

Food Habits and Consumption Patterns among the Mankidia Tribes of Odisha

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Abstract- Food is a significant concern for human beings, beginning with conception and continuing throughout an individual's life. Studying a community's food habits offers a unique opportunity to gain insight into their customs, traditions, and behaviour and trace their socioeconomic history. It is an essential need for the human body, providing nutrition and energy to living organisms, and has cultural value in addressing social relationships in society. Food habits vary in each community based on their ecological condition, production system and availability of local food resources. Mankidia is one of the thirteen Particular Vulnerable Tribal Groups (PVTGs) that resided in the Similipal Tiger Reserved Forest till the last decade, so the forest biosphere highly influences their food habits and consumption patterns. The poor financial condition and local agricultural set-up also affect the daily diets. So, this study focuses on the food habits and consumption patterns among the Mankidia tribe of Mayurbhanj district, Odisha. The research also analyses the causes behind their food habits. This study is mainly based on primary sources, which I gathered through the site visit, organising interview schedules, and face-to-face interview techniques using semi-structured open-ended questionnaires and a homogeneous purposive sampling method for selecting respondents.

Keywords: Mankidia, Mayurbhanj, Food Habit, Consumption Patterns, Diet, Flora, Fauna.

Introduction

Understanding the food habits and consumption patterns of tribes requires consideration of their unique cultural contexts, historical experiences, and contemporary challenges. Moreover, efforts to support tribal food sovereignty, promote nutritional health, and preserve traditional knowledge are essential for the well-being of indigenous communities. Food habits and consumption patterns of tribal people often pose a unique challenge. The tribes of India are an excellent example of the tremendous diversity in Indigenous culture, tradition and environment, which has a significant impact on their food systems, eating habits, and nutrition. The food intake among the tribals largely depends on the vagaries of nature, with considerable seasonal variations depending upon the availability of agricultural and forest produce. They follow distinctive dietary patterns and primarily rely on locally available food items. This study aims to understand the food habits and consumption patterns of the Mankidia tribe.

The Mankidia

The Mankirdia are a semi-nomadic subgroup of the Birhor tribe. They are among the state's most primitive and little-known forest dwelling and roaming communities. In addition to Odisha, they can be found in Jharkhand, West Bengal, Madhya Pradesh & Maharashtra. Small travelling Mankirdia bands can be found primarily in the districts of Mayurbhanj, Keonjhar, Balasore, Jajpur, Deogarh, Sundergarh, and Sambalpur in Odisha. They are mainly concentrated in and around the Similipal highlands. According to the 2011 census, the population is 2,222, with 1144 males and 1078 females, a sex ratio of 942. The literacy rate of the tribe is 21.14%, the lowest tribal literacy rate in the state. They are predominantly a hunting and food-collecting community. The term Mankidia or Mankirdia is derived from *mankar* means monkey. Traditionally, they are expert in monkey trapping, and after catching them, they have them as diet; therefore, they were called 'Mankidi', 'Mankidia' or 'Mankirdia'. They are called 'Mankidi' in Kalahandi and Sundargarh districts, while 'Mankirdia' in Mayurbhanj and Sambalpur districts (SCSTRTI, 2014).

Monkeys are one of their common meals, which they bring from the forest or neighbouring villages. When these monkeys cause havoc in rural areas by destroying crops, fruits, and vegetables, the villagers call them to catch. They wander in the jungle in small bands and reside in various *tandas* and the temporary makeshift settlements of dome-shaped leaf homes known as *Kumbha*. They commonly speak the Munda language; however, some are also fluent in Oriya. Traditionally, they are semi-nomadic and wander between the market and the forest. They collect forest products like honey, ropes made of siali fibres, jute, etc. and sell them in local markets, so they select a site for settlement which is near water supplies, the local markets, and the availability of *siali* fibres, jute, and monkeys. They pursue a hunting

and gathering economy. Hunting monkeys, snails, squirrels, hares, birds, and other animals is their prime occupation. They are skilled in monkey trapping and use large nets of *siali* fibres to catch them. Besides monkeys, they often catch birds, snails, squirrels, hares and other animals using traps and nets. Their other major occupations are collecting forest flora for their diets and fabricating ropes and rope-made products from *siali* fibres and jute loops. Nowadays, connecting with mainstream societies, they have also adopted other occupations. They work as agricultural labourers in local agrarian fields, waged labourers in neighbouring villages or towns, and commercial vehicle drivers. Their houses consist of one room and an open courtyard; however, very few have more than one room. Their limited assets comprise simple clothing, a few silver ornaments, bamboo baskets, aluminium utensils, a knife, a bow and arrow, monkey-catching nets, and date palm mats.

