RURAL MARKETS OF MALNAD REGION IN KARNATAKA -AN ECONOMIC ANALYSIS

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RURAL MARKETS OF MALNAD REGION IN KARNATAKA -AN ECONOMIC ANALYSIS

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Dedicated to my

beloved parents and

Guide

Department of Agricultural Marketing and Co-operation
University of Agricultural Sciences
Bangalore – 560065

CERTIFICATE

This is to certify that thesis entitled, **"RURAL MARKETS OF MALNAD REGION IN KARNATAKA-AN ECONOMIC ANALYSIS"** submitted by **Miss. DHEEKSHITH, K.C.** for the award of the degree of **MASTER OF SCIENCE (AGRICULTURE)** in **AGRICULTURAL MARKETING AND CO-OPERATION** to the University of Agricultural Sciences, GKVK, Bangalore, is a record of *bonafide* research work done by her during the period of her study in this University under my guidance and supervision. The thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.

Bangalore
February 2007

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C.P. Gracy for their kind co-operation and help during the course of my post graduation studies in the Department of Agricultural marketing and Co-operation.

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(Dheekshith, K.C.)

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Introduction

Chapter I

INTRODUCTION

The Indian agriculture traditionally was a self sustainable village system. The surpluses in production were used to be exchanged among farmers through barter system in earlier days. With the advancement of time, the surplus production of agricultural produce over and above the needs for domestic requirements used to be sold in a common place convenient to group of villages atleast once in a week. Subsequently these markets have been converted into a market place for purchase and sale of marketable surplus of agricultural produce among rural community. This market place is popularly called as weekly shandy/rural shandy.

The rural primary markets play a vital role in marketing of agricultural produce, particularly of small and marginal farmers and also provides avenue to purchase and sale of products from urban areas. Normally, the villagers reach the market on foot or by bullock carts or by using public utility transportation. In India, the average distance to the nearest village market is around five kilo meters. In hilly regions the average distance to the nearest shandy is 10 kilo meters.

Agriculture plays an important role in the overall economic and social welfare of the country. The agricultural sector in India accounts for about 20 per cent of its GDP, 15 per cent of total earnings and employ 59 per cent of the ccountry's workforce. In India 75 per cent of the population lives in villages and their main occupation is agriculture. In India, rural marketing is dominated by the unorganized sector, like agriculture and to a certain extent, the industrial products which are used mainly for the purpose of agricultural and allied activities.

Status of rural markets in India

Rural Markets are the segments of markets of any economy, which are distinct from the other types of markets commodity markets or labour markets. Periodic markets constitute an important segment of rural economy in India.

India is the world's tenth largest economy with a GDP of US $ 695 in 2006. The country's growth is also strong, with real GDP growing in by 8.4 per cent in 2005-2006. As a result the purcahsing power of the population is increasing including rural population. On account of this there is a great demand for consumer articles including essential commodities. With this background rural markets have acquired prominance since they have become centers for marketing these products.

India's rural market is characterized by its vast spread - over 600,000 villages with a total population exceeding 620 million. Among the villages, 145,098 villages or 23 per cent of total villages have population less than 200. Another 21 per cent have population between 200 and 500. Only 13,113 villages have population over 5,000 and these villages are in seven states - Uttar Pradesh, Bihar, West Bengal, Maharashtra, Andhra Pradesh, Kerala and Tamil Nadu. Kerala is dominated by large villages; 1,259 out of the total of 1,384 have average population of 15,475 per village, for the rest of the country the figure is 954.

In rural areas, a total of 3,697,527 shops (retail outlets) have been operating with an average of 6 shops per village. Among the states the number of shops per village is lowest, (around 1.5) in Himachal Pradesh, Arunachal Pradesh and Meghalaya. On the other side, Kerala has the largest number of shops (192 per village). In Punjab, West Bengal, Goa,

Gujarat, Andhra Pradesh, Tamil Nadu and Pondicherry the overall shops per village are around 7.

In India the concept of weekly shandies is an age old marketing system. Rural markets in rural areas play an important role in improving agricultural marketing. They provide a location at which farmers can meet the traders, increase retail competition by providing a convenient place where farmers can meet with consumers, reduce post harvest losses and provide a focal point for rural activities.

In rural markets, trade is characterized by direct sale of small quantities of produce by producers to village traders and to rural consumers. Rural markets called by different names such as shandies, weekly shandies, haats, bazars, jatra, mela, periodic markets, etc.

Rural markets form part of a trade network and normally arranged in a periodic basis on specific week days and are commonly organized at a central place in a village, hobli, and taluk.

Rural markets provide a convenient location for traders to meet with farmers. In some cases these markets operate seasonally or twice or only once in a week. In others, they operate more or less; continuously with large –scale traders some times employing agents in several such markets to buy on their behalf. The rural markets provide an easy and convenient way of marketing to the farmers and small traders who wish to sell their produce on their own.

Importance of rural markets/shandies

Rural markets play an important social function. Farmers prefer to take their own produce to market rather than sell it to the traders. The visit to the rural center provides them an opportunity to buy items unavailable in their villages and to catch up with local news. Further

rural markets function as more than just trading places. They are the focal point of rural center and provide an important place where people can meet.

Rural periodic market is the first contact point for producers-sellers for encasting their agricultural produce and buying other goods needed by them. There are 27,294 rural periodic markets including those for live stock in the country. Among these 45 per cent are in the east, 27 per cent in north, 20 per cent in west and 8 per cent in south. Uttar Pradesh and Bihar have the maximum number of haats, i.e. 25 per cent and 18 per cent respectively.

It is the rural markets where majority of the farmers especially, small and marginal farmers bring their farm produce for sale and convert them into cash. The level of prices prevailing in these markets in turn, determine their income. In addition, the rural markets will also serve as center for consumption and investment of goods for the rural sector.

Agricultural Marketing

Agricultural marketing has a pivotal role to play in the socio-economic transformation of a predominantly agrarian economy like ours. This is now a well-recognized fact that the nation cannot march ahead on the road of rapid economic growth without ensuring a remunerative price to the farmers for their produce. The role of efficient agricultural marketing system as a key component for accelerating agricultural production and thereby promoting economic growth in developing countries is now widely accepted.

In the absence of better marketing facilities to sell the farm produce and lack of remunerative prices the agriculture sector will result in lack of lesser development. The higher rate of development and growth in agriculture sector will have a far-reaching impact on achieving higher

overall economic growth in India. The overall economic growth rate is 7.6 per cent in 2006 and the agriculture sector growth rate is 1.5 per cent. In the light of crucial role of agricultural marketing which will influence higher economic growth, the central and the state government of India, under co-operative sector many institutions were established to address to the issue of efficient agriculture marketing system in the country. Most of the institutional network was created under government and co-operative sector. In the recent past in the liberalized economic atmosphere private companies also entered into the agriculture marketing arena in India.

Rural marketing system

The rural marketing system has originated primarily to cater to the needs of the rural population. The rural marketing system can be broadly classified into two main sub systems

a) Agricultural and
b) Non agricultural /manufactured goods

The non agricultural goods marketing system, covers the arrangement for marketing articles manufactured by the cottage industries, handicrafts produced by the rural artisans, including the supply of inputs and raw material for cottage industries and artisans. The transaction of non agricultural produce in rural shandies is done to meet the requirements of rural consumers. These goods are mainly manufactured in urban areas and sold to the rural consumers through weekly shandies.

Rural markets are popularly called as the village shandies or periodic markets. They are owned and managed mostly by local bodies and to certain extent by private individuals. These markets act as a fulcrum for the socio economic and cultural development of rural

population. In these markets, the farmers from the surrounding villages market their farm produce and purchase their farm and home requirements.

Our country has 27,294 rural periodic markets which are devoid of basic infrastructure and marketing facilities. The problems associated with these markets are:

1. Village shandies are chronically lacking infrastructural facilities
2. No regulation of trade practices in the shandies

Present rural markets

The rural markets have been well established for a long time. However, hygienic conditions are usually very poor. In most cases these markets are devoid of basic facilities. During the rainy season these markets are extremely muddy, as a result sellers display their produce on the ground, with the risk of contamination. Majority of the rural markets are operating in this situation for a very long time. Further rural markets usually lack any form of shelter.

The study was undertaken in Chickmagalore district. The district has varied agro climatic regions. The eastern side is dry zone and western side is hilly zone. Malnad is a very special geographical area in Karnataka where the density of population is very less and the people mainly depend on rural markets because of less access to outside world. In this context the malnad region has been purposively selected for the study to analyze broadly the current status of rural markets and means to promote an effective, efficient integrated agricultural marketing system in the state.

The study focuses on the analysis of the composition of commodities traded in these markets, composition of sellers, composition

of buyers, pricing and problems associated with rural markets. The study proposes to address these in Chickmagalore district with the following specific objectives.

Objectives of the study

1) To analyze the composition of sellers, buyers and commodities in weekly shandies.
2) To analyze the management and trade practices of weekly shandies.
3) To study the infrastructure facilities available in weekly shandies.
4) To document the constraints faced by stakeholders in weekly shandies.

