
Chapter 6

The Benefits to Agrobiodiversity of the Wide Range of Food Cultures in Nepal

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Introduction

Contemporary cultural milieus in Nepal (religion, caste, ethnicity, gender, and associated value orientations) are social realities and their relationships to agrobiodiversity do not pose any *metatheoretical* problems. But some gaps in knowledge need to be addressed in order to understand agrobiodiversity management in Nepal's culturally complex society in which diverse groups of people, each group with its own social world, views, values, norms, and mores, are found scattered throughout the different agro-ecological zones. Analysis of agricultural and biodiversity issues in the Nepali context can be useful if it also addresses caste-related sociocultural phenomena.

The caste system in Nepal is categorised into four *Varnas*¹ and thirty-six castes (*Char Varna, Chhattis Jat*). In Nepal the state has played an important role in systematic hierarchisation by rearranging the classical strata into *Tagadhari*², *Matwali*³ and *Pani Nachalne*⁴ groups. Not only is Nepali society divided into different castes, it is also composed of a wide variety of different ethnic groups.

1 The classical four-fold system is comprised of *Brahman, Kshatriya, Vaisya, and Sudra* in that order.

2 This is the sacred thread (*Janai*) wearing group composed of three sub-groups, the *Bahun, Thakuri, and Chhetri*.

3 This group belongs to the Tibeto-Burman (*Tamang, Magar*) family that was gradually brought into the sphere of Indo-Aryan culture, including the caste system.

4 This group is considered untouchable, people from whom water cannot be accepted (e.g., sweepers – *Pode(s)*)

The different caste and ethnic groups in Nepal have their own food habits. It was felt useful to see how caste-based culture and sociology of food are related to agrobiodiversity. A brief exploration was made to gain a preliminary picture of the extent to which caste and ethnic variations in food habits and in preferences for different species and varieties of crops and animals are associated with differences in the management of agrobiodiversity.

Relationship between Food Cultures and Management of Animal Diversity

Traditional *Tagadhari*, especially the *Bahun* (brahmin), are not avid meat lovers. They do rear large animals, but only for dairy products, power, and manure. The *Bahun* are selective sheep and goat-meat eaters (some are strict vegetarians), but they do not hunt wild game, which in a certain sense supports biodiversity. This attitude of non-violence towards wild animals is neither the result of a particular love of wild animals, nor a response to religious dictum (as in Buddhism), it is a part of Hindu culture. The *Tagadhari* traditionally excluded pigs and chickens from their agricultural system, as both of these species are considered impure and unhygienic.

Traditionally, the meat-eating habits of the *Bahun* and the *Chhetri* are similar, but the *Chhetri*, being warriors, are more eager wild game hunters. The *Chhetri* and *Bahun* keep goats, sheep, ducks, and pigeons, but they are particularly keen on milk and milk products and are thus more knowledgeable in the management of cattle and buffalo.

The *Matwali* consume different varieties of large and small ruminants. While many of the animal species may be the same, there are also some variations within the group. Some *Matwali* eat pork⁵, some do not touch it. As with the *Tagadhari*, some *Matwali* consider the local black pigs untouchable and ritually purify themselves if they happen to touch one accidentally.

Matwali, such as the *Gurung*, prefer chicken and buffalo as their main source of meat, thus these are an integral part of the farming system. The value of these animals is high in these communities. These groups not only rear good quality animals, they also maintain good farm forestry and diverse fodder species. Since they value free-range chickens in their daily life and rituals, their kitchen gardens are always poor in leafy vegetables because they are mostly eaten by chickens. Some traditional broad-leaved mustard seed (*Rayo*) is mixed with manure and planted in vertical terrace risers to prevent chickens eating the leaves. These

5 Some raise and eat the exotic white breed only while others, such as the Rai and Limbu, can eat both the exotic and the local black pigs (e.g., *Chwanche*) which are traditionally untouchable even to some of the *Matwali* groups.

communities prefer to plant garlic or leeks around their homesteads because they are not eaten by poultry. Even within the same caste and ethnic groups, there are sub-groups that differ in their meat-eating habits. Traditionally, the *Ghale*, a sub-group of the *Gurung*, do not eat chicken or buffalo meat. They prefer sheep. The *Ghale* of Gorkha, Lamjung, and Kaski districts are custodians of the local migratory sheep and goat breeds. They raise the migratory sheep in a nomadic (transhumant) system and possess the indigenous knowledge and skills for managing these valuable resources in the marginal and fragile mountain niches. Generally *Matwali* groups are avid wild game hunters. This, and the relative absence of restrictions on eating a great variety of meats, gives the impression that the *Matwali* should be good managers of animals.

