



Research Report

On

**“Awareness Creation to Strengthen Agricultural
Marketing System and Agribusiness
Development”**

An Assessment of

Level of Farmers’ Awareness on Agricultural Marketing

Conducted

By

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CHAPTER 1

INTRODUCTION

“Agricultural marketing is witnessing major changes owing to liberalization and globalisation of markets. In this context agriculture has to be market driven, more cost effective, competitive, innovative and responsive to high tech and I.T. applications. Training and extension systems in agricultural marketing will have to sensitise and orient the beneficiaries to respond to these challenges. It is necessary to build capacity of each of the beneficiary group namely, the farmers, market functionaries and other officials involved in the agricultural marketing activities. Knowledge has to be imparted at the grassroots level in areas such as market driven production program, post harvest management of agricultural and horticultural crops, availability of marketing finance, information on facilities for quality assurance and standards, grading, packaging, storage, transportation, contract farming, direct marketing, alternative markets including Forward and Futures markets, commodity exchanges, online market information system etc. Training and education modules will have to be prepared in these areas for reaching the region specific farmers in vernacular languages. The objective of imparting training to marketing functionaries and stake holders should be to create an ambiance of Good Marketing Practices in the country to promote the interests of farmers as well as consumers.”

Report of Inter-Ministerial Task Force on Agricultural Marketing Reforms (2002)

Agricultural marketing occupies an important place particularly in the context of the new liberalization process and value addition requirements of the Agricultural sector. The existing marketing system needs to be updated through improvement in skills, knowledge, attitude etc. One of the reasons for lack of returns in agriculture is traditional way of marketing through middlemen and absence of awareness about undergoing developments in agricultural marketing. The other reasons are unscientific and inadequate crop planning, crop husbandry, post harvest management and inadequate alternative marketing channels.

Adequate knowledge on production and marketing aspects are key to improve the competitiveness of farmers that allow them to capture increased income generating potential associated with a number of emerging trends in Indian agriculture, including: (i) shifting demand towards high value agriculture and higher quality of produce, (ii) greater urban demand, and (iii) the move of large corporations into agricultural marketing. Empowerment of farmers is

necessary to make them able to respond positively to these changes in the food market for production systems diversification, increased farm productivity, improved product quality and standards, and realization of value addition opportunities.

Agricultural marketing scenario in the country is continuously evolving and taking a shape with the implementation of reforms to modernize the sector. Reforms in agricultural marketing are underway, as most of the states / UTs have adopted the Model APMR Act. The provisions under agricultural marketing reforms include; direct marketing, contract farming, establishment of farmer/ consumer markets, private markets, futures and forward trade, etc.

With this changing scenario, farmers are not getting benefitted for the want of awareness regarding the developments and means to get benefits of the developments. Knowledge regarding agricultural marketing is crucial to enable farmers to make informed decisions about what to grow, when to harvest, to which markets produce should be sent, and whether to store it or not. Farmers get benefit from contract farming, direct marketing, group marketing, commodity futures markets, electronic spot markets, only to the extent they organize in marketing groups, self-help groups, cooperatives or companies and learn skills suited to the new marketing environment. Understanding quality standards, learning the terms of contract, and choosing and preparing the produce for the market are going to be essential skills for farmers. Farmers required to be exposed to the characteristics and complexities of the marketing system to make it more efficient.

This is known fact that the farmers are not getting latest information on prices of commodity in nearby markets, no market intelligence at farmers place, incomplete information about the market process and value chain, unknown about the consumer's preference, no guidance about the primary grading and packaging at farm gate, etc. Thus, need of the hour is to address various aforementioned issues in agricultural marketing sector to induce competitiveness, bring awareness among farmers to make them responsive to the market needs.

Proper planning for capacity building of farmers on different aspects of agricultural marketing needs to know the current level of awareness of the farmers and the assessing their need for training programme. Keeping this in mind, the institute had initiated a novel development research aiming at measuring the level of awareness of farmers on different aspects of

agricultural marketing and making farmers aware about the latest developments in agricultural marketing at the same time. The specific objectives of the research are:

1. To make the farmers aware of the need for market considerations while planning their production and other agricultural operations.
2. To develop a commercial & business oriented mindset of farmers towards the agricultural operations.
3. To empower the farmer to take decision based on market information.

CHAPTER 2

METHODOLOGY

The level of awareness among farmers of different aspects of production and marketing of crops and timely application of that knowledge in the farming business is instrumental factor in deciding farm income. Keeping this in mind, it has been tried through this study to know the level of awareness of sample farmers on different aspects of agricultural marketing.

The Approach

As a part of this novel development research, 11 Farmers Awareness Programmes were conducted in different states (table-2.1). The issues such as reforms in agricultural marketing, post-harvest management of agricultural/ horticultural produce, different schemes in agricultural marketing, accessing and using market information, improved marketing practices of agricultural produce, etc. were covered in FAPs to make farmers aware of modern agricultural marketing practices and take informed decision. The FAPs were conducted in Rajasthan, Haryana, Uttar Pradesh, Karnataka, Madhya Pradesh and Gujarat.

Table-2.1: List of Farmers Awareness Programmes Conducted

S.No	Date	Venue	Farmers Interviewed
1	25.02.2010	Dujar, Distt- Nagur, Rajasthan	72
2	26.02.2010	Ladnu, Distt- Nagur, Rajasthan	
3	18.03.2010	Distt- Lucknow, U.P.	63
4	19.03.2010	Distt- Unnao, U.P.	
5	19.03.2010	Jind, Haryana	49
6	21.03.2010	Belgaum, Karnataka	59
7	22.03.2010	Bailhongal, Karnataka	
8	29.03.2010	CIAE, Bhopal	67
9	30.03.2010	KVK, Bhopal	
10	29.03.2010	KVK, Mangal Bhandi, Vadodra	87
11	30.03.2010	Daboi, Vadodara	

The pre-structured schedule was addressed prior to conducting of awareness programme for collection of primary data. The opinion survey was conducted before the awareness programme at each selected locations mentioned in table 3.1. Each programme was attended by about 30 – 40 farmers.

Data Analysis

Primary data collected from farmers were tabulated and analysed using percentages and averages of the response received from farmers on different aspects of agricultural marketing.

CHAPTER 3

RESULTS AND DISCUSSION

The awareness of farmers on different issues of agricultural helps them to respond to the market demand, and realize better price for their produce by taking informed decisions regarding marketing of their produce. The study was aimed to measure the level of awareness of farmers in different states of the country. The results of analysis are presented below.

General Characteristics of Sample Farmers:

The general characteristics of selected farmers who have turned up for attending farmers awareness programmes on agricultural marketing, like operational farm holdings, average age of respondents, education level and main occupation has been worked out and presented in this section. It is perceived that the educated youth is opting out of agriculture and has a better decision power and education imparts among them the capability of taking informed decision.

Table-1: State-wise Number of Farmers selected

State	Less than 1 Acre	1-5 Acre	5-10 Acre	Above 10 Acre	Overall
Gujarat	7 (8.0)	40 (46.0)	15 (17.2)	25 (28.7)	87 (100.0)
Haryana	1 (2.0)	12 (24.5)	17 (34.7)	19 (38.8)	49 (100.0)
Karnataka	8 (13.6)	19 (32.2)	20 (33.9)	12 (20.3)	59 (100.0)
MP	5 (7.5)	31 (46.3)	10 (14.9)	21 (31.3)	67 (100.0)
Rajasthan	3 (4.2)	16 (22.2)	37 (51.4)	16 (22.2)	72 (100.0)
UP	24 (38.1)	22 (34.9)	15 (23.8)	2 (3.2)	63 (100.0)
Grand Total	48 (12.1)	140 (35.3)	114 (28.7)	95 (23.9)	397 (100.0)

Note: Figures in parentheses are percentages to total.

Farm size wise distribution of selected farmers in different states under study was worked out and is presented in table 1. It is revealed from the table that, of the total farmers turned up for attending the awareness programmes on agricultural marketing, about 35 per cent were having operational land holding 1-5 acres, nearly 29 per cent having 5-10 acres, about 24 per cent were cultivating above 10 acres and nearly 12 per cent were possessing operational land holdings less than 1 acres. In Uttar Pradesh, most of the farmers (about 73 per cent) turned up for awareness

programmes were marginal and small farmers having operational land holding less than 5 acres while in other states majority of farmers were having operational holding more than 5 acres. In Karnataka nearly half of the total farmers who have turned up for attending awareness programmes were belonging to 1-5 acre land holding size group.

Average Age

The average age of the respondents was worked out and given in table 2. The results depicted that almost all the farmers turned up for attending awareness programmes on agricultural marketing were in the age group of ranging 38 to 42 years. The average age of the respondents in Gujarat was 32 to 42 years, about 36 to 45 years in Haryana, in the range of 36 to 47 years in Madhya Pradesh, 36 to 44 years in Karnataka and Rajasthan and in the range of 37 to 52 years in Uttar Pradesh.

Table-2: Average Age of Respondents

State	Less than 1 Acre	1-5 Acre	5-10 Acre	Above 10 Acre	Overall
Gujarat	32.1	36.9	42.4	39.2	38.1
Haryana	45.0	36.6	39.4	44.4	40.8
Karnataka	40.4	36.4	41.0	43.7	39.9
MP	47.0	36.3	41.7	38.8	38.7
Rajasthan	39.3	41.1	43.1	36.3	41.0
UP	36.8	41.0	46.1	51.5	40.9
Grand Total	38.1	37.8	42.4	40.5	39.8

The above results indicated that younger generation showed interest in farming. By attending awareness programme on agricultural marketing, it is revealed that the farmers are now realizing the importance of understanding the pulse of the markets. It also indicated that they are more enthusiastic to learn new things emerging in agricultural marketing.

Education Status

The level of education is an important factor in adoption of new technology in farming business. Hence, the education level of farmers who attended awareness programmes on agricultural marketing was worked out and presented in table-3. It is revealed from the table that in Gujarat state, majority of farmers (about 88 per cent) were educated above middle to even post graduation level. Similarly in Haryana state, the proportion of farmers educated above middle

level was higher (about 84 per cent of the total respondents). The proportion illiterate farmers of the total farmers found least in Gujarat state (4.6 per cent). Of the total farmers turned up for attending awareness programmes, the proportion of illiterate farmers was found higher in Karnataka (15.3 per cent), Uttar Pradesh (12.7 per cent), Madhya Pradesh (10.4 per cent) and Rajasthan (9.7 per cent).

Table-3: Education level of Sample Farmers

Land Holding	Education	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acres	Illiterate			4 (50.0)	1 (20.0)		5 (20.8)	10 (20.8)
	Primary	1 (14.3)			1 (20.0)		8 (33.3)	10 (20.8)
	Middle			1 (12.5)		1 (33.3)	3 (12.8)	5 (10.4)
	Sr. Sec	3 (42.9)	1 (100.0)	3 (37.5)	3 (60.0)	1 (33.3)	8 (33.3)	19 (39.6)
	Gr	3 (42.9)				1 (33.3)		4 (8.3)
1-5 Acres	Illiterate	1 (2.5)	2 (16.7)	2 (10.5)	3 (9.7)	2 (12.5)	2 (9.1)	12 (8.6)
	Primary			5 (26.3)	6 (19.4)	4 (25.0)	2 (9.1)	17 (12.1)
	Middle	6 (15.0)		2 (10.5)	6 (19.4)	2 (12.5)	5 (22.7)	21 (15.0)
	Sr. Sec	22 (55.0)	8 (66.7)	8 (42.1)	12 (38.7)	2 (12.5)	10 (45.5)	62 (44.3)
	Gr	10 (25.0)	2 (16.7)	2 (10.5)	2 (6.5)	5 (31.3)	3 (13.6)	24 (17.1)
	PG	1 (2.5)			2 (6.5)	1 (6.3)		4 (2.9)
5-10 Acres	Illiterate		3 (17.6)	2 (10.0)		3 (8.1)	1 (6.7)	9 (7.9)
	Primary			2 (10.0)	2 (20.0)	8 (21.6)		12 (10.5)
	Middle		1 (5.9)	6 (30.0)	1 (10.0)	6 (16.2)	2 (13.3)	16 (14.0)
	Sr. Sec	10 (66.7)	6 (35.3)	8 (40.0)	3 (30.0)	16 (43.2)	11 (73.3)	54 (47.4)
	Gr	5 (33.3)	5 (29.4)	2 (10.0)	2 (20.0)	3 (8.1)		17 (14.9)
	PG		2 (11.8)		2 (20.0)	1 (2.7)	1 (6.7)	6 (5.3)
> 10 Acres	Illiterate	3 (12.0)		1 (8.3)	3 (14.3)	2 (12.5)		9 (9.5)
	Primary		2 (10.5)		1 (4.8)	3 (18.8)		6 (6.3)
	Middle			1 (8.3)	6 (28.6)	2 (12.5)		9 (9.5)
	Sr. Sec	12 (48.0)	15 (78.9)	5 (41.7)	1 (4.8)	8 (50.0)	1 (50.0)	42 (44.2)
	Gr	9 (36.0)	2 (10.5)	4 (33.3)	8 (38.1)	1 (6.3)		24 (25.3)
	PG	1 (4.0)		1 (8.3)	2 (9.5)		1 (50.0)	5 (5.3)
Overall	Illiterate	4 (4.6)	5 (10.2)	9 (15.3)	7 (10.4)	7 (9.7)	8 (12.7)	40 (10.1)
	Primary	1 (1.1)	2 (4.1)	7 (11.9)	10 (14.9)	15 (20.8)	10 (15.9)	45 (11.3)
	Middle	6 (6.9)	1 (2.0)	10 (16.9)	13 (19.4)	11 (15.3)	10 (15.9)	51 (12.8)
	Sr. Sec	47 (54.0)	30 (61.2)	24 (40.7)	19 (28.4)	27 (37.5)	30 (47.6)	177 (44.6)
	Gr	27 (31.0)	9 (18.4)	8 (13.6)	12 (17.9)	10 (13.9)	3 (4.8)	69 (17.4)
	PG	2 (2.9)	2 (4.1)	1 (1.7)	6 (9.0)	2 (2.8)	2 (3.2)	15 (3.8)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Farmers having education level of post graduation level were not found in less than one acre farm size group whereas, in other farm size groups graduate and post graduate level educated people also found adopted farming practices. It is interesting to note that, farmers having operational holdings more than 5 acres majority of them were educated above middle level. Overall, only about 10 per cent of the total farmers turned up for attending awareness programmes on agricultural marketing were found illiterate, nearly 11 per cent were educated upto primary level, about 13 per cent were educated upto middle level, nearly 45 per cent were educated upto senior secondary level and 21 per cent of the total farmers were graduate and post graduates.