Hypotheses

1) The sellers group composed mainly of traders and the buyers group consisted mainly of labour class and only those commodities are traded that are locally produced.
2) The trade practices are not regulated in the rural shandies.
3) There is no adequate infrastructure available for marketing in the shandies.

Review of Literature

CHAPTER II
REVIEW OF LITERATURE

Saxena and Mathur (1980) examined the relationship between seasonal price variation and profitability of storage of wheat and the relative economics of various methods of storage, using data collected from a sample of 148 cultivators in Bijapur block, Agra for the year 1974-75. Three methods of storage –bulk, bag and kuthila were analyzed. Storage profit showed a direct relationship between seasonal price variation and period and existing available railway transportation constraints. The results reveal that the storage space requirements are directly related to the assumed level pf initial stocks and that storage space need to be larger in surplus states to minimize and transportation and storage costs. Magnitude of inter-state movements and transportation cost decrease with the increase in initial stocks need to be avoided from further burden by additional shipments which increase the total costs per unit of handling.

Lingamurthy *et al.* (1981) reported that regulated market provides storage facilities to the farmers who want to wait for a fair price. The Warangal agriculture market in A.P. has 2100 metric tones storage capacity and is sufficient to cater to the needs of the farmers. Moderate rates are charged for storage. But storage accommodation is temporary one ranging between 15 and 30 days. The godown charges Rs. 4 per bag per day for all agricultural commodities.

According to Ghodake and Walker (1982) the major factors that prevented the sample farmers from achieving the potential farm yield were lack of capital, profit seeking behavior, lack of knowledge about new technology, risk bearing ability, institutional and infrastructural facilities in the study area.

Singh and Rao (1983) studied the models of food grains in different size groups of operational holdings. In case of wheat, it was observed that the most common practice of storing was in kunala and bags. However, among the small and medium type holdings, more than 50 per cent of food grains was stored in bags, while the cultivators of large holdings stored more than 50 per cent of it in others (Hattie, Matka, etc) more or less a similar pattern was observed in respect of grain in all the categories. As regards barley, it was seen that among smallholdings, 59-75 per cent stored in bags. Maize and bajra were commonly stored in bags by all the three types of holdings (small, medium and large). Cultivators of medium and large holdings stored about 55 per cent and 63 per cent of the paddy in bags respectively, where as smallholdings stored about 88 per cent of the paddy in bags. Thus, bags constituted the most common mode of storage followed by kunala.

Singh *et al.* (1988) studied the storage effects on economics of potato marketing in Farrukhabad district of Uttar Pradesh. They examined that the net price-spread was higher (71.59 %), when the potato growers sell in off-season after storing it in cold storage, which was due to high prices during off-season. Against this, during pre-storage period, the producer's share in consumer's price worked out to 61.67 per cent. This indicates that the storage plays an important role in providing higher price to the potato growers.

De (1989) examined the role of cold storage in marketing of potato in West Bengal. He found that the existing cold storage capacity has been created predominantly in the private sector, which in 1987-88 owned 85 per cent of the cold storages and 92 per cent of the potato stored in private cold storages. The interest of all connected stores and the collusion of interests have resulted in the formation of small group of potato traders. The cold storage owners also play an important role as

lenders to poor farmers with the guarantee of potato supply immediately after harvest on a fixed contract price.

Narasimhan (1991) examined the rural markets and their role in the rural development. The author also examines policy alternatives in the light of issues facing the rural markets. The author suggests central assistance grant for market development, particularly towards development of infrastructure for rural markets, including the creation of storage facilities. The author further suggests that the current grant system has to be widened and extended in order to facilitate rural markets development.

Saxena (1992) in his study observed that the rural markets and marketing system in Rajasthan are rudimentary and diversified. The rural markets in Rajasthan are operating in the form of periodic markets, mobile traders and rural shops. In order to overcome the constraints in these markets, the author suggests planned development of the Marketing system to various regions of the state.

Hiremath (1993) studied the economics of production and marketing of lime in Bijapur district, Karnataka and identified the problems relating to production and marketing of lime. The problems faced by the farmers in marketing of lime were absence of processing facility, absence of cold storage facility, fluctuation in price were the major problems by 100 per cent farmers. Other problems expressed were absence of cooperative marketing of lime, non-availability of packing material at reasonable price and difficulty in transportation.

Gulati *et al.* (1994) in their study identified the constraints in the exports of fresh fruits, vegetables and processed fruits and vegetables. The study found that the canalization of onion through NAFED had led to loss of share in export market because of intervention from NAFED,

whenever there was an escalation of price in the domestic market. The infrastructure for storage, transport, and internal as well as international trade was largely inadequate. The annual interest rate on finance was high (13%). Institutions such as farmer exporters' cooperatives like Maha grapes and Maha mango was considered most useful in the export promotion of fruits and vegetables. This was essential to ensure good quality product as well as remunerative returns to the farmers.

Brahma Prakash and Dinesh Kumar (1997) studied infrastructural requirements for the development of agro processing industry in rural India and concluded that lack of market information, rapid and refrigerated transport system, storage facility, banking institution, packing and post harvest technology were the major constraints responsible for the slow growth of agro processing industry in rural areas.

Pagire and Jadhav (1998) studied the problems in marketing of grapes in Maharashtra and concluded that, there was high cost of packing material, high cost of transportation and non-availability of pre-cooling and cold storage facilities, etc. The number of grape growers who reported the above problems constituted 88 per cent. Nearly 50 per cent of the grape growers faced the problem of non-availability of skilled labour. About 78 per cent of the respondents opined that there was undue delay in payment by the commission agents and about 93 per cent grape growers reported that the rate of commission charges was too high and the commission agents resorted to unauthorized deductions from the payments.

Gajanana and Subramanyam (1999) studied the constraints in production and marketing of anthuriums in Karnataka. The non-availability of the required quantity and quality of planting materials, high cost of seedlings, incidence of pest and diseases were the major

constraints in the production of flowers. With regards to marketing, absence of organized market was the major problem followed by high cost of transportation, exploitation by the traders were the other constraints faced by the growers in marketing of anthuriums.

Ravikumar *et al.* (2000) attempted to identify the factors influencing the price of the commodity in the market. Anakapalle, Adoni and Warrangal regulated markets were selected for the study. The multiple regression modules are used to identify and analyze the determinants of average price in the selected commodities in the market. The study revealed that arrival of the commodity and its competing crop are the major factors influencing the price of the commodity in the markets. In respect of the price of the commodity in the selected market the arrivals of the competing crop in the market increases, the price will fall and consequently the price of the selected commodity will rise.

Khairoowala and Siddiqui (2001) identified the major problems in rural markets. Lot of hustle and bustle in the haats, lack of awareness about new products among villagers etc. They also suggested some measures for marketers for improvement of the haats such as initially the marketers should hire some stall/ place in haats to create awareness about their product among visitors and with some incentives or scheme. They should offer high price branded products in big haats and cheap and reasonable quality products in smaller haats and concluded that haats have lots of potential which need to be exploited and haat can come out to be answer to all marketing problems in rural India.

Banafar *et al.* (2004) while studying the constraints in production, marketing and processing of soybean in Sehore district of Madhya Pradesh identified the main constraints in production viz., non-availability of high yielding varieties, poor management practices, non-availability of efficient Rhizobium culture, weed infestation and diseases

and pest. The constraints identified in marketing were lack of post harvest technology, the inclination of commission agents towards buyers rather than sellers. They suggested that developing high yielding, disease resistant varieties for more quality production.

