Leafy vegetables in Rangpur city corporation area of Bangladesh focusing on potential medicinal values

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Abstract

Leafy vegetables were conducted in the Rangpur city corporation of Bangladesh from October 2019 to December 2021. They were 44 species identified, divided into 33 genera and 20 families. Out of the recorded species, 69.44% were herbs followed by climbers (18.18%), shrubs (11.11%) and trees (2.27%) respectively. In the research area, wild species made up 34.09% of the total, while cultivated species made up 65.91%. The current investigation revealed that traditional knowledge about the use of wild vegetables is in urgent need of documentation as part of intangible cultural heritage. To meet the dietary demands of Rangpur city corporation residents, the use and cultivation of these leafy vegetables should be encouraged. The study can provide baseline data that can be used to prioritize conservation efforts through resource management that is both sustainable and environmentally friendly. In Rangpur City Corporation, major medicinal leafy vegetables were carried out. Thirty seven (37) therapeutic plants have been identified, with their usefulness for the treatment of over 40 ailments recorded. The current study found that medicinal plants continue to play a significant role in rural communities. The information acquired from local traditional healers will be beneficial for further ethnobotany, taxonomy, and drug development studies using natural resources.

Keywords: Leafy vegetables; Medicinal values; Drug discovery; Rangpur; Bangladesh

1. Introduction

Vegetables are the leaves of any plant that is used as a vegetable, which may or may not be accompanied by sensitive petioles and stems. They make up a large component of our diet and help to prevent malnutrition. In the decade 2010-12, the FAO projected that about 870 million people were chronically undernourished, accounting for 12.5 percent of the global population, or one in every eight individuals. To address the under nutrition problem, great emphasis has been placed on the exploitation and use of uncommon plant resources for food [99]. Indigenous vegetables are best characterized as species that are locally essential for the economic, nutritional, and health of humans, as well as social systems. Many studies have revealed that fresh veggies contribute significant functional food components such as vitamins, iron, folic acid, minerals, physiologically active chemicals, and photosynthetic pigments throughout the last decade. Antioxidants found in vegetables protect against a variety of chronic diseases, including heart disease and certain cancers [102].

Leafy vegetables, often known as pot herbs, greens, or leafy greens, are vegetable-like plants with sensitive petioles and stems. Despite the fact that they come from a wide range of plants, their nutrients and preparation procedures are remarkably similar to those of other leaf vegetables. Plants with edible leaves are found in about a thousand different species. Short-lived herbaceous plants like lettuce and spinach are commonly used to make leafy vegetables. *Adansonia*, *Aralia*, *Moringa*, *Morus*, and *Toona* are among the woody plants whose leaves can be consumed as leafy vegetables. Humans can consume the leaves of numerous fodder plants, but only in times of hunger. Alfalfa, clover, and the vast...
majority of grasses, including wheat and barley, are examples. These plants are frequently far more prolific than more traditional green vegetables, but because of their high fiber content, getting the most out of their nutritious benefits is tough. Further processing, such as drying and grinding into dust or pulping and pressing for juice, might be used to address this challenge. Leafy vegetables are often low in calories, fat, protein per calorie, nutritional fiber, and cultivated African food plants [102].

People in Bangladesh have a long history of eating green vegetables. However, despite the fact that leafy vegetables make up a substantial part of the daily diet of Bangladesh’s rural population, little research has been done on them [5], [96], [98], [100], [101], [37], [70] and [74]. Despite the importance of leafy vegetables in modern human life, no major systematic attempt to identify and document plant species has been done in Bangladesh. Similar medicinal plants studies in Bangladesh have been carried out by [2], [5-53], [54-83] and [88-95]. The objectives of the current research are to identify and uses of medicinal leafy vegetables in the Rangpur city corporation area of Bangladesh.

2. Material and methods

2.1. Study area

Rangpur City Corporation is located in the Rangpur division, Northern region of the country. It has a total area of 205.7 square Kilometres. The study area was conducted at Rangpur City Corporation. The study area is bounded by Mithapukur, Rangpur, Mirzapur, Kafrikhal, Latifpur, Ranipukur, Khorgachh, Mayenpur, Haridebpur and Darshana. The types of land in this study area include fallow land, cultivated land, grazing and non-grazing land. For this reason, various kinds of leafy vegetables are present in the study area [4].

