing the popularity of traditional sweets and desserts such as baktsa in Bhutan.
Micronutrient deficiencies	In Bhutan, although a small percentage of the population lives below the food poverty line, stunting and being underweight is still prevalent in over a fifth of children under five, according to the World Food Programme and in line with Bhutan's National Nutrition Strategy and Action Plan (2021–2025), which implies a lack of dietary diversity and deficiencies of micronutrients. www.moh.gov.bt/wp-content/uploads/ict-files/2021/08/National-Nutrition-Strategy-and-Action-Plan.pdf
Shift to commercial mono and modern crops	In Meghalaya State in India, the shift from subsistence to commercial mono-crop farming and from traditional to modern crops has rapidly reduced food diversity, and consequently, food and nutrition security.
Youth engagement in agriculture	Farming is considered physically challenging and economically not very lucrative. There is either regular farm labour shortage with most of the younger generation opting for non-farm livelihoods or they are opting for commercial crops such as vegetables.
Lack of intergenerational transfer of culinary knowledge	The younger members of the community are less interested in the age-old preparation techniques and recipes of their traditional dishes. They are more inclined to eating fast foods that now dominate the global market. Weak transfer of knowledge is a crucial challenge. Some dishes and cuisines require special skills for handling and processing the ingredients. For example, while picking 'Zhuyecai' in the wild, one should prevent the vegetable from getting wet as the water will accelerate its decay.

Decline in the diversity of ingredients	Since ethnic cuisines are based on locally sourced ingredients from the local production system and surrounding land uses, a decline in local production with a narrowed resource base and availability has a big impact on traditional recipes.
Disruption in production due to climate change	Sowing and harvesting related traditional practices are hampered. The challenge is further aggravated by the loss of local adaptive varieties of plants and livestock breeds.
Seasonal availability of ingredients	Certain ingredients, especially those using special species from the wild, have to be gathered at a certain time of year. For example, every year in May, with the melting of snow in the Gaoligong Mountains on the west side of the Nujiang River in western Yunnan province, China, zhuyecai begins to sprout close to the ground and needs to be picked within a month or two and eaten very quickly. Otherwise, the fast-growing zhuyecai will soon bloom and grow old, making it unpalatable.
Storage of special ingredients	Indigenous communities often lack ventilated and breathable storage areas or packaging to store and transfer delicate special ingredients; some also require some kind of traditional processing before storage.
A small volume of ingredients	Many ethnic dishes are seasonal delicacies prepared when certain ingredients are available or during festivals; therefore such dishes/ingredients may not be available in the market all year round.
Lack of scientific evidence on nutrition	Most of the traditional dishes have not been assessed for their nutritional value, which makes it very difficult to promote them as safe and nutritious food. Proper nutritional assessment would help build trust and confidence among consumers.
Lack of policy support and other enabling mechanisms	Agricultural policies still focus on intensive production of a few staples rather than on diversifying food systems, the food ecosystem and the food web; and often interventions are sector oriented and not holistic.

Research areas on ethnic cuisines

The following are examples of various scientific discourses with research topics focusing on or related to ethnic cuisines:

Toxicology	Ethnic foods are becoming popular worldwide, but their being safe is often questioned given food-borne outbreaks and contamination of the foods with pathogenic agents, toxins, undeclared allergens and hazardous chemical compounds	Fusco et al., 2015
	Less explored is the context of household food processing, particularly as related to the presence of noxious or toxic plant chemicals. For example, removing cyanogenic glucosides (a precursor to the poison cyanide) from cassava, also known as manioc – *Manihot esculenta*. Likewise, removal of saponin from quinoa by prior to consumption, by rinsing, or by scarification – a process of making small cuts on the outer surface of seeds. It then becomes easier to leach out the toxic or unwanted compounds, and make it palatable for consumption.	Padmaja, 1995; Ruiz et al., 2014
	Food contamination is a challenge that is becoming prominent in recent years with the increased diversity of contamination sources and their implications for human health. Although ethnic cuisines are considered homemade food, popularising them would require some investment in the assessment of how safe they are	Rather et al., 2017
Education	It is important to provide consistent, consumer-friendly information on nutrition to help the public make informed choices about the foods they are eating	Leung, 2010
	A practical course on food chemistry allows researchers to explore flavour, texture, nutrition, cooking methods and other traditional food chemistry topics. They explore cuisines both in the lab and in kitchens and delve into the science behind how ingredients are used in different ways by different cultures	Malapati, 2013
Experience economy	The cost has been found to be a significant factor in whether people decide to consume ethnic foods, while other major factors include authenticity and familiarity	Leung, 2010
	The degree to which the aesthetic, educational and experience value of an ethnic cuisine is linked has practical implications for restaurant operators in creating their menus, travel agencies in making tour itineraries; and governments in using ethnic cuisine for destination marketing.	Lai et al, 2019