It is clear from above discussion that the higher proportion of educated and younger generation has turned up for attending awareness programmes on agricultural marketing. This signifies that the educated and younger generation is also taking interest in the farming business and they are enthusiastic to learn the complexities of agricultural marketing and showed interest in understanding the pulse of the market so that they can respond to market realities.

Phone Connectivity

The telephone (landline or mobile) is a faster means of communication. From agricultural marketing point of view, the market information can be accessed by farmers or disseminated by govt. /private agencies timely, cost effective and in efficient way. Hence, the selected farmers connectivity with this means of communication was assessed from the data collected and presented in table 4.

It is revealed from the results of analysis that majority of the respondents (nearly 82 per cent) were connected with mobile phone, and only about 17 per cent farmers were not connected with either landline or mobile. Nearly 90 per cent of the selected farmers in Haryana, Madhya Pradesh, Gujarat and Rajasthan found to be connected with mobile phone. Farmers with no phone connection were found higher in Karnataka (45.8 per cent) and Uttar Pradesh (16.6 per cent of total respondents). Nearly 80 to 90 per cent of the farmers having operational holdings above one acre were connected with mobile phones. While higher proportion of respondents was with no phone connections that were having operational holding less than one acre. This signifies

that the younger and educated generation of farmers might be using latest information technology for the betterment of their farming business.

Table-4: Phone Connectivity with Sample Farmers

Land Holding	Phone	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acre	Landline	1 (14.3)					1 (4.1)	2 (4.2)
	Mobile	6 (85.7)	1 (100)	5 (62.5)	4 (80.0)	3 (100)	13 (54.2)	32 (66.2)
	No phone			3 (37.5)	1 (20.0)		10 (41.7)	14 (29.2)
1-5 Acres	Landline						1 (4.5)	1 (0.7)
	Mobile	34 (85.0)	12 (100)	12 (63.2)	27 (87.1)	15 (93.8)	16 (72.7)	116 (82.9)
	No phone	6 (15.0)		7 (36.8)	4 (12.9)	1 (6.3)	5 (22.7)	23 (16.4)
5-10 Acres	Landline					1 (2.7)		1 (0.9)
	Mobile	14 (93.3)	14 (82.4)	8 (40.0)	9 (90.0)	31 (83.8)	15 (100.0)	91 (79.8)
	No phone	1 (6.7)	3 (17.6)	12 (60.0)	1 (10.0)	5 (13.5)		22 (19.3)
> 10 acres	Landline	1 (4.0)			1 (4.8)			2 (2.1)
	Mobile	23 (92.0)	19 (100.0)	7 (58.3)	20 (95.2)	15 (93.8)	2 (100.0)	86 (90.5)
	No phone	1 (4.0)		5 (41.7)		1 (6.3)		7 (7.4)
Overall	Landline	2 (2.3)			1 (1.5)	1 (1.4)	2 (3.2)	6 (1.5)
	Mobile	77 (88.5)	46 (93.9)	32 (54.2)	60 (89.6)	64 (88.9)	46 (73.0)	325 (81.9)
	No phone	8 (9.2)	3 (6.1)	27 (45.8)	6 (9.0)	7 (9.7)	15 (23.8)	66 (16.6)

Note: Figures in parentheses are percentages to total.

Main occupation

The farmers who have turned up for attending awareness programmes were mainly occupied in farming business (97.2 per cent), implying thereby that major source of income for about 97 per cent of farmers was agriculture. In Gujarat only one respondent out of total sample of 87 and in Rajasthan 2 out of 72 respondents found to be having business as a major source of income, and in Madhya Pradesh 1 out of total 67 respondents having service as a major source of income. In Haryana and Karnataka all the selected respondents were earning income mainly from farming business. Whereas, in Uttar Pradesh of the total 63 respondents 1 was engaged in business, 1 in service, 6 were labourers and 55 respondents were engaged mainly in agriculture.

Table- 5: Main Occupation of Sample Farmers

Land Holding	Occupation	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acres	Agriculture	7 (8.0)	1 (2.0)	8 (13.6)	5 (7.5)	3 (4.2)	18 (28.6)	42 (10.6)
	Business						1 (1.6)	1 (0.3)
	Labour						5 (7.9)	5 (1.3)
1-5 Acres	Agriculture	39 (44.8)	12 (24.5)	19 (32.2)	31 (46.3)	16 (22.2)	21 (33.3)	138 (34.8)
	Business	1 (1.8)						1 (0.3)
	Labour						1 (1.6)	1 (0.3)
5-10 Acres	Agriculture	15 (17.2)	17 (34.7)	20 (33.9)	10 (14.9)	36 (50.0)	14 (22.2)	112 (28.2)
	Business					1 (1.4)		1 (0.3)
	Retired						1 (1.6)	1 (0.3)
> 10 Acres	Agriculture	25 (28.7)	19 (38.8)	12 (20.3)	20 (29.9)	16 (20.8)	2 (3.2)	94 (23.4)
	Service				1 (1.4)			1 (0.3)
Overall	Agriculture	86 (98.9)	49 (100)	59 (100)	66 (98.5)	71 (98.6)	55 (87.3)	386 (97.2)
	Business	1 (1.1)				1 (1.4)	1 (1.6)	3 (0.8)
	Labour						6 (9.5)	6 (1.5)
	Service				1 (1.5)		1 (1.6)	2 (0.5)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Knowledge of APMCs

The knowledge of farmers on Agricultural Produce Market Committees (APMCs) was assessed and presented in table 6. This is revealed from the table that highest proportion of farmers who responded negative on the knowledge regarding APMCs was found in Uttar Pradesh (54 per cent) followed by Gujarat and Rajasthan (33 per cent in each state), Madhya Pradesh (29.9 per cent), Karnataka (22 per cent and Haryana (20 per cent). It is really heartening to note that in the era of second generation of reforms in agricultural marketing, a large chunk of farmers responded negative on the knowledge of APMCs. The highest proportion of farmers knowing about APMCs was recorded in Karnataka (71 per cent of the total farmers responded positively on knowledge of APMCs) followed by Gujarat (65.5 per cent), Madhya Pradesh (58.2 per cent), Rajasthan (54.2 per cent), Haryana (34.7 per cent) and least in Uttar Pradesh (33.3 per cent). Farm size wise analysis revealed that higher proportion of farmers with larger land holdings responded positive on knowledge about APMCs.

Table- 6: Knowledge of Sample Farmers about APMCs

Land Holding	Yes/ No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acres	No	2 (2.3)		3 (5.1)	2 (3.0)	1 (1.4)	11 (17.5)	19 (4.8)
	Yes	5 (5.7)		5 (8.5)	2 (3.0)	2 (2.8)	9 (14.3)	23 (5.8)
	NR		1 (2.0)		1 (1.5)		4 (6.3)	6 (1.5)
1-5 Acres	No	14 (16.1)	1 (2.0)	4 (6.8)	10 (14.9)	7 (9.7)	13 (20.6)	49 (12.3)
	Yes	26 (29.9)	3 (6.1)	15 (25.4)	16 (23.9)	6 (8.3)	7 (11.1)	73 (18.4)
	NR		8 (16.3)		5 (7.5)	3 (4.2)	2 (3.2)	18 (4.5)
5-10 Acres	No	4 (4.6)	2 (4.1)	4 (6.8)	1 (1.5)	13 (18.1)	9 (14.3)	33 (8.3)
	Yes	11 (12.6)	7 (14.3)	13 (22.0)	9 (13.4)	22 (30.6)	4 (6.3)	66 (16.6)
	NR		8 (16.3)	3 (5.1)		2 (2.8)	2 (3.2)	15 (3.8)
> 10 Acres	No	9 (10.3)	7 (14.3)	2 (3.4)	7 (10.4)	3 (4.2)	1 (1.6)	29 (7.3)
	Yes	15 (17.2)	7 (14.3)	9 (15.3)	12 (17.9)	9 (12.5)	1 (1.6)	53 (13.4)
	NR	1 (1.1)	5 (10.2)	1 (1.7)	2 (3.0)	4 (5.6)		13 (3.3)
Overall	No	29 (33.3)	10 (20.4)	13 (22.0)	20 (29.9)	24 (33.3)	34 (54.0)	130 (32.7)
	Yes	57 (65.5)	17 (34.7)	42 (71.2)	39 (58.2)	39 (54.2)	21 (33.3)	215 (54.2)
	NR	1 (1.1)	22 (44.9)	4 (6.8)	8 (11.9)	9 (12.5)	8 (12.7)	52 (13.1)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

NR- No Response, Note: Figures in parentheses are percentages to total.

Knowledge of Provisions of Market Regulation

The agricultural markets were regulated and APMCs were established to arrange an orderly marketing of farmers produce. Knowledge of this provision was responded by about 90 per cent of total farmers turned up for attending awareness programmes in Rajasthan and Gujarat states (Table-7) followed by Uttar Pradesh (66.7 per cent), Haryana (53.1 per cent) and least in Karnataka and Madhya Pradesh (nearly 45 per cent). The regulation of markets was aimed at correct weighing of the produce of farmers at the time of marketing in APMCs was responded positively by about 92 per cent of the total respondents in Rajasthan, nearly 84 per cent farmers in Gujarat, 68.3 per cent in Uttar Pradesh, nearly 52 per cent farmers in Madhya Pradesh and Haryana, and least (37.3 per cent of the total farmers) in Karnataka.

The provision of ensuring immediate payment of the produce marketed by the farmers in APMCs responded by about 90 per cent farmers in Rajasthan, 87.4 per cent in Gujarat, nearly 65 per cent farmers in Uttar Pradesh, nearly half of the farmers in Haryana and Madhya Pradesh and merely 29 per cent of the total respondents in Karnataka. Nearly 80 per cent of the total

respondents in Rajasthan and Gujarat expressed that APMCs were created for scientific price discovery of their produce through open auction. Whereas, in Karnataka merely 9 per cent farmers felt that there was scientific price discovery of their produce in APMCs.

Table- 7: Response of Sample Farmers on Provisions of Market Regulation

S.No.	Particulars	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	To arrange for sale of commodity	78 (89.7)	26 (53.1)	27 (45.8)	30 (44.8)	65 (90.3)	42 (66.7)	268 (67.5)
2	Correct weighment	73 (83.9)	25 (51.0)	22 (37.3)	35 (52.2)	66 (91.7)	43 (68.3)	264 (66.5)
3	Immediate payment	76 (87.4)	22 (44.9)	17 (28.8)	35 (52.2)	64 (88.9)	41 (65.1)	255 (64.2)
4	Scientific price discovery	69 (79.3)	20 (40.8)	5 (8.5)	31 (46.3)	58 (80.6)	40 (63.5)	223 (56.2)
5	Prevent Unauthorized deductions	63 (72.4)	17 (34.7)	2 (3.4)	28 (41.8)	64 (88.9)	35 (55.6)	209 (52.6)
6	Provide market Infrastructure	67 (77.0)	19 (38.8)	2 (3.4)	28 (41.8)	61 (84.7)	38 (60.3)	215 (54.2)
7	Provide backward and forward linkage	46 (52.9)	11 (22.4)	4 (6.8)	20 (29.9)	52 (72.2)	32 (50.8)	165 (41.6)
8	Total Farmers	87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

It was known fact that prior to regulation of agricultural markets, commission agents/ traders used to deduct unauthorized charges in the name of *dharmada*, *muddat*, *dhalta*, *kardha*, etc. APMCs were created under regulation of agricultural markets aimed at preventing the various types of unauthorized charges from farmers. Knowledge of this provision under regulation of agricultural markets was expressed by 90 per cent of the selected farmers in Rajasthan, about 72 per cent in Gujarat, about 56 per cent in Uttar Pradesh, nearly 40 per cent in Haryana and Madhya Pradesh and merely 3 per cent of the farmers in Karnataka responded positively on this provision.

