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# Chapter 2 Expansion of the Himalayan Herbal Market: Networks between Tibetan Medicine, the Economy, and Environmentalism

## Kei NAGAOKA

# 1. Introduction

This study explores the expanding marketization of Himalayan herbs associated with Tibetan medicine. From the perspective of medical anthropology, I have studied the institutionalization of Tibetan medicine and bodily experiences of illness in India for several years [Nagaoka, 2021]. Additionally, I have recently started working on my new research project focusing on the marketization of Himalayan medicinal herbs as the primary ingredients in Tibetan medicine. The term *marketization* is used here to refer to the formation of an economic network through the commercialization of goods and their distribution over a wide area.

Tibetan medicine (*bömen*) [*bod sman*]<sup>1</sup> refers to medical knowledge and practices historically used by Tibetan Buddhist communities in the Tibetan and Himalayan regions and Central Asian regions. Tibetan medicine, like Traditional Chinese Medicine (TCM) and Ayurveda, is a codified system that considers illness to be an imbalance of vital elements and treats it by restoring balance using various medicinal

<sup>1</sup> Tibetan terms are italicized and phonetically transcribed, followed by a transliteration using the standard Wylie system on the first use.

herbs and other ingredients. The basic theory of this medicinal system is described in the authoritative medical text *Gyushi* [*rgyud bzhi*], or the *Four Tantras*, codified in the twelfth century and in commentaries on it written in later periods. Medical practitioners are called *amchi* [*am chi*] or *menpa* [*sman pa*] in Tibetan, and beginning in the seventeenth century their medical training was conducted at Chagpori Medical College in Lhasa and various monasteries under the patronage of the Dalai Lama's regime.



Fig. 1. Amchi (right side) and patient

Source: Image of e-book cover in *Sowa Rigpa Journal #3: The Art of Diagnosis* published by International Academy for Traditional Tibetan Medicine, 2020. (It is a partially processed painting from the seventeenth century in Tibet.)

In the late twentieth century, Tibetan medicine became known to the Western world after the Chinese annexation of Tibetan regions in the 1950s, when many Tibetan refugees were exiled to India and Nepal. Western travelers, journalists, and researchers have witnessed the

medical practices at the Tibetan refugee settlements in India and Nepal and published books and articles about them since the 1980s. This knowledge and practice, which until then had been referred to simply as "medicine" (*men*) [*sman*] among locals in their everyday lives, was described as "Tibetan medicine" or "*bömen*." Having developed a new nationalist sensibility, Tibetan refugees have come to emphasize the expertise of medical knowledge based on their culture in their diasporic situation. However, different terms — such as "Himalayan medicine," "traditional Bhutanese medicine," and "*Amchi* medicine" — are also used in northwestern India, Nepal, and Bhutan. These terms are deeply related to the political position and contexts regarding the cultural ownership of knowledge and practices in regions and countries.

Recently, a growing number of practitioners and institutions adopted the broader term "Sowa Rigpa" (*sowa rigpa*) [*gso ba rig pa*] translated as "science of healing." *Sowa* means to enhance, feed, nourish, strengthen, heal, or cure, while *rigpa* refers to a field of knowledge, science, or academic or monastic discipline [Craig & Gerke 2016: 94–95]. Sowa Rigpa is viewed as a unifying term to give the practitioners in Tibetan and Himalayan regions a sense of belonging in a transnational identity and to retain their diverse and more localized subjectivities. Furthermore, after India recognized Sowa Rigpa as an official name of a medical system in 2010, this term brought a sense of legitimacy and authority internationally. Although Tibetan and Himalayan practitioners still debate this term, Sowa Rigpa has a brand value as the name of a globally circulating medical system [Craig and Gerke 2016].

## 2. Tibetan Medicine in the Himalayan Herbal Market

Himalayan medicinal herbs, one of the unique components of

Tibetan medicine, are wild alpine plants that grow in cold habitats at altitudes of 3,000 meters or higher in the Himalayas. Well-known varieties include Himalayan blue poppies (*Meconopsis* species) and Himalayan rhododendrons (*Rhododendron* species), which include the national flowers of Bhutan (*Meconopsis horridula*) and Nepal (*Rhododendron arboretum*), respectively. Historically, these plants have been marketized and are closely linked to the institutionalization of Tibetan medicine.