Food neophobia	Promotional activities around local or ethnic food can help tourists and outsiders overcome their food neophobia (the fear of trying new foods) and thus strengthen the position of local/ ethnic foods in the market.	Khanna and Bhagat, 2021
Food chemistry	Research has explored the antibacterial, antifungal, antioxidant, and anti-spoilage properties of cumin – a spice well known for its strong characteristic flavour	Mandal and Mandal, 2016
Nutrition	The nutritional dimension of food in the form of average energy density was explored for some Indian foods. Using a novel instrument Calorie Answer™, it was found that the average energy value of Indian foods are significantly higher than that of Chinese and Malay foods. It was also found that information on the energy density of foods can help consumers make appropriate food choices.	Quek et al., 2019
Microbiology	Culturable and non-culturable microorganisms naturally ferment the majority of global fermented foods and beverages. Traditional food fermentation represents an extremely valuable cultural heritage in most regions. Biologically, fermentation has great microbiome genetic potential.	Tamang et al, 2016; Thapa and Tamang, 2020
Genomics	Ten edible mushrooms from Meghalaya State in India – *Gomphus floccosus, Lactarius deliciosus, Lactarius volemus, Cantharellus cibarius, Tricholoma viridiolivaceum, Inocybe aff. sphaerospora, Laccaria vinaceoavellanea, Albatrellus ellisii, Ramaria maculatipes* and *Clavulina cristata* – were identified based on molecular analysis. Wild edible mushrooms are used in the cuisines of many ethnic communities in the Himalaya because of their favourable organoleptic characteristics and health benefits.	Khaund and Joshi, 2014
Authenticity	Modification of traditional foods solely for the benefit of tourists and tourism businesses can affect the integrity of ethnic cuisines and cultural identity.	Nair et al., 2020

Action tracks of the UN Food Systems Summit

ACTION TRACK #1

ENSURE ACCESS TO SAFE AND NUTRITIOUS FOOD FOR ALL

Ethnic and traditional cuisines, with their simple preparation and ingredients sourced from farm and forest, are a good source of nutrition

ACTION TRACK #2

SHIFT TO SUSTAINABLE CONSUMPTION PATTERNS

Awareness of the ingredients and their health benefits triggers sustainable consumption of fresh and unadulterated food

ACTION TRACK #3

BOOST NATURE-POSITIVE PRODUCTION

The preparation of ethnic cuisines encourages sustainable production and management of agrobiodiversity and agroecosystems and preservation of other natural food sources

ACTION TRACK #4

ADVANCE EQUITABLE LIVELIHOODS

Ethnic cuisines open up new prospects for nutrition-oriented food-based value chains and strengthen ecotourism infrastructure

ACTION TRACK #5

BUILD RESILIENCE TO VULNERABILITIES, SHOCKS AND STRESS

Preservation of ethnic cuisines reinforces culture, heritage and traditional knowledge, continually engaging communities to create resilient food systems

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Appendix I: Template for cuisine information

The following template was used to collect information on the ethnic cuisines. The aim was to capture the many ways local foods are prepared and consumed, highlight the nutritional value of different categories of food, the extent to which cultivated and uncultivated resources are used as ingredients, and the thinking around food-based value chains.