Methodology

CHAPTER III
METHODOLOGY

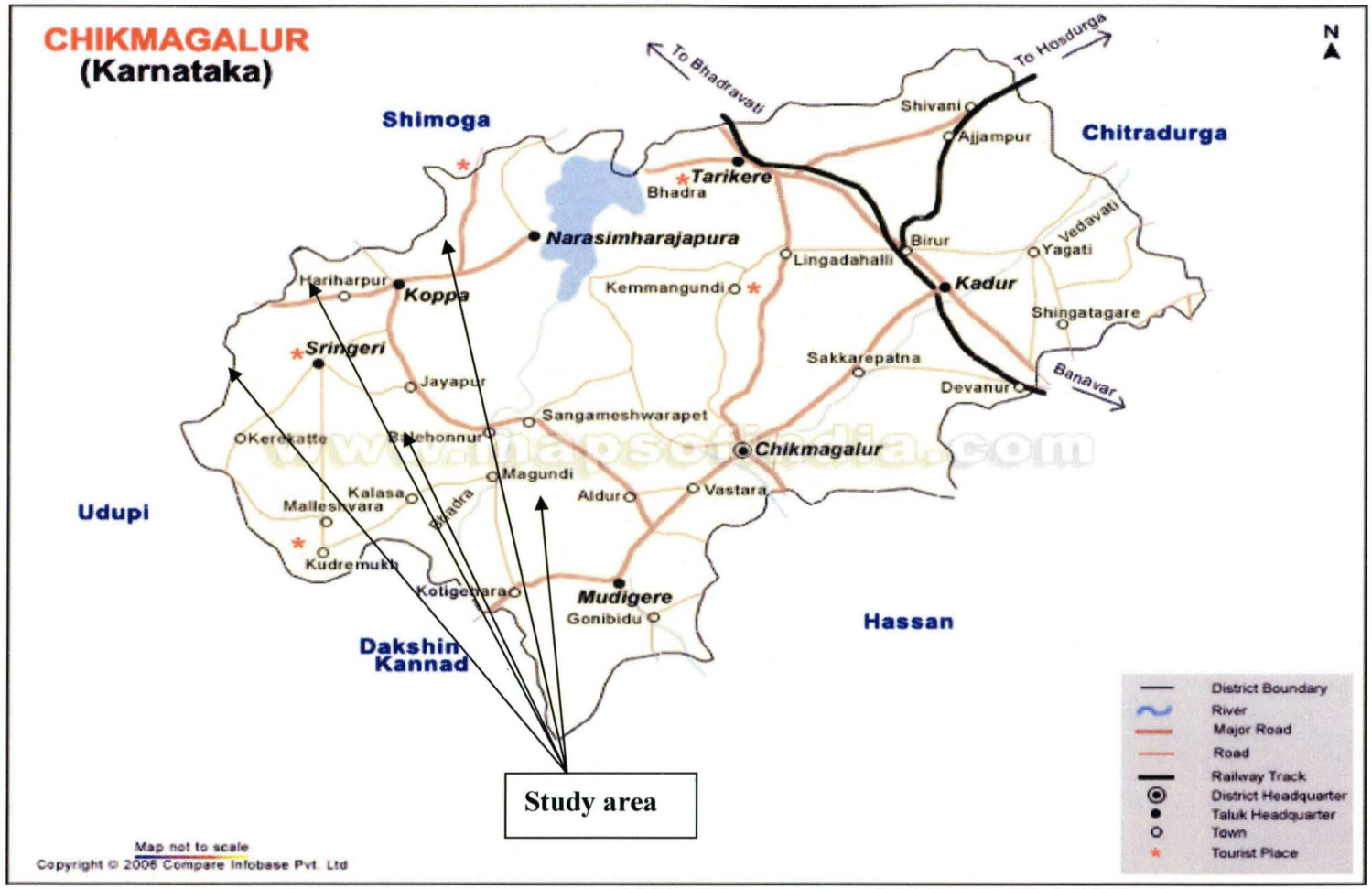
A systematic designing of the study is sine-qua-non for any scientific inquiry. In this chapter, the database and analytical tools and methods used in the study are presented under the following broad headings.

3.1 DATA BASE

The study was undertaken in Chickmagalur district of Karnataka. In the district, 5 shandies in Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur taluks were selected for the study using random sampling technique. The study is based on both primary and secondary data. The primary data is being collected from farmers, traders, consumers and local governing bodies. The survey of market includes inventory surveys that indicate physical and trading conditions in study area. Survey of traders was done to investigate their financial viability. The primary information was collected from 16 producers cum sellers from each shandy, 12 buyers, from each shandy. Further the information from 6 officials of village panchayat and other local governing bodies was collected, thus making a sample of 170 respondents. Information was also collected in respect of infrastructure facilities, management, mode of market fee collection and constraints faced by the traders, farmers and consumers in rural markets.

The secondary data was collected relating to population of the district, data regarding the area under different crops, location of production areas, review of market operations and physical survey, which involves mapping the study area.

Fig. 1 Map showing the study district and location of shandies



Description of study area

Chickmagalur district was called Kadur till 1947. It is situated roughly in the south-western part of Karnataka State. A large area of this district is 'malnad', i.e., largely forested hilly region with heavy rainfall, situated in a fertile valley, south of the Baba-Budan hill range is the headquarters town of the district. The district has several boundaries, the general boundaries are east –Tumkur district, west – Western Ghats which separates it from Dakshina Kannada, north- east: Chitradurga district, north – Shimoga district. The district broadly grouped into plains and hilly regions. Socioeconomic and demographic features significantly differ in these two belts within the district.

Chickmagalur district has seven taluks namely Koppa, Sringeri, Narasimharajapura, Tarikere, Kadur Chickmagalur and Mudigere. The district consists of both malnad region as well as dry region. The taluks such as Koppa, Sringeri, Narasimharajapura and Mudigere are purely of malnad regions.

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Table 3.1 Profile of Chickmagalur District

Items	**Chickmagalur District**
Population	1140905
Area (Sq. Kms)	7201.00
Density of population (persons/ Sq.Kms)	158
Sex ratio (No. of females per 1000 males)	984
Literacy rate (population aged 7 years and above)	M-80.3 F-64.0
Percentage among total workers	
i) Cultivators	28.6
ii) Agricultural labourers	21.1
iii) household industries	2.3
iv) Other workers	47.9
v) Number of villages	1117
vi) Number of towns	9

Table 3.2 Profile of the taluks

Items	Koppa	Sringeri	Narasimharajapure	Tarikere	Kadur	Chickmagalore	Mudigere
Population	87780	36930	65639	224170	289406	29556	141415
Density of population (person/sq. kms)	153	83	88	184	205	183	122
Area (sq. kms)	572.21	443	744	1216	1414	1613	1162
Sex ratio (No. of females per 1000 males)	994	992	1029	974	979	982	996
Literacy rate (population aged 7 yrs and above)	78.3	80	76	70	67.8	75	69
% among total workers							
(i) cultivators	18.7	30	23	33	47	18	13
(ii) agril. Labourers	22.6	32	27	35	27	8	7.3
(iii) house hold industries	2.4	2.5	3	3.3	2.5	2	1.5
(iv) other workers	56.2	34.5	46	28.3	23.6	71.4	78
(v) No. of villages	80	49	58	249	312	229	140
(vi) No. of towns	1	1	1	1	2	1	2

Table 3.3 Days of operation of the shandies in the district

Shandy place	**Days of operation**
Koppa	Sunday
Sringeri	Monday
Narasimharajapura	Saturday
Tarikere	Friday
Kadur	Monday
Chickmagalur	Wednesday
Mudigere	Friday
Balehonnur	Sunday
Aldur	Saturday

3.2 ANALYTICAL TOOLS

The methods of analysis employed in the present study are elaborated under the following headings

3.2.1 Tabular analysis
3.2.2 Regression
3.2.3 Garrets ranking technique

3.2.1 Tabular analysis

Simple and conventional tabular analysis was used to get use full results. The common tools used were averages, percentages, ratios and cross tabulations. By these tools the general information about the traders and consumers (respondents) viz., the average age of respondents, literacy level of the respondents, average income of respondents, family size of respondents, average expenditure of the consumers, composition of sellers, buyers and commodities etc. were obtained.

3.2.2 Regression

In statistics linear regression is a method of estimating the conditional expected value of one variable y given the values of some other variable or variable x.

Here regression was done to find out the influence of the variables age, literacy and occupation on income.

3.2.3 Garrets ranking technique

The study of constraints faced by the stakeholders is one of the important aspects of research from policy point of view. The respondents were asked to rank (in the order of severity) the constraints faced in the

shandies and these ranks were converted to scores by referring to Garrets table.

In this study, Garrett's ranking technique was used to analyze the constraints faced by the sellers and the consumers in the shandies. The order of the merit given by the respondents was changed into ranks by using the formula:

$$\text{Percent position} = \frac{100\ (R_{ij} - 0.50)}{N_j}$$

Where Rij = Rank given for i_{th} item by j_{th} individual

N_j = Number of items ranked by j^{th} individual

The percent position of each rank was converted to scores by referring to tables given by Garret and Woodworth (1969). Then for each factor, the scores of individual respondents were summed up and divided by the total number of respondents for whom scores were gathered. The mean scores for all the factors were ranked, following the decision criterion that lower the value the more important is the constraint to farmers.

Results

CHAPTER IV

RESULTS

In consonance with the objectives of the study, the data collected from different sources were analyzed and interpreted. The results of the study were presented under the following heads.

4.1. General characteristics of the sample respondents
4.2. Composition of sellers, buyers and commodities in weekly shandies.
4.3. Management and trade practices of weekly shandies
4.4. Infrastructure facilities available in weekly shandies
4.5 Constraints faced by stakeholders in weekly shandies

4.1 General characteristics of the sample farmers

The socio-economic characteristics of the sample respondents are presented below

4.1.1 Number of visitors in each shandy

Table 4.1 shows the total number of visitors who visits the shandies on shandy day. The visitors are being categorized under different groups namely farmers, traders, local population, labour class and population from other taluks. The number of visitors who visit Koppa shandy were 300 to 450 out of which 100 are farmers, 50 are traders. Local population covers 100 visitors the labour class accounts for 150. The other 50 are the visitors who visit from other taluks.

In Sringeri shandy the total numbers of visitors who visit the shandy are 200 to 250, out of which 75 are the farmers, 30 are traders, 100 people are of local population and around 50 people visit from other taluks. Where as in Narasimharajapura shandy, 300 people visit every market day of which 100 people come from other taluks, 400 people visit

Balehonnur shandy of which 150 belong to local population and on every market day around 50 people come from other taluks.

Around 400 people comprising of 100 local and 50 out of taluk people visit Aldur shandy on every market day. On an average around 50 farmers visits the shandy.

4.1.2 Age-wise distribution of sample respondents

The sample respondents were classified according to the age group and the details are presented in the table 4.2.

