Micro-Enterprises Development for Poverty Alleviation

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Orange Resource Survey of Banskharka VDC, Parbat District[1]

Abstract

MEDEP was implemented in Parbat since 1998. Among 55 VDCs in Parbat, Banskharka is known for orange (mandarin) production and has the potential for generating income through marketing and processing. It needs detailed information on production for planning purpose. Hence, this study was conducted to assess the status of orange production in Banskharka. It was found that the marketing of orange was still traditional on 'dana' system (per fruit basis) without grading. In order to add profit to the farm income, there was a need to grade fruits and sell the better qualities in the market and process the lower grade ones. Hence, the micro-entrepreneurs should be motivated to grade their fruits by utilizing the CFC building supported by MEDEP. The agriculture extension programme should reach the farmers and help them solve the yellowing and fruit drop problems in orange. As the study was conducted in a VDC known for orange production, the findings indicated that promotion of orange production like in Banskharka can reduce seasonal migration of people in search of employment opportunity.

1. Introduction

1.1 Background of the Study

MEDEP was to improve the socio-economic conditions of the low-income families and socially excluded people in Nepal. By 2010, MEDEP has been implemented in 36 districts. Parbat is one of the districts where the programme is implemented since the first phase (Piloting Phase, 1998). Parbat has high population density (319/sq. km.) among the mountainous districts of the Western Development Region. There are 32,731 families with 4.82 members per family (CBS, 2001). Some members of 96 percent households are employed abroad affecting negatively to the supply of agricultural labour.

1.2 Statement of the Problem

Among 55 VDCs in Parbat, Banskharka is known for orange (mandarin - *Citrus reticulata* Blanco (NCDP, 1990)). It is often said that orange processing enterprise can be established in Banskharka. However, detailed information on the status of orange trees and the level of production is lacking.

1.3 Objectives of the Study

The main objective of this research was to assess the orange production status in Banskharka VDC of Parbat district.

[1] By Micro-enterprise Development Programme (MEDEP)-2010

2. Research Methodology

2.1 Conceptual Framework

When the resource is abundant (mandarin orange production in this study), the harvesting needs to be matched with the market demand to maximise the return. Grading should be practised and the low-graded fruits should be used for processing to reduce the cost of processed products as well as enhance the quality of marketed fruits to fetch better price.

2.2 Analytical Framework

This study has considered the number of trees (bearing and non-bearing), production, price, return and potential area for enhancing production and value addition to the primary produce.

2.3 The Data

This study was conducted in Banskharka VDC of Parbat district. Banskharka is known for orange production in Parbat (DADO, 2010). On the basis of orange plants with the households, 139 households were surveyed. The required information was collected by direct observation, group discussion and interview by using structured questionnaire designed on the basis of various forms used by MEDEP (MEDEP, 1999; MEDEP, 2007). The households to be surveyed were identified through focus group discussions. The wards with high yield of orange were given high priority during the data collection.

3. Results and Discussions

3.1 Orange Production Status in the Study Area

History of orange: Orange was traditionally found in Banskharka VDC. Orange trees were planted around 1973. Later, Lumle Agriculture Centre promoted orange cultivation in this VDC.

Use of orange: Orange was found mostly eaten by the family, guests and was also given as gift to relatives and guests. Some of the production was sold for cash income and some were used for processing into squash with the support from MEDEP.

Availability of orange: There were 12,504 trees of which 7,017 were fruiting and 5,487 were non-fruiting in Banskharka VDC. The ward-wise distribution of orange trees is presented in Table 1. The total production was 226,147 kg. With average selling price of Rs 25/kg, it was equivalent to Rs 5,653,675 with an average of Rs 21,998 per household.

