



Photo: Mahesh Shrestha-LIBIRD

Maina Thapa selling her products at Lekhnath Festival

# From rarity to ubiquity

## *Entrepreneurship revives rare rice variety*

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As families in urban and peri-urban regions in Pokhara leave farming, they also lose access to traditional varieties of rice from their own farms. In this context, establishing linkages between rural producers and urban consumers can be an effective way of preserving local food culture and extending the benefits of the expanding markets of the urban cities to the rural producers.

The value of traditional rice varieties are determined by various socioeconomic and cultural uses. Farmers manage a large number of cultivars for various reasons including food security, socio-cultural value, specific abiotic co-adaptive traits (such as being adapted to drought, poor

soils) and economic or market value. *Anadi*, a sticky and glutinous rice, is one such variety grown in Rupa and Begnas lake watershed, a peri-urban area to the Pokhara valley in Kaski, Nepal, for its cultural and traditional use. *Anadi* is grown by many households but in small areas dotting the paddy landscape with patches of brown panicles.

### **Market linkage increases production**

Maina Thapa is a subsistence farmer in the Rupa Lake Watershed. Sixteen years ago, she used to alternate her rice production among three major varieties; *Mansuli*, *Madhise*, and *Radha 7* as she owned limited *khet* land (irrigated paddy land), about 508.5 sq. meters. She did not produce *Anadi*

rice as her land was not suitable for *Anadi*, which requires irrigated or persistently waterlogged conditions.

Her foray into *Anadi* began with a role she was assigned to as a member of a local cooperative. The Pratigya Cooperative was formed in 1996 in Chaur of Kaski to collect, process and market local foods, providing saving and credit services to members and low interest loans to farmers. Maina Thapa was one of the 15 founding members of the Cooperative. Pratigya Cooperative in collaboration with LI-BIRD started working on promoting and marketing of *Anadi* in the watershed and Pokhara (nearest urban market from *Rupa* and *Begnas*) from 2001. Along with *Anadi*, they also worked on promotion of other local and value-added food products made from taro. The members of the cooperative divided work among themselves and Maina was responsible for collection, quality control, storage, processing and marketing of *Anadi*.

In 2001, Maina was able to collect only 12.2 kg of *Anadi* grains from the village and sold it unprocessed to a wholesaler (Sital Agro Products) in Pokhara for NPR 16 per kg (NPR 40 per *pathi*, a local unit equal to 2.4 kg of rice). Pratigya Cooperative spread the word of buying *Anadi* grains in the area. When farmers heard this and realized that *Anadi* can be sold, they increased their production. The demand from wholesalers in the market also increased. The price for *Anadi* grains went up to NPR 25 per kg (NPR 60 per *pathi*) in 2005 with the wholesaler covering the transportation costs.

Maina cultivated *Anadi* in about 0.5 hectares of the leased land and produced a little over 1.7 tons of grains. In addition, she also collected and aggregated *Anadi* from small producers in the village increasing her annual collections from 12.2 kg to 488 kg within 6 years. Maina says, “*Since we were linked to the market and started selling Anadi, we were motivated to produce more.*”

### **The Cooperative initiative**

Responding to the demand and higher value of milled *Anadi*, the cooperative and LI-BIRD invested in a rice mill in 2005 through the UNDP/SGP Community Biodiversity Registration project. In the same year, the cooperative leased-in about 4 hectares of *khet* land from the local Ananda Jyoti Secondary School for NPR 20,000 per year. They started cultivating and milling various rice varieties such as *Ekle*, *Anadi*, *Madhise* and *Chaite* as well. The mill was an important service to the local community, especially homemakers.

To maximize its profit, the cooperative decided to take their products to the market themselves cutting the role of the middlemen. In 2006, LI-BIRD with financial support from

### **Benefits of Anadi rice variety**

It is mainly consumed as Latte (rice cooked with ghee and sugar) during festivals. Other local recipes include Khatte (snack prepared by soaking de-husked rice in water and then roasting) and Siraula (snack prepared by soaking *Anadi* paddy followed by roasting and milling). It is also served when people are ill, especially when suffering from aches and sprains, although its medical properties have not yet been scientifically studied. In the past, cooked *Anadi* was also used to prepare casts for mending fractures when modern health care services were not readily accessible

the Development Fund (Norway) supported to rent an outlet for the cooperative in Pokhara for marketing. LI-BIRD was to support full rental cost for the first six months, 75% for the next six months and 25% for the final six months, with the cooperative progressively covering greater share of the rent. However, this strategy was not successful. The shop never managed to turn in a profit and closed after mere nine months.

Lack of business acumen and the carelessness of the members were the main reasons for the failure of the shop. Since the shop was owned by the cooperative rather than an individual, members did not have incentives to give the required time for operation and management of the shop. The shop was established to tap into the seemingly lucrative cut taken by middlemen. However, this bitter experience showed that middlemen play an important role of risk bearing in the value-chain, linking rural producers with urban retailers and also ensuring supply through out the year.

### **From a farmer to an entrepreneur**

The rent for leased land of school kept on increasing each year and in 2007 it reached NPR 30,000. With yearly increase in land rent and the loss they were bearing, the cooperative decided to discontinue renting the land for rice production. Maina decided to lease the land herself and made the highest bid. Through her experience of six years in *Anadi*, Maina had gained knowledge, expanded her market networks and was confident to take this up herself.