Koppa: In Koppa shandy out of 16 respondents 2 (12.50%) were found in the age group of less than 20 years, 4 (25%) were in the age group of 21-35 years, 7 (43.75%) respondents were reported in the age group of 36-55 years and 3 (18.75%) were found to be above 56 years.

Narasimharajapura: Out of 16 respondents majority 8 (50%) were in the age group of 21-35 years, 4 (25%) respondents were in the category of less than 20 years, and 2 (12.50%) respondents from each category i.e., 36-55 years and above 56 years.

Sringeri: In Sringeri shandy, 6 (37.50%) respondents found in the age group 21-35 years, 2 (12.50%) from less than 20 years and 4(25%) respondents reported from two categories i.e., 36-55 years above 56 years.

Balehonnur: 16 respondents who interviewed in Balehonnur shandy, out of which 3 (18.75%) were below 20 years, majority 8 (50%) respondents found in 21-35 years age group. No one reported from above 56 years.

Aldur: Similarly in case of Aldur shandy 3 (18.75%) were found below 20 years, 6 (37.50%) respondents between 21-35 years, 5 (31.25%) were in the range of 36-55 years and only 2 (12.50%) respondents found above 56 years.

Table 4.1 Number of visitors in each shandy

(In number)

Category	Koppa	Sringeri	N.R. Pura	Balehonnur	Aldur	Average
Farmers	100	75	75	50	125	85
Traders	50	30	25	100	50	59
Local population	100	100	75	150	100	105
Labor class	150	50	100	150	100	110
Population from other taluks	50	50	100	50	50	60
Total	450	305	375	500	425	411

Table 4.2 Age of Seller respondents

Age	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
Less than 20 years	2 (12.50)	2 (12.50)	4 (25)	3 (18.75)	3 (18.75)	14 (17.50)
21-35 years	4 (25)	6 (37.50)	8 (50)	8 (50)	6 (37.50)	32 (40)
36-55 years	7 (43.75)	4 (25)	2 (12.50)	5 (31.25)	5 (31.25)	23 (28.75)
56 years and above	3 (18.75)	4 (25)	2 (12.50)	NIL	2 (12.50)	11 (13.75)
Total	16 (100)	16 (100)	16 (100)	16 (100)	16 (100)	80 (100)

Note: The figures in parentheses indicate the percentages to the total.

In the cumulative sample of 80 respondents 14 were aged less than 20 years (17.50 %), 32 were aged between 21-35 years (40 %), 23 were aged between 36-55 years (28.75 %), and 11were in the category of above 56 years. Hence it can be clear from the table 4.2 that majority of the respondents trading in the shandies belonged to young age group (21-35 years) followed by middle age group (36-55 years).

4.1.3 Literacy level of sellers respondents

The table 4.3 shows the level of education of respondents who visited the shandies from different places.

Compared to all the shandies Narasimharajapura and Balehonnur shandies have more number of illiterates (18.75 %). Similarly majority of the respondents having primary level education found in Sringeri shandy (50 %). Narasimharajapura and Balehonnur shandies have more number of respondents with middle school education (50 %). Aldur has highest number of high school level respondents and only two (12.5%) respondents were graduates from Balehonnur.

Out of the total respondents (16) in Koppa shandy, 31.25 per cent respondents were having primary education, 12.50 per cent were illiterates. Where as 43.75 per cent respondents were completed middle school education and only 6.25 per cent respondents have high school as well as college education. In case of Sringeri shandy out of the total respondents the majority 50 per cent of the respondents studied till primary level, 12.50 per cent respondents with middle school education, 37.50 per cent completed high school education and no one reported as an illiterate and a graduate.

Similarly in case of Narasimharajapura shandy, out of 16 respondents, majority 50 per cent of the respondents with middle school education, 12.50 per cent with primary education, 12.50 with high

school education, 18.75 per cent respondents found illiterates and only 6.25 per cent were graduates.

Where as in Balehonnur shandy, 18.75 per cent were illiterates, 18.75 per cent studied up to primary level, 50 per cent respondents middle school level education and 12.50 per cent found to be graduates. In Aldur shandy out of the total respondents, 12.50 per cent with primary school, majority 50 per cent respondents were studied up to high school level, 25 per cent and 12.50 per cent respondents with middle school education and illiterates respectively.

4.1.4 Average income of the sellers in the study area

The sellers in all the shandies can be classified based on the commodities sold in the market viz., vegetables, fruits, mutton, fish, utensils, clothes and miscellaneous items. The results are presented in table 4.4. The results show that the average income of a vegetable seller is Rs. 50340, among all the sellers in different shandies sellers from Aldur shandy had highest income with Rs. 56984 and sellers from Narasimharajapura had average lowest income of Rs. 44268. Among the fruit traders the average income was Rs.14729, it ranged between Rs. 12560 in Koppa shandy to a high of Rs. 18580 in Sringeri shandy. The mutton traders were the second highest money earners in the shandies with an average of Rs. 37588.

Table 4.3 Literacy level of the sellers' respondents

Education	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
No schooling	2 (12.50)	NIL	3 (18.75)	3 (18.75)	2 (12.50)	10 (12.50)
Primary school	5 (31.25)	8 (50)	2 (12.50)	3 (18.75)	2 (12.50)	20 (25)
Middle school	7 (43.75)	2 (12.50)	8 (50)	8 (50)	4 (25)	29 (36.25)
High school	1 (6.25)	6 (37.50)	2 (12.50)	NIL	8 (50)	17 (21.25)
College	1 (6.25)	NIL	1 (6.25)	2 (12.50)	NIL	4 (5)
Total	16 (100)	16 (100)	16 (100)	16 (100)	16 (100)	80 (100)

Note: The figures in parenthesis show the percentages to the total.

Table 4.4 Income of sellers in different shandies

(Rs/annum)

Income levels of different sellers	**Koppa**	**Sringeri**	**N.R.Pura**	**Balehonnur**	**Aldur**	**Averag**
Vegetables trader	56398	45263	44268	48786	56984	50340
Fruits trader	12560	18580	14095	13850	14560	14729
Mutton trader	34200	40000	35000	42059	36681	37588
Fish trader	18532	20153	18000	19563	20568	19363
Utensils trader	32652	23548	28546	41236	39658	33128
Cloths trader	20800	25140	22000	25631	19586	22631
Miscellaneous trader	8652	5000	7563	6325	5981	6704

Source: Questionnaire

Note: The figures in parenthesis show the percentages to the total.

The mutton traders in Balehonnur shandy earned the maximum average income of Rs. 42059. The average income of utensil traders was also high with around Rs. 33128. The sellers selling cloths in the shandy had an average income of Rs. 22631. Among the miscellaneous traders including those of agricultural implements, fibre products, plastic products etc had an average annual income of Rs.6704.

Among all the categories of sellers vegetable sellers had the highest annual income as vegetables are the most common commodities sold in rural shandies on regular intervals which are again influenced by the seasonal supply and availability.

4.1.5 Average family size of the consumer's respondents

The results of the study are presented in table 4.5. The family size of the respondents were classified as small family with less than three members, medium size family with three to five members and big family with more than five members. The results showed that in Koppa shandy, out of 12 respondents, all the respondents 12 (100 per cent) belonged to medium size. In Sringeri shandy, out of 12 respondents, one was having less than3 (8.3 per cent) family size, 10 respondents were having 3 to 5 (83.3 per cent) family size and only one respondent was having more than5 (8.3 per cent) family size.

In Narasimharajapura shandy, out of 12 respondents, one was having less than 3 (8.3 per cent) family size, 11 respondents were having 3 to 5 (91.6 per cent) family size and no respondent having more than5 (0) family size. In Balehonnur shandy, out of 12 respondents, two were having less than3 (16.6 per cent) family size, nine respondents were having 3 to 5 (75 per cent) family size and only one respondent having more than5 (8.3 per cent) family size. In Aldur shandy, out of 12 respondents, three were having less than3 (25 per cent) family size, nine

respondents were having 3 to 5 (75 per cent) family size and no respondent having more than5 (0) family size.

4.1.6 Age of the consumer respondents

The respondents are classified based on their age group as less than 20 years category, young age of 20-35 years, medium aged group of 35-50 years and age group of more than 50 years. The results are presented in table 4.6.

The results show that in Koppa shandy, out of 12 respondents, two (16.6 per cent) were found below 20 years, 6 (50 per cent) were between 21-35 years, 4 (33.3 per cent) were between the age group of 36 to 55 years and no one reported above 56 years. In Sringeri shandy, out of the total respondents, majority 8 (66.6 per cent) were in the age group of 21 to 35 years, two (16.6) respondents were found both in 36-55 years and above 56 years and no one reported from less than 20 years. In case of Narasimharajapura shandy, none of the respondents were in the age group of 36-55 years and four (33.3 per cent) respondents from each category i.e., from less than 20 years, 21-35 years and above 56 years.

Similarly in Balehonnur shandy majority of the respondents 6 (50 per cent) were between 21 to 35 years. 2 from each categories (16.6 per cent) reported were found in less than 20 years category, 36-55 years category and above 55 years category. In case of Aldur shandy 3 (25 per cent) were found in less than 20 years category, 2 (16.6 per cent) were from the age group of 36 to 50 years, 2 (16.6 per cent) respondents were more than 56 years and 5 respondents (41.6 per cent) were from the age group of 21-35 years.