2.2. Methodology

The work is based on fresh materials collected during nineteen visits to Rangpur city corporation, Bangladesh from October 2019 to December 2021 to cover the seasonal variations. There were 44 species identified, divided into 33 genera and 20 families. The visits covered all types of habitats, particular river bank, slope, village grove, fruit gardens and roadsides of the study area. Medicinal information was obtained through semi-structured interviews with knowledgeable people such as local Kabiraj and elderly people. A total of 117 informants having an age range 21-76 years were interviewed using semi-structured interviewed method [3]. Plant parts with either flower or fruits collected using traditional herbarium techniques to make voucher specimens for documentation and voucher specimens have been preserved at Herbarium of Rajshahi University.

2.3. Plant identification

Collected specimens have been critically examined, studied and identified. Identifications have been confirmed by consulting standard literatures [84], [87] and [1]. Nomenclature has been updated following recent literature [1], [85] and [86].

3. Results

A leafy vegetable was conducted in the Rangpur City Corporation of Bangladesh from October 2019 to December 2021. There were 44 species identified, divided into 33 genera and 20 families (Table 1). Six Amaranthaceae species, five Araceae species, five Brassicaceae species, two Apiaceae species, two Asteraceae, two Convolvulaceae, two Liliaceae, two Marsileaceae, two Solanaceae, one Athyriaceae, six Basellaceae, two Chenopodiaceae, two Euphorbiaceae, two Malvaceae, two Meliaceae, two Miliaceae, two Morinaceae, two Nyctaginaceae, two Rubiaceae, are among the leafy vegetables. (Figure 2) Herbs (69.44%) were the most common life form, followed by climbers (18.18%), shrubs (11.11%) and trees (2.27%). In the research area, (Figure 3) wild species made up 34.09% of the total, while cultivated species made up 65.91%. Out of these wild and cultivated leafy vegetables (Figure 4) 88.63% species were used as leafy vegetables, (20.45%) species fruit, (6.81%) species seed, (4.54%) species bulb, (6.81%) species flower, (2.27%) species frond, (2.27%) species corm, (2.27%) petiole and (15.90%) species as a whole plant. The current investigation revealed that traditional knowledge about the use of wild vegetables is in urgent need of documentation as part of intangible cultural heritage. To meet the dietary demands of Rangpur city corporation residents, the use and cultivation of these leafy vegetables should be encouraged. The study can provide baseline data that can be used to prioritize conservation efforts through resource management that is both sustainable and environmentally friendly. Documentation of leafy vegetables in Rangpur City Corporation, Bangladesh was investigated. Out of 44 species, 43 belong to angiosperms and 1 to pteridophytes. The flowering seasons of dominant species range from January-December (36.36%), October-January (22.72%), March-October (11.36%), January-May (9.09%), June-October
(4.54%), March-May (4.54%), March-August (4.54%), November-February (4.54%) and February-May (2.27%). Distribution was measured only to indicate the status of the occurrence of each species in this area and was based on eye estimation. A: Species that are distributed everywhere are called abundant (very common); when they are distributed at certain intervals, they are called frequent (common). The occurrence of species that are very rare is called ‘rare’. Of the 44 species recorded here, common is represented by (61.36%), very common (20.45%) and rare (18.18%) (Figure 1).

In Rangpur City Corporation, major medicinal angiosperm leafy vegetables were carried out. Thirty seven (37) therapeutic plants have been identified, with their usefulness for the treatment of over 40 ailments described. The medicinal plants are utilized by the locals to treat a variety of ailments, including anemia, asthma, blood illnesses, bronchitis, chicken pox, diarrhea, diabetes, eczema, fever, headache, skin diseases, wounds, and more. Diverse plant parts from various species are used as medication to cure various diseases. To treat various diseases, (Figure 5) the leaves (77.27%), fruit (15.90%), root (20.45%), seed (6.81%), bulb (4.54%), flower (4.54%), frond (2.27%), corm (2.27%), and whole plant (13.63%) were used. The scientific name, local name, family name, and medicinal applications of each species were mentioned. The current study found that medicinal plants continue to play a significant role in rural communities. The information acquired from local traditional healers will be beneficial for further ethnobotany, taxonomy, and drug development studies using natural resources.