Earlier, Mankidias resided inside Similipal's reserve forest, but they were extruded from the biosphere of the Similipal Tiger Reserve (STR), and they were denied habitat rights inside under the historic Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. Their Safety was said to be the reason for their denied habitat rights because the State Forest Department says wild animals, especially tigers, could attack tribals. They were given rehabilitation outside of the forest region following Similipal's designation as a biosphere, but their reliance on the forest persisted. So, they frequently go to the jungle to gather various forest items. Some products are available on the outer portion of the jungle, while many are found in the core of the forest. Typically, the male family members travel a long distance to search for a job, while females work in close proximity. Their traditional clothing and ornaments are plain and simple. Their dresses are pretty similar to those of their neighbouring Munda-speaking tribes, such as Santal, Munda, Kol, and Ho. Men wear coarse handloom loin cloth, while women wear comparable sarees. These white clothing have a coloured checked pattern and are woven by local weavers. Women use ornaments made of glass, beads, and cheap metal. They often fix a wooden comb into their hair knots.

They believe in both benevolent and malevolent spirits and worship the sun, as many Munda-speaking tribes worship. They also worship Logobir and Budhimai. They honour their ancestors through worship to maintain good health and succeed in hunting and gathering forest products.

Methodology

The proposed study is focused on the Mankidia tribe at Uthansahi Village in Mayurbhanj district of Odisha. Both primary and secondary sources have been used for this research. I collected the primary data from interviews scheduled with my respondents formally and informally. I also followed the participant observation method for an in-depth understanding of their activities and lifestyles and followed interview schedules and face-to-face interview techniques using semi-structured questionnaires to understand the food habits and consumption patterns in their daily life. In this study, a homogeneous purposive sampling method is used to collect houses from the villages of the Mankidia tribe. As a sample, I collect information from the tribal people.

Food Habits and Consumption Patterns: Causes

Odisha is the home of the highest number of tribes, where as many as 62 tribal communities reside, and the third largest tribal population of the country inhabit here. A significant tribal population of the state lives in the forest ecosystem and has its own social patterns, traditions, and traditional food habits. The diet pattern among the tribals comprises various unconventional foods like edible forms of flowers, fruits, tubers, leaves, stems, seeds, and wild mushrooms (Sinha & Lakra, 2004). They rely on forest-based products as food items in their everyday life. Species that are not domesticated or grown but are still accessible in their natural habitat and utilised as food sources are called wild edible plants (Pegu et al., 2013). Recent research reveals that 80 per cent of forest dwellers of Odisha, Bihar, Madhya Pradesh, West Bengal, and Himachal Pradesh depend on the forest for 25 to 50% of their annual food requirements (Sinha & Lakra, 2004).

The Mankidia tribe is the hunting and food-gathering communities. Similipal Tiger Reserve Forest was the permanent home of this tribe till the previous decade, but their inhabitant rights were denied by implementing the Forest Act by the forest department, and they were moved from the jungle. Presently, many are resided in the outer periphery of the forest. My study village, Uthansahi, is about 3 km southeast of the Similipal Tiger Reserve Forest. Being forest dwellers, their food habits are greatly influenced by the forest biosphere. Many forest products, like wild edible plants, animals, and birds, are part of their diets. *Sags* (plant leaves) are one of their diets' most essential dishes, which they mainly extract from the jungle. Besides, leaves, roots, stems, fruits and flowers from many plants and trees are also added to their food. Many small wild animals and birds like *mankar* (monkeys), squirrels, rabbits, pigeons, doves, *Kai* (red aunts), *jhari poka* (winged ants), etc. are part of their meals.