Fig. 2. Himalayan blue poppy Source: [Tomiyama 2020: 69]



Fig. 3. Himalayan rhododendron Source: [Yoshida 2005: 317]

Previous studies on Tibetan medicine criticize the dichotomous perspective of "traditional" versus "modern" and discuss the institutionalization, standardization, and industrialization of Tibetan medicine in contemporary contexts [e.g., Pordié ed. 2008; Adams, Schrempf, and Craig eds. 2010]. These studies focused on the manufacturing of medicines as a process of pharmaceuticalization from

individual decoctions to mass-produced pills, as well as their connection to Buddhist rituals and identity politics of Tibetanness [Kloos 2017a; Adams, Schrempf, and Craig eds. 2010; Madhavan 2017]. In addition, there is growing research on the relationship between Himalayan medicinal herbs and the national or global markets [Blaikie 2013; Kloos 2017b; Saxer 2009, 2013].

However, these studies have yet to adequately examine the broader historical processes of the marketization of Himalayan herbs and their interaction with Tibetan medicine. In contrast with these previous studies, my study argues that the Himalayan herbal market expanded not in a monolithic and linear process of "modernization" but through multiple networks and practices entangled with Tibetan medicine, the economy, and environmentalism. Specifically, the following questions are examined in this article: Why did the marketization of Himalayan plants occur? How was this marketization linked to Tibetan medicine? What impact does Western environmentalism have on this market?

This study was based on research conducted intermittently between 2010 and 2016 at Tawang, an eastern Himalayan border region in northeastern India, and at two Tibetan medical institutions: the Central Institute of Higher Tibetan Studies (CIHTS), formerly called the Central University of Tibetan Studies (CUTS), in Varanasi, and Men-Tsee-Khang (MTK) in Dharamsala, both in northern India. Regarding the structure of this article, I explain the emergence of Himalayan plant marketization during the colonial period. I then discuss the expanding marketization by focusing on Tibetan medicine and the practice of collecting herbs in Tawang. Finally, I examine the relationship between the marketization of Himalayan herbs, Tibetan medicine, and environmentalism.

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#### Fig. 4. Map of research area

Source: It is made by the author. The upper photo was taken by the author in 2015 and the lower one was used from the website of *Tibetan Journal* http://www.tibetanjournal.com/tag/sowa-rigpa/ (last access date: 2022/09/02)

# 3. Early Marketization of Himalayan Plants in Horticulture

Alpine plants have been commonly used in treatments and rituals by Himalayan villagers for themselves and their livestock. Although the plants were locally distributed in the Trans-Himalayan trade between Tibet and India, the marketization of Himalayan plants did not occur on a large scale until India's colonization.

Since the sixteenth and seventeenth centuries, European countries began experiencing a horticultural boom, with botanical gardens collecting and growing exotic plants extracted from their colonies not only for food and medicinal purposes but also ornamentally. In the early nineteenth century, British officials and explorers visited India and Nepal and began surveying and collecting Himalayan plant specimens. The Royal Botanic Gardens, Kew and other botanical gardens in the

United Kingdom employed plant hunters to survey the Himalayan flora, who collected a variety of plants and sent them to the botanical garden in Kolkata, India, which was under British control [Shirahata 2005].

For example, Joseph Dalton Hooker (1817–1911), a botanist and plant hunter who later became Director of the Royal Botanic Gardens, Kew traveled across India and the Himalayas between 1847 and 1851, collecting specimens and seeds of 25 new Rhododendron species in the kingdom of Sikkim in the eastern Himalayas [Edwards 2022]. These evergreen rhododendrons, with their bright red flowers, became wildly popular with British gardeners beginning in the 1850s and later in the United States. Numerous cultivars were created from the plants Hooker had introduced and distributed commercially in the nursery trade.