L: Ward-wise distribution of orange trees in Banskharka VDC

Ward number	Number of tree		Production (Kg) in 2010	Market centre
	Non-fruiting	Fruiting		
1	695	1,166	32,570	Beni
2	1,792	1,997	61,020	Baglung, Kusma, Pokhara, Beni
3	1,061	1,898	58,925	Beni, Baglung, Galeshwar, Pokhara
4	370	424	16,940	Beni
5	325	317	6,410	Beni, Galeshwar, Pokhara, Kathmandu, Baglung
6	308	381	9,432	Beni
7	655	543	32,680	Beni, Baglung, Galeshwar
8	275	274	6,570	Beni, Pokhara, Galeshwar
9	6	17	1,600	Beni
Total	5,487	7,017	226,147	

Quality of orange: The Brix value of the orange was found to vary from 9.5 to 12. Brix measures the total soluble solids in the fruit juice. The Brix was increasing towards the later stage of harvesting. The higher the Brix, the better is the taste (sweetness) of the fruit. For better quality, Brix reading should be 12 or more in mandarin oranges (Thapa et al, 2000). Higher Brix is desired for processing into juice as well.

Marketing of orange: Farmers sell orange directly to the middlemen from the tree on *dana* (per fruit) system. The per fruit price is same for all sizes of fruit. The middlemen/collectors classify the fruits into three grades (1, 2 and 3) and sell on weight basis (per kg system) at different prices for each grade. The collectors/middlemen were mostly from Kusma, Galeshwar, Beni, Baglung and Pokhara. The average farm-gate price was Rs 30/kg.

Market coverage: Farmers mostly sell the orange directly to the middlemen from Pokhara, Kusma and Baglung. Kusma, Galeshwar, Baglung, Beni and Pokhara are the major markets for the orange produced in Banskharka. Narayanghat, Kathmandu and Jomsom are the other potential markets.

Processing: In the surveyed sample, about 1,500 bottles (750 ml/bottle) squash were processed by two micro-entrepreneurs' groups. It was sold in the local market. It was told that orange squash was sold better during wedding ceremony. In the market, consumers wanted to drink squash as juice for which they had to add water to the squash. So, the micro-entrepreneurs were found eager to know the technology of juice processing. Nevertheless, the juice price was high. Use of graded fruits and minimisation of wastes were found as the ways to reduce the price of juice.

3.2 Issues and Problems

In production: Yellowing of the branches after fruiting has been the major problem encountered by the orange farmers. The fruit drop was another problem. Farmers

were spraying nilotutho (copper sulphate). However, the problem was not solved. Since spraying of nilotutho did not work, farmers are using their own technology of cutting the tree branches after they find it infected.

In selling: Farmers were not grading the fruits according to size. Therefore, they were selling oranges on the number of fruit basis (dana system) and not on the basis of weight.

Farm labour: As said earlier, 96 percent of the households have some members working abroad. This has affected the supply of farm labour in the community.

4. Conclusions and Recommendations

4.1 Conclusions

Banskharka VDC has a high potential of orange production. The orange resource can be used for selling as well as processing. The cultivation is increasing in Banskharka VDC. To add profit to the farm income, there is a need to enhance entrepreneurship culture. If selling could be enhanced and processing could be promoted, it can contribute to poverty reduction in Banskharka VDC, thereby creating employment in the locality reducing the migration in search of employment.

4.2 Recommendations

- In order to fetch better price in marketing and reduce the cost of production in processing, the micro-entrepreneurs should be motivated to grade their produce by utilizing the CFC building supported by MEDEP.
- As per the market demand for orange juice, an action research should be conducted to process orange juice by using a new technology, which is processing without using preservative and sugar.
- The major production problem should be communicated with the District Agriculture Development Office and solution sought to enhance productivity.

REFERENCES

CBS. 2001. District Profile of Parbat. Central Bureau of Statistics. Kathmandu.

DADO. 2010. Annual Progress Report 2009. District Agriculture Development Office Parbat.

MEDEP. 1999. MEDEP Survey Forms - A, B, C, D, E. Micro-Enterprise Development Programme (MEDEP/UNDP), Ekantakuna, Jawalakhel, Kathmandu

MEDEP. 2007. Junar Resource Survey in Sindhuli 2007. Micro-Enterprise Development Programme (MEDEP/UNDP), Pulchok, Kathmandu

NCDP. 1990. Progress Report of the Sixth Five-Year Plan. National Citrus Development Programme. Dhankuta, Nepal

Thapa, P. K., Pant, K. P., Parajuli, D. P. and Gautam, L. 2001. Report on Overview of Fruits, Vegetables and Spices Subsectors in Nepal. A Study Commissioned by MEDEP, Ekantakuna, Kathmandu.