Table 1: Showing the families of the plant species recorded

| Sl. No. | Family name       | No. of the Herb Species | No. of the Shrubs species | No. of the Climber Species | No. of the tree species |
|---------|-------------------|-------------------------|---------------------------|----------------------------|------------------------|
| 1       | Amaranthaceae     | 6                       | -                         | -                          | -                      |
| 2       | Apiaceae          | 2                       | -                         | -                          | -                      |
| 3       | Araceae           | 5                       | -                         | -                          | -                      |
| 4       | Asteraceae        | 2                       | -                         | -                          | -                      |
| 5       | Athyriaceae       | -                       | 1                         | -                          | -                      |
| 6       | Basellaceae       | -                       | -                         | 1                          | -                      |
| 7       | Brassicaceae      | 4                       | 1                         | -                          | -                      |
| 8       | Chenopodiaceae    | 1                       | -                         | -                          | -                      |
| 9       | Convolvulaceae    | 1                       | -                         | 1                          | -                      |
| 10      | Cucurbitaceae     | -                       | -                         | 5                          | -                      |
| 11      | Euphorbiaceae     | 1                       | -                         | -                          | -                      |
| 12      | Liliaceae         | 2                       | -                         | -                          | -                      |
| 13      | Malvaceae         | 1                       | -                         | -                          | -                      |
| 14      | Marsileaceae      | 2                       | -                         | -                          | -                      |
| 15      | Meliaceae         | -                       | -                         | -                          | 1                      |
| 16      | Moringacea        | -                       | 1                         | -                          | -                      |
| 17      | Nyctagniaceae     | 1                       | -                         | -                          | -                      |
| 18      | Rubiaceae         | -                       | -                         | 1                          | -                      |
| 19      | Solanaceae        | 1                       | 1                         | -                          | -                      |
| 20      | Tiliaceae         | 1                       | 1                         | -                          | -                      |
| Total   | 20                | 30                      | 5                         | 8                          | 1                      |
Table 2 Assessment of wild and cultivated leafy Vegetables in Rangpur district, Bangladesh