The *Pani Nachalne* group, although Hindus with Indo-Aryan cultural traditions, eat pork as well as all the other types of meat eaten by the *Tagadhari* and *Matwali*. The *Sarkee* (cobblers) are allowed to eat beef, but only when the cattle die from natural causes or accidents, as cattle slaughtering is prohibited by law in Nepal. In contrast to China and some South-East Asian countries, dogs, horses, donkeys, monkeys, cats, snakes, and rodents are all inedible species for most mountain communities and indeed most people in Nepal. Field rodents are, however, a main source of protein for the *Moshar* community in the Mahottari and Siria districts in the Nepalese *Terai*. The *Moshar* migrate from one place to another in search of employment and do not have arable land to farm and rear animals. The *Pani Nachalne* households in the vicinity of higher caste settlements sometimes find it hard to raise pigs and chickens. As a result, most *Pani Nachalne* groups are settled relatively far away from the main villages.

Food and Culture-related Plant and Crop Diversity

Like the cow, some trees, shrubs, and herbs have a special ritual conservation status in Hindu religious practice. Because of their perceived sacredness they are not exploited commercially or misused. Some of these vegetation species are: *ber* (*Ficus bengalensis*), *pipal* (*Ficus religiosa*), *sami* (*Ficus rumphii*), *lakuri* (*Fraxinus floribunda*), *rudraaksha* (*Eleocharpus sphaericus*) and *tulasi* (*Ocimum basilicum*). The *Tagadhari*, and especially the *Bahun*, are more particular about the maintenance of the ritual status of non-human living things in the community. *Tusa* (young shoots of the small bamboo) is an important delicacy in the Buddhist highlands, but, at lower elevation areas, it is seldom harvested for food because of its more important utilitarian values.

The *Matwali* grow a variety of finger-millet because they consume large amounts of millet and often have a supply deficit. The *Matwali* (liquor drinkers) use a sizeable portion of their millet harvests and, to some extent, their rice for making the local brews, *jand* and *rakshi*, the two most important home-made alcoholic