Knowledge of Services Provided by APMCs

It is perceived that the extent of knowledge of farmers regarding different kind of services and facilities at APMCs is required to take the full benefit of the APMCs. The knowledge of farmers regarding different services and facilities provided by APMCs for orderly marketing of agricultural produce was assessed and presented in table 8. It was revealed from the table that nearly 80 per cent of selected farmers in Gujarat responded that APMCs are to arrange facility

for sale of produce followed by about 68 per cent in Karnataka, 57 per cent in Rajasthan, nearly 50 per cent in Haryana and about 30 per cent in Madhya Pradesh and Uttar Pradesh. More than 80 per cent of farmers of Rajasthan and Gujarat responded positively on the facilities like farmers rest house and drinking water facilities provided by APMCs. Whereas around half of the total farmers turned up for attending awareness programme on agricultural marketing in Haryana, Madhya Pradesh and Uttar Pradesh responded positively on the knowledge of such facilities in mandies.

Table- 8: Response of Sample Farmers on Services Provided by APMC

S. No.	Particulars	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Facility for Sale of Produce	69 (79.3)	24 (49.0)	40 (67.8)	21 (31.3)	41 (56.9)	17 (27.0)	212 (53.4)
2	Civic Amenities	40 (46.0)	28 (57.1)	1 (1.7)	23 (34.3)	30 (41.7)	12 (19.0)	134 (33.8)
3	Farmers Rest-house	75 (86.2)	31 (63.3)	7 (11.9)	36 (53.7)	61 (84.7)	31 (49.2)	241 (60.7)
4	Drinking Water Facility	73 (83.9)	27 (55.1)	12 (20.3)	23 (34.3)	60 (83.3)	22 (34.9)	217 (54.7)
5	Parking Facility	58 (66.7)	29 (59.2)	14 (23.7)	21 (31.3)	65 (90.3)	34 (54.0)	221 (55.7)
6	Loading and Unloading	50 (57.5)	23 (46.9)	6 (10.2)	16 (23.9)	34 (47.2)	11 (17.5)	140 (35.3)
6	Weighment	6 (6.9)	4 (8.2)	6 (10.2)	1 (1.5)	4 (5.6)		21 (5.3)
7	Grading			3 (5.1)				3 (0.8)
8	Total	87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

It is interesting to note that the response of sample farmers negligible regarding facilities of weighing and grading in APMCs in all the selected states. The facility of cleaning and grading of produce is negligible in many of the mandies and therefore, response of farmers on grading facilities at mandies is obvious. But negligible response of farmers on weighing facilities is heartening to note. This may be due to dissatisfaction of farmers on weighing in mandi by commission agents /traders.

Own Farm Grading

Grading of farm produce at the field level is advisable for better price realization and avoiding cost of marketing of unmarketable lot if graded produce is taken to mandi for marketing. Keeping this in mind, response of farmers was sought on the practice of own farm grading of

produce before taking the produce to mandies for marketing and the results are presented on table-9. It is revealed from the table that of the total farmers turned up for attending awareness programme on agricultural marketing in all the states, 62 per cent responded that they carry out grading of produce at farm level. Nearly 80 per cent of selected farmers in Rajasthan and Uttar Pradesh were following farm level grading followed by 65 per cent in Haryana, 61 per cent in Gujarat, 46 per cent in Karnataka and about 40 per cent in Madhya Pradesh. Among the different operational farm holding groups, the largest proportion of farmers with less than 1 acre of operational land holding in Rajasthan, Madhya Pradesh and Gujarat were found to be carrying out grading practices at farm level. Whereas, in Uttar Pradesh the proportion of farmers carrying out grading of produce at farm level found to increase with the increase in the operational land holding.

Table- 9: Response of Farmers for Carrying out Own Farm Grading

Land Holding	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acres	5 (71.4)		4 (50.0)	4 (80.0)	3 (100.0)	17 (70.8)	33 (68.8)
1-5 Acres	25 (62.5)	8 (66.7)	6 (31.6)	10 (32.3)	11 (68.8)	18 (81.8)	78 (55.7)
5-10 Acres	8 (53.3)	11 (64.7)	10 (50.0)	5 (50.0)	30 (81.1)	13 (86.7)	77 (67.5)
> 10 Acres	15 (60.0)	13 (68.4)	7 (58.3)	8 (38.1)	13 (81.3)	2 (100.0)	58 (61.1)
Total	53 (60.9)	32 (65.3)	27 (45.8)	27 (40.3)	57 (79.2)	50 (79.4)	246 (62.0)

Note: Figures in parentheses denotes percentages of the total farmers in the respective category.

Benefit of Farm Level Grading

It is perceived that farmers can realize better price for their produce on carrying out grading at farm level. The response of farmers is sought whether grading of their produce at farm level benefitted them or is a costly affair in marketing of agricultural produce and is presented in table 10. As depicted in the table, overall 63 per cent of the total farmers turned up for attending farmers awareness programme responded that they were benefitted with the grading of produce at farm level. About 79.2 per cent of total farmers in Rajasthan, 77.8 per cent in Uttar Pradesh, 66.7 per cent in Gujarat, 65.3 per cent in Haryana 54.2 per cent in Karnataka and least 32.8 per cent in Madhya Pradesh responded that grading at farm level was beneficial for them in terms of increased price realization. Majority of farmers in all farm size groups responded positively on the benefit of grading of farm produce at farm level.

Table- 10: Response of Sample Farmers on Benefits of Farm Level Grading

Land Holding	Yes/ No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
<1 Acres	No			4 (6.8)	1 (1.5)		3 (4.8)	8 (2.0)
	Yes	7 (8.0)		4 (6.8)	3 (4.5)	3 (4.2)	17 (27.0)	34 (8.6)
	NR		1 (2.0)		1 (1.5)		4 (6.3)	6 (1.5)
1-5 Acres	No	11 (12.6)	1 (2.0)	7 (11.9)	10 (14.9)	1 (1.4)	2 (3.2)	32 (8.1)
	Yes	25 (28.7)	6 (12.2)	9 (15.3)	9 (13.4)	15 (20.8)	15 (23.8)	79 (19.9)
	NR	4 (4.6)	5 (10.2)	3 (5.1)	12 (17.9)		5 (7.9)	29 (7.3)
5-10 Acres	No	6 (6.9)	1 (2.0)	6 (10.2)	4 (6.0)	2 (2.8)		19 (4.8)
	Yes	8 (9.2)	14 (28.6)	11 (18.6)	4 (6.0)	27 (37.5)	15 (23.8)	79 (19.9)
	NR	1 (1.1)	2 (4.1)	3 (5.1)	2 (3.0)	8 (11.1)		16 (4.0)
> 10 Acres	No	6 (6.9)	4 (8.2)	3 (5.1)	6 (9.0)	1 (1.4)		20 (5.0)
	Yes	18 (20.7)	12 (24.5)	8 (13.6)	6 (9.0)	12 (16.7)	2 (3.2)	58 (14.6)
	NR	1 (1.1)	3 (6.1)	1 (1.7)	9 (13.4)	3 (4.2)		17 (4.3)
Overall	No	23 (26.4)	6 (12.2)	20 (33.9)	21 (31.4)	4 (5.6)	5 (7.9)	79 (19.9)
	Yes	58 (66.7)	32 (65.3)	32 (54.2)	22 (32.8)	57 (79.2)	49 (77.8)	250 (63.0)
	NR	6 (6.9)	11 (22.4)	7 (11.9)	24 (35.8)	11 (15.2)	9 (14.3)	68 (17.1)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Packing of Produce

Packaging is an important aspect in marketing of agricultural produce. Proper packing maintains the quality of the produce in transit and easy to transport. The response on practice of proper packing of produce by farmers was sought and presented in table 11. It is clear from the table that, majority of farmers in Uttar Pradesh, Rajasthan, Haryana and Karnataka responded positively on packing of produce. Whereas, in Gujarat and Madhya Pradesh the majority of farmers negatively responded regarding proper packaging of farm produce. Overall 52.4 per cent of the total framers turned up for attending awareness programme on agricultural marketing in selected states were found to be following proper packing of produce. Of the total selected farmers nearly 11 per cent of the farmers not responded on the aspect of proper packing of produce by them while marketing of agricultural produce. This signifies that still large chunk of farmers were not aware on the proper packing of produce for marketing. Thus, there arises a need to create awareness among farmers regarding proper packing of produce at farm and its benefits.

Table-11: Response of Farmers on Proper Packing of Produce

Land Holding	Yea/ No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
<1 Acres	No	7 (8.0)	1 (2.0)	2 (3.4)	2 (3.0)	1 (1.4)	1 (1.6)	14 (3.5)
	Yes			6 (10.2)	1 (1.5)	2 (2.8)	19 (30.2)	28 (7.1)
	NR				2 (3.0)		4 (6.3)	6 (1.5)
1-5 Acres	No	32 (36.8)	2 (4.1)	10 (16.9)	15 (22.4)	1 (1.4)	1 (1.6)	61 (15.4)
	Yes	5 (5.7)	6 (12.2)	9 (15.3)	10 (14.9)	15 (20.8)	18 (28.6)	63 (15.9)
	NR	3 (3.4)	4 (8.2)		6 (9.0)		3 (4.8)	16 (4.0)
5-10 Acres	No	9 (10.3)	3 (6.1)	3 (5.1)	8 (11.9)	4 (5.6)	1 (1.6)	28 (7.1)
	Yes	5 (5.7)	12 (24.5)	13 (22.0)	2 (3.0)	29 (40.3)	14 (22.2)	75 (18.9)
	NR	1 (1.1)	2 (4.1)	4 (6.8)		4 (5.6)		11 (2.8)
> 10 Acres	No	20 (23.0)	4 (8.2)	5 (8.5)	12 (17.9)	1 (1.4)		42 (10.6)
	Yes	4 (4.6)	12 (24.5)	6 (10.2)	5 (7.5)	13 (18.1)	2 (3.2)	42 (10.6)
	NR	1 (1.1)	3 (6.1)	1 (1.7)	4 (6.0)	2 (2.8)		11 (2.8)
Overall	No	68 (78.2)	10 (20.4)	20 (33.9)	37 (55.2)	7 (9.7)	3 (4.8)	145 (36.5)
	Yes	14 (16.1)	30 (61.2)	34 (57.6)	18 (26.9)	59 (81.9)	53 (84.1)	208 (52.4)
	NR	5 (5.7)	9 (18.4)	5 (8.5)	12 (17.9)	6 (8.3)	7 (11.1)	44 (11.1)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Storage of Produce

Agricultural produce are seasonal in nature and in general supply increases at the time of harvest on account of increased flow of produce in the markets from small farmers for the want of credit needs. In this process, with the increase of produce flow in the markets particularly at the time of harvest the prices of agricultural commodities tend to rule lower. Therefore, storage of farm produce is an important function in agricultural marketing which adds time utility and saves farmers from distress sale. Scientific storage is also essential to reduce post harvest losses and maintain the quality of produce. Response of farmers on storage was assessed and presented in table 12. It is revealed from the table that, about 41 per cent of the farmers who have turned up for attending awareness programme on agricultural marketing in selected states responded positively on storage of the produce for avoiding distress sale, reap benefit of lean period prices and for home use. About 36 per cent farmers not stored the produce might be on account of immediate requirement of money at harvest. Highest proportion of total farmers storing produce was found in Karnataka (64.4 per cent) followed by 49 per cent in Haryana, 45.8 per cent in Rajasthan, 43.3 per cent in Madhya Pradesh, 38 per cent in Uttar Pradesh and merely 19.5 per cent in Gujarat.

Table- 12: Response of Farmers on Storage of Produce

Land Holding	Yes/ No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
<1 Acres	No	5 (5.7)		2 (3.4)	2 (3.0)	1 (1.4)	2 (3.2)	12 (3.0)
	Yes	1 (1.1)	1 (2.0)	5 (8.5)	2 (3.0)	2 (2.8)	11 (17.5)	22 (5.5)
	NR	1 (1.1)		1 (1.7)	1 (1.5)		11 (17.5)	14 (3.5)
1-5 Acres	No	26 (29.9)	3 (6.1)	7 (11.9)	9 (13.4)	4 (5.6)	8 (12.7)	57 (14.4)
	Yes	7 (8.0)	6 (12.2)	11 (18.6)	13 (19.4)	9 (12.5)	7 (11.1)	53 (13.4)
	NR	7 (8.0)	3 (6.1)	1 (1.7)	9 (13.4)	3 (4.2)	7 (11.1)	30 (7.6)
5-10 Acres	No	11 (12.6)	4 (8.2)	3 (5.1)	5 (7.5)	8 (11.1)	7 (11.1)	38 (9.6)
	Yes	3 (3.4)	8 (16.3)	14 (23.7)	1 (1.5)	16 (22.2)	5 (7.9)	47 (11.8)
	NR	1 (1.1)	5 (10.2)	3 (5.1)	4 (6.0)	13 (18.1)	3 (4.8)	29 (7.3)
> 10 Acres	No	15 (17.2)	5 (10.2)	3 (5.1)	5 (7.5)	6 (8.3)	1 (1.6)	35 (8.8)
	Yes	6 (6.9)	9 (18.4)	8 (13.6)	13 (19.4)	6 (8.3)	1 (1.6)	43 (10.8)
	NR	4 (4.6)	5 (10.2)	1 (1.7)	3 (4.5)	4 (5.6)		17 (4.3)
Overall	No	57 (65.5)	12 (24.5)	15 (25.4)	21 (31.3)	19 (26.4)	18 (28.6)	142 (35.8)
	Yes	17 (19.5)	24 (49.0)	38 (64.4)	29 (43.3)	33 (45.8)	24 (38.1)	165 (41.6)
	NR	13 (14.9)	13 (26.5)	6 (10.2)	17 (25.4)	20 (27.8)	21 (33.3)	90 (22.7)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Reasons for storing the produce

Storage of agricultural commodities particularly semi-perishables saves farmers from distress sale and they can reap the benefit of higher prices in lean season. The response on the reasons for storage of agricultural produce was assessed and presented in table 13. As depicted from the table that, majority of the farmers who have stored produce for getting benefit of higher price (nearly 63 per cent of total farmers responded positively). About 56 per cent of the total farmers stored the produce for off season sale in expectation of increase in prices during the period, and for own consumption. The other reasons of storage of agricultural produce were saving the produce from post harvest losses which was expressed by about 28 per cent of total farmers in selected states. More than 80 per cent of total selected farmers in Gujarat responded positively that they store produce for better price realization, for off season sale and for own consumption. Whereas in Haryana and Madhya Pradesh, majority of farmers store agricultural produce for better price realization in the lean period (about 53 per cent farmers responded positively on the reason). In Karnataka nearly 54 per cent of the farmers store produce for home consumption and 40 per cent for better price realization also and nearly 37 per cent for off season sale also.