1. **Geographical location**
   Provide the name and a brief description of the locality from where the cuisine originated (100 words)

2. **Geographic coordinates**
   Provide the latitude/longitude information for the locality

3. **Community and its feature**
   Provide the name and important features of the community to which cuisine belongs (100 words)

4. **Name of the cuisine**
   Provide the local name for the cuisine (The cuisine can comprise one dish or a set of dishes)

5. **Cuisine type**
   Please choose the category of cuisines to which the identified cuisine best fits into
   * One cuisine can belong to more than one category

   - ☐ **Culture:** linked to festivals and age-old customs and traditions of a given community; depicts socio-cultural value
   - ☐ **Lesser knowns:** uses unique and underutilised plants and animals as ingredients and highlights their potential
   - ☐ **Medicinal:** with special medicinal and healing properties, prepared specially to cure certain disease or ailment
   - ☐ **Survival:** borne out of scarcity of ingredients in the lean period and uses non-conventional agro-resources
   - ☐ **Aesthetic/artistic:** requiring special preparation and cooking techniques and presentation
   - ☐ **Transformed:** has been modified through infusion of other ingredients and secondary farm commodities over time

6. **Cuisine description**
   Describe the cuisine explaining its feature, values, special properties also justifying the type of cuisine category selected (150 words)

7. **Food category**
   Choose a food category that the cuisine best fits into:

   - ☐ Appetizer
   - ☐ Stew
   - ☐ Main
   - ☐ Dessert
   - ☐ Beverage
   - ☐ Pickles

8. **Ingredients and quantity**
   List all ingredients and define quantity using standard measurement units (grams and liters). Please indicate both local and English names of the ingredient)

   For example:
   Tanam (Sesame seeds): 25 grams (rather than 1 cup or ½ cup)
   Marsi (local glutinous rice): 500 grams
   Mustard oil: 10 ml

9. **Indicate the source of ingredients**
   You can choose multiple options

   - ☐ Home grown in kitchen gardens
   - ☐ Sourced from own farm and nearby forets
   - ☐ Sourced from local marked
   - ☐ Procured from outside

10. **Indicate the type of production systems that the community maintains**
    You can choose multiple options

    ☐ Certified organic farm
    ☐ Integrated mixed farming with limited external inputs
    ☐ High input intensive farmalands
    ☐ Shifting cultivation plots and fallows
    ☐ Agri-horti-silvi
    ☐ Agri-pastoral

11. **Preparation**
    Describe the steps of preparation of cuisines in bullet points. Highlight special use of traditional utensils and processes.

12. **Food etiquette (change trend)**
    Describe how food habits are changing over time or how they are beng maintained over the generations (100 words)

13. **Nutrition value per serving**
    Mention if caloric value of the cuisine is known, otherwise use "nutrition analysis not done'

14. **Scale of demand for the cuisine**
    You can choose multiple options

    ☐ Household
    ☐ Local
    ☐ National
    ☐ Regional and global

15. **Challenges in maintaining the traditional cuisine**
    Please describe challenges (150 words). The guiding points are as follows:

    ☐ Sourcing of ingredients and volumen (availability)
    ☐ Interest towards cuisine and transfer of knowledge (continuity)
    ☐ Use and promotion (importance)
    ☐ Support and investment (incentive)

16. **Prospective monetary value of the cuisine**
    Looking at the ingredients and the nutritional value, provide a prospective cost of the cuisine in the market

17. **Link to economy**
    You can choose multiple options

    ☐ Already promoted through a star otel as special menu and proceeds of sale goes to the ethnic community
    ☐ Promoted locally through food banks and food cooperatives
    ☐ Promoted through ecotourism-included in menus at local restaurants and homestays
    ☐ Promoted through local food festivals and community events
    ☐ Not linked to food value chain

18. **Photographs**
    Provide high-resolution photographs of community, cuisine, presentations, special ingredients, and any interesting process of preparation

19. **Country team (contributors/authors)**
    List all institutions and individuals involved in organising and collating the information on each cuisine