Thus it can be said that majority of the respondents visiting shandies were of the middle age groups (21 to 35 years).

Table 4.5 Family size of the consumer respondents

(In number)

Family size	**Koppa**	**Sringeri**	**N.R.Pura**	**Balehonnur**	**Aldur**	**Total**
Less than 3	0 (0.0)	1 (8.3)	1 (8.3)	2 (16.6)	3 (25)	7 (11.6)
3 to 5	12 (100)	10 (83.3)	11 (91.6)	9 (75)	9 (75)	51 (85)
More than 5	0 (0.0)	1 (8.3)	0 (0.0)	1 (8.3)	0 (0.0)	2 (3.3)
Total	12 (100)	12 (100)	12 (100)	12 (100)	12 (100)	60 (100)

Note: The figures in parentheses show the percentages to the total.

Table 4.6 Age of the consumer respondents

Age	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
Less than 20 years	2 (16.6)	NIL	4 (33.3)	2 (16.6)	3 (25)	11 (18.3)
21-35 years	6 (50)	8 (66.6)	4 (33.3)	6 (50)	5 (41.6)	29 (48.3)
36-55 years	4 (33.3)	2 (16.6)	NIL	2 (16.6)	2 (16.6)	10 (16.6)
56 years	NIL	2 (16.6)	4 (33.3)	2 (16.6)	2 (16.6)	10 (16.6)
Total	12 (100)	12 (100)	12 (100)	12 (100)	12 (100)	60 (100)

Note: The figures in parentheses show the percentages to the total.

4.1.7 Distribution of sample respondents (consumers) by educational level:

The educational level of respondents is presented in the Table 4.7. In the cumulative sample of 60 consumers 13 (21 per cent) were illiterates, 14 (23 per cent) were studied up to primary education, 10 (16.6 per cent) studies up to middle school, 17 (28 per cent) studied up to high school level and remaining 6 (10 per cent) studied up to college. Among consumers belonged to five shandies high school education respondents were highest (28.3 per cent) in Sringeri, Koppa and Narasimharajapura shandies and lowest in Balehonnur shandy. The literacy rate was highest in Sringeri and Koppa.

Among the total respondents (12) in Koppa shandy, three (25 per cent) respondents were having primary education; two (16.6 per cent) were illiterates. Where as three (25 per cent) respondents were studied up to middle school, four (33.3 per cent) studied up to high school. In case of Sringeri shandy out of the total respondents only one was an illiterate, three (25 per cent) were having primary education, two (16.6 per cent) having middle school education. Highest number of high school educators (5) found in this shandy (41.6 per cent) and only one found to be having college education.

Similarly in case of Narasimharajapura shandy, out of 12 respondents, three (25 per cent) were reported to be illiterates, two (16.6 per cent) studied up to primary level, one (8.3 per cent) middle school education, four (33.3 per cent) studied up to high school and only two (16.6 per cent) studied up to college. Where as in Balehonnur shandy, three (25 per cent) were illiterates, four (33.3 per cent) were studied up to primary school, three (25 per cent) studied up to middle school, two (16.6 per cent) studied up to high school level. In Aldur shandy out of the total respondents, only one (8.3 per cent) was having middle school education,

two (16.6 per cent) having primary education, three (25 per cent) were studied up to college and two (16.6 per cent) studied up to high school. No illiterates were found.

Table 4.7 Educational qualifications of the consumer respondents

(In number)

Education	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
No schooling	2 (16.6)	1 (8.3)	3 (25)	3 (25)	4 (33.3)	13 (21.6)
Primary school	3 (25)	3 (25)	2 (16.6)	4 (33.3)	2 (16.6)	14 (23.3)
Middle school	3 (25)	2 (16.6)	1 (8.3)	3 (25)	1 (8.3)	10 (16.6)
High school	4 (33.3)	5 (41.6)	4 (33.3)	2 (16.6)	2 (16.6)	17 (28.3)
college	NIL	1 (8.3)	2 (16.6)	NIL	3 (25)	6 (10)
Total	12 (100)	12 (100)	12 (100)	12 (100)	12 (100)	60 (100)

Note : The figures in parentheses show the percentages to the total.

4.1.8 Distribution of consumers according to income:

The distribution of consumers can be ganged by one's income. The distribution of respondents according to income is presented in Table 4.8. All the consumer respondents were classified into different income groups such as less than Rs. 20,000, Rs. 20000-50000, Rs. 50000 to one lakh and group having more than 1 lakh family annual income. The results showed that in Koppa shandy the income of the two (16.6 %) respondents was having less than 20000 income. The majority of the respondents i.e., four (33.3 %) came in the range of Rs.20000 to 50000, while three (25%) were in the income range of Rs. 50000 to 1 lakh and the other three (25 %) were reported in the range of more than 1 lakh. While in Sringeri shandy, the income of the two (16.6 %) respondents were having Rs. less than 20000 income level and four (33.3 %)

respondents each constitute the income level of Rs. 20000 to 50000. A majority of five (41.6 %) respondents out of the 12 respondents were from Rs. 50000 to 1 lakh income level and only one (8.3 %) respondent was found to be having more than 1 lakh income level.

In case of Narasimharajapura shandy, out of the total respondents, six (50 %) were from Rs.20000 to 50000 income level and five (41.6 %) were from the income group of Rs. 50000 to I lakh and only one (8.3 %) was from above 1 lakh income level. In Balehonnur shandy out of the total (12 respondents), majority come under 20000 to 50000 income level, three (25 %) were from 50000 to 1 lakh income level and two (16.6 %) were from below 20000 income level. In case of Aldur shandy, one (8.3 %) respondent was from below Rs. 20000 group, six (50 %) were from Rs. 20000 to 50000 income range and four (41.6 %) were in the range of Rs.50000 to 1 lakh. Lastly, no respondent were reported in the last category i.e. above Rs. 1 lakh of income.

Out of the 60 combined respondents, 45 per cent belonged to income group ranging between Rs. 20000-50000, followed by Rs. 50000 to 1 lakh (33%) category. Nearly 11 per cent were from less than Rs. 20000 category and higher income category. This clearly indicates that vast majority of consumers (78%) belonged to middle income and very marginal representation by both lower income group as well as higher income groups.

Table 4.8 Distribution of consumers based on income

(In number)

Income (Rs/annum)	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
Less than20000	2 (16.6)	2 (16.6)	0 (0.0)	2 (16.6)	1 (8.3)	7 (11.6)
20000-50000	4 (33.3)	4 (33.3)	6 (50)	7 (58.3)	6 (50)	27 (45.0)
50000-1 lakh	3 (25)	5 (41.6)	5 (41.6)	3 (25)	4 (33.3)	20 (33.3)
More than 1 lakh	3 (25)	1 (8.3)	1 (8.3)	0 (0.0)	1 (8.3)	6 (10)
Total	12 (100)	12 (100)	12 (100)	12 (100)	12 (100)	60 (100)

Note: The figures in parentheses show the percentages to the total.

4.2 Composition of sellers, buyers and commodities in weekly shandies.

4.2.1 Composition of sellers

The major types of sellers found in study area are of two types one being pure sellers and others who are part time sellers who sell in the shandies. Traders in the shandies have come from different places. The same traders will visit the same shandies. According to the shandy days the sellers move from one shandy to other shandy in the study area. The data set out in the table 4.9 indicates the composition of traders in all the five shandies. In Koppa shandy, majority 16 (75 %) of the respondents were purely traders followed by part time sellers. In case of Sringeri majority are traders (68.75 %) followed by part time sellers in Narasimharajapura shandy (31.25%). Similar trend is observed in Sringeri shandy i.e., 11 (68.75 %) were pure traders and five (31.25 %) were part time sellres.

Similarly in Balehonnur shandy, out of 16 respondents, 12 (75 %) were pure traders, four (25 %) respondents having part time selling as their occupation. Lastly in Aldur shandy, out of total respondents interviewed, 13 (81.25 %) respondents were pure traders and three (18.75 %) were part time sellers.

Table 4.9 Composition of sellers in all shandies

Main occupation	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
Pure sellers	12 (75)	11 (68.75)	11 (68.75)	12 (75)	13 (81.25)	59 (73.75)
Part time sellers	4 (25)	5 (31.25)	5 (31.25)	4 (25)	3 (18.75)	21 (26.25)
Total	16 (100)	16 (100)	16 (100)	16 (100)	16 (100)	80 (100)

Note: The figures in parentheses show the percentages to the total.

Table 4.10 Composition of Buyers

Main Occupation	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur	Total
Farmers	2 (16.6)	1 (8.3)	1 (8.3)	3 (25)	3 (25)	10 (16.6)
Labour	7 (58.3)	3 (25)	4 (33.3)	5 (41.6)	5 (41.6)	24 (40)
Business	0 (0.0)	3 (25)	2 (16.6)	1 (8.3)	0 (0.0)	6 (10)
Miscellaneous	3 (25)	5 (41.6)	5 (41.6)	3 (25)	4 (33.3)	20 (33.3)
Total	12 (100)	12 (100)	12 (100)	12 (100)	12 (100)	60 (100)

Note: The figures in parentheses show the percentages to the total.