Table- 13: Farmers Response on Reasons of Storage

Land Holding	Reasons for Storage	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
< 1 Acres	For better price	6 (85.7)		4 (50.0)	2 (40.0)	3 (100)	14 (58.3)	29 (60.4)
	Off season sale	6 (85.7)	1 (100)	3 (37.5)		3 (100)	12 (50.0)	25 (52.1)
	Own consumption	6 (85.7)		5 (62.5)	2 (40.0)	3 (100)	10 (41.7)	26 (54.2)
	Any other	6 (85.7)		1 (12.5)		2 (66.7)	3 (12.5)	12 (25.0)
1-5 Acres	For better price	36 (90.0)	5 (41.7)	8 (42.1)	14 (45.2)	11 (68.8)	16 (72.7)	90 (64.3)
	Off season sale	36 (90.0)	3 (25.0)	7 (36.8)	7 (22.6)	11 (68.8)	15 (68.2)	79 (56.4)
	Own consumption	35 (87.5)	2 (16.7)	9 (47.4)	12 (38.7)	10 (62.5)	9 (40.9)	77 (55.0)
	Any other	28 (70.0)	1 (8.3)	1 (5.3)	7 (22.6)	3 (18.8)	4 (18.2)	44 (31.4)
5-10 Acres	For better price	12 (80.0)	11 (64.7)	6 (30.0)	6 (60.0)	24 (64.9)	11 (73.3)	70 (61.4)
	Off season sale	11 (73.3)	7 (41.2)	7 (35.0)	3 (30.0)	24 (64.9)	10 (66.7)	62 (54.4)
	Own consumption	11 (73.3)	6 (35.3)	11 (55.0)	5 (50.0)	22 (59.5)	10 (66.7)	65 (57.1)
	Any other	8 (53.3)	1 (5.9)	5 (25.0)	1 (10.0)	13 (35.1)	4 (26.7)	32 (28.1)
> 10 Acres	For better price	21 (84.0)	10 (52.6)	6 (50.0)	13 (61.9)	10 (62.5)	1 (50.0)	61 (64.2)
	Off season sale	20 (80.0)	8 (42.1)	5 (41.7)	9 (42.9)	12 (75.0)	2 (100.0)	56 (58.9)
	Own consumption	18 (72.0)	4 (21.1)	7 (58.3)	12 (57.1)	10 (62.5)	2 (100.0)	53 (55.8)
	Any other	12 (48.0)	3 (15.8)		3 (14.3)	6 (37.5)		24 (25.3)
Overall	For better price	75 (86.2)	26 (53.1)	24 (40.7)	35 (52.2)	48 (66.7)	42 (66.7)	250 (63.0)
	Off season sale	73 (83.9)	19 (38.8)	22 (37.3)	19 (28.4)	50 (69.4)	39 (61.9)	222 (55.9)
	Own consumption	70 (80.5)	12 (24.5)	32 (54.2)	31 (46.3)	45 (62.5)	31 (49.2)	221 (55.7)
	Any other	54 (62.1)	5 (10.5)	7 (11.9)	11 (16.4)	24 (33.3)	11 (17.5)	112 (28.2)
Grand Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages of the total farmers in the respective category.

Benefits of Storage

The storage of agricultural produce has benefitted the farmers or it has added to the cost, the response of this issue was assessed and presented in table 14. As revealed from the table that, nearly 61 per cent of the total farmers who have turned up for attending farmers awareness programmes in selected states reported that they were benefitted by storing the produce and selling it in the lean period. Highest positive response on the benefit from storage of produce was reported by the farmers of Uttar Pradesh (about 78 per cent of the total farmers benefitted from storage) followed by Rajasthan (73.6 per cent), Gujarat (64.4 per cent), Madhya Pradesh and Haryana (nearly 53 per cent in each state), and least in Karnataka (35.6 per cent). About 42 per cent farmers in Karnataka and 31 per cent of the total farmers in Gujarat reported that they were not benefitted from storage of agricultural produce.

Table-14: Response of Farmers on Benefits of Storage

Land Holding	Yes/No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
<1 Acres	No			2 (3.4)	1 (1.5)		1 (1.6)	4 (1.0)
	Yes	7 (8.0)	1 (2.0)	3 (5.1)	3 (4.5)	3 (4.2)	17 (27.0)	34 (8.6)
	NR			3 (5.1)	1 (1.5)		6 (9.5)	10 (2.5)
1-5 Acres	No	10 (11.5)	1 (2.0)	6 (10.2)	5 (7.5)	1 (1.4)	1 (1.6)	24 (6.0)
	Yes	28 (32.2)	6 (12.2)	7 (11.9)	14 (20.9)	11 (15.3)	18 (28.6)	84 (21.2)
	NR	2 (2.3)	5 (10.2)	6 (10.2)	12 (17.9)	4 (5.6)	3 (4.8)	32 (8.1)
5-10 Acres	No	7 (8.0)	4 (8.2)	9 (15.3)	2 (3.0)	2 (2.8)		24 (6.0)
	Yes	7 (8.0)	10 (20.4)	8 (13.6)	4 (6.0)	27 (37.5)	12 (19.0)	68 (17.1)
	NR	1 (1.1)	3 (6.1)	3 (5.1)	4 (6.0)	8 (11.1)	3 (4.8)	22 (5.5)
> 10 Acres	No	10 (11.5)	4 (8.2)	8 (13.6)	2 (3.0)			24 (6.0)
	Yes	14 (16.1)	9 (18.4)	3 (5.1)	15 (22.4)	12 (16.7)	2 (3.2)	55 (13.9)
	NR	1 (1.1)	6 (12.2)	1 (1.7)	4 (6.0)	4 (5.6)		16 (4.0)
Overall	No	27 (31.0)	9 (18.4)	25 (42.4)	10 (14.9)	3 (4.2)	2 (3.2)	76 (19.1)
	Yes	56 (64.4)	26 (53.1)	21 (35.6)	36 (53.7)	53 (73.6)	49 (77.8)	241 (60.7)
	NR	4 (4.6)	14 (28.6)	13 (22.0)	21 (31.3)	16 (22.2)	12 (19.0)	80 (20.2)
Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

Preferred agency for sale of Produce

Preference for agency to sale the farm produce is worked out and presented in table 15. It is revealed from the table that, of the total farmers turned up for attending awareness programme on agricultural marketing in selected states 68 per cent preferred to sale their produce in local mandi. Local mandi was the most preferred place for sale in Madhya Pradesh (80.6 per cent of the total farmers) followed by Haryana (77.6 per cent), Uttar Pradesh (about 70 per cent), Gujarat (63.2 per cent), Rajasthan (61 per cent) and Karnataka (59.3 per cent of total farmers preferred). The second most preferred agency for sale of produce was selling directly to traders as reported by 54.4 per cent of the total farmers in selected states. Majority of the farmers in Gujarat (92 per cent farmers) preferred to sale their produce directly to traders whereas, 66.7 per cent in Rajasthan, 47.6 per cent in Uttar Pradesh, 38.8 per cent in Haryana and Madhya Pradesh each and 22 per cent in Karnataka sold their produce directly to traders.

Table- 15: Response of Farmers regarding Preferred agency for sale of Produce

S.No.	Data	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Local Mandi	55 (63.2)	38 (77.6)	35 (59.3)	54 (80.6)	44 (61.1)	44 (69.8)	270 (68.0)
2	Contract Company	7 (8.0)	8 (16.3)		6 (9.0)	2 (2.8)	7 (11.1)	30 (7.6)
3	Farmers Market/ Haat	31 (35.6)	10 (20.4)	1 (1.7)	15 (22.4)	16 (22.2)	21 (33.3)	94 (23.7)
4	Shop	5 (5.7)	6 (12.2)	5 (8.5)	4 (6.0)	1 (1.4)	10 (15.9)	31 (7.8)
5	Govt. /NGO	3 (3.4)	7 (14.3)		7 (10.4)	4 (5.6)	2 (3.2)	23 (5.8)
6	Exporter	8 (9.2)	3 (6.1)	1 (1.7)	3 (4.5)		4 (6.3)	19 (4.8)
7	Cooperative	23 (26.4)	12 (24.5)	2 (3.4)	31 (46.3)	7 (9.7)	6 (9.5)	81 (20.4)
8	Processing	8 (9.2)	6 (12.2)	4 (6.8)	2 (3.0)	2 (2.8)	4 (6.3)	26 (6.5)
9	Direct to Trader	80 (92.0)	19 (38.8)	13 (22.0)	26 (38.8)	48 (66.7)	30 (47.6)	216 (54.4)
10	Direct to Retailer	58 (66.7)	7 (14.3)	27 (45.0)	13 (19.4)	35 (48.6)	12 (19.0)	152 (38.3)
11	Other	6 (6.9)	6 (12.2)		4 (6.0)	22 (30.6)	2 (3.2)	40 (10.1)

Note: Figures in parentheses are percentages to total.

The third most preferred agency for sale of produce as reported by about 38.3 per cent of the total farmers was selling directly to retailers. About 66.7 per cent of the total farmers in Gujarat, 48.6 per cent in Rajasthan, 45 per cent in Karnataka, around 19 per cent in Madhya Pradesh and Uttar Pradesh, and 14.3 per cent of the total farmers in Haryana preferred to sale their produce directly to retailers. Farmers' market of rural haat was preferred by 23.7 per cent of the total farmers selling through cooperative was preferred by 20.4 per cent of the total farmers in selected states.

Post Harvest Losses at Different Stages

Losses in agricultural produce after harvest occur at different stages of supply chain right from point of harvesting to the point of consumption. The response of farmers on the post harvest losses at different operations was sought and presented in table 16. It is evident from the table that post harvest losses were high during storage of produce as expressed by 48 per cent of the total farmers in selected states. Nearly 46 per cent of the total farmers expressed that post harvest losses at mandi level were high. Post harvest losses during grading & packing and during transit was reported by about 45 per cent of the total farmers. Losses in produce due to improper harvest were expressed by about 21 per cent of the total farmers. Farmers in Gujarat expressed that there were higher post harvest losses during grading and packing of produce as expressed by 79.3 per cent of the farmers followed by losses during transit and at mandi level (about 76 per cent of total farmers reported) and 69 per cent of the total reported that losses were high during storage.

Whereas in Karnataka, very few farmers expressed the losses occur during storage, due to improper harvesting and at mandi level.

Table-16: Response of Farmers on PH losses at different stages

S.No.	Data	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	During Grading and packing	69 (79.3)	17 (34.7)	12 (20.3)	21 (31.3)	23 (31.9)	36 (57.1)	178 (44.8)
2	During Transportation	66 (75.9)	13 (26.5)	19 (32.2)	13 (19.4)	27 (37.5)	39 (61.9)	177 (44.6)
3	During Storage	60 (69.0)	14 (28.6)	7 (11.9)	33 (49.3)	45 (62.5)	32 (50.8)	191 (48.1)
4	At Mandi Level	66 (75.9)	19 (38.8)	4 (6.8)	31 (46.3)	27 (37.5)	35 (55.6)	182 (45.8)
5	Improper harvesting	51 (58.6)	4 (8.2)	7 (11.9)	6 (9.0)	11 (15.3)	5 (7.9)	84 (21.2)

Note: Figures in parentheses are percentages to total.

Awareness on Reforms in Agricultural Marketing

The reform process in agricultural marketing was initiated in 2001 by the Government of India by involving different states of India with the objectives of enabling the producers to undertake market-driven production planning, to facilitate integration of farm production with domestic and global markets and to attract massive investment needed for building post-harvest infrastructure. The central government circulated the Model Act to the states for amendment. More than 26 states and UTs have amended their Acts in respect of mainly three areas of reforms out of the many proposed in the Model Act which included the provisions like; Promote competitive agricultural markets in private and co-operative sector, Encourage Direct Marketing and Contract Farming programmes, Promote dissemination of market information, grading and standardization by setting up a bureau for the purpose at state level, Promote marketing extension by setting up a cell for the purpose at state level, Facilitate procurement of agricultural produce directly from farmer's fields, Establish effective linkages between farm production and Retail Chains, Facilitate Private Investment in owning, establishing and operating markets, Public-Private-Partnership to promote professionalism in existing markets, Stepping-up of Pledge Financing and Marketing Credit, Introduction of Negotiable Warehousing Receipt System in Rural Storage Projects, and IT to Promote Trade and Market led Extension Services.