The agriculture of the locality also profoundly influences their food habits. Rice is the primary cereal cultivated in the district. Maize is another cultivated grain, while wheat cultivation is minimal. Among lentils, pigeonpea, black gram, and green gram are the main crops. Mustard is the prime oilseed crop. Sugarcane and groundnuts are also cultivated in a small area. Ladyfinger, pumpkin, potato, and Colocasia are vegetable items cultivated here. Among fruits, mango, guava, banana, papaya, and citrus are prime (Agriculture Contingency Plan, Mayurbhanj). The impact of local food production is quite visible in their dietary system. Rice is the prime cereal of the district, so rice is the prime grain of

Mankidia's diet, and they have it for all three meals of a day. Corn cultivation is significantly less, so occasionally, they have corn powder, while foods made of wheat are rare. Commonly, pulses are not part of their diet; however, sometimes they have red lentils. Other locally cultivated agricultural products like vegetables and fruits are parts of their dietary system.

The economic condition of Mankidias is also an essential factor in their food habits. Their economic life is full of threats and hardships and barely at the level of subsistence. Selling ropes and other items made of *siali* creepers along with some other forest products like honey in neighbouring village markets is their mode of income, which is inadequate to get two meals a day. Around 289 Mankidia families with a strength of 1200 people reside in the six blocks of the Mayurbhanj district, and recent research reveals that not a single Mankidia household possesses a piece of agricultural land (Time of India, 29 October 2023) and they are away from their agricultural production; however, some of them work as agricultural labourers in neighbouring villages. So, they gather a major portion of their meal from the jungle and around their village. Owing to their financial hardship, they are forced to consume cheap and locally available food for their everyday life. Rice is the most common cereal, and it is found at a very reasonable rate of one rupee per kg by public distribution centres regulated by the state government. Each family get a maximum of 35 kilograms of rice per month at this rate, and for this scheme, the government defines a family as comprised of a husband, wife and their unmarried children.

Meal Pattern (Dietary Habit)

Usually, Mankidias have three meals in a day: early morning, afternoon, and night. The two meals of the day, i.e., morning and afternoon, consume *pakhal*, and at night, they eat boiled Rice. All family members have their dinner jointly. They prefer to eat fresh boiled rice with some leafy vegetables for dinner. Their meals are comprised of vegetarian and non-vegetarian items and vegetables available in their kitchen garden. In lentils, they prefer *masoor dal* (red lentils) but do not consume it daily. Sometimes, they consume some vegetables which they cultivate in the backyard of their house. Varieties of tree and plant leaves are other essential food items besides rice. They collected them from the forest and near their open field. Generally, the food consumption patterns among tribes are inappropriate, and nutritious foods like lentils, pulses, millets, and fruits are less and irregular in their diet (Dave, et al. 2019). I also found a similar condition in the Mankidia tribe, as their food habits are deeply influenced by the forest biosphere in which they live.

Agricultural Food

Mankidia families generally consume those agricultural products cultivated in and around their villages. Types of cereals, lentils, and vegetables which are locally cultivated are their prime diet. Fruits are also part of their diet but are gathered from the jungle. A brief discussion of these foods has been given below.

Cereals

Rice is the most common and prominent cereal for them, more than any other grain. They believe rice is the best energy source, which is essential for their daily and constant hard work. They cooked Rice once in a day. After cooking, they mix water in the cooked rice and leave it to ferment. The next day, they have it in the morning and afternoon with side items like leafy curries, salt, and seasonal fruits. This boiled, fermented rice is called *pakhal*, a common and popular meal in Odisha. Mankidias consider *pakhal* an excellent and instant energy source, which is highly important for daily work, so it is the prime food among the Mankidia tribe. *Mudhi* (puffed rice) and *chuda* (flattened rice) are other rice products they consume.

Maise is another cereal that Mankidia consumes sometimes. They generally take corn powder from Anganwadi Centre for pregnant ladies and children. The consumption of wheat is very minimal. Traditionally, rice is the prime cereal cultivated in the region, which caused the conventional habit of consuming rice. Nowadays, wheat is easily available in markets, but their financial condition does not allow them to afford it; on the other side, government agencies also do not provide it at a reasonable rate. The belief is that rice is an instant energy provider, which is very much essential for their hard work throughout the day.