Furthermore, in 1924, a British plant hunter named Francis (Frank) Kingdon-Ward (1885–1958) located one of the rare blue poppies (*Meconopsis baileyi*, later reclassified as *Meconopsis betonicifolia*) during his botanical expedition in eastern Tibet and successfully brought a large quantity of its seeds to England [Kingdon-Ward 1960]. In 1926, blue poppy flowers bloomed from the seeds he collected and were shown to the public for the first time at the Royal Horticultural Society's Chelsea Flower Show in London. This became a sensation in the Western horticultural world because blue poppies had never been seen in Europe. Although botanists had been studying blue poppies through the specimen since the nineteenth century, public interest in them as exotic and rare horticultural plants was sparked.

With the Himalayan plant boom in horticulture through the introduction and cultivation of colorful alpine varieties such as rhododendrons and blue poppies, Himalayan plants began being marketized through botanical gardens, plant hunters, nurseries, and gardening enthusiasts in Western countries. This marketization began in the form of horticultural plants in Europe and was closely related to the history of colonial rule. Botanical gardens were centers for the marketization of exotic plants, establishing a global plant network connecting sovereign and colonial countries under the politics and economics of colonial rule [Kawashima 1999].



Fig. 5. Chelsea Flower Show in 1926-1927 Source: Website of *Gardens Illustrated* https://www.gardensillustrated.com/chelsea/history-of-chelsea-flowershow/ (last access date: 2022/09/02)

# 4. Marketization of Herbs as Tibetan Medicines

In the second half of the twentieth century, Himalayan plants began to be linked to the institutionalization of Tibetan medicine. After the WHO proposed the concept of primary healthcare and recommended incorporating traditional medicine into national health policies, different traditional medicine such as Ayurveda, Unani, Yoga, and Siddha were institutionalized and protected by the Indian governmen. Regarding Tibetan medicine or Sowa Rigpa, four medical institutions were established by Tibetan refugees between the 1960s and 1990s. These institutions began collecting various medicinal plants in the Himalayan



mountains of India to produce manufactured medicinal pills.

Fig. 6. Manufacturing Tibetan medicines in India Source: Website of Men-Tsee-Khang https://www.men-tsee-khang.org/index2.htm (last access date: 2022/09/02)

As the number of branch clinics of Tibetan medical institutions increased throughout India, the medicines were used not only by Tibetan refugees but also by regular citizens, including Himalayan Buddhists and the Indian middle class (non-Buddhists) who took great interest in herbal medicines and health. For the mass production of medicinal pills, Tibetan medical institutions dispatched *amchi* to a broad area from northern to northeastern India to collect alpine plants that had not yet been marketed. In addition to the horticultural network, alpine plants were manufactured into Tibetan medicines, expanding the distribution throughout India.

After their legalization in 2010, Tibetan medicinal pills became subject to India's Drugs and Cosmetics Act of 1940 and patent laws. These laws facilitated their official entry into the global pharmaceutical market, and the marketization of Himalayan herbs as medicines and healthcare products, such as teas and cosmetics, subsequently expanded [Kloos 2017b]. Presently, the Indian government and Tibetan medical institutions are working on the Traditional Knowledge Digital Library (TKDL) project, which aims to prevent biopiracy by foreign companies and digitize knowledge of Himalayan herbs.

In the meantime, China has also legalized Tibetan medicine as part of its national traditional medicine, and many institutions and pharmaceutical companies based on Tibetan medicine have emerged [Saxer 2013]. Through the pharmaceuticalization of Tibetan medicine for the global market in both India and China, patent applications and clinical research are on the rise [Madhavan 2017]. Thus, the marketization of Himalayan herbs in the form of Tibetan medicines has been gradually expanding from domestic distribution to the global market since the late 2000s.

## 5. The Practice of Collecting Herbs in Tawang

Through the manufacturing of Tibetan medicines, Himalayan locals began to be more closely connected to the marketization of these plants, although they had been indirectly related to horticultural marketization in their work as guides or laborers for plant hunters during colonial times. Tibetan medical institutions must collect certain quantities of Himalayan herbs from the mountains every year to manufacture the various medicines in their factories, which requires the cooperation of the locals.