The benefit of reforms in agricultural marketing would percolate down to the farmers' level with the increased awareness among them regarding the provisions of reforms. The response of farmers on awareness regarding reforms in agricultural marketing was sought and depicted in

table-17. It is evident from the table that, about 28 per cent of the total farmers in selected states were aware of the reforms in agricultural marketing.

Table- 17: Response of Farmers on Awareness about Agricultural Marketing Reforms

Land Holding	Yes/No	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
<1 Acres	No	2 (2.3)		4 (6.8)	2 (3.0)	1 (1.4)	10 (15.9)	19 (4.8)
	Yes	4 (4.6)		4 (6.8)		1 (1.4)	6 (9.5)	15 (3.8)
	NR	1 (1.1)	1 (2.0)		3 (4.5)	1 (1.4)	8 (12.7)	14 (3.5)
1-5 Acres	No	14 (16.1)	1 (2.0)	19 (32.2)	10 (14.9)	6 (8.3)	16 (25.4)	66 (16.6)
	Yes	23 (26.4)			8 (11.9)	4 (5.6)	1 (1.6)	36 (9.1)
	NR	3 (3.4)	11 (22.4)		13 (19.4)	6 (8.3)	5 (7.9)	38 (9.6)
5-10 Acres	No	6 (6.9)	8 (16.3)	13 (22.0)	1 (1.5)	6 (8.3)	10 (15.9)	44 (11.1)
	Yes	8 (9.2)	2 (4.2)	3 (5.1)	6 (9.0)	12 (16.7)	3 (4.8)	34 (8.6)
	NR	1 (1.1)	7 (14.3)	4 (6.8)	3 (4.5)	19 (26.4)	2 (3.2)	36 (9.1)
> 10 Acres	No	14 (16.1)	7 (14.3)	8 (13.6)	7 (10.4)	6 (8.3)	2 (3.2)	44 (11.1)
	Yes	10 (11.5)	3 (6.1)	2 (3.4)	8 (11.9)	3 (4.2)		26 (6.5)
	NR	1 (1.1)	9 (18.4)	2 (3.4)	6 (9.0)	7 (9.7)		25 (6.3)
Overall	No	36 (41.4)	16 (32.7)	44 (74.6)	20 (29.9)	19 (26.4)	38 (60.3)	173 (43.6)
	Yes	45 (51.7)	5 (10.2)	9 (15.3)	22 (32.8)	20 (27.8)	10 (15.9)	111 (28.0)
	NR	6 (6.9)	28 (57.1)	6 (10.2)	25 (37.3)	33 (45.8)	15 (23.8)	113 (28.5)
Grand Total		87 (100)	49 (100)	59 (100)	67 (100)	72 (100)	63 (100)	397 (100)

Note: Figures in parentheses are percentages to total.

About 44 per cent of the total farmers expressed no awareness of reforms and nearly 28 per cent have not responded on the issue. Thus, it can be said that about 72 per cent of the total farmers were not aware on the reforms in agricultural marketing. About 52 per cent of the farmers in Gujrat expressed that they were aware of the reforms followed by Madhya Pradesh (32.8 per cent) and Rajasthan (27.8 per cent). In other states, less than 15 per cent of the total farmers were found to be aware of the reforms in agricultural marketing. Therefore, creation of awareness among farmers on benefits and provisions of reforms in agricultural marketing is required for the benefit of the farming community.

Knowledge of Alternative Marketing Channels

Assessment of farmers' awareness in selected states about alternative marketing channels opened up after reforms in agricultural marketing has been depicted in the table 18. It is apparent from the table that major proportion of farmers in Gujarat state (more than 50 per cent of the total farmers) was aware of all the alternative channels of marketing followed by Rajasthan, Uttar

Pradesh, Haryana and Madhya Pradesh. However, it is surprising to know that, farmers in Karnataka, where agriculture is very well developed, were not aware of this. It might be due to the poor response or reluctance of the sample respondents to reveal the facts.

All the states put together, about 30 per cent of the sample respondents at overall level were aware about alternative marketing channels. This trend may go up as the reforms process initiated by Government of India is piercing now a day. It is also interesting to note that, about 25 per cent of the farmers at overall level were aware of retail chains and willing to market their produce directly to the retail chains. Cooperative marketing, electronic spot exchanges and group marketing were known to majority of the farmers in Gujarat state.

Table- 18: Response of Farmers regarding alternative marketing channels

S.No	Data	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Contract Farming	52 (59.8)	13 (26.5)	4 (6.8)	10 (14.9)	22 (30.6)	15 (23.8)	116 (29.2)
2	Group Marketing	50 (57.5)	5 (10.2)	1 (1.7)	6 (9.0)	16 (22.2)	20 (31.7)	98 (24.7)
3	Cooperative Marketing	58 (66.7)	11 (22.4)		12 (17.9)	22 (30.6)	21 (33.3)	124 (31.2)
4	Spot Marketing	49 (56.3)	7 (14.3)		6 (9.0)	18 (25.0)	27 (42.9)	107 (27.0)
5	Futures Markets	51 (58.6)	7 (14.3)		9 (13.4)	19 (26.4)	24 (38.1)	110 (27.7)
6	Pre Harvest Contractor	57 (65.5)	6 (12.2)	4 (6.8)	7 (10.4)	17 (23.6)	24 (38.1)	115 (29.0)
7	Traders/ Dealers	46 (52.9)	10 (20.4)	14 (23.7)	13 (19.4)	24 (33.3)	32 (50.8)	139 (35.0)
8	Retail Chains	29 (33.3)	9 (18.4)	12 (20.3)	7 (10.4)	22 (30.6)	25 (39.7)	104 (26.2)

Note: Figures in parentheses are percentages to total.

Problems in Marketing of Agricultural Produce

Response of farmers on an open ended question related to problems faced by farmers in marketing of agricultural produce was assessed and the response received is depicted in table-19. The major problems expressed by farmers who turned up for attending awareness programme on agriculture marketing in selected states were; not getting reasonable price (as expressed by 14 per cent of the total respondents), lack of storage for foodgrains (8.6 per cent), non-availability of market at nearby place (7.3 per cent), delay in sale of produce in mandi (6.8 per cent), high commission charges in mandi (6.3 per cent), delay in payment of produce (5.3 per cent), lack of knowledge on marketing (4.8 per cent), lack of inputs availability at market place (4.3 per cent), Lack of basic amenities (4 per cent), Non availability of cold storage in the market area (3.5 per cent) and lack of crop insurance (3 per cent).

Table- 19: Response of Farmers regarding problems in marketing

S. No.	Problems	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Lack of Storage for Foodgrains	1 (1.1)	1 (2.0)		12 (17.9)	9 (12.5)	11 (17.5)	34 (8.6)
2	Don't get Reasonable Price	20 (23.0)	4 (8.2)		7 (10.4)	6 (8.3)	19 (30.2)	56 (14.1)
3	No Cold Storage				4 (6.0)	7 (9.7)	3 (4.8)	14 (3.5)
4	Quality wise pricing of product	3 (3.4)					1 (1.6)	4 (1.0)
5	Lack of knowledge of Marketing	1 (1.1)			6 (9.0)	9 (12.5)	3 (4.8)	19 (4.8)
6	Marketing of Medicinal Plants					5 (6.9)		5 (1.3)
7	Market is far away	20 (23.0)				8 (11.1)	1 (1.6)	29 (7.3)
8	High Commission Charge	11 (12.6)			5 (7.5)	1 (1.4)	8 (12.7)	25 (6.3)
9	Transportation Problem	3 (3.4)					6 (9.5)	9 (2.3)
10	Delay in sale at mandi	4 (4.6)	2 (4.1)		8 (11.9)		13 (20.6)	27 (6.8)
11	Lack of Basic Amenities	3 (3.4)	3 (6.1)		6 (9.0)		4 (6.3)	16 (4.0)
12	Delay in Payment	4 (4.6)	1 (2.0)		5 (7.5)		11 (17.5)	21 (5.3)
13	Lack of Inputs availability	3 (3.4)	3 (6.1)		5 (7.5)		6 (9.5)	17 (4.3)
14	Crop insurance	2 (2.4)	3 (6.1)		2 (3.0)	4 (5.6)	1 (1.6)	12 (3.0)
15	Packaging Facilities						4 (6.3)	4 (1.0)

Note: Figures in parentheses are percentages to total.

There was no response from farmers in Karnataka and the response was poor in the states of Haryana, and Rajasthan. About 23 per cent of the total farmers in Gujarat expressed that they did not get the reasonable price of their produce and non availability of market at nearby location. The problem of high commission charges in Mandi was expressed by about 13 per cent of the selected farmers. In case of Uttar Pradesh, 30 per cent of the total farmers faced the problem of not getting the reasonable price for their produce. About 21 per cent farmers expressed the problem of delay in sale of produce at mandi and 17.5 per cent have faced the problem of lack of storage and delay in payment of their produce sold.

Singh (1997) studied fifteen vegetable growers selected randomly each of three village in the Patan sabzi mandi of Patan, Madhya Pradesh, during 1995-96 and reported that the problems faced by the vegetable growers were lack of post harvest technological services, such as grading packaging, transportation, cold storage, processing and weak linkage of institutional support, marketing information services etc.

Gupta and Rathore (1999) studied the constraints in vegetable marketing in Raipur district of Madhya Pradesh in 1995-96. In the study they found that the producers felt some post harvest problems. Some marginal and small farmers experienced difficulty about efficient transportation from village to market. Due to small produce with them, they are unable to hire big and efficient means of transportation. Most of the farmers were of the opinion that vegetable based processing industries especially tomato must be established in producing areas in order to provide remunerative prices to farmers of their produce. Due to lack of storage facility, regulated and cooperative marketing producers are forced to sell their produce through commission agents, who charged 8 per cent of the value of produce which is quite high. A good number of farmers complained in this regard. Some of the farmers perceived that an adequate arrangement should also be made to disseminate the market news and rendering of grading service for vegetables in order to receive better prices of the produce.

Kantharaju (1989) reported that the high rate of taxes, large transportation cost and lack of transportation were the main marketing problems. Thakur *et al.* (1994) identified the problems encountered by the farmers in marketing of vegetables. They were (1). Unorganized marketing and low prices paid to farmers, (2) lack of mechanical grading, packing, and proper storage facilities, (3) malpractices, high and undue marketing margins and costs in markets.(4) lack of village roads, lack of sufficient and low cost transportation facilities. (5) lack of market information and market news, and (6) lack of processing units and cooperative societies.

Ramamoorthy (1996) studied the major socio-economic constraints in cotton production and management. The constraints were identified and ranked through rank analysis. The study identified the major production constraints as poor quality input supply, inadequate credit supply and high production risk and the marketing constraints as price fluctuation, storage problems under weighment and poor market development. Bonny (1996) surveyed the constraints on commercial production of vegetable in Pananchery and Duthur, Kerala and reported that increased cost of plant protection chemicals was perceived as the most important factor by the respondents followed by inadequate market facilities, poor storage and other post-harvest facilities, insufficient capital and high labour costs.

Patel *et al.* (1997) in their study on marketing efficiency of Anand vegetable market in Gujarat reported that lack of storage facilities, delay in payment of sale proceeds, high cold storage

charges, monopoly of few middlemen and need of timely display of these perceptible products etc. were the major problems faced by the cabbage and cauliflower growers. Nagaraja *et al.* (1999) identified the most important constraints in production and marketing of potato in Kolar district of Karnataka by assigning the ranks. The frequent fluctuations in price (Rank-I) involvement of too many middlemen (Rank-II), delayed payment (Rank-III), insufficient storage facilities (Rank-IV), low output prices (Rank-V) and high market charges (Rank-VI) were the main constraints in marketing.

Narappanavar and Bavur (1998) examined the problems in storage, transportation and dissemination of market information in potato marketing in Dharwad, Karnataka and found that farmers were not facing several problems in transportation because of large number of tractors in the villages. Similarly, farmers were making suitable arrangements for storage of potato on the farm itself. However, about 35 per cent of the farmers complained on illegal deductions while selling the produce at the market in the form of weighing charges. The other problems noticed were lack of grading facilities, arbitrary hamali charges, low prices and variations in output price and high commission charges. Therefore, it is suggested that there is need for ensuring improved storage to cities and purchase of potato at the local market by the Government at the time of heavy arrivals to assure the remunerative returns to the potato growers.

Suggestions for Improvement of Agricultural Marketing

Farmers in the selected states were asked to give suggestions through an open ended question for improvement in marketing of their produce. The response received from farmers is presented in table-20. Though overall response received on the suggestions for improvement in marketing was poor, may be due to ignorance or lack of awareness of farmers. The assurance of remunerative price for their produce was preferred by 11.3 per cent of the total farmers followed by timely payment of their sale proceeds and no commission charges from farmers as expressed by 10.8 per cent of the total farmers. About 7 per cent of the total farmers selected responded the requirement of mandi at nearby place so that they need not to travel long distance for sale of their produce. About 5.5 per cent of the total farmers expressed that adequate storage facilities for storage of farmers produce are required. Nearly 5 per cent farmers required for basic amenities in the market place and they should be trained on the marketing aspects.