Appendix II: List of ingredients and materials used

Ingredients	Scientific name	Remark	Parts eaten
Aralia young shoot (Cilongbao)	*Aralia chinensis*	Main ingredient	Young shoot
Ash for detoxification	-	Detoxification	-
Black mustard seed	*Brassica nigra*	Spices	Seed
Bamboo shoot	*Bambusa vulgaris, Phyllostachys edulis* among many	Main ingredient	Young shoot
Bamboo tube and leaf	*Cephalostachyum pergracile*	Utensil and plugs	-
Banana blossom	*Musa* sp. (*Musaceae*)	Main ingredient	Flowers and fruits
Basil	*Ocimum basilicum*	Green leafy herb	
Beans	*Phaseolus vulgaris*	vegetable	legume
Black mustard oil	*Brassica nigra*	Oil	Seed
Black pepper	*Piper nigrum* (Piperaceae)	Spices	Seeds
Black Sesame seed	*Sesamum radiatum* (Pedaliaceae)	Spices	Seeds
Bone meat (pork, beef)	-	Broth	Meat
Buckwheat	*Fagopyrum esculentu*m (Polygonanceae)	Base ingredient	Seed flour
Bunching onion	*Allium fistulosum* (Liliaceae)	Vegetables	Flowering shoot
Butter	-	Dairy produce	-
Butter milk	-	Dairy produce	-
Capsicum	*Capsicum* sp. (Solanaceae)	Vegetable	Fruit
Cashew nut	*Anacardium occidentale* (Anacardiaceae)	Garnish and spices	Seed
Cheese		Dairy produce	-
Chicken	*Gallus gallus domesticus*	Base ingredient	Meat
Chicken organ meat	-	Key ingredient	Meat
Chicken titey	*Gallus gallus* sp. (local breed)	Special flavouring agent	Burnt feather
Chinese black cardamom (Tsaguo)	*Ammomum Tsao-ko*	Spices	Fruit
Cicadas	*Cicadoidea* sp.	Whole insect	
Condensed milk	-	Dairy (processed)	Milk

Corn	*Zea mays*	Base ingredient	Seed
Chonglou	*Rhizoma paridis*	Herb	Roots and rhizome
Coriander leaf	*Coriandrum sativum*	Garnish and spices	Leaf
Coriander seed	*Coriandrum sativum*	Spices	Seed
Cucumber	*Cucumis sativus*	Vegetable	Fruit
Cumin	*Cuminum cyminum*	Spices	Seeds
Dried Fish	*Schizothorax griseus* *Schizothorax myzostomus* *Schizothorax leukus* *Schizothorax heteri*	Fish	-
Dulong cattle (Mithun)	*Bos frontalis*	Meat	Meat
Dulong cattle meat	*Bos frontalis*	Meat	Tender meat
Dulong chicken	*Gallus gallus* sp. *Endemic breed*	Meat	Meat
Eggs	-	Egg	-
Fenugreek	*Trigonella foenum-graecum*	Spices	Seed
Fermented bamboo shoot	*Dendrocalamus* sp. (Poaceae)	Fermented food	Young and tender shoot
Fermented paneer	-	Fermented food	Cheese
Fish	*Tilapia* sp		
Kinema (fermented soyabean)	*Glycine max*	Fermented food	Seed
Kasaw (fermented sticky rice)	*Oryza sativa*	Fermented food	Seed
Fermented tea	*Camelia sinensis*	Fermented food	Leaves
Garlic	*Allium sativum* (Amaryllidaceae)	Herbaceous plant	Cloves and green leaves
Ghee	-	Dairy	Oil
Ginger	*Zingiber officinale* (Zingiberaceae)	Herbaceous perennial plant	Rhizome
Green chilli	*Capsicum annuum*	Vegetable and spices	Fruit

Green onion	*Allium sativum*	Vegetable	Leaves
Hanyir leaves	*Houttuynia cordata*	Vegetable and spices	
Hot Mint	*Persicaria odorata*	Vegetable and spices	Leaves
Juwano	*Trachyspermum ammi*	Spices	Seed
Lacquer	*Toxicodendron vernicifluum*	Edible oil	Oil cake
Lemon	*Citrus limon*	Garnish	Fruit
Lemon grass	*Cymbopogan* sp	Spices, flavouring	Leaf
Yangben	*Fructicose group of lichen*	Main ingredient	Whole
Local sesame (red)	*Sesamum radiatum*	Spices	Seed
Long coriander	*Eryngium foetidum*	Spices	Leaves
Long bean	*Vigna* sp.	Vegetable	Legume
Milk	-	Dairy	-
Mixed grounded masala	-	Spices	-
Mustard leaves	*Brassica campestris*	Vegetable	Leaves
Mustard oil	*Brassica campestris*	Oil	Seed
Mushroom	*Termitornyces albuminosus*	Vegetable	Fruiting body
Okra	*Abelmoschus esculentus*	Vegetable	Fruit
Onion (corm)	*Allium cepa*	Vegetable	Corm and leaf
Oyik (Ga)	*Pauzolzia Hirta* (Urticaceae)	Vegetable	Rhizomes and leaves
Packing leaves	*Phrynium pubinerve*	Plant for packing	Leaves
Pangtsi	*Simplocus paniculata*	Edible oil	Seed
Peanut	*Arachis hypogaea*	garnish and spices	Seed
Peanut oil	*Arachis hypogaea*	Edible oil	Seed
Phatphel	*Persicaria odorata* (Polygonaceae)	Green leafy herb	Green leaves
Pig	*Sus* sp.	Meat	Blood and stomach
Pork ham	*Sus* sp.	Meat	Ham
Potato	*Solanum tuberosum*	Vegetable	Tuber
Powdered milk	-	Dairy (processed)	-
Pumpkin	*Cucurbita* sp.		