4.2.2 Composition of Buyers

The consumer respondents were classified as farmers, laborers, Business people and respondents having miscellaneous occupations including teacher, nursing and students. The results are presented in table 4.10. It indicates occupation of the respondents in all the five shandies and also the pooled averages. In Koppa shandy, majority seven (58.3 %) of the respondents were laborers, followed by respondents having miscellaneous occupations three (25 %). Only two respondents (16.6 %) who visited Koppa shandy were farmers. In Sringeri shandy out of total respondents, one (8.3 %) was a farmer, three (25 %) were laborers, three (25 %) were businessmen and the other five (41.6 %) were doing miscellaneous occupations.

In Narasimharajapura shandy, the composition of buyers was same as in Sringeri shandy and out of 12 respondents, one (8.3 %) was a farmer, four (33.3 %) were laborers, two (16.6 %) were businessmen and majority five (41.6 %) had miscellaneous occupations.

Similarly in Balehonnur shandy, out of 12 respondents, three (25 %) were farmers, five (41.6 %) were laborers, one (8.3 %) was businessmen and the other three (25 %) were doing miscellaneous occupations. Lastly in Aldur shandy, out of total respondents interviewed, three (25 %) were farmers, five (41.6 %) were laborers, four (33.3 %) were doing miscellaneous occupations and out of total respondents no respondent belonged to businessman category.

Out of the total buyers (60) nearly 40 per cent belonged to labourers followed by others (33%), farmers (16%) and remaining from business (10%). This clearly indicates that labour class is mainly depending on shandies for purchasing their daily necessities.

4.2.3 Composition of commodities

The composition of commodities and the pattern of arrivals that are traded in all the five shandies in the study area were studied keeping in the mind the seasonal production, seasonal availability and local demand for the commodities. Most of the vegetables, which flow to the shandies, follow a seasonal pattern with peak arrivals during June to October. In case of mangoes, May, June and July. The commodities, which are available all round the year, are Mutton and Papaya is traded an every market day except in rainy season when the shandies do not assemble. It can be observed that among all the commodities the major vegetables are traded in all the season for daily consumption.

4.3 Management and trade practices of weekly shandies

The management practices followed in the study area is analyzed and is represented in Table 4.12. The results obtained in the study were, in all the shandies namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur the trade is regulated by the mandal panchayat. The mandal panchayat will employ a person to supervise the shandies on particular shandy days. There is no compulsory registration for the sellers attending the shandies, but the sellers have to pay a market fee of around one per cent of the total value of the produce brought to the shandy to the mandal panchayat, which is collected by the supervisor. The village panchayat all the shandies have not provided any infrastructure facilities to the shandy users but they have some trade regulating mechanism such as dispute settlement.

No shandy has shelter provided by the village panchayat except Balehonnur shandy. The sellers make their own arrangements for shelter, water facility, light and other needs. Road is the only facility given to the shandy users in the study area.

Table 4.11 Composition of commodities in different shandies

	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur
January	Onion, Garlic, Tomato, Mutton, fish	Tomato Guards Chilly Fish	Onion Okra Tomato Mutton Utensils	Tomato, Coccinia Guards Beans Apple	Onion Root veg Ginger Mutton Clothes
February	Beet root, cabbage, tomato, clothes, utensils	Drum stick Beans Lemon Tomato Mutton	Guards Chilly Carrot Papaya Grapes	Carrot Bendi Sweet potato Garlic Mutton	Carrot Sweet potat Mutton Papaya
March	Tomato, Coccinia Guards Beans Fish	Carrot Bendi Sweet potato Garlic Dry fish	Raddish Peas Carrot Fish Grapes	Onion Root veg Ginger Mutton Clothes	Okra Cauliflower Foot wear Moosambi Fish
April	Onion Root veg Ginger Mutton Clothes	Tomato Pumpkin Guards Clothes Miscellaneous	Onion Beans Carrot Raddish Fish	Beans Peas Root veg Miscellaneous Mutton	Beet root, potato, tomato, clothes, utensils
May	Radish Peas Carrot Fish Mango	Beans Okra Cauliflower Foot wear Jack fruit	Root veg Red chilies Utensils Miscellaneous Fish	Okra Tomato Potato Lemon Fish	Banana Mango Onion Cabbage Clothes
June	Tomato Brinjal Onion Jack fruit Leafy veg	Dry fish Mutton Leafy veg Potato Onion	Coccinia Cauliflower Orange Dry fish Mutton	Leafy veg Jack fruit Potato Foot wear Miscellaneous	Orange Jack fruit Carrot Beet root Mutton

Continuation of table ...

July	Onion Tomato Guards Mutton Foot wear	Cucumber Pumpkin Guards Tomato Mutton	Leafy veg Potato Onion Chilly Miscellaneous	Okra Beet root Cabbage Clothes Foot wear	Tomato Carrot Leafy veg Miscellaneo Mutton
August	Beet root Carrot Butter fruit Utensils Mutton	Beans Okra Cauliflower Mutton Utensils	Coccinia Beans Cauliflower Mutton Clothes	Okra Tomato Potato Leafy veg Mutton	Potato Onion Miscellaneo Clothes Papaya
September	Radish Beans Potato Mutton Fish	Tomato Guards Chilly Fish Utensils	Cabbage Cauliflower Cucumber Mutton Foot wear	Chilly Beans Carrot Miscellaneous Fish	Fruits Pumpkin Carrot Tomato Miscellaneo
October	Garlic Chilly Tomato Beet root Apple	Drum stick Beans Lemon Mutton Clothes	Drum stick Beans Lemon Tomato Mutton	Guards Chilly Carrot Papaya Mutton	Beet root, potato, tomato, clothes, utensils
November	Tomato Pumpkin Guards Clothes Miscellaneous	Beet root Carrot Radish Fish Miscellaneous	Guards Beet root Beans Okra Cauliflower	Okra Coccinia Chilly Mutton Clothes	Clothes Fruits Miscellaneo Root veg Potato
December	Drum stick Guards Miscellaneous Fruits Fish	Coccinia Beans Utensils Mutton Clothes	Cauliflower Mutton Clothes Fruit Mutton	Fish Mutton Fruit Onion Tomato	Onion Root veg Ginger Mutton Clothes

Table 4.12 Management practices

Practices	**Koppa**	**Sringeri**	**N.R.Pura**	**Balehonnur**	**Aldu**
Who is regulating trade?	VP*	VP	VP	VP	VP
Is there any supervision on working of the shandy by the officials	Yes	Yes	Yes	Yes	Yes
Does the seller require registration?	NIL	NIL	NIL	NIL	NIL
market fee (%)	1 per cent	1 per cent	1 per cent	1 per cent	1 per cent
Who is collecting market fee?	VP	VP	VP	VP	VP
Infrastructure facilities provided by Regulating Agency	Road	Road	Road	Road	Road

*Note: * VP represents the Village Panchayat.*

4.4 Infrastructure facilities available in weekly shandies

Considering the past studies, a study has been undertaken to know about the infrastructure facilities available in shandies such as plat form, shed, weighing machine, light facility, water facility, road, toilet and shelter to the animals etc in the shandies of Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur. The results are presented in the Table 4.13. It was found that except road, and other facilities such as plat form, shed, weighing machine, light facility, water facility, toilet and shelter to the animals are not available to the sellers or to the consumers.

4.5 Regression table

Table 4.14 shows the influence of age, literacy and occupation on income. From the table it shows that as the age increases by one year the income increases to the tune of 1.4 times. If a person has got one more year of education the income increases to the tune of 1.2 times. Income of the seller has stagnant effect on occupation of the seller in the study area.

4.6 Problems faced by the stake holders in the study area

The constraints faced by the farmers were listed. The scores were allotted according to the weightage given by the farmers to the constraints in the order of merit. The results are presented in Table 4.15 and Table 4.16.

4.6.1 Problems faced by the consumers in the study area

The lists of problems faced by rural sellers in the study area were administered to the respondents and they were asked to rank the problems in the order of importance. These results were analyzed with

Table 4.13 Infrastructure facilities available in weekly shandies

Infrastructure	Koppa	Sringeri	N.R.Pura	Balehonnur	Aldur
Platform	0	0	0	0	0
Shed	0	0	0	0	0
Weighing machine	0	0	0	0	0
Light facility	0	0	0	0	0
Water facility	0	0	0	0	0
Road	1	1	1	1	1
Toilet	0	0	0	0	0
Shelter to animals	0	0	0	0	0

Note: 1 represents infrastructure available in particular shandy

0 Represents infrastructure not available

Table 4.14 Regression table

Particulars	Co-efficient
Intercept	5722.38
Age	1.428*
Literacy	1.214
Occupation	0.827*

*Note: * represents influence of age and occupation on income*

Table 4.15 Problems faced by the sellers in the study area

Problems	Scores	Ranks
Lack of infrastructure	3.03	1
Transportation cost	6.67	2
Lower demand	81.51	3
Distance from the production point	178.73	4
Location of the shandy	334.71	5

Table 4.16 Problems faced by the consumers in the study area

Problems	Scores	Ranks
Lower proximity to the shandy	7.04	1
Quality of the produce	7.81	2
Price	27.44	3
Less frequent market days	47.5	4
Lack of sanitation	88.45	5

the help of Garrett's scores. From the table 4.15 it is clear that the most important problem faced by the sellers in the study area was lack of infrastructure facility. The second most important problem, which the respondents listed, was the transportation cost.