Table- 20: Response of farmers on suggestion for improvement in marketing

S. No.	Data	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Availability of Storage	NR	1 (2.0)	NR	9 (13.4)	6 (8.3)	6 (9.5)	22 (5.5)
2	Availability of quality inputs	2 (2.3)	4 (8.2)	NR	5 (7.5)	NR	6 (9.5)	17 (4.3)
3	Mandi at nearby place	19 (21.8)	NR	NR	NR	8 (11.1)	1 (1.6)	28 (7.1)
4	Training on marketing aspects	1 (1.1)	1 (2.0)	NR	6 (9.0)	9 (12.5)	3 (4.8)	20 (5.0)
5	Contract farming and direct marketing	NR	1 (2.0)	NR	1 (1.5)	NR	5 (7.9)	7 (1.8)
6	Transport facility	4 (4.6)	NR	NR	NR	7 (9.7)	6 (9.5)	17 (4.3)
7	Ensure timely sale of produce	NR	1 (2.0)	NR	4 (6.0)	NR	9 (14.3)	14 (3.5)
8	Ensure timely payment and no commission charge	12 (13.8)	1 (2.0)	NR	9 (13.4)	2 (2.8)	19 (30.2)	43 (10.8)
9	Ensure remunerative price	16 (18.4)	1 (2.0)	NR	6 (9.0)	4 (5.6)	18 (28.6)	45 (11.3)
10	Basic amenities in market	2 (2.3)	3 (6.1)	NR	9 (13.4)	NR	6 (9.5)	20 (5.0)
11	Allow more traders to buy produce	3 (3.4)	1 (2.0)	NR	1 (1.5)	NR	2 (3.2)	7 (1.8)
12	Cold Storage	NR	NR	NR	4 (6.0)	7 (9.7)	2 (3.2)	13 (3.3)
13	Electronic Weighing	1 (1.1)	NR	NR	7 (10.4)	NR	1 (1.6)	9 (2.3)
14	Facilities for export	NR	1 (2.0)	NR	NR	NR	6 (9.5)	7 (1.8)
15	Crop Insurance	2 (2.3)	3 (6.1)	NR	4 (6.0)	2 (2.8)	4 (6.3)	15 (3.8)

NR= No response

Note: Figures in parentheses are percentages to total.

The other suggestions received from farmers for improvement in marketing of their produce included; proper and timely transport facilities, availability of crop insurance, ensure timely sale of their produce in mandi, availability of cold storage, widening reach of contract farming and direct marketing, electronic weighing of their produce, allow more traders to buy produce in mandi and facilities for export of their produce.

Majority of farmers in Gujarat suggested that mandi should there at nearby place (21.8 per cent of the total farmers suggested), ensure remunerative prices for their produce (18.4 per cent), ensure timely payment and no commission charges to be deducted from farmers (13.8 per cent) and allow more traders to buy produce in mandi. The response received from farmers in Uttar Pradesh on the improvement of marketing of agricultural produce included; ensure remunerative prices for their produce (30.2 per cent), ensure timely payment and no commission charges to be deducted from farmers (28.6 per cent), ensure timely sale of their produce in mandi (14.3 per cent). Availability of adequate storage facilities, availability of basic amenities in markets,

facility for export of produce and availability of quality inputs at market place were required by 9.5 per cent of the total farmers in Uttar Pradesh.

Training Need of Farmers

Marketing of agricultural products, especially in the present day context, is a complex subject. Proper marketing of produce requires both hardware, in the form of appropriate infrastructure, and software skills in the form of training to farmers on different aspects of agricultural marketing. Appropriate infrastructure at right place is the key to efficiency in the supply chain. But the right soft skills to manage to manage different marketing operations efficiently are also equally important. It has been tried here to understand the training requirement of farmers for efficient marketing of their produce and the results are presented in the table 21.

The perusal of table 21 reveals that of the total farmers, nearly 71 per cent felt that they require training on post harvest management aspect. About 84 per cent farmers in Rajasthan, about 81 per cent in each Gujarat and Uttar Pradesh, about 60 per cent in Karnataka and Madhya Pradesh and 45 per cent farmers in Haryana expressed their requirement of training on post harvest management aspect. Market information is an important aspect for realizing higher market prices. Farmers need to know how to collect and use market information for their benefit. Overall about 71 per cent of the total farmers in selected states responded positively on the training requirement on market information. Maximum response was received in Gujarat (88.5 per cent) and Rajasthan (82 per cent) and least in Haryana (45 per cent) states.

Table- 21: Response of Farmers on Training Needs on Different Aspects of Agricultural Marketing

S.No.	Training on	Gujarat	Haryana	Karnataka	MP	Rajasthan	UP	Total
1	Post-harvest Management	71 (81.6)	22 (44.9)	36 (61.0)	40 (59.7)	61 (84.7)	51 (81.0)	281 (70.8)
2	Marketing Information	77 (88.5)	22 (44.9)	32 (54.2)	42 (62.7)	59 (81.9)	50 (79.4)	282 (71.0)
3	Futures Trading	70 (80.5)	17 (34.7)	18 (30.5)	23 (34.3)	57 (79.2)	50 (79.4)	235 (59.2)
4	Food Safety & Quality	77 (88.5)	22 (44.9)	32 (54.2)	41 (61.2)	58 (80.6)	54 (85.7)	284 (71.5)
5	Legal Reforms	74 (85.1)	23 (46.9)	15 (25.4)	38 (56.7)	58 (80.6)	53 (84.1)	261 (65.7)
6	Market Infrastructure	76 (87.4)	20 (40.8)	13 (22.0)	34 (50.7)	58 (80.6)	51 (81.0)	252 (63.5)
7	Modern Terminal Market	74 (85.1)	18 (36.7)	24 (40.7)	35 (52.2)	59 (81.9)	55 (87.3)	265 (66.8)
8	Marketing of MAP	75 (86.2)	15 (30.6)	19 (32.2)	38 (56.7)	57 (79.2)	53 (84.1)	257 (64.7)
9	Cooperative Marketing	74 (85.1)	15 (30.6)	10 (16.9)	37 (55.2)	56 (77.8)	58 (92.1)	250 (63.0)
10	SPS Measures	68 (78.2)	10 (20.4)	17 (28.8)	24 (35.8)	57 (79.2)	44 (69.8)	220 (55.4)
11	Grading and Certification	69 (79.3)	8 (16.3)	16 (27.1)	30 (44.8)	58 (80.6)	48 (76.2)	229 (57.7)

12	WTO	68 (72.8)	10 (20.4)	1 (1.7)	33 (49.3)	58 (80.6)	49 (77.8)	219 (55.2)
13	Warehousing	66 (75.9)	15 (30.6)		32 (47.8)	2 (2.8)	48 (76.2)	163 (41.1)

Note: Figures in parentheses are percentages to total.

Food safety and quality is becoming important aspect in today's world of increasing consumers' income led emphasis on consuming safe food. Training requirement on food safety and quality was expressed by 71.5 per cent of the total respondents in selected states. The higher proportion of farmers felt training need on food safety and quality aspects in Gujarat (88.5 per cent of the total farmers), Uttar Pradesh (85.7 per cent), and Rajasthan (80.6 per cent).

About 65 per cent of total farmers expressed the training need on the aspects such as use of market infrastructure, provisions of legal reforms in agricultural marketing and its benefits, cooperative marketing, and concept, benefits and participation in Modern Terminal Markets. The response on these aspects was higher in the states of Gujarat, Uttar Pradesh and Rajasthan. Farmers face risk in farming business in production and marketing of crops and thus require training on the risk management aspects. Futures trading is a market based instrument for minimization of price risk. Requirement of training on this aspect was expressed by about 60 per cent of the total farmers of all the selected states. Nearly 80 per cent of the total farmers in Gujarat, Uttar Pradesh and Rajasthan felt that they require training on use of futures trading for price risk management, crop and market planning.

CHAPTER 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Knowledge regarding agricultural marketing is crucial to enable farmers to make informed decisions about what to grow, when to harvest, to which markets produce should be sent, and whether to store it or not. Farmers get benefit from contract farming, direct marketing, group marketing, commodity futures markets, electronic spot markets, only to the extent they organize in marketing groups, self-help groups, cooperatives or companies and learn skills suited to the new marketing environment. Understanding quality standards, learning the terms of contract, and choosing and preparing the produce for the market are going to be essential skills for farmers. Farmers required to be exposed to the characteristics and complexities of the marketing system to make it more efficient.

Keeping this in mind, the institute had initiated a novel development research aiming at measuring the level of awareness of farmers on different aspects of agricultural marketing and making farmers aware about the latest developments in agricultural marketing at the same time. As a part of this novel development research, 11 Farmers Awareness Programmes were conducted in different states. The FAPs were conducted in Rajasthan, Haryana, Uttar Pradesh, Karnataka, Madhya Pradesh and Gujarat.

Results

Farm size wise distribution of selected farmers in different states under study revealed that, of the total farmers turned up for attending the awareness programmes on agricultural marketing, about 35 per cent were having operational land holding 1-5 acres, nearly 29 per cent having 5-10 acres, about 24 per cent were cultivating above 10 acres and nearly 12 per cent were possessing operational land holdings less than 1 acres.

The average age of the respondents depicted that almost all the farmers turned up for attending awareness programmes on agricultural marketing were in the age group of ranging 38 to 42 years indicating that younger generation showed interest in farming. By attending awareness programme on agricultural marketing, it is revealed that the farmers are now realizing the

importance of understanding the pulse of the markets. It also indicated that they are more enthusiastic to learn new things emerging in agricultural marketing.

Overall, only about 10 per cent of the total respondents were found illiterate, nearly 11 per cent were educated upto primary level, about 13 per cent were educated upto middle level, nearly 45 per cent were educated upto senior secondary level and 21 per cent of the total farmers were graduate and post graduates. This indicated that the higher proportion of educated and younger generation has turned up for attending awareness programmes on agricultural marketing. This signifies that the educated and younger generation is also taking interest in the farming business and they are enthusiastic to learn the complexities of agricultural marketing and showed interest in understanding the pulse of the market so that they can respond to market realities.

Phone Connectivity

The telephone (landline or mobile) revealed from the results of analysis that majority of the respondents (nearly 82 per cent) were connected with mobile phone, and only about 17 per cent farmers were not connected with either landline or mobile. Nearly 80 to 90 per cent of the farmers having operational holdings above one acre were connected with mobile phones. While higher proportion of respondents was with no phone connections that were having operational holding less than one acre. This signifies that the younger and educated generation of farmers might be using latest information technology for the betterment of their farming business.

Knowledge of APMCs

The knowledge of farmers on Agricultural Produce Market Committees (APMCs) revealed that highest proportion of farmers knowing about APMCs was recorded in Karnataka (71 per cent of the total farmers responded positively on knowledge of APMCs) followed by Gujarat (65.5 per cent), Madhya Pradesh (58.2 per cent), Rajasthan (54.2 per cent), Haryana (34.7 per cent) and least in Uttar Pradesh (33.3 per cent). The highest proportion of farmers who responded negative on the knowledge regarding APMCs was found in Uttar Pradesh (54 per cent) followed by Gujarat and Rajasthan (33 per cent in each state), Madhya Pradesh (29.9 per cent), Karnataka (22 per cent) and Haryana (20 per cent). It is really heartening to note that in the era of second generation of reforms in agricultural marketing, a large chunk of farmers responded negative on the knowledge of APMCs.

Knowledge of Provisions of Market Regulation

Knowledge of provisions of market regulation was responded by about 90 per cent of total farmers turned up for attending awareness programmes in Rajasthan and Gujarat states followed by Uttar Pradesh (66.7 per cent), Haryana (53.1 per cent) and least in Karnataka and Madhya Pradesh (nearly 45 per cent).

Knowledge of Services Provided by APMCs

The knowledge of farmers regarding different services and facilities provided by APMCs for orderly marketing of agricultural produce revealed from the table that the knowledge of farmers on different services provided by APMCs is higher in the states of Gujarat, Rajasthan and Haryana. It is interesting to note that the response of sample farmers negligible regarding facilities of weighing and grading in APMCs in all the selected states. The facility of cleaning and grading of produce is negligible in many of the mandies and therefore, response of farmers on grading facilities at mandies is obvious. But negligible response of farmers on weighing facilities is heartening to note. This may be due to dissatisfaction of farmers on weighing in mandi by commission agents /traders.

Own Farm Grading

Response of farmers regarding the practice of own farm grading of produce before taking the produce to mandies for marketing revealed that of the total farmers about 62 per cent responded that they carry out grading of produce at farm level. Nearly 80 per cent of selected farmers in Rajasthan and Uttar Pradesh were following farm level grading followed by 65 per cent in Haryana, 61 per cent in Gujarat, 46 per cent in Karnataka and about 40 per cent in Madhya Pradesh.

Benefit of Farm Level Grading

The response of farmers on whether grading of their produce at farm level benefitted them or is a costly affair in marketing of agricultural produce depicted that overall 63 per cent of the total farmers responded that they were benefitted with the grading of produce at farm level. About 79.2 per cent of total farmers in Rajasthan, 77.8 per cent in Uttar Pradesh, 66.7 per cent in Gujarat, 65.3 per cent in Haryana 54.2 per cent in Karnataka and least 32.8 per cent in Madhya Pradesh responded that grading at farm level was beneficial for them in terms of increased price realization.

Packing of Produce

The knowledge of selected farmers of proper packing of produce indicated that majority of farmers in Uttar Pradesh, Rajasthan, Haryana and Karnataka responded positively on packing of produce. Whereas, in Gujarat and Madhya Pradesh the majority of farmers negatively responded regarding proper packaging of farm produce. This signifies that still large chunk of farmers were not aware on the proper packing of produce for marketing. Thus, there arises a need to create awareness among farmers regarding proper packing of produce at farm and its benefits.

