

Tech. Bulletin No : 48

Collection, Processing and Marketing of *Buchanania lanzan* (Chironji) in Madhya Pradesh



Pratibha Bhatnagar
Swati Jain



State Forest Research Institute Jabalpur (M.P.) - 482 008

2005

Acknowledgements

We thank the people and traders of Chhindwara, Damoh, Panna, Umaria , Shahdol, Amarwara and Kanpur for giving us their valuable time and information for this study.

We express our deep sense of gratitude to **Shri P. K. Shukla**, IFS, Director, State Forest Research Institute, for providing guidance in drafting of this manuscript and offering useful suggestions and to **Shri Ravi Shrivastava**, IFS, Addl. Director for checking the manuscript.

We are also thankful to the **M. P. Minor Forest Produce (Trade and Dev.) Federation**, Bhopal for funding this project.

Shri R. G. Chouksey assisted in the initial work in May 2000, which led to formulation of this project. We are grateful to the all forest officers and their staff for readily providing information and facilities during field visits.

Thanks are also due to **Ms. Aditi Mishra**, **Shri Naval Singh Lodhi**, **Shri Vijay Bahudur**, technical staff for assisting in the finalization of the report, **Ku. Manisha Chaurasia** for the typing the report and **Shri Rakesh Jain TA** (Computer) for preparing map and scanning of photographs.

Content

Acknowledgements

Chapter - I *Buchanania lanzan*

- 1.0 Introduction
- 1.1 Uses
- 1.2 Botanical characteristics
- 1.3 Occurrence and distribution
- 1.4 Review of literature
- 1.5 Objectives

Chapter - II Production areas and trade centres

- 2.1 Major chironji producing areas of the state
- 2.2 Collection of chironji in M.P.
- 2.3 Quality of chironji
- 2.4 Important trading centres

Chapter - III Collection, harvesting and processing

- 3.1 Collection and harvesting
- 3.2 Collection of unripe seeds
- 3.3 Dimension of unsustainable harvesting
- 3.4 Processing
- 3.5 Grading
- 3.6 Storage
- 3.7 Packaging

Chapter - IV Income from collection

- 4.1 Dependence on NWFPs for income.
- 4.2 Prevalence of exchange system.
- 4.3 Income from chironji collection.

Chapter - V Marketing and trade

- 5.1 Village level marketing
- 5.2 District level markets
- 5.3 Regional markets
- 5.4 National markets
- 5.5 Marketing channel

Chapter - VI Price variations and method of pricing

- 6.1 Seasonal price variation
- 6.2 Variation in price due to quality
- 6.3 Pricing in mandies
- 6.4 Price integration at different markets

Chapter - VII Economics of chironji trade

- 7.1 Collection cost
- 7.2 Processing cost
- 7.3 Economics of chironji processing unit

Chapter - IX Conclusion and recommendations

- 8.1 Trends in chironji
- 8.2 Recommendations

References

Annexures

CHAPTER - I

BUCHANANIA LANZAN

1.0 Introduction

Buchanania lanzan, commonly known as *chironji*, *achar* or *char* is an important tree species, found in mixed dry deciduous forests of Madhya Pradesh. It belongs to the family Anacardiaceae, generally comprising of trees or shrubs. It is a medium sized tree, almost evergreen and leafless only for a short period of time (CSIR, 1948). It was discovered by a Mr. Buchanan Hamilton, a forester in 1798 in Burma. It has a dark grey or black bark, regularly divided into small rectangular plates somewhat resembling a crocodile hide and reddish inside (ICFRE 1996) *Buchanania lanzan* flowers from January to March with fruits ripening from April to June. The fruit is an ovoid drupe, about 0.5 inch long, black when ripe, with a hard two-valved stone 0.35 to 0.40 inch in diameter enclosing an oilseed (Troup, 1986). The seeds fall before or at the commencement of rainy season.

The collection of fruits is done in May. The tree occurs both in forests and on agricultural land. Collection of fruits is done by farmers on their own land and by the rural population from the forests. The harvesting of *chironji* fruit is often done in unripe form. The fruit becomes light-black on ripening and is known as *pandi*. The kernels of ripe fruit are large sized. The seeds known as *guthly*, are dried and sold in unprocessed form to local traders, who sell it either to wholesalers or to the processing mills.

The traders of these mills use power driven nut-cracking machines known as cool grind to remove kernels. Winnowing and cleaning work is reported to be done by women.

Chironji is sold in different grades and is referred to as super quality (bold *dana*), best (double *dana*), medium, etc. Grading criteria is according to size, quantity of broken nuts and freshness in taste.

Chironji has a very short shelf life. The collection to marketing channel ranges from harvesting of nuts, drying, washing, grinding, sorting, grading, packaging and distribution. The marketing ranges from local to regional and even international as some quantity is exported also.

Earlier, the purchaser/contractor by paying a fixed royalty to the government, had complete rights of collection of *chironji* fruits over a well-defined area and could stock any amount. In 1986, the royalty system was done away with and the *chironji* fruits could be traded freely in market.

In view of the economic significance of *Buchanania lanzan* in the state and variable price of different grades of seeds, the trade is beset with several problems. Traders usually fix prices on the basis of percentage by floatation method.

There are some good-quality areas of *chironji* in the state. Delineation of areas on the basis of quality of *chironji* fruit is the first essential step to ensure better economic returns. Only a small quantity of *guthly* is sold during the collection season. Farmers prefer to sell the