In the case of Tawang, Himalayan herbs in forests and high mountain regions have generally been used in folk medicine for treating humans and livestock, and in rituals to purify the land for peaceful coexistence with local deities and spirits. More specifically, locals in this area make use of fragrant plants such as the Himalayan rhododendron (*Rhododendron arboreum*), the Himalayan fir (*Abies spectabilis*), and black juniper (*Juniperus indica*). These plants are burned outside the house every morning for purification purposes. Additionally, when

plowing fields or building houses, these plants are burned as a way of asking land deities for permission to work on the surrounding land.



Himalayan rhododendron

Himalayan fir

Black juniper

Fig. 7. Fragrant plants collected for purification rituals in Tawang Source: The photos were taken by the author in 2014

Tawang residents began forming a relationship with MTK, the Tibetan medical institution, by collecting medicinal herbs in the 1980s. At the time of my research, Himalayan blue poppies, Himalayan gentians (*Gentiana* species), and other herbs were being collected by Thupten (a Monpa man in his 40s and *amchi* at the MTK branch clinic) and 20 local nuns every year. These plants were subsequently sun-dried and processed by local pastoralists who camped on the mountain during the summers. Thupten then sent them to MTK's pharmaceutical factory in Dharamsala.

Local cooperation is essential for the *amchi*'s work at Tibetan medical institutions. The 20 local nuns perform this duty as a social service, and as such they do not accept monetary compensation as a token of his appreciation. Thupten provides each of them with a packet of a dozen expensive medicines called *rinchen rilb* [*rin chen rilbu*] or "precious pills" containing various plants, minerals, and precious jewels that is blessed by the Dalai Lama in a ritual, in addition to free meals during their work of collecting herbs. Furthermore, Thupten

pays local pastoralists with money as a reward, and he also exchanges homemade wine fermented with barley, finger millet, and vegetables for the pastoralists' homemade cheese and butter based on the traditional barter system in Tawang. Thus, locals play an important role in the expanding marketization of Himalayan herbs as medicines through the contemporary institutionalization network of Tibetan medicine.



Fig. 8. *Amchi* (right side) diagnosing a patient at an MTK branch clinic in Tawang Source: The photo was taken by the author in 2011

# 6. Himalayan Herbs as Biological Resources

In addition to the horticultural and medicinal networks, the Himalayan herbal market encountered Western environmentalism in the late twentieth century. Environmental activists have emphasized that Himalayan herbs are endangered biological resources and have started to intervene in the market networks for horticultural and medicinal products to prevent overexploitation. International environmental groups such as the World Wildlife Fund (WWF) and

The Mountain Institute (TMI) have begun projects for cultivating medicinal and aromatic Himalayan herbs to transform markets and protect the environment.

The Western framework for environmental thought is said to have undergone a major shift in the late 1960s and 1970s, from one of nature conservation for human interests to environmentalism as a broad philosophy, involving actions and policies that show concern for protecting and preserving the natural environment for its own sake.<sup>2</sup> After the Himalayan region was named a biodiversity hotspot, Western environmentalists grew increasingly interested in the region's flora and fauna in the 1980s. The term *biodiversity* hotspot was proposed in 1988 by Norman Myers, a British environmental scientist, to designate areas with over 1,500 endemic plant species, but where over 70% of the original habitat had been lost and therefore where conservation was of high importance [Myers et al. 2000]. Conservation International (CI) selected 34 hotspots worldwide and emphasized the need for conservation efforts. International environmental groups began surveying Himalayan plants as significant biological resources requiring protection, designating many of them as endangered [Singh et al. 2021].

