Dinesh Makodu, who lives inside a thick forest near Agumbe in Shivamogga district, earns a descent income by harvesting and selling wild fruits, which constitute a major part of non-timber forest products (NTFPs) in this region of Western Ghats. There are several others in the Western Ghats region of Uttara Kannada and Shivamogga for whom wild fruits are a major source of income. Take for example, Krishna Siddi from Gaddehalli village in Uttara Kannada district. Over last 30 years, He has collected about 2.5 lakh kg of uppage fruit (Garcinia gummi-gutta). According to a study conducted by Life Trust, a civil society organisation based in Sirsi in Uttara Kannada district, of all the NTFPs, wild fruits contribute to more than 75 per cent of the income to the indigenous communities who traditionally engage in the collection of NTFPs. These fruits, which have multiple uses such as food additives and medicine, contribute significantly to the food security and livelihood improvement of local communities.

South and Southeast Asia are home to more than 500 fruit species. These can be categorised into four classes: major tropical fruits, minor tropical fruits, under-utilised tropical fruits and wild tropical fruit species. Unfortunately, there is no authentic data regarding the production and trade of wild fruits of all tropical fruits produced worldwide, about 90 per cent is consumed domestically. The remaining is traded as fresh (five per cent) or processed (five per cent). The prevailing practices of harvesting most of the wild tropical fruits are largely unscientific and unsustainable. These include one or more of the following: harvesting of immature fruits, over-harvesting and lopping of fruit bearing branches. These practices harm the regeneration of species, lower the quality and thus, fetch less price in the market.

NTFPs are sold in the lean season when agriculture labour demand is low. Fluctuation in the price of the fruit rind is quite rampant and the harvesters do not have any control over it. Poor knowledge about the non-destructive methods of harvesting and processing coupled with a lack of initiatives for value addition and market has become a hurdle in regulating the situation. Absence of an appropriate policy to involve different stakeholders in the entire dynamics is another issue to be addressed.

For the people dwelling in the Western Ghats region, much of the ecology, economy and culture are forest-based. The health and functioning of the forests depend on the sustainable management of
resources. In India, wild tropical fruits comprise about 30 per cent of the forest revenue. NTFPs are recently included in the national working plan code of the Forest Department. They also comprise 20 to 30 per cent of income of tribal families who are often landless and the most vulnerable to climate change. Developing value-added products from wild fruit crops with high commercial potential needs to be encouraged. Further, initiatives like domestication, providing improved knowledge on agronomic aspects, participatory and action research towards value chain development and marketing should be promoted. “We need to conserve the wild tropical fruits through initiating community based sustainable forest management practices.

Further, very few wild fruits are evaluated for their commercial and nutritional values and medicinal usages,” explains Balachandra Sayimane, a landscape ecologist and farmer. As per the study conducted by Life trust, there are more than 200 wild fruit species in the Western Ghats range of Uttara Kannada that have human use. However, not all are edible.

**A special place**

Of all the wild fruit species found in Uttara Kannada, the Garcinia species have a special niche. Uppage (Garcinia gummi-gutta), kokum (Garcinia indica), betta hunase (Garcinia xanthochymus) and Arishina andi (Garcinia morella) are some of the important species. Juice is extracted from the rind of these fruit species. The rind is also dried and used as souring agent and in beverages. Oil or ghee from the seeds is used for edible, medicinal and cosmetic purposes. It is also used in the preparation of home made candles and soaps. Income obtained by harvesting and selling of uppage in the district is more than Rs 11 million per year. There are also other species that contribute significantly to the local ecology as they provide food for wild animals and are used in traditional preparations. Some such species that are part of the rich biodiversity of Western Ghats are vaate (Artocarpus lakoocha), sampige (Flacourtia montana), halage (Elaeagnus conferta), jamun (Syzygium cumini), ranjalu (Mimusops elengi), bikke (Gardenia gymnifera), nurkalu (Buchanania lanzan), guddegeru (Semecarpus anacardium), ankole (Alangium salvifolium) kouli (Carissa carandas), tumri (Diospyros melanoxylon), ichalu (Phoenix sylvestris), hulimaige hannu (Rourea santaloides), mullannu (Ziziphus oenoplia and Ziziphus rugosa), aramadlu (Zanthoxylum ovalifolium), haale (Chrysophyllum roxburghii), hebbalasu (Artocarpus hirsutus) and challe hannu (Aporosa lindleyana). Some species yield in certain seasons and some throughout the year.

Over the years, the traditional knowledge on wild tropical fruits — from identification of the species to usage, medicinal properties and harvesting norms — is gradually disappearing. To ensure that it does not get lost, Life Trust has initiated participatory research and development activities with focus on documentation of knowledge linked to these fruits and species conservation. Promoting domestication and value addition of wild fruits is also being done in association with forest dependent communities. To help out, Dattatraya Hegde of Bhairimane, a farmer, leads an informal network of grafting experts whose interest is to promote domestication of wild tropical fruits and horticulture crops. He himself has cultivated 20 species of wild fruits in eight acres of land near Sirsi. In doing so, wild fruits gets the much needed support.

Source: [http://www.deccanherald.com/content/525107/fruits-forest.html](http://www.deccanherald.com/content/525107/fruits-forest.html)