Lentils

Lentils are a significant source of protein, and they are rarely used in their diet; though pigeon pea, green gram and black gram are cultivated in their locality, due to pathetic financial conditions, they cannot afford pulses. Sometimes, they consume *masoor dal* (red lentils). I asked them why this lentil was consumed, but they could not answer. They reply that they use it traditionally. It seems that the rate of the dal is probably the reason, as *masoor dal* was available at a reasonable price earlier, so they could pay for it; however, nowadays, the rate of all pulses has minimal margins, but their habit and taste are set with this lentils so they consume it. Urad dal (black gram) is also used in their diet, but not as dal; they have *pitha* (black lentil cake) made of black lentil on feasts and festivals made of black gram.

Vegetables

Vegetables are the everyday diet of Mankidias. They use various leaves, roots and tubers, seeds, fruits and flowers in their daily diet. Generally, they add a variety of *sags* (leaves) collected from the jungle or near their homes, like *kanta* leaf, *saroo* leaf, *moringa* leaf, bitter leaf, *sunsuni* leaf, etc. In fact, these leaves are prominent assistant diets that are consumed with boiled rice. They cultivate some vegetables and *sags* on their farms, which are essential foods in their diet. Brinjal, tomato, lady finger, sweet potato, papaya, ivy guard, and mushrooms are some vegetables they cultivate in their backyard.

Forest: A Significant Source of Their Dietary System

Forests are the home of many diverse varieties of flora and fauna. It provides food and livelihood to the tribes. Tribals generally extract leaves, roots, and fruits from the jungle while they hunt small wild animals to get meat, skin and horns. Flora and fauna gathered from forests are traditional food sources for tribes. Identification of wild plants for diet is the indigenous knowledge that passes from generation to generation through culture. Besides, animal hunting skills are also passed through culture (Ota, 2014).

Mankidia tribal communities used various locally available plants, animals and birds in their daily diet, displaying their inheritance, customs and traditions. They use parts of specific plants as their food, collected from the forest during seasons. They understand the jungle and the types of species found in particular seasons, so they extract trees and plant products and hunt small wild animals and birds. After thoroughly interacting with them, I found that almost all the households in my study village depend upon the forest directly or indirectly for different purposes. They consume parts of plants like roots, stems, leaves, flowers, and fruits daily, many of which are also used as medicines for diseases. Likewise, they hunt many animals and birds, like monkeys, squirrels, rabbits, pigeons, doves, red ants, winged ants, etc., for their consumption. Kumar et al. (2012) explain that using wild edible plants as food is prevalent among Kharia, Kolho, Santal, and Mankidia tribal groups residing in the Similipal Biosphere Reserve. These wild edible plants provide them with support to fight against the food shortage during critical periods of Famine.

Uses of Flora as a Common Diet

Mankidia people gather various plants from the forest throughout different seasons to utilise as food. Some edible components are eaten raw, while some are cooked. Some edible plant leaves like *kanta sag* are collected from the jungle and dried in the sun for future preservation. Generally, Mankidias rely on forest-produced items in their daily dietary patterns. The forest is known as the storehouse of food products among the tribal people. Their dependency on the forest is concerning for collecting the various types of wild fruits, vegetables, green leaves, and roots that they use in everyday life. Majorly 81.7 % of the family gathered forest food products from the forest, like fruits, vegetables, mushrooms, green leaves, roots, and tubers, to help maintain food security (Padhi & Patel, 2021). Mankidias often prefer fermented boiled rice (*Pakhal*) and water extracted from it with some leafy vegetables in their daily diet. They add various vegetables, leaves, seasonal fruits, roots, tubes, etc., to their daily intake. About 1532 wild food species are available in India, and most are concentrated mainly in the Eastern Ghats, Western Ghats, and Himalayan hill ranges (Reddy et al. 2007, cited in Kumar et al. 2012).

Leaves

Generally, Mankidia people prefer different leaves in their meals, which they collect from forests and open fields in their village. Many of these leaves are available in different seasons. *Saroo*, *kanta*, *puruni*, *banpoi*, and *marmuri* leaves are collected from the forest, while *Sunusunia*, *bathua*, *madaranga*, and *puruni* leaves are collected from their village's open fields or ponds. Sometimes, they also consume seasonal leaves, like *moringa*, tamarind, and *pita gihma*.