Soon after taking the lead, she intensified her production to meet the increasing market demand. She invested in a tractor (as there was shortage of agricultural labor), pump set for irrigation, packaging machine, rice mill and support staff. Her husband, retired from the Army, also supported her to operate this as a family business.

She has utilized local fairs such as the annual Lekhnath *Mahotshab*, Pokhara *Mahotshab*, and the occasional organic fairs as one of the main venues to sell and promote her produce. LI-BIRD and its various donors and partners such



Photo: Mahesh Shrestha-LIBIRD

Maina Thapa in her farm

as Bioversity, IFAD and The Swiss Re Foundation have supported participation of farmers like Maina, and farmers' groups as well. She sells much of her milled *Anadi* rice as well as *Siraula* and *Chiura* (beaten rice) at these fairs and uses them to increase her business network.

Unlike other subsistence farmers, Maina's income is now enough to support her family including higher education of her children. Maina says that "*agriculture needs to be seen as a business and we smallholder farmers are entrepreneurs, regardless of the scale.*" She encourages other women to be independent and take advantage of the agricultural land they hold.

### Linking smallholders to the market

Maina plays a key role in rural and urban linkage for marketing traditional rice varieties. Usually, the volume of production of *Anadi* from individual farmer is low (about 2-12 kg). It is not easy for them to find retailers/wholesalers. Wholesalers also do not prefer collecting small quantities from individual farmers. On the other hand, farmers want to

be paid in cash but retailers/wholesalers either pay by cheque/cash or take the goods on credit. There was a need for a middleman in the chain, which Maina has been playing to the benefit of the local smallholder farmers. Maina currently has a network with five wholesalers. She also supplies *Anadi* to other consumers directly in Kathmandu valley.

At its peak in 2009, Maina sold about 7.3 tons of *Anadi* grains (4.9 of her own production and 2.4 collected from other farmers), incorporating collection of *Anadi* into her own business. In 2014, she sold 2.9 tons of *Anadi* rice, 1/5th of it collected from farmers. She collects *Anadi* from 15-20 farmers every year from her village and nearby villages of Hansapur and Rupakot as well.

Some level of organizing, aggregation and linkages with value-chain actors can create opportunities to smallholder farmers to benefit from local diversity.

While farmers continue to cultivate *Anadi* for their own consumption during festivals, many are no longer selling it to Maina. For the less resourced farmers, the cost of production is no longer attractive for the few kilograms they sell. Farmers report of declining productivity of *Anadi*, perhaps indicating a need for landrace enhancement through selection (Sthapit and Ramanatha Rao 2007). The milling recovery of *Anadi* is lower than other rice varieties at about 53%, its coarse straw is not preferred by livestock, which also decays faster compared to other straws making it unsuitable for alternative material uses as well. On the other hand, with a larger scale of production, the more resourceful farmers are essentially following in Maina's footsteps and are selling their *Anadi* directly to vendors in Pokhara and Kathmandu.



*Anadi, the traditional rice variety*

Adapting to this changing landscape of competition, Maina has now diversified her portfolio of varieties. In addition to *Anadi*, she cultivates *Ekle* (for her own household consumption) and *Pokhareli Jethobudho*, both local varieties. *Pokhareli Jethobudho* is a prized aromatic long grain rice improved by LI-BIRD and farmers through the process of participatory varietal breeding and released through the national system. While the volume of *Anadi* sold by Maina has peaked, gone down and stabilized, she diversified her business by producing and selling 7.3 tons of *Pokhareli Jethobudho* in 2014, something unheard of for this variety in her village. Perhaps in another decade, she will have moved on to another enterprise.

### Emerging lessons

When it comes to agricultural market development, the lure of identifying the best varieties or products, ramping up standardized production to scale and tapping the lucrative national and international markets is inspiring as well as tempting. However, the promise of such a great scope can only be realized through equally great investment in developing and managing the entire value-chain, something that is often beyond the capacity of many rural development organizations and programmes.

However, on the other hand, there lies a plethora of opportunities in terms of local crops and varieties that have localized and limited yet untapped market potential sustained by traditional culinary knowledge, rituals and nostalgia. The case of Maina Thapa shows that some level of organizing, aggregation and linkages with value-chain actors can create opportunities to smallholder farmers to benefit from local diversity. It also shows that one needs to diversify and change

with the times as these varieties inherently have small markets and even a few additional competitors can eat into one's business. However, there are still plenty of alternative local varieties with untapped potential that enterprising farmers like Maina can carry over their experience and lead the way for others to follow.

### References

- Gyawali, S., B.R. Sthapit, B. Bhandari, J. Bajracharya, P.K. Shrestha, M.P. Upadhyay and D.I. Jarvis., **Participatory crop improvement and formal release of *Jethobudho* rice landrace in Nepal**. *Euphytica*, 2010, 176: 59-78.
- D. Jarvis, B. Sthapit and L.Sears, (eds), **Conserving Agricultural Biodiversity In situ: A Scientific Basis for Sustainable Agriculture**, 2000, Proceedings of a Workshop, 5-12 July 1999, Pokhara, Nepal. IPGRI, Rome, Italy.
- B.R. Sthapit, M.P. Upadhaya, P.K. Shrestha and D.I. Jarvis (eds.), **On-farm conservation of agricultural biodiversity in Nepal, Volume II - Managing diversity and promoting its benefits**, Proceedings of the Second National Workshop, 25-27 August 2004, Nagarkot, Nepal. IPGRI, Rome, Italy.



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