Given this backdrop, Tibetan medical institutions could not ignore the new environmentalist view of Himalayan herbs. By taking it into account, they aimed to show the global value and reliability of their manufactured pills based on Tibetan medicine in the health and

<sup>2</sup> Kay Milton [1993] pointed out that environmentalism is essentially a quest for a viable future pursued through the implication of culturally defined responsibilities. According to her, these responsibilities arise from the recognition that "the environment," as the complex of natural phenomena which we share with the universe and on which we depend, is affected by human activity and that controlling the activity will secure a viable future [Milton 1993: 2–3].

pharmaceutical markets. These institutions started projects to cultivate Himalayan herbs in the late 2000s in the Indian regions of Tawang and Ladakh.<sup>3</sup>



Fig. 9. Mountain forest around villages in Tawang Source: The photo was taken by the author in 2015

# 7. Cultivating Herbs for Creating a Sustainable Market

Projects to cultivate Himalayan wild herbs have created a network between the Indian government, Tibetan medical institutions, and Tawang locals. CIHTS started a project entitled "Establishment and Development of Medical Herbal Garden (EDMG), Tawang" in 2008 by means of a government grant, with the following objectives: (1) to conserve endangered species by establishing techniques for cultivating medicinal plants, (2) to standardize the quality of herbal medicines

<sup>3</sup> Ladakh is a western Himalayan border area located in northwestern India.

to ensure their stable supply, regardless of climate change, and (3) to create a mechanism for villagers to earn cash incomes through the cultivation of medicinal plants, thereby contributing to the social and economic development of the northeastern region of India, which is considered underdeveloped. In other words, it is a long-term project involving measures for coping with environmental changes, marketizing medicines, and protecting local livelihoods, such as ensuring a stable supply of medicines and returning profits to the locals.

CIHTS's *amchi* researched plants in Tawang and hired a village resident who was knowledgeable about local medicinal herbs. After building herbal gardens at three different altitudes, they began cultivating Himalayan medicinal plants and comparing their growth. They cultivated 15 species in 2010, which increased to 131 in 2014. These plants were selected based on their prices in the Chinese herbal market, as alpine plants used in Tibetan medicine fetch high prices in China. At the time of my research, this cultivation project was still in the preliminary stage, consisting of the *amchi* and only four locally employed people. Teachers and students also participated in the project to experiment with planting herbs at their schools.



Fig. 10. Cultivation project of Tibetan medicinal herbs in Tawang Source: The photos were taken by the author in 2014

Currently, the Himalayan region is an important experimental ground for testing the compatibility between environmental protection and the economy for the government, Tibetan medical institutions, and environmental activists through herb cultivation projects. For residents of Tawang and other Himalayan areas, this practice of cultivating wild herbs was a different experience compared to the environmental movement in earlier decades. Previous environmental movements, such as the anti-dam movement, involved people fighting the government and companies to prevent them from depriving them of their livelihoods. However, in the case of the Himalayan herb cultivation project, they are required to participate and collaborate through a project managed by the government and institutions. Unlike agricultural development projects for cultivating cash crops, the basic framework for cultivating wild Himalayan herbs remains unclear. Negotiations between locals, the government, and institutions are ongoing in order to establish sustainable Himalayan herbal markets.

#### 8. Conclusion

Multiple networks for Himalayan herbs have expanded during their historical process of marketization. The herbs first attracted interest as rare horticultural plants not found in Europe, which expanded the horticultural network to include botanical gardens, plant hunters, nurseries, and gardening enthusiasts in Western countries during colonial times. Since the late twentieth century, Himalayan herbs have become important ingredients in medicinal pills manufactured by Tibetan medical institutions, which formed a network of medicines between professional institutions, medical practitioners, and locals. Furthermore, Himalayan herbs were defined as endangered biological resources from the perspective of biodiversity hotspots, leading to the formation of a

network for wild herb cultivation involving environmental activists, the government, Tibetan medical institutions, and locals. The contemporary transformation of Tibetan medicine is closely related to the historical marketization process of Himalayan herbs and their multiple networks. These broad networks connect with various actors, including not only professionals but also laypeople engaging with these Himalayan herbs as horticultural plants, medicines, and biological resources. The expansion of these networks has created a transnational negotiation between Tibetan medicine, the economy, and environmentalism in the Himalayas.

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