beverages in the Nepali hills and mountains. In everyday life, *Matwali* households, like those of the *Gurung*, *Magar*, *Thakali* and *Bhotia*, and even the *Newar*, prefer to offer their elderly people and visitors *rakshi*. A *Matwali* household feels very uncomfortable if they do not have good quality *rakshi* to offer to visitors. *Jand*, another alcoholic preparation, requires fermentation not distillation and is popular with the *Rai*, *Limbu*, *Tamang*, and *Jyapu*. Both of these alcoholic beverages are very important culturally because they are used in many of the *Matwali* festivals, both as an item to be consumed with much gusto and as an item for ritual offering. A rich diversity of finger-millet and rice is maintained for the specific purpose of preparing alcoholic beverages. In eastern Nepal, local land races of millet are grown specifically for *jand* and seeds are carefully maintained. Similarly, the *Gurung* and *Magar* in western Nepal continue to grow local millets to maintain the quality of their *rakshi*. Millet is not only used in the production of *jand* and *rakshi*, it also an important food item in the Nepali mountains. Normally a regular meal consists of a combination of boiled rice (*bhat*) and *dhindo* (a kind of porridge generally made from millet or barley). Farmers still grow low-yielding *juwai kodo* for special visitors, such as sons-in-law, as the quality of *dhindo* is better from this local land race. These items, depending upon the season, are eaten in combination with vegetable curries, beans, and pickles and, in relatively well-off households, with pulse soups, milk, and *whey*. Even if *dhindo* is a nutritious staple food item, it does not enjoy the status of rice. Empirical observations strongly suggest that the frequency of inclusion of millet *dhindo* in meals is closely associated with economic class, well-off people tend to eat *dhindo* less frequently. Some *Tagadhari* and *Matwali* communities in the hills and mountains do not like being seen eating *dhindo*. The different status of *dhindo* vis-a-vis *bhat* (rice) has some connection with the notion of ritual purity among different food items in traditional Hindu food culture. *Bhat* and *dhindo* have thus become a sort of dichotomy in the culture of food in the hills and mountains (less so in the mountains), in which the former is normally taken as symbolising beauty, prosperity, and affluence, while the latter is associated with poverty and ugliness. The cultural definition of 'white' and 'fair' as being more appealing and beautiful than 'dark' and 'dark brown' also applies to the *bhat-dhindo* dichotomy. In spoken Nepali, the word *kode* (millet eater) is used not only as a derogatory remark towards individuals, it also carries a negative connotation for the cereal itself. As a result, cultivation of finger-millet in accessible areas of Nepal is gradually being replaced by income-generating through vegetable crops, and food grain needs are met by purchasing from the market. In the past it was not possible to buy staple food grains simply because of the lack of access as well as the capacity to purchase. Despite its nutritious nature, finger-millet is considered a poor people's crop. It is an 'underused crop' as a result of lack of food processing research and promotion of the products. Farm workers in the hills and mountains would rather accept finger-millet as wages than the equivalent amount of maize or even unhusked paddy. There is no milling loss in finger-millet as with unhusked maize and paddy.

Furthermore, both *dhindo* and bread millet are thought to provide more energy than maize or rice. In addition millet keeps much longer than other cereals.

Maize is another important staple crop. It is eaten in at least six different ways without any major processing transformations, more ways than any other cereal in the hills and mountains. Maize is primarily consumed as bread (*Makai ko roti*), porridge (*Dhindo*), or *Aatto*⁶ (*Makai ko bhat*). It is also roasted, boiled, fried, flattened, and popped. Younger, fully unripe maize cobs are eaten without roasting or cooking. Maize is also widely used in the production of *jand* and *rakshi*. Farmers recognise the use of different species and maintain different kinds of maize for different purposes. Such strategies are important to farmers in the context of the absence of modern food processing facilities in remote mountain farming communities and add to the diversity of varieties.

There are many such examples. It is thus clear that the relative importance of different food grains has strong cultural roots. This affects both the consumption and production patterns among different ethnic groups, leading to the conservation of some species and varieties and negligence towards others.

There are numerous variations (even in a single settlement) in the ways different ethnic groups grow, maintain, and prepare their food. Variations exist in the ways these groups perceive the importance of food crops and animals and food items prepared for eating. Variations also exist in the ways in which different groups perform agriculture. Thus management of agrobiodiversity in the Nepalese mountains would benefit greatly from a better understanding of the food cultures of different ethnic and caste groups.

Issues

There are indications that various aspects of cultural traditions can promote agrobiodiversity. Variations exist in food habits, with different degrees of importance attached to different crop and animal species according to caste and ethnicity. These specific food habits mean that certain varieties of plants and animals are selected and maintained for specific purposes. Crop and animal diversity are often linked with diversity of agro-ecological and topographic conditions, but the diversity of human knowledge and skills for selecting and maintaining genetic resources for specific cultural purposes are ignored in most discussions about the management of agrobiodiversity.

Both academic and applied agrobiodiversity research focus largely on economics and/or biology. Sociocultural aspects are either left out or paid

6 Coarse maize grit cooked in the fashion of steamed rice. This food culture is usually common where rice fields are limited.

superficial lip service. Research is needed into ways of using existing cultural systems of caste and ethnic groups to help conserve and promote agrobiodiversity. There is an information gap about the extent to which agrobiodiversity is associated with sociocultural and market forces. Knowledge about the relationship between ritual status and maintenance of agrobiodiversity of cultivated crops and domesticated animals, the order of the domestication process for different crop and livestock species, and their association with centres of diversity and different ethnic groups would be of help in formulating effective approaches to management of agrobiodiversity.