

# Forests for food security: A Nepalese experience

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## Abstract

Nepal is one of the richest countries in the world in terms of biodiversity. Forests cover about 45% of the total land area with 8 vegetation types and 118 ecosystems. Food security is one of the most important issues related to forests and forestry in Nepal. Historically, forests provided various kinds of food stuff for the majority of rural people and food insecurity was not a problem. People used to collect various types of *Dioscorea*, (a yam) and *Colocasia esculenta antiquorum* (root vegetable) free of cost from forest. Today, this is not the case. People seem to have forgotten wild foods available free of cost from the forests.

However, at present Nepalese people do consume yam and fiddlehead fern (Neuro) as seasonal vegetables. A market survey implemented during the monsoon period of 2019 at vegetable market in Kathmandu revealed that vendors sold about 15 million Nepalese Rupees (US \$ 490,000) worth each of fiddlehead fern and yam. There is tremendous potential to use wild foods in Nepal because of its varied ecological conditions and different forest management.

As regular and inappropriate collection methods and amounts may hamper long-term productivity, government interventions may be needed to improve food security and sovereignty. Incentives in the form of technology and tax rebates would help promote better management of wild populations and possibly domestication of wild foods. Some wild foods contain toxic elements, and must be properly processed. Traditional consumption patterns have to be modified to suit modern lifestyle. These actions could be instrumental in improving food security in Nepal.

## Introduction

Nepal is one of the richest countries in the world in terms of biodiversity. Forests cover about 45% of the total land area with 8 vegetation types and 118 ecosystems. Food security is one of the most important issues related to forests and forestry in Nepal. Historically, forests provided various kinds of food stuff for the majority of rural people and food insecurity was not a problem. People used to collect various types of *Dioscorea*, (a yam) and *Colocasia esculenta antiquorum* (root vegetable) free of cost from forest. Today, this is not the case. People seem to have forgotten wild foods available free of cost from the forests.

## Methods and Materials

A market survey implemented during the monsoon period of 2019 at vegetable market in Kathmandu

## Results

There is tremendous potential to use wild foods in Nepal because of its varied ecological conditions and different forest management. Survey result showed that about 15 million Nepalese Rupees (US \$ 490,000) worth each of fiddlehead fern and yam.



Fig 1. Yam stacked for sale.

## Discussion

Tarul is a Nepali name for Yam (both wild and domesticated). Its scientific name is *Dioscorea*. Different varieties of *Dioscorea* (Tarul) are available in Nepalese market and the price varies depending on their food value and taste.

Nepalese people use Yam as food especially in Maghe Sankranti (first day of Magha)

## Conclusions

Food security is one of the most important issues related to forests and forestry in Nepal. Historically, forests provided various kinds of food stuff for the majority of rural people and food insecurity was not a problem. People used to collect various types of *Dioscorea*, (a yam) and *Colocasia esculenta antiquorum* (root vegetable) free of cost from forest. Today, this is not the case. People seem to have forgotten wild foods available free of cost from the forests.



Fig 2. Non-timber forest products for sale

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