Radish	*Rhaphanus sativus*	Vegetable	Tuber
Red dried chilli	*Capsicum annuum*	Vegetable and spice	Fruit
Red rice	*Oryza* sp.	Base ingredient	Grain
White rice	*Oryza* sp.	Base ingredient	Grain
Salt	-	Add on	-
Sichuan pepper	*Zanthoxylum indicum*	Spices	seed and leaves
Sesame oil	*Sesamum indicum*	Edible oil	Seed
Sisnu	*Urtica dioica*	main ingredient	Leaves
Soya sauce	*Glycine max*	Add on	Sauce
Spinach leaves	*Spinacia oleracea*	vegetable	Leaves
Squash (Chayote)	*Sechium edule*	Vegetable	Entire plant
Stone	-	Cooking	-
Star Ainse	*Illicium verum*	Spices	Fruit
Sweet potato	*Ipomoea batatas*	Vegetable	Tuber
Sugar	-	Add on	-
Tassa or Tassey (Pu)	*Metroxylon sagu* (Arecaceae)	Base ingredient	Starch from stem pith
Taro	*Colocasia esculenta*	Vegetable	Tuber
Tomato	*Lycopersicum esculentum*	Vegetable	Fruit
Turmeric	*Curcuma longa*	Spices	Rhizome
Turnips	*Brassica rapa subsp*. rapa	Vegetables	Tuber and leaves
Vinegar	-	Add on	-
Walnut	*Juglans regia*	Garnish and spices	Seed
Wheat	*Triticum aestivum*	Base ingredient	Flour
Wild pepper (Bhutan)	-	Spices	Fruit
Wild shitake mushroom	*Lentinula edodes*	Mushroom	Fruiting body
Wine (cooking)	-	Simmering substrate	Alcohol
Yeast	*Saccharomyces cerevisiae*	Fermenter	-
Yogurt (curd)	-	Dairy	-
Zemse	*Amaranthus* sp.	Base ingredient	Flour
Zhuyecai	*Maianthemum oleraceum*	Alpine wild plant	Young shoot and leaf

About ICIMOD

The Hindu Kush Himalaya region stretches 3,500km across Asia, spanning eight countries – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. Encompassing high-altitude mountain ranges, mid-hills and plains, the zone is vital for the food, water and energy security of up to two billion people and is a habitat for countless irreplaceable species. It is also acutely fragile – and absolutely frontline to the impacts of the triple planetary crisis of climate change, pollution and biodiversity loss. The International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, Nepal, is an international organisation established in 1983, that is working to make this critical region greener, more inclusive and climate resilient.

REGIONAL MEMBER COUNTRIES

◂ A combo Khasi meal with the essence of local resources and ingredients found in Khweng village, Meghalaya | Photo: Banteilang Syiem/ NESFAS

This book seeks to capture the essence of ethnic cuisines and their contribution to sustainable mountain food systems. Ethnic cuisines are prepared from diverse ingredients sourced from a wide range of ecosystems using traditional knowledge to combine the ingredients in a variety of ways.

They play an important role in agrobiodiversity management, help promote both biodiversity and culture, and if marketed well, can improve the livelihoods of rural farmers. The book is a tribute to the rich culinary knowledge of indigenous communities of the eastern Himalaya, and to all those who recognise the value of traditional foods, food cultures, and the environment. We hope that this publication will raise awareness among the public and policymakers about ethnic cuisines and the importance of consuming, preserving, and promoting them.

NORWEGIAN MINISTRY OF FOREIGN AFFAIRS

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ICIMOD and its Regional Member Countries gratefully acknowledge the generous support of Austria, Norway, Sweden and Switzerland for core and programme funding, and Australia, Canada's International Development Research Centre, the European Union, Finland, Germany, the United Kingdom, the United States of America, and the World Bank for project funding.

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