Roots and Tubers

Generally, tribal people collect roots and tubers from forests and open land in their villages. Seasonally, they collected tubers from the forest. Tubers of certain species are eaten as curries. Some tubers are boiled, burned, and consumed as a curry, while some are cut and dried, made into flour and cooked. Mankidia tribal people are taking Tunga Aru (*Dioscorea wallichii* Hook.), potato, sweet potato, yam, etc. Pani Aru (*Dioscoria oppositifolia* Linn) and Daikon Radish etc.

Fruits

Mankidia people do not regularly consume fruits in their diet. They do not spend money on buying fruits from the market due to their poor economic status. They collect some seasonal fruit from the jungle and their kitchen garden. Fruits like Kendu, jackfruit, mango, Khajur, star gooseberry, blueberry, and other wild berries they collected from the forest. Papaya, jackfruit, mango, guava, etc., are also grown in their kitchen garden. Many Mankidias prefer to have their meal with seasonal fruits.

Use of Fauna as a Food

In addition to plants, Mankidia people consume various fauna that can be found in forests or that have been domesticated. They hunt and gather different animals and birds for their consumption. Here, I categorised the animals and birds that these people eat.

Animals & Birds

Mankidia people consume different types of animals and birds in their non-vegetarian food. They prefer both domestic and wild animals. The people of this community are very fond of eating the flesh of monkeys. If they have surplus monkey meat, they dry it under the sun and preserve it for future consumption. Fish is one of the essential non-vegetarian diets, which they brought from ponds and small river streams in the forest or around their village. Though they are fond of non-vegetarian food, they can not afford it in their daily diet. Traditionally, they hunted small wild birds and animals in the Similipal Tiger Reserve Forest, but wild animal preservation policies and denied habitat rights into the jungle highly impacted their non-vegetarian diets. Due to government restrictions, they do not go deep into the forest and frequently hunt wild animals, which causes a sharp shortage of non-vegetarian items. However, they still hunt small domestic as well as wild animals like rabbits, squirrels, etc., in their localities. They also eat wild hens, pigeons, red ants and flying ants.

Their pathetic financial condition does not allow them to buy from the market. However, the domestication of animals became an alternative to their meat consumption. Presently, some Mankidias have reared domestic animals like goats, hens, pigs, etc., for their economic pursuit as well as for consumption. So, their non-vegetarian foods became an essential feast on festive occasions, but meat consumption is rare in ordinary days.

Methods of Food Preparation

The diet pattern of the Mankidias is never systematic and standardised. The amount of food and meal patterns varies from time to time according to the availability of food materials in different seasons. They eat ordinary meals comprised of Rice and green leaves collected from the forest. They often preserve leaves like *kanta* and other types of leaves, which they dry in sunlight and keep for future use. After dried, they grind them and take them with the meal prepared with curry. They mixed this powder with water extracted from fermented rice and boiled it with garlic and tomato. Sometimes, they have dry fish mixed up with spinach leaves. Green leaves and vegetables cooked with salt with added *salma spondias mombin* and tamarind. They use a little oil and spices in food preparation. They prefer mustard oil rather than refined oil. They follow a similar method for preparing non-vegetarian food. They use grinding stones to grind *masalas* or any other food items.

They take these vegetables with their meals, burned and boiled. They prepared their curry without using spices. Generally, four methods are used for preparing vegetables: burnt on fire, boiled, fried, and half-fry and mixed water. Many vegetables like potato, brinjal, tomato, and some roots like sweet potato are deeply burnt directly on the fire and make paste and add salts and some spices. Such dishes are locally called chutney. Some vegetables, like yam, sweet potato, tunga Aru (*Dioscorea wallichii hook.*), pani Aru (*dioscoria oppositifolia linn*), types of leaves, etc., are boiled and made into curry. Vegetables like potatoes, redish, bamboo shoots, banana cells, neem and moringa flowers, etc., are prepared by frying. Vegetables like cauliflower, cabbage, potato, brinjal, Tunga Aru, Pani Aru, papaya, etc., are prepared by the four methods, i.e., half-fry and mixed with water, salt and some spices.