In the order of importance, the main problem by the sellers was lower demand for the products sold in the shandies. The respondents also listed the distance from the production point to shandy as their next important problem. As the vegetables are not grown in the malnad region the seller has to purchase it from the farmers production point. Another problem which the respondents listed was the location of the shandy since there were no infrastructure available in the shandies the stalls were being scattered.

4.6.2 Problems faced by the consumers in the study area

The list of problems faced by the consumers in the trading in local shandies in the study area was studied and the farmers were asked to rank the problems in order of importance. The results of the analysis are presented in the table. From the table 4.16 it is observed that the most important problem faced by the consumers in the study area was lower proximity to the shandy followed by inferior quality of the produce, high prices, less frequent market days leading to lower scope to purchase only in these shandies and finally lack of sanitation.

Discussion

Chapter V

DISCUSSION

The results presented in the previous chapter are discussed under following headings:

5.1 General characteristics of the sample respondents
5.2 Composition of sellers, buyers and commodities in weekly shandies
5.3 Management and trade practices of weekly shandies
5.4 Infrastructure facilities available in weekly shandies
5.5 Constraints faced by stakeholders in weekly shandies

5.1 General characteristics of the sample respondents

5.1.1 Average family size of the consumer's respondents

The family size of the respondents were classified as small family with less than three members, medium size family with three to five members and big family with more than five members. The results showed that in Koppa shandy, all the respondents (100%) were having three to five member families. In Sringeri shandy, majorities of the respondents (83%) were having three to five member family si ze.

In Narasimharajapura shandy, majority respondents (91%) were having three to five family size. In Balehonnur shandy, 75% respondents were having 3 to 5 family size and only one respondent having more than 5 family size. In Aldur shandy, majorities (75%) of the respondents were having 3 to 5 family size.

In the cumulative sample of 60 respondents highest number of respondents having three to five family sizes (51%), followed by less than three category (11%) and more than five category (3%).

5.1.2 Age of Seller respondents

The respondents are classified based on their age group as less than 20 years category, young age of 21-35 years, medium aged group of 36-55 years and age group of more than 56 years. The result shows that in all the five shandies namely Koppa, sringeri, Narasimharajapura, Balehonnur and Aldur the seller fall under the category of 21-35 years (40%).

Hence it clearly indicates that the age of the sellers in all the five shandies is dominated by young age group of 21-35 years followed by middle aged category having 36-55 years (29%), less than 20 years group (17%) and more than 56 years (13%) category.

5.1.3 Average income of sellers

The sellers in all the shandies can be classified in the following categories based on the commodities that the sellers sell viz sellers selling vegetables, fruits, mutton, fish, utensils, clothes and all other sellers were classified in the category of miscellaneous sellers. The average income of sellers differs from seller to seller and shandy-to-shandy based upon the size of the shandy in terms of number of visitors and the nature of commodity sold. It was found that among all the shandies the average annual income of vegetable trader was Rs. 50340, fruits was Rs. 14729, mutton seller income was Rs. 37588, utensils was Rs. 33128, clothes Rs. 22631 and miscellaneous was Rs. 6704.

Hence it can be concluded that vegetables are the main consuming produce in malnad region followed by fruits, mutton, fish and miscellaneous.

5.1.4 Education of the sellers' respondents

Education plays a key role in enhancing an individual knowledge of the respondents. In the cumulative sample 80, illiteracy was highest in

Balehonnur (19%) followed by Koppa and Aldur (12%). However vast majority of consumer respondents studied up to middle school (36.25%) with highest in Narasimharajapura. This is mainly due to the nearness of other shandies to Narasimharajapura. This is because Narasimharajapura is near to Koppa as well as Sringeri. The consumers of different region usually visit Koppa shandy, which comprises mainly of labor class. So the local population visits Narasimharajapura shandy, which has got more illiterates.

The result shows the level of education of respondents who visited the shandies from different places. The result shows that in Koppa shandy, 50 per cent respondents were having primary education. In case of Sringeri shandy out of the total respondents the majority of the respondents (50%) studied till primary level. Similarly in case of Narasimharajapura shandy, majorities 50 per cent of the respondents were found to be completed their middle class education. Where as in case of Balehonnur and Aldur shandy majorities (50%) studied up to middle class and high school level education respectively. And in Sringeri shandy it was found that out of the total respondents there were no illiterate sellers.

5.1.5 Number of visitors in each shandy

From the previous chapter Table 4.1 showed that the total number of visitors who visits the shandies on shandy day. The visitors are being categorized under different groups namely farmers, traders, local population, labor class and population from other taluks. In Koppa shandy, among all the different categories of visitors 33 per cent accounted the labor class. The visitors from other taluks are constituted lowest of 11 per cent.

In case of Sringeri and Aldur shandies, among the total number of visitors who visit the shandy are farmers, which accounted for major

proportion 30per cent and 31 per cent respectively. Where as in Narasimharajapura, Balehonnur shandies, 300 people visit every market day of which 22 per cent come from other taluks and 33 per cent belonged to local population respectively.

Hence it can be seen that labor class is the main stay of shandies in malnad region. Laborers majorly depend on the shandies for their day to day needs.

5.1.6 Age of the consumer respondents

The respondents are classified based on their age group as less than 20 years category, young age of 21-35 years, medium aged group of 36-55 years and age group of more than 56 years. The results of the study indicated that in Koppa shandy, of the total respondents 50 per cent found in the age group of 21 to 35 years. In Sringeri shandy, 66 per cent found in the age group of 21 to 35 years; again 16.6 per cent were in the age group of 36 to 50 years.

Similarly in Balehonnur shandy majority (50%) of the respondents were between 21 to 35 years. In case of Aldur shandy 41.6 per cent respondents were from the age group of 21 to 35 years. Thus it can be said that majority of the respondents visiting shandies were of 21 to 35 years category.

5.1.7 Income of the consumers' respondents

All the consumer respondents were classified into different income groups such as less than Rs. 20000, Rs. 20000-50000, and Rs. 50000 to one lakh and group having more than one lakh as their family annual income. In Koppa shandy the 33 per cent of the respondents came in the range of Rs. 20000 to 50000. While in Sringeri shandy, 41 per cent of the respondents were from Rs. 50000 to one lakh income level. In case of Narasimharajapura shandy, out of the total respondents, 50 per cent

were fallen in the income of Rs.20000 to 50000. In Balehonnur shandy, majorities (58%) fell in 20000 to 50000 income level. In case of Aldur shandy, 50 per cent of the respondents were from Rs. 20000 to 50000 income ranges.

From the foregoing analysis it can be concluded that the majority of the respondents visited the shandy under survey were from the income group of Rs. 20000-50000 followed by 50000-100000. This lead to a conclusion that that income was above one lakh usually does not prefer goods from shandies.

5.1.8 Educational qualification of the consumer respondents

This shows the level of education of respondents who visited the shandies from different places. Out of the total respondents in Koppa and Sringeri shandies, majorities of the respondents were completed high school education. Similarly in case of Narasimharajapura shandy, four respondents out of the total were having secondary level education. Where as in Balehonnur shandy, four were having primary level education, two were studied up to middle school level, three respondents were found to be having secondary level education and three found as illiterates. In Aldur shandy four respondents found to be illiterates.

The overall picture suggests that the majority of the respondents were having high school education, followed by primary level education, secondary level education, illiterates and then the graduates.

5.2 Composition of sellers, buyers and commodities in weekly Shandies

5.2.1 Composition of sellers

The major type of sellers found in study area are of two types one being pure sellers and other who are part time sellers who sell in the

shandies. The data indicates the composition of traders in all the five shandies and also the pooled averages. It was found that in all the five shandies namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur the majority of the sellers were pure traders.

From results some of the interesting conclusions are most of the respondents from all the shandies were traders. So, majority of respondents who trade in the village shandies were being employed as traders followed by part time sellers.

5.2.2 Composition of Buyers

The consumer respondents were classified as farmers, laborers, Business people and respondents having miscellaneous occupations including teacher, nursing and students. The results indicate occupation of the respondents in all the five shandies and also the pooled averages. In Koppa shandy, majority of the respondents was laborers, in Sringeri and Narasimharajapura shandy out of total respondents, three were laborers, three were businessmen and the other were doing miscellaneous occupations. Similarly in Balehonnur shandy and Aldur shandy, majority were laborers.

Overall it can be seen that most of total consumer respondents from all the shandies were laborers, followed by respondents doing miscellaneous occupations, farmers and businessmen. It can be inferred that the laborers are the frequent visitors to village shandies followed by the visitors having miscellaneous occupations. So, majority of respondents who visited the village shandies was being employed as laborers followed by miscellaneous occupants and the farmers.

5.2.3 Composition of commodities

Malnad region is famous for cultivating plantation crops. Most of the vegetables are rarely grown in this region and the vegetables are

highest consumed in malnad region. So this is supplemented by other places of Chickmagalur District and also from other parts.

The result showed that there are various commodities such as vegetables, fruits, mutton, utensils and miscellaneous which flow to the market from different places. The vegetables which flow to the market is seasonal bounded. The commodities such as mutton and fruits like papaya are traded throughout the year. It was observed that in all the five shandies most commonly consumed commodities are traded.

5.3 Management and trade practices of weekly shandies

The management practices followed by the regulating agency such as Village Panchayat were studied to get a better insight of the rural shandies in the study area. It was found that in all the shandies namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur the trade is regulated by the Village Panchayat. The Village Panchayat had employed a person to supervise the shandies on particular shandy days. There is no compulsory registration for the sellers attending the shandies, but the sellers have to pay a market fee of around one per cent of the total value of the produce brought to the shandy to the Village Panchayat, which is collected by the supervisor. The trade regulating agency in all the shandies have not provided any infrastructure to the shandy visitors but they have some trade regulating mechanism such as dispute settlement.

5.4 Infrastructure facilities available in weekly shandies

Infrastructure plays a very important role in the marketing of the produce in rural shandies. Majority of the primary rural markets does not have the infrastructure facilities like plat form, shed, weighing machine, light facility, water facility, road, toilet and shelter to the animals etc.

Considering the past studies, a study has been undertaken to know about the infrastructure facilities such as plat form, shed, weighing machine, light facility, water facility, road, toilet and shelter to the animals etc available in the shandies namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur. It was found that road is the only facility that all the shandies have, and other facilities such as plat form, shed, weighing machine, light facility, water facility, toilet and shelter to the animals are not available to the sellers or consumers.

5.5 Influence of age literacy and occupation on sellers income

From the result it can be concluded that age and occupation have got positive effect on income of the sellers. Education has no influence on the income of the sellers who responded in the study area.

5.5.1 Constraints faced by stakeholders in weekly shandies

The constraints faced by the sellers were listed based up on the previous studies were allotted according to the weightage given by the farmers to the constraints in the order of merit. In all the shandies namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur the sellers have identified lack of infrastructure as the major problem. The second important problem is the transportation cost, followed by lower demand, distance from the production point as the next constraint and location of the shandy as their last constraint.

5.5.2 Problems faced by the consumers in the study area

The list of problems faced by the consumers in the local shandies in the study area was studied, and it is observed that the most important problem faced by the consumers in the study area was lower proximity to the shandy. In the order of importance, the next main problem was that

of Quality of the produce being poor, followed by other constraints such as Price being very different among the sellers and some times to high to afford, less frequent market days leading to lower scope to purchase only in these shandies and finally lack of sanitation.

Summary and Policy Implication

CHAPTER VII

SUMMARY AND POLICY IMPLICATIONS

6.1 Introduction

Agriculture continues to be main stay of life for majority of the Indian population. It contributes around 20 per cent of the GDP and employs 59 per cent of the workforce in the country. Significant strides have been made in agriculture production since independence. The agriculture production of food grains increased from 51 million tones in 1950-51 to 213 million tones in 2003-04. The output of oilseeds went up to 23 million tones. Similarly, the production of fruit and vegetables also increased to more than 134 million tones. The subject of agriculture and agricultural marketing is dealt both by the States as well as by the Central government in the country.

Most agricultural commodity markets generally operate under the normal forces of demand and supply. However, with a view to protecting farmers' interest and to encourage them to increase production, the Government also fixes minimum support/statutory prices for some crops and makes arrangements for their purchase whenever their price falls below the support level. The Government is promoting organized marketing of agricultural commodities in the country through a network of regulated markets. To achieve an efficient system of buying and selling of agricultural commodities, most of the state Governments and Union Territories have enacted legislations (APMC Act) to provide for regulation of agricultural produce markets. The basic objective of setting up of regulated markets is to ensure reasonable price to the farmers produce by regulating market practices and attain transparency in transactions.

In the market structure hierarchy APMCs are at the top, with 7,161 regulated markets, or mandis, usually governed by APMC (Agricultural Produce Marketing Committee) Acts. These regulated markets are primarily wholesale markets, located near important towns or centers of production.

The mandis that are operating at secondary level are located in district headquarters or major trade centers. These mandis are spread throughout the length and breadth of the country. However, the small farmers have limited access to these mandis. In these markets transactions take place between commission agents and wholesalers. Market intermediaries purchase the farm produce from farmers, often in advance, and bring it to mandis for sale to wholesalers.

Unlike the regulated markets, there are also unregulated markets known as haats, peta, angadi, hatwari, shandies, chindies or painths. These are sometimes periodic (once a week) and sometimes permanent. In rural markets, dis-intermediation is greater and there is an opportunity for producers to directly sell to consumers or small rural retailers. Unlike mandis, small farmers have access to haats. Local bodies usually control these markets by auctioning space and issue licenses and permit the vendors to use these shandies.

Market fees or taxes are collected from the traders, but these are rarely ploughed back to develop the infrastructure in the shandies. Shandies lack basic facilities like platforms for sale or auction, electricity, drinking water, facilities for grading, sorting and so on.

Malnad is a special geographical area in Karnataka, where the density of population is less; almost it is like a hilly region. The people in extreme knots and corners of hilly region have less access to the out side world in terms of road connectivity, communication, market access,

social contacts, etc. majority of the people in this region depend more on weekly shandies to sell their farm produce in small quantities and also to buy the family requirements of commodities from outside village system. The rural shandies are the nerve centers of economic activities in malnad region mainly due to lack of big markets and big towns. Hence studying the working of rural markets throws light on economic and social life of people in malnad region.

6.2 Data base

The study was undertaken in Chickmagalore district of Karnataka. In the district 5 weekly shandies were selected for the study namely Koppa, Sringeri, Narasimharajapura, Balehonnur and Aldur using random sampling technique. The study is based on both primary as well as secondary data. The primary data is being collected from farmers, market traders, consumers and local governing bodies. The primary information was collected from 16 producers cum sellers from each shandy, 12 buyers, from each shandy. Further the information from 6 officials of village panchayat and other local governing bodies was collected, thus making a sample of 170 respondents.

The secondary data was collected relating to population of the district and its demographic characteristics, agricultural production data regarding the area under different crops and their yields etc.

Tabular analysis, Regression and Garrets ranking technique were employed to realise the objectives of study.

6.3 Major findings of the study

1. In Koppa shandy, among the different categories of visitors major portion accounted (150 visitors out of 450) belonged to labor class and least representation by visitors from other taluks.

2. In case of Sringeri shandy local population (100) found highest among all categories and in Aldur shandy among the total numbers of visitors, farmers which accounted for major proportion (125). Where as in Balehonnur shandy, 500 people visit every market day of which only 50 farmers visit the shandy and in Narasimharajapura shandy 100 belong to local population as well as labor class.

3. Majority of the respondents who trade in the shandies were belonged to middle age groups (21 to 35 years). Majority of the respondents were completed their middle school level education in all shandies.

4. In all the shandies the average annual income from trade by vegetable traders was found to be high with (Rs. 50340), followed by fruit traders (Rs.14729), meat sale (Rs.37588), utensils (Rs.33128), clothes (Rs.22631) and miscellaneous products (Rs.6704).

5. Majority of consumers visiting the shandies belonged to the income group of Rs.20000-50000 followed by consumers having an annual income of Rs.50000-100000.

6. Majority of sellers in the weekly shandies are the middlemen buying the products from different sources selling sources to different buyers and the second largest group are the producers who are selling the little marketable surplus in the farm operations.

7. The trade regulating agency in all the shandies is the village panchayat. They are responsible for regulating trade.

8. Majority of the primary rural markets do not have the infrastructure facilities like plat form, shed, weighing machine, light facility, water facility, road, toilet and shelter to the animals etc.

9. Among the problems faced by the stakeholders of the shandies, lack of infrastructure was the major problem followed by high transportation cost, lower sales, distance from the production point and inaccessible shandy.

10. Important problems faced by the consumers in the study area are lower proximity to the shandy, followed by the low quality of the produce, high price, less frequent market days, Lower range of products and lack of infrastructure facilities.

Policy implications

1. Importance of rural shandies in rural economy Rural markets have been playing an integral part of the economy. These markets serve as centers for supply of household materials to rural population. Hence there is a need to improve the rural markets by providing necessary infrastructural facilities and there is a need for systematic and effective development of these markets.

2. Majority of visitors to Koppa shandy are labourers in coffee estates. The government may initiate action to open fair price shops in Koppa nearby weekly shandies to enable the labourers to draw their monthly quota of food grains produce under public distribution system which is convenient the people.

3. The Sringeri and Aldur shandies are basically primary markets, where in the majority of the visitors are farmers. So this may be developed as a sub market yard as a Sringeri APMC.

4. The infrastructure in weekly shandies of malnad region is very poor and needs intensive annual maintenance in the light of heavy rains in the region. So concerned APMC should come out with a plan to address special problem in malnad region.

5. To enable easy moment of farmers to the weekly shandies mini buses, which can be easily go to hilly tracks, may be introduced.

6. The government agencies should take up project to establish weekly shandies in hobli and village panchayat centers to reduce the distance from the farmers place to the weekly shandy.

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