| Sl. No. | Scientific Name                  | Local Name | Family Name | Habit | Abundance | Flowering time | Use of Plant Parts |
|---------|----------------------------------|------------|-------------|-------|-----------|----------------|--------------------|
| 1       | *Amaranthus gangeticus* L.       | Lal shak   | Amaranthaceae | Herb  | Very common | Jan-Dec        | Whole plant        |
| 2       | *Amaranthus oleracea* L.         | Data Shak  | Amaranthaceae | Herb  | Common    | Jan-Dec        | Leaf               |
| 3       | *Amaranthus spinosus* L.         | Katanotey  | Amaranthaceae | Herb  | Common    | Jan-Dec        | Leaf               |
| 4       | *Amaranthus viridis* L.          | Noteyshak  | Amaranthaceae | Herb  | Common    | Jan-Dec        | Whole plant        |
| 5       | *Alocasia indica* Schott         | Bashpor kochu | Araceae | Herb  | Common    | Jan-Dec        | Leaf               |
| 6       | *Amorphophalus bulbifer* (Roxb.) Blume | Olkchu | Araceae | Herb  | Common    | Jan-Dec        | Leaf, corm         |
| 7       | *Acalypha indica* L.            | Muktajhuri | Euphorbiaceae | Herb  | Rare      | Mar-Oct        | Leaf               |
| 8       | *Allium cepa* L.                | Piaj         | Liliaceae   | Herb  | Common    | Oct-Jan        | Bulb, leaf         |
| 9       | *Allium sativum* L.             | Rasun        | Liliaceae   | Herb  | Common    | Oct-Jan        | Bulb, leaf         |
| 10      | *Azadirachta indica* A. Juss    | Nimpata     | Meliaceae   | Tree   | Common    | Mar-Oct        | Leaf               |
| 11      | *Basella alba* L.               | Puishak     | Basellaceae | Climber | Very common | Jan-Dec        | Leaf               |
| 12      | *Brassica campestris* L.        | Sorisha shak | Brassicaceae | Shrub  | Very common | Oct-Jan        | Leaf               |
| 13      | *Brassica juncea* L.            | Rai sorisha  | Brassicaceae | Herb  | Very common | Oct-Jan        | Leaf               |
| 14      | *Brassica oleracea* L. var. botrydis | Fulkopi | Brassicaceae | Herb  | Common    | Oct-Jan        | Leaf               |
| 15      | *Brassica oleracea* L. var. capitata | Badhakopi | Brassicaceae | Herb  | Common    | Oct-Jan        | Leaf               |
| 16      | *Benincasa hispida* (Thunb) cogn | Panikumra  | Cucurbitaceae | Climber | Common    | Mar-May        | Leaf, fruit, flower |
| 17      | *Boerhaavia repens* L.          | Punarnava   | Nyctaginaceae | Herb  | Common    | Jan-Dec        | Leaf               |
| 18      | *Celosia cristata* L.           | Moragphul   | Amaranthaceae | Herb  | Common    | Jan-Dec        | Leaf               |
| 19      | *Centella asiatica* (L.) Urb.   | Thankuni    | Apiaceae    | Herb  | Rare      | Jan-May        | Whole Plant, Leaf  |
| 20      | *Coriandrum sativum* L.         | Dhaniya     | Apiaceae    | Herb  | Common    | Oct-Jan        | Whole plant        |
| 21      | *Colocasia esculenta* L. Schott | Kochu       | Araceae     | Herb  | very common | Jan-Dec        | Leaf               |
| No. | Scientific Name               | Common Name       | Family          | Type  | Season          | Parts       |
|-----|------------------------------|-------------------|-----------------|-------|-----------------|-------------|
| 22  | Chenopodium album L.         | Bathua shak       | Chenopodiaceae  | Herb  | Common          | Jan-May     |
| 23  | Coccinia grandis L.          | telakucha         | Cucurbitaceae   | Climber | Rare            | Mar-Oct     |
| 24  | Cucurbita maxima Duch        | Mistikumra        | Cucurbitaceae   | Climber | Very common     | Jan-May     |
| 25  | Capsicum frutescens L.       | Marich            | Solanaceae      | Shrub  | Very common     | Jan-Dec     |
| 26  | Corchorus capsularis L.      | Deshipat          | Tiliaceae       | Shrub  | Common          | Mar-Aug     |
| 27  | Corchorus olitorius L.       | Merashak          | Tiliaceae       | Herb   | Common          | Mar-Aug     |
| 28  | Diplazium esculentum Retz    | Dhekishak         | Athyriaceae     | Shrub  | Common          | Oct-Jan     |
| 29  | Enhydra fluctuans Lour.      | Helencha          | Asteraceae      | Herb   | Common          | Nov-Feb     |
| 30  | Ipomoea aquatica Forssk      | KalmiShak         | Convolvulaceae  | Climber | Very common     | Mar-Oct     |
| 31  | Ipomoea batatas (L.) Lamk    | Mistialu          | Convolvulaceae  | Herb   | Rare            | Feb-May     |
| 32  | Lagenaria siceraria L.       | Lau               | Cucurbitaceae   | Climber | Very common     | Jan-Dec     |
| 33  | Lactuca sativa L.            | Lettuce           | Asteraceae      | Herb   | Rare            | Jan-Mar     |
| 34  | Malva verticillata L.        | Napashak          | Malvaceae       | Herb   | Common          | Nov-Feb     |
| 35  | Marsilea minuta (L.) Mant    | Shusni shak       | Marsileaceae    | Herb   | Rare            | Jan-Dec     |
| 36  | Marsilea quadrifolia L.      | Shusni shak       | Marsileaceae    | Herb   | Rare            | Jan-Dec     |
| 37  | Moringa oleifera Lamk        | Sajna             | Moringaceae     | Shrub  | Common          | Jan-Dec     |
| 38  | Paederia foetida L.          | Gandhabhaduli     | Rubiaceae       | Climber | Rare            | Jan-Dec     |
| 39  | Raphanus sativus L.          | Mula shak         | Brassicaceae    | Herb   | Common          | Oct-Jan     |
| 40  | Spinacia oleracea L.         | Palong shak       | Amaranthaceae   | Herb   | Common          | Oct-Jan     |
| 41  | Solanum tuberosum L.         | Alu shak          | Solanaceae      | Herb   | Common          | Jan-May     |
| 42  | Trichosanthes dioica Roxb    | Potol             | Cucurbitaceae   | Climber | Common          | Mar-Oct     |
| 43  | Xanthosoma sagittifolium L.  | Boi Kochu         | Araceae         | Herb   | Common          | Mar-May     |
| 44  | Xanthosoma violaceum Schott  | Kalo Kochu        | Araceae         | Herb   | Common          | Jan-Dec     |
Table 3 Medicinal Leafy vegetables are used by local people in Rangpur city corporation Bangladesh

| Sl. No. | Scientific Name | Family         | Local Name   | Used Parts | Diseases To be treated                                                                 |
|---------|----------------|----------------|--------------|------------|---------------------------------------------------------------------------------------|
| 1       | Acalypha indica L. | Euphorbiaceae  | Mukta jhuri | Leaf       | Bronchitis, Skin diseases Pneumonia, Infected wounds, Anti bacterial, Anti-fungal.       |
| 2       | Amaranthus oleracea L. | Amaranthaceae | Data shak    | Leaf       | Inflammations Haemorrhage, complaints, Boils abscesses, Fever, Anaemia or kidney and lung disorders. |
| 3       | Amaranthus spinosus L. | Amaranthaceae | Kata notey   | Leaf, Koot | Leucorrhoea, Hallucination, Burning sensation, Piles, bronchitis, constipation, eczema, leprosy and flatulence. |
| 4       | Amaranthus viridis L. | Amaranthaceae | Notey shak   | Leaf, Root | Bronchitis, piles, Burning sensation, Leprosy, hallucination, Leucorrhoea and constipation. |
| 5       | Azadirachta indica L. | Meliaceae     | Neem         | Leaf, Fruit| Skin ulcers, leprosy, stomach pain, Eye disorders, fever, diabetes, and Liver problems. |
| 6       | Alocasia indica Schott | Araceae       | Bashpor Kochu| Whole Plant, Leaf | High fever, tuberculosis, diarrhoea and Influenza. |
| 7       | Amorphophalus bulbifer (Roxb.) Blume | Araceae | Olkochu | Corm | Gonorrhoea and Piles. |
| 8       | Allium cepa L. | Liliaceae      | Piaj          | Bulb       | Asthma, cough, rheumatism, colic and insect bites. |
| 9       | Allium sativum L. | Liliaceae      | Rosun         | Bulb       | Inflammation, Bronchitis, Leucoderma, Piles, Fever, coughs, wounds, heart diseases and indigestion. |
| 10      | Brassica juncea L. | Brassicaceae  | Rai Sorisha   | Leaf, seed | Tumours, lumbago, Arthritis, rheumatism and stomach disorders. |
| 11      | Brassica oleracea L. var. botrydis | Brassicaceae  | Fulkopi      | Leaf       | Cancer and cardiovascular diseases. |
| 12      | Basella alba L. | Basellaceae    | Puishak       | Leaf, Root | Anaemia, Dysentery, Gonorrhoea and cancer. |
| 13      | Boerhaavia repens L. | Nyctaginaceae | Punarnava     | Leaf, Root | Kidney disorders, Skin diseases, insomnia, asthma, Jaundice, gonorrhoea. |
| 14      | Brassica campestris Roxb. | Brassicaceae | Sorisha shak | Leaf, seed | Internal congestions, rheumatic affections, Febrile and inflammatory symptoms and neuralgic. |
| 15      | Benincasa hispida (Thunb.) Cogn. | Cucurbitaceae | Panikumra    | Leaf, Fruit | Aphrodisiac, Jaundice, diuretic, blood disease, laxative, epilepsy, tonic and fever. |
| No. | Species | Family   | Common Name | Plant Parts | Uses                                    |
|-----|---------|----------|-------------|-------------|-----------------------------------------|
| 16  | *Coccinia grandis* L. | Cucurbitaceae | Telakucha | Leaf, Root | Asthma, Fever, epilepsy, gonorrhoea, Diabetes, catarrh dropsy and diabetes. |
| 17  | *Cucurbita maxima* Duch. | Cucurbitaceae | Mistikumra | Leaf, fruit | Intestinal infection, antihelminthic, Kidney problems, migraine and neuralgia. |
| 18  | *Chenopodium album* L. | Chenopodiaceae | Botua Shak | Leaf | Laxative, antirheumatic, antihelminthic, contraceptive, antiphlogistic, and intestinal ulcers. |
| 19  | *Celosia cristata* L. | Amaranthaceae | Morogphul | Leaf, flower, seed | Headache, eye inflammation, carpal tunnel syndrome, sores, skin erupation, and ulcers. |
| 20  | *Corchorus capsularis* L. | Tiliaceae | Deshipat | Leaf, root | Liver disorders, Dysentery, gonorrhoea, tonic, liver, and dysuria. |
| 21  | *Corchorus olitorius* L. | Tiliaceae | Marashak | Leaf | Demulcent, in worms of children hepatic, liver disorders, gastric catarrh, Dyspepsia and intestinal colic. |
| 22  | *Centella asiatica* (L.) urb. | Apiaceae | Thankuni | whole plant, Leaf | Bronchitis, fevers, ulcerations, Eczema, Leprosy, Inflammations and convulsive disorders. |
| 23  | *Coriandrum sativum* L. | Apiaceae | Doniya | Leaf, fruit | Asthenia, Suppuration, Piles, Inflammation Dyspepsia, hiccups, gleet’s jaundice. |
| 24  | *Capsicum frutescens* L. | Solanaceae | Morich | Leaf, Fruit | Dysuria, night blindness, pain, bronchitis, chest trouble Headache cough and dyspepsia. |
| 25  | *Colocasia esculenta* (L.) Schott | Araceae | Kochu | Leaf | Cancer of nose and warts, Tumours, ulcerated polyp. |
| 26  | *Diplazium esculentum* Retz. | Athyriaceae | Dhekishak | Tender, Leaf, frond | Skin diseases and urinary problems. |
| 27  | *Enhydra fluctuans* Lour. | Asteraceae | Helencha | Leaf | Skin and nervous affection, dropsy, ascites anasarca. |
| 28  | *Ipomoea aquatica* Forssk | Convolvulaceae | Kalmishak | Leaf, flower | Jaundice, bronchitis and liver complaints, leucoderma, biliousness, leprosy, fever. |
| 29  | *Ipomoea batatas* (L.) Lamk. | Convolvulaceae | Mistialu | Whole plant, leaf, root | Strangury and diarrhoea, Low fever skin disease. |
| 30  | *Lactuca sativa* L. | Asteraceae | Lettuce | Leaf | Prevents fall of inflammation and hairs, Ophthalmia, Headache. |
| 31  | *Malva verticillata* L. | Malvaceae | Napashak | Leaf | Gastrointestinal tract and respiratory tract, disorders of the skin. |
| 32  | *Moringa oleifera* Lamk | Moringaceae | Sajna | Leaf, fruit | Headache, general weakness, blindness, gastric problem and paralysis. |
33. *Marsilea minuta* (L.) Mank. Marsileaceae Susnishak Whole Plant, Leaf Sleeping disorders and headache, hypertension, respiratory troubles, cough.

34. *Marsilea quadrifolia* L. Marsileaceae Susnishak Whole plant, Leaf Abscesses, Snakebite.

35. *Paederia foetida* L. Rubiaceae Gondhovaduli Leaf, root Diarrhoea dysentery, lumbago, liver and stomach troubles

36. *Spinacea oleracea* L. Amaranthaceae Palong shak Whole Plant, Leaf Inflammations of the lungs and bowels, scalding urine, fever, joint pain

37. *Trichosanthes dioica* Roxb. Cucurbitaceae Potol Leaf, fruit, root Dysentery, diarrhoea, bronchitis and catarrh.

**Figure 1** Recorded status of occurrence

**Figure 2** Habit diversity of the recorded species
4. Discussion

Plant foods, particularly green vegetable spices, have the most diverse alternatives in terms of availability and diversity, as humanity draws the majority of its foods, medicine, and industrial products from plant genetic resources, whether wild or farmed. However, the erosion of traditional knowledge connected with traditional food systems and resources is a severe threat to them [97]. Traditional meals have become less popular in recent years for a variety of reasons, with...
traditional green leafy vegetables being one of the most affected (TGLVs). This reduction has been aided by the introduction of cash crops and exotic species, as well as the commercialization of agriculture and urbanization. Furthermore, some GLVs are frequently referred to be poverty foods [103] since many species are uncultivated, grow wild, and are viewed as agricultural weeds.

This stigma causes individuals to avoid them, particularly young people [103], resulting in a simplicity of many people's diets and a rise in high energy dense meals. These dietary changes have been accompanied by an increase in a number of diet-related chronic disorders, such as diabetes, cardiovascular disease, and cancer, all of which are major obstacles to human health and well-being. As a result, it is critical to develop knowledge about traditional community food consumption, as this will act as a prerequisite for food and nutrition. It will also aid in the development of successful food-based health promotion efforts and serve as the foundation for long-term diets.

5. Conclusion

The present study will record an inventory of the wild and cultivated vegetables of Rangpur City Corporation of Bangladesh. The present study will also be focusing on diversity of wild and cultivated vegetables and their local uses for the healthcare. The present investigation will be helpful for botanical and pharmacological research in future for the herbal drug development. Therefore, our country will be benefited both socially and economically.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that there are no conflicts of interests.

Statement of informed consent

In this study, medicinal information was obtained through semi-structured interviews with knowledgeable informants. A total of 117 informants having an age range 21-76 years were interviewed in the study area.

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