Some wild leaves like *kanta sag (Amaranthus spinosus L.)* and *Mathada sag* are preserved for the future by drying in the sun. After drying, they grind them into powder and use as a side item for their meal. They mix this powder with the fermented boiled rice water, and they boiled it. After boiling, they mix tomato and garlic and make curry for their meal. Occasionally, they prepare *pitha* (cake) of rice and corn powder. The Anganwadi Centre provides this powder to children and pregnant ladies. They prefer to have it mainly at the festivals. However, their financial conditions are pathetic, which forces some Mankidia children to solicit *pitha* and other food items from neighbouring villages, especially during some festivals.

Beverages

Mankidias are very much fond of liquors. They prefer two types of beers made of rice and *mahua tree flowers*. Traditionally, Mankidia's men and women prepare these liquors, or some people in their communities prepare and sell them within the village. The rice beer is called illi (in the Mankidia language) or *handia* (in the Odia language), and *mahuli* beers are *arkhi* (in the Mankidia language). They consumed these beers very often in their daily life. They enjoyed this drink on any domestic occasion or social function performed in their community. Both males and females consume these beverages. The women prepare rice beer by the conventional method. Sometimes, they also take red tea, and to increase smell and taste, they add a particular grass (lemon grass) grown in their locality.

They drink liquor for intoxication to get pleasure and forget the trials and tribulations of life to get temporary relief. They believe these liquors also have some health benefits, such as they consider that mahua liquor drives out colds and headaches. Mahua is regarded as the most sacred and intoxicating liquor; therefore, it is used for rituals. They also offer

this liquor to their ancestral deities in rituals and festive occasions to keep them in good temper and get their blessings for happiness and prosperity. Their domestic or social functions cannot be performed without this drink. Both men and women of the Mankidia tribe are addicted to chewing tobacco. They purchased it from the local shop or market. They believe that chewing tobacco leaves keeps their mouth fresh.

Cooking Appliances

Generally, Mankidia's houses consist of one room with an open courtyard; however, very few have two rooms. They have open kitchens in their house premises, where they have their traditional 'chulha' (hearth) for cooking. They use grinding stones to grind spices or other food items. Traditionally, the females of their family engaged in cooking. They use aluminium utensils for cooking. They use stream water for cooking and drinking, which are unhygienic and cause many diseases. Owing to their ecological set-up, their kitchen affairs are primitive, and cooking practices are very traditional.

Conclusion

Mankidias' food habits and consumption patterns are highly influenced by the biosphere of Similipal Tiger Reserved Forest. Being hunter and food gatherers by tradition, they rely on their surrounding environment for food collection, which influences their consumption patterns. However, the denied habitant rights in the forest deeply impacted their dietary system. Early on, they relied more on forest products, and agricultural products were less in their diets. But nowadays, they are no longer forest dwellers and live on the outer periphery of the jungle, where cultivation practices are common. So, their food habits are constantly changing, and their dependency on agricultural products is increasing day by day. The non-vegetarian diets are also transforming. Earlier, they often had meats in their diet, but now meat consumption is reduced, and the types of meats have also changed; previously, they relied more on wild animals, but now on domesticated animals.

Rice, maize, green leaves, vegetables, lentils, and fruits are those agricultural products they consume. Rice is the most common and essential food they consume all three of a day. Boiled rice and fermented boiled rice (*pakhala*) are the prime food types made of rice. Other items made of rice, like puffed rice and flattened rice, are also used. Maize are generally used in the form of power. The use of other important cereal wheat is rare in the Mankidia kitchen. Pulses are also rare in their diet. Due to their poor financial condition, they make minimal use of imported and costly items like wheat, lentils, various spices, etc. Their foods are simple, boiled and devoid of multiple spices. Their overall common dietary system comprises rice, pulses, leaves, plants, fruits, vegetables, roots, tubers, insects, fish, and small birds and animals. Liquors extracted from rice and mahua trees are the preferred beverages traditionally enjoyed and offered to their deities; however, after converting to Christianity, many of them distanced themselves from intoxication. They prefer boiled and simple food to fried and spicy food.

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