Contribution of Wild Edible Plants (WEP) to Food and Nutrition Security A Case of Northern Dhading, Nepal

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Key Results

» Everyone eats wild edible plants in one or other ways

» Out of reported 257 regularly eaten food plants, two-thirds (170) were wild edible plants

» 14 to 28 percent per meal of vegetables is fulfilled from wild edible plants

» Quantity-wise yearly contribution of fruits, vegetables, and spices are 20, 17, and 14 percent/household/year respectively (table 1).

» 65 percent of respondents perceived WEPs are nutritious; 62 percent said it is tasty and 17 percent said it fulfills food requirement during the vegetable scarce season

» Food deficit households consumed higher amount of WEPs as compared to households with better food sufficiency

» Knowledge of WEPs is not transferred to younger generation

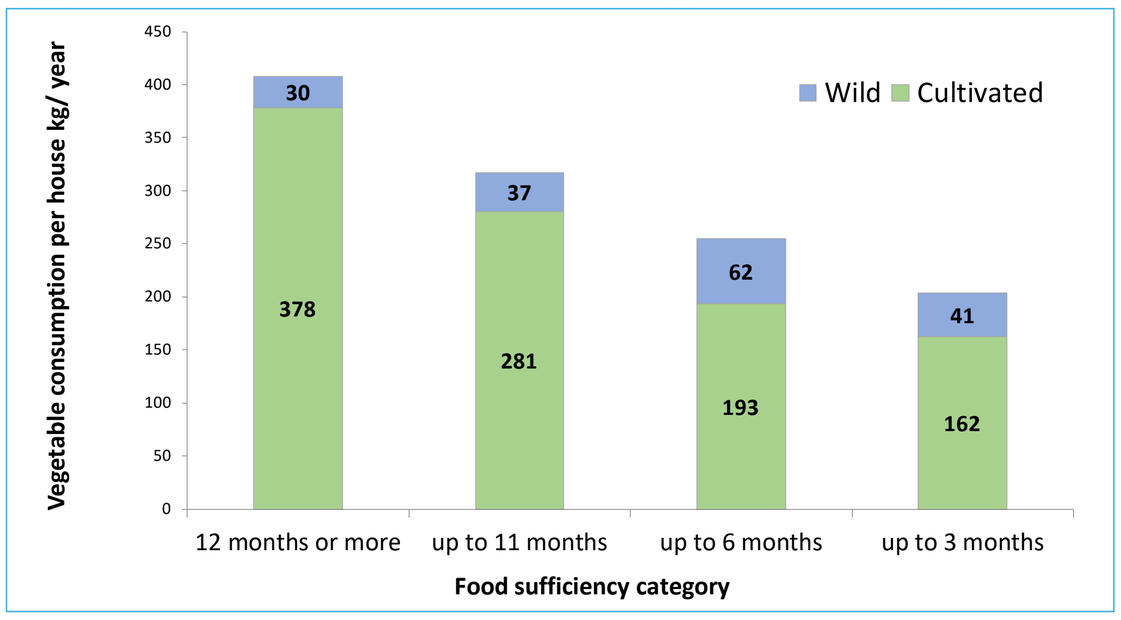
Thorny olive | Fiddlehead fern | Mountain ebony | Wild garlic | Gyroporus castaneus

Table 1. Average consumption (kg and percentage/household/year) of cultivated and wild plants

	Cultivated	Wild	Total Kg.	Cultivated%	Wild%
Vegetables	236	49	285	83	17
Fruits	78	19	97	80	20
Spices	43	6	50	86	14
Total	**357**	**75**	**432**		

Source: Survey data, Joshi and Basnet (2022)

Figure 1. Food sufficiency and WEP vegetable consumption



Source: Survey data, Joshi and Basnet (2022)

Introduction

Wild Edible Plants (WEPs) are defined as plants that grow spontaneously in self-maintaining populations in natural or semi-natural ecosystems and can exist independently of direct human action (FAO 1999, Shumsky et al., 2014). WEPs are commonly consumed by tribal and indigenous communities (León-Lobos et al., 2022, Thakur et al., 2017) and is a source of food and nutrition especially where and when other food source is scarce. More than 440 wild plants are known to be regularly consumed by many communities in Nepal (Panta et al., 2021, Joshi et al., 2007). Despite numerous studies on the importance of WEP, the magnitude of WEPs in the rural food system in Nepal remains poorly understood. Therefore a study was conducted in three rural municipalities of Dhading aiming to estimate and assess the current role and future potential of WEPs in addressing food and nutrition security.

Study Area and Methodology

The study was conducted in three Northern rural municipalities of Dhading namely Gangajamuna, Khaniyabas, and Ruby Valley. These municipalities are remote region with seasonal road access and are characterized as moderately food insecure. Tamang is major ethnic group followed by Brahmins, Newars and Dalits.

Participatory rural appraisal (PRA) methods, namely Key Informant Interview (KII), Focus Group Discussion (FGD), and household questionnaire survey (249 HHs, respondents age>30 years) were employed for data collection along with photo documentation. The data were analyzed using Excel software.

Acknowledgment

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Recommendation

» Document the existing knowledge before vanished, which only senior citizens have; engage the younger generation in WEPs harvesting and recipe generation for knowledge transfer;

» Integrate WEPs as major resource in Food and nutrition security policies, plans and programs;

» Mainstream WEPs in the food system for a sustainable food supply; one of the opportunities is CFUGs operational plan for its sustainable management and utilization;

» Prioritize research on proper species identification, their distribution, diversity, assessment of their nutritional value and domestication and cultivation practices development.

Conclusion

WEPs are one of the important sources of food and nutrition, especially during food deficit periods, and have the potential to address malnutrition. These are well adapted to the local environment, tolerant and resistant to insect pests, and organic in nature, hence WEPs contribution to local food system strengthening is crucial. On the other hand, WEP's wide utilization could bring economic benefits along with food and nutrition security. Integration of WEPs in the food system should be prioritized for research and its management.

References

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