Storage of Produce

Response of farmers on storage revealed that, about 41 per cent of the farmers who have turned up for attending awareness programme on agricultural marketing in selected states responded positively on storage of the produce for avoiding distress sale, reap benefit of lean period prices and for home use. About 36 per cent farmers not stored the produce might be on account of immediate requirement of money at harvest.

Reasons for storing the produce

The response on the reasons for storage of agricultural produce depicted from the table that, majority of the farmers who have stored produce for getting benefit of higher price (nearly 63 per cent of total farmers responded positively). About 56 per cent of the total farmers stored the produce for off season sale in expectation of increase in prices during the period, and for own consumption. The other reasons of storage of agricultural produce were saving the produce from post harvest losses which was expressed by about 28 per cent of total farmers in selected states.

Benefits of Storage

Nearly 61 per cent of the total farmers who have turned up for attending farmers awareness programmes in selected states reported that they were benefitted by storing the produce and selling it in the lean period. Highest positive response on the benefit from storage of produce was reported by the farmers of Uttar Pradesh (about 78 per cent of the total farmers benefitted from storage) followed by Rajasthan (73.6 per cent), Gujarat (64.4 per cent), Madhya Pradesh and Haryana (nearly 53 per cent in each state), and least in Karnataka (35.6 per cent).

Preferred agency for sale of Produce

Farmers' response on preference for agency to sale the farm produce revealed that, of the total farmers in selected states, 68 per cent preferred to sale their produce in local mandi. The second most preferred agency for sale of produce was selling directly to traders as reported by 54.4 per cent of the total farmers in selected states. The third most preferred agency for sale of produce as reported by about 38.3 per cent of the total farmers was selling directly to retailers. Farmers' market of rural haat was preferred by 23.7 per cent of the total farmers selling through cooperative was preferred by 20.4 per cent of the total farmers in selected states.

Post Harvest Losses at Different Stages

The response of farmers on the post harvest losses at different operations indicated that post harvest losses were high during storage of produce as expressed by 48 per cent of the total farmers in selected states. Nearly 46 per cent of the total farmers expressed that post harvest losses at mandi level were high. Post harvest losses during grading & packing and during transit was reported by about 45 per cent of the total farmers. Losses in produce due to improper harvest were expressed by about 21 per cent of the total farmers.

Awareness on Reforms in Agricultural Marketing

The response of farmers on awareness regarding reforms in agricultural marketing indicated that, about 28 per cent of the total farmers in selected states were aware of the reforms in agricultural marketing. About 44 per cent of the total farmers expressed no awareness of reforms and nearly 28 per cent have not responded on the issue. Thus, it can be said that about 72 per cent of the total farmers were not aware on the reforms in agricultural marketing. Therefore, creation of awareness among farmers on benefits and provisions of reforms in agricultural marketing is required for the benefit of the farming community.

Knowledge of Alternative Marketing Channels

Assessment of farmers' awareness in selected states about alternative marketing channels opened up after reforms in agricultural marketing showed that all the states put together, about 30 per cent of the sample respondents at overall level were aware about alternative marketing channels. This trend may go up as the reforms process initiated by Government of India is piercing now a day. It is also interesting to note that, about 25 per cent of the farmers at overall level were aware of retail chains and willing to market their produce directly to the retail chains. Cooperative

marketing, electronic spot exchanges and group marketing were known to majority of the farmers in Gujarat state.

Problems in Marketing of Agricultural Produce

The major problems expressed by farmers in selected states were; not getting reasonable price (as expressed by 14 per cent of the total respondents), lack of storage for foodgrains (8.6 per cent), non-availability of market at nearby place (7.3 per cent), delay in sale of produce in mandi (6.8 per cent), high commission charges in mandi (6.3 per cent), delay in payment of produce (5.3 per cent), lack of knowledge on marketing (4.8 per cent), lack of inputs availability at market place (4.3 per cent), Lack of basic amenities (4 per cent), Non availability of cold storage in the market area (3.5 per cent) and lack of crop insurance (3 per cent).

Suggestions for Improvement of Agricultural Marketing

The issues which need to be addressed for the benefit of the farmers included; assurance of remunerative price for their produce; timely payment of their sale proceeds and no commission charges from farmers; requirement of mandi at nearby place; adequate storage facilities for storage of farmers produce; provide basic amenities in the market place; training of farmers on the different aspects of agricultural marketing; proper and timely transport facilities, availability of crop insurance, ensure timely sale of their produce in mandi, availability of cold storage, widening reach of contract farming and direct marketing, electronic weighing of their produce, allow more traders to buy produce in mandi and facilities for export of their produce.

Training Need of Farmers

Nearly 71 per cent felt that they require training on post harvest management aspect. Market information is an important aspect for realizing higher market prices. Overall about 71 per cent of the total farmers in selected states responded positively on the training requirement on market information. Training requirement on food safety and quality was expressed by 71.5 per cent of the total respondents in selected states. About 65 per cent of total farmers expressed the training need on the aspects such as use of market infrastructure, provisions of legal reforms in agricultural marketing and its benefits, cooperative marketing, and concept, benefits and participation in Modern Terminal Markets. Requirement of training on this aspect was expressed by about 60 per cent of the total farmers of all the selected states.

REFERENCES

- Gupta, S.P. and Rathore N.S., 1999, Disposal pattern and constraints in vegetable market: A case study of Raipur District of Madhya Pradesh. *Agric. Mktg.* 42 (1): 53-59.
- Kantharaju, 1989, A study on adoption of improved practices of coffee and cardamom by small farmers in Hassan district of Karnataka. *M. Sc. (Agri.) Thesis*, University of Agricultural Sciences, Bangalore.
- Nagaraj, G. N., Narayanaswamy, T. C. and Bhaskar, V., 1999, Production and marketing constraints in potato. *Agricultural Banker*, **23**(1): 1-3.
- Narappanavar, S. R. and Bavur, S. B., 1998, The marketing of potato: A case study in Dharwad district of Karnataka. *The Bihar Journal of Agricultural Marketing*, **6**(2): 154-159.
- Patel, G. N., Patel, R. M., Patel, H. A., Khatra, R. G. and Gondalia, V. K., 1997, Marketing efficiency – A case of Anad vegetable market. *Indian Journal of Agricultural Marketing*, **11**(1&2): 87-88.
- Ramamoorthy, K., 1995, An integrated cotton production and marketing management. *Annual Report for 1994-95*, Central Institute for Cotton Research, Nagpur, p. 84.
- Singh, M. R., 1997, Economics of production and marketing of Vegetables: a case study in Patan block of Jabalpur district. *Agric. Mktg.* 40 (2): 18-20.
- Thakur, D. S., Thakur, D. R., Sharma, K. D. and Sanjaya, 1994, Vegetable revolution and economics in Himachal Pradesh. *Bihar Journal of Agricultural Marketing*, **2**(2): 145-151.

List of Farmers Interviewed

S No	Name of the Farmer	Father name	Village	Tehsil	District	State
1	Maniram dukia	Ramniwas	Lanin gram	Ladnu	Nagaur	Raj
2	Jagdish prasad swami	Her dev das	coujar	ladunu	Nagaur	Raj
3	Parsa Ram	Jetha Ram	degana	degana	Nagaur	Raj
4	Hema Ram Gurjar	Ramkaran Gurjar	Dujjar	Ladnun	Nagaur	Raj
5	Rajendra Kr.saini	Chandra saini	dujar	ladnun	Nagaur	Raj
6	Shuka ram yadav	Hira ram	dujar	Ladnun	Nagaur	Raj
7	Nagar mal bagada	Ganpat ram	kasumvi	ladnun	Nagaur	Raj
8	Ghirdhari lal swami	Narayan das	kasumbi	Ladnun	Nagaur	Raj
9	Anand bagada	Ganpat ram	kasumbin alipur	ladnun	Nagaur	Raj
10	Malchand bagada	Galu ram	kasumbi alipur	Ladnun	Nagaur	Raj
11	Ashu lal	Jagdeva ram	kasumbi alipur	Ladnun	Nagaur	Raj
12	Dungar mal chouhan	Shigha ram	Kasumbt alipur	Ladnun	Nagaur	Raj
13	Manohar das	Bajrang das	Kasumbi alipur	Ladnun	Nagaur	Raj
14	Samdar dan	Shakti dan	Henigram	Ladnun	Nagaur	Raj
15	Gokul dan charan	Swai dan charan	Malasi	Ladnun	Nagaur	Raj
16	Bagrang lal	Chagan Lal	Bakliya	Ladnun	Nagaur	Raj
17	Ramdhan Jhuria	Gordhan Ram	Malasi (lenin Gram)	Ladnun	Nagaur	Raj
18	SulaRam Prajapat	Ganesha ram Prajapat	Lenin Gram	Ladnun	Nagaur	Raj
19	Hari narayan	Gourdhan	Lanin gram	Kadnun	Nagaur	Raj
20	Bajarang lal	Ramdhan	Lanin gram	Ladnun	Nagaur	Raj
21	Ram kishan jat	Gourdhan jat	Lanin gram	Ladnun	Nagaur	Raj
22	Jivana ram	Anada ram	Malasi	Ladnun	Nagaur	Raj
23	Sivchand	Khumaram	Bakliya	Ladnun	Nagaur	Raj
24	Ram chand	Ram niwas	Lanin gram	Ladnun	Nagaur	Raj
25	Magna ram bera	Bhagirath ram	Lanin gram	Ladnun	Nagaur	Raj
26	Pacha Ram Prajapat	Hajari Lal	Lenin Gram	Ladnun	Nagaur	Raj
27	Prema Ram	Manrupa Ram	Chak Gauredi	Ladnun	Nagaur	Raj
28	Bhawnar Dan	Bhim dan	Malasi	Ladnun	Nagaur	Raj
29	Naima ram	Madha ram	Baid	Ladnun	Nagaur	Raj
30	Namichand	Gourdhan ram	Malasi	Ladnun	Nagaur	Raj
31	Mangilal Jat	Bhagirath Jat	Chuk Goredi (Lenin Gram)	Ladnun	Nagaur	Raj
32	Shivkaran Jakhad	Naryan Jakhad	Nimbi Jodha	Ladnun	Nagaur	Raj
33	Andaram baira	Mohan ram	Lanin gram	Ladnun	Nagaur	Raj
34	Salag ram	Lakha ram	baid	Ladnun	Nagaur	Raj
35	Jetharam	mula ram jat	chak gordi	Ladnun	Nagaur	Raj

36	Rajendra swami	Omprakash	Dujar	Ladnun	Nagaur	Raj
37	Chunna ram chaudhary	Hari ram	Dabdi	Ladnun	Nagaur	Raj
38	Girdhari ram	Durga ram	Ladnun	Ladnun	Nagaur	Raj
39	Gyanna ram	Chotha ram	Malasi	Ladnun	Nagaur	Raj
40	Ramkaran	Ladu ram	Chak goaredi	Ladnun	Nagaur	Raj
41	Manaram khileti	Sukha ram	Hiravati	Ladnun	Nagaur	Raj
42	Mangi lal	Hira ram	goradi	ladnun	Nagaur	Raj
43	Narsidan	bhurdan	Malasi	Ladnun	Nagaur	Raj
44	Khivraj meghwal	Likhama ram	Lanin gram	Ladnun	Nagaur	Raj
45	Ramratan saledia	Shiav kumar	Lanin gram	Ladnun	Nagaur	Raj
46	Hira ram	Jiaram	Lanin gram	Ladnun	Nagaur	Raj
47	Poonam chand	Bherra ram	Berrasar	Nokhha	Bikaner	Raj
48	Ganpat ram ghotiya	Narayan ram	Nimbii jodha	Ladnun	Nagaur	Raj
49	Gajendra Ghotiya	Gumanaram	Nimbi Jodha	Ladnun	Nagaur	Raj
50	Hema Ram	Sohana Ram	Chuk Gauredi	Ladnun	Nagaur	Raj
51	Gopal Ram Thera	Dhanna Ram Thera	Chuk Goredi	Ladnun	Nagaur	Raj
52	Madha Ram	Mohan Ram	Chuk Goredi	Ladnun	Nagaur	Raj
53	Narendra kumar Bidiyasar	Andaram Bidiyasar	Malasi	Ladanun	Nagaur	Raj
54	Jivan Ram	Anna Ram Jat	Malasi	Ladnun	Nagaur	Raj
55	nanu Ram	Kistura Ram	ladnun	ladnun	Nagaur	Raj
56	Mahan Meghwal	Kusya Ram Meghwal	jamyasar	Ghayal	Nagaur	Raj
57	Prahlad Bhati	Khuba Ram Meghwal	Manad	Ladnun	Nagaur	Raj
58	Ram dev Jhuria	Gaurdhan Ram Jhuria	Lenin Gram	Ladnun	Nagaur	Raj
59	Shankar Singh	Madhau Singh	Nimbi Jodha	Ladnun	Nagaur	Raj
60	Kesar Singh	Sujan Singh	Nimbi Jodha	Ladnun	Nagaur	Raj
61	om Prakash Saran	NanuRam saran	Jeganiya	Ratangarh	Churu	Raj
62	Narendra Jhuria	Ramdev Jhuria	Lenin Gram	Ladnun	Nagaur	Raj
63	Basant Kumar Jhuria	Harinarayan jhurai	Chuk goredi	Ladnun	Nagaur	Raj
64	Nanu Ram Jhuria	Gaurdhan Ram Jhuria	Lenin Gram	Ladnun	Nagaur	Raj
65	Mohana Ram	Lichman Ram	Chuk Goredi	Ladnun	Nagaur	Raj
66	Prahlad Singh	Narpat Singh	Kasumbi	Ladnun	Nagaur	Raj
67	mahavir Prasad	Devmitra Pujari	Dujar	Ladnun	Nagaur	Raj
68	Mahendra swami	Indradas Swami	Dujar	Ladnun	Nagaur	Raj
69	Prabhu Ram Meghwal		Kasumbhi	Ladnun	Nagaur	Raj
70	Girdhari Lal Yadav	Padama RamYadav	Dujar	Ladnun	Nagaur	Raj
71	Madan Lal Bainra	Mohan Ram Bainra	Lenin Gram	Ladnun	Nagaur	Raj
72	Soma Ram Jat	Shiv Karan Jat	Lenin Gram	Ladnun	Nagaur	Raj
73	Hari prasad Sahu	Dhanna Lal Sahu	Kachi Var	Bhopal	Bhopal	MP

			Kheda			
74	Dev Singh Dangi	Shree Kishan	Kham kheda	Bhopal	Bhopal	MP
75	Sarvan Singh Gangwar	Bhag Chandra Gangwar	Semri Kalan	Berasiyan	bhopal	MP
76	Raguvir Singh Dangi	Jasrat Singh Dangi	Kham kheda Berasiya road	Hujur	Bhopal	MP
77	Gopal Singh Mehar	Prabhu Lal	Semri Kalan	Berasiya	Bhopal	MP
78	Lichman Singh	Man Singh	Semri Kalan	Berasiya	Bhopal	MP
79	Ranjit singh Dangi	Beni Prasad dangi	Kham kheda Berasiya road	Hujur	Bhopal	MP
80	Mod. Moin Khan	Mod. Aamin Khan	Kham Kheda	Hujur	Bhopal	MP
81	Lal Bahadur Singh Dangi	Toran Singh Dangi	Baisonda	Baisema	Bhopal	MP
82	Ashis Kumar Kanesh	Dal Singh Kanesh	Lalghati	Bhopal	Bhopal	MP
83	Vijay Singh Jat	Ram Prasad	Nipania Jat	Hujur	Bhopal	MP
84	Khemraj dangi	Raghunath Singh	Semri Kalan	Bairviya	Bhopal	MP
85	Ratan Singh Dangi	Daulat Singh	Semri Kalan	Bairsiya	Bhopal	MP
86	Prem Narayan Visvkrama	Jamna Prasad Visvakrama	Mugaliya hat	Bhopal	Bhopal	MP
87	Rameshwar Rathor	Banwar Ji	MungaliyaHat	Hujur	Bhopal	MP
88	Mohan Lal Bhati	Umrao Singh Bhati	Mugaliya Hat	Hujur	Bhopal	MP
89	Radhe Shyam	Raghunath Singh	Semari Kalan	Bairsiya	Bhopal	MP
90	Kishor Singh Gangwar	Bhag Chand Gangwar	Semri Kalan	Berasiya	Bhopal	MP
91	Nihal singh Gangwar	T.R. Gangwar	Semri kalan	Bairasiya	Bhopal	MP
92	mohan Singh dangi	Kisan ji	Khami kheda	Hujur	Bhopal	MP
93	Surendra Singh Dangi	Man Singh Dangi	KhamKheda	Hujur	Bhopal	MP
94	Gharmendra Patidar	Radhakisan Patidar	Mugliya hat	Hujur	Bhopal	MP
95	Iklesh Yadav	Ramesh	Khamkheda	Hujur	Bhopal	MP
96	Genda Lal	Gulab	Semri	hujur	Bhopal	MP
97	J.H. Hasmi	M.H. Hasmi	Lalariya	Bairsiya	Bhopal	MP
98	Rais Ahmad Khan	Abdul Hamid Khan	Lalriya	Bairasiya	Bhopal	MP
99	Mohan Yadav	Rup Singh	KhamKheda	Hujur	Bhopal	MP
100	Risabh Rajak	Narayan Singh Rajak	Kham Kheda	Hujur	Bhopal	MP
101	Manoj Patidar	Om Prakash Patidar	Mugaliya Hat	Hujur	Bhopal	MP
102	Himmat Singh	Umed Singh	Semri Kalan	Bairasiya	Bhopal	MP
103	Vare Lal	RaghuNath	Semri Kalan	Bairasiya	Bhopal	MP
104	Sobhit Dangi	Bala Prasad Dangi	KhamKheda	Hujur	Bhopal	MP
105	Rahul Dangi	Vikram singh Sangi	Kham kheda	Hujur	Bhopal	MP
106	HarGovind Patidar	Laxminarayan Patidar	Mugaliya Hat	Hujur	Bhopal	MP
107	Chandan Singh Dangi	Nandu Lal	Semri Kalan	Bairasiya	Bhopal	MP
108	Phool Singh Viswakarma	Babulal Viswakarma	Semri kalan	Bairasiya	Bhopal	MP

109	Rahuvir Singh Mehar	Jhanu Lal Mehar	Semri Kalan	Bairasiya	Bhopal	MP
110	Jasrath Singh Dangi	Ram Prasad Dangi	Semri Kalan	Bairasiya	Bhopal	MP
111	Hiteswar Singh Jat	Basanti lal Jat	Nipaniya Jat	Hujur	Bhopal	MP
112	Nand Kishor Sharma	Lakhpat Ram Sharma	Sua	Bairasiya	Bhopal	MP
113	Mukesh Kumar	Banu lal Sharma	Nagla Prahlad	Hathras	Mahamaya Nagar	UP
114	Ram Dayal	Sita Ram	Aamjhara	Hujur	Bhopal	MP
115	Ram Singh Jat	Babu Lal Jat	Rahua Ratanpur	Bairasiya	Bhopal	MP
116	Gopi Lal Sen	Devi Singh Sen	Sua Ratanpur	Bairasiya	Bhopal	MP
117	Vishram Singh Maran	Ram Lal Maran	Papaliya Khadak	Hujur	Bhopal	MP
118	Genda Singh Rawat	Ram Prasad	Magtai	Hathras	Hathras	UP
119	Suvran Singh	Bala Prasad	Ratibad	Hujur	Bhopal	MP
120	Shalig Ram Meena	Moti Ram Meena	Ratibad	Hujur	Bhopal	MP
121	Mahendra Singh	Kishan Singh	RaboVad	Bhopal	Bhopal	MP
122	Mahendra Singh Dangi	Toran Singh Dangi	Baisonda	Bairasiya	Bhopal	MP
123	Pradeep Singh Thakur	Sher Singh Thakur	Bhaisonda	Berasia	Bhopal	MP
124	Khushi Lal Leva	Jeetmal Leva	Parvaliya Sadak	Hujur	Bhopal	MP
125	Hidayat Ullah	Niyamat Ullah	Islam Nagar	hujur	Bhopal	MP
126	Mulchand Gautam	Mangal Sen	Indra puri	Hujur	Bhopal	MP
127	Jaswant Singh Jat	Bamar lal Jat	Kotra Chaupda	Bairasia	Bhopal	MP
128	Lakhan Lal Kuswah	Karan Singh Kuswah	Ratua	Bairasia	Bhopal	MP
129	Kamesh Kumar Parmar	Manoj Parmar	Pulgaon	Durg	Durg	MP
130	Girrish Kumar Narang	Gend Ram Narang	Khopli	Durg	Durg	MP
131	Jagannath	Shri Lal Ji	Vadi Khedi	Bairasia	Bhopal	MP
132	Arvind Singh	Man Chandra Singh Rajput	Richi	Sivani Malma	Hoshangabad	MP
133	Sudhir Kumar Varma	Baldau Prasad Varma	Guma	Palari	Raipur	MP
134	Parvej Usmani	Iqbal Usmani	Kajuri(Ratatal)	Hujur	bhopal	MP
135	Sunil Mehra	Hari Singh Mehra	karond kalan	Najul	Bhopal	MP
136	Gunny Bag	Karim Bag	Khajuri ratatal	Hujur	Bhopal	MP
137	Vinod Kumar Pandy	D.P.Pandy	Khajuri	Hujur	Bhopal	MP
138	Vijay Agrawal	R.S. Agrawal	Bairagarh	Huzur	Bhopal	MP
139	Arvind Malviya	Kamlesh Kumar Malviya	Islam Nagar	Huzur	Bhopal	MP
140	Badri Prasad dangi	Jagannath Dangi	Kolu khedi	Berasia	Bhopal	MP
141	Bal Kishan	Man Singh	Semri	Berasia	Bhopal	MP
142	Sushila Devi	Swami Dayal	BuDhi Kheda	Unnav	Unnav	UP
143	Sadhan Singh	Ramnaresh Singh	Patka pur	Unnav	Unnav	UP
144	Daymanti Singh	Shreepal Singh	Patkapur	Unnav	Unnav	UP

145	Syama Singh	Sarju Singh	Patka pur	Unnav	Unnav	UP
146	Sarla	Gayadin	Chilaula	Unnav	Unnav	UP
147	Raj Kumari	Kanhiya vaksh Singh	Patakpur	Unnav	Unnav	UP
148	Mithlesh	Suresh Chandra	Hafizabad	unnav	unnav	UP
149	Srojani	Bablu	Babukheda	Unnav	Unnav	UP
150	Kamal Kanti	Isma Ojar	Chilaula	Unnav	Unnav	UP
151	Santosh Kumari	Ram Bharose	Sarosi Sikandar Pur	Unnav	Unnav	UP
152	Hemlata Kushwah	Jagannath Kushwah	Chilaula	Unnav	Unnav	UP
153	Urmila Singh	Harish Chandra Singh	Chilaula	Unnav	Unnav	UP
154	Fulan Devi	Shiv Ram	Aant	unnav	unnav	UP
155	Vimla Devi	Surju	Hafizabad	Unnav	Unnav	UP
156	Sanno Devi	Binda Prasad	Achli kheda	Unnav	Unnav	UP
157	Shobha Devi	Ram Asre Varma	Achli Kheda	Unnav	Unnav	UP
158	Upasna Yadav	KaliChran Yadav	MohKuvi Kheda	Unnav	Unnav	UP
159	Geeta Singh	Bannam Singh	Nanda Kheda	Menikheda	Unnav	UP
160	Sakhi Sabita Nadar	Moti Lal	Nada Kheda	Unnav	Unnav	UP
161	Chaya Singh	Vannam Singh	Nanda Kheda	Maine Kheda	Unnav	UP
162	Poonam Yadav	Ganga Prasad Yadav	Saroso Sikandarpur	Unnav	Unnav	UP
163	Suman Sahu	Amit Sahu	Rastampur	Unnav	Unnav	UP
164	Puspa Sahu	Ram Bharose Sahu	Rustampur	Unnav	Unnav	UP
165	Suman	Ram Raj	Budhi kheda	Unnav	Unnav	UP
166	Manju	Rameshwar	Babukheda	Unnav	Unnav	UP
167	Kamla Sharma	Ram Prasad Sharma	Rustampur	Unnav	Unnav	UP
168	Archna Gautam	Harish Chandra Gautam	Babukheda	Unnav	Unnav	UP
169	Raj Kumari Yadav	Shree Ram	Patari Kheda	Unnav	Unnav	UP
170	Meena	Mohan Lal	Mohesvi Khedagaon	Patari	Unnav	UP
171	Sharma Devi	Dhani Ram	Budhikheda	Unnav	Unnav	UP
172	Shiv Rani	Ram Lal	Budhi kheda	Unnav	Unnav	UP
173	Neelam Pandy	Shiv Prasad Panday	Sarosi	Unnav	Unnav	UP
174	Sukhrana	Sukhlal	Budhikheda	Unnav	Unnav	UP
175	Hemraj	Gaurishankar	Baheliya	Malihabad	Lucknow	UP
176	Mod. Sartaj	Jadpa	Umrawal	Malihabad	Lucknow	UP
177	Kunwar Rajeswar Singh Chauhan	Kunwar Maheshwar Singh Chauhan	Umrawala	Malihabad	Lucknow	UP
178	Dadich Prasad Prajapati	Mansha Ram	Para Bhadrahi	Malihabad	Lucknow	UP
179	Mahesh Prasad	Natha Ram	Para Bhadrahi	Malihabad	Lucknow	UP
180	Subhash Chandra	Bhagwan Deen	Madhwapur	Malihbad	Lucknow	UP

181	Parsu Ram	Prabhudayal	Para bhadrahi	Malihabad	Lucknow	UP
182	Indrapal Devedi	Rameshwar Prasad	Ramgarha	Malihabad	Lucknow	UP
183	Punti Lal	Bhawani	Mitora	Malihabad	Lucknow	UP
184	Shiv Kumar Devedi	Ram Pal Devedi	Gaudva	Malihabad	Lucknow	UP
185	Nawab Ahmad Khan	Makbul Ahmad khan	Mauhalla kavalhar	Malihabad	Lucknow	UP
186	Kesar Jamal Khan	Shabbir Ahmad Khan	Mo. Kewalhar	Malihabad	Lucknow	UP
187	Bhagwan Vaksh Singh	Ram Nath Singh	Nauvasta	Malihabad	Lucknow	UP
188	Ramnaresh Singh	Vijay Bahadur Singh	Narapanpur	Malihabad	Lucknow	UP
189	Amar Bahadur Singh Rathor	Shree Ram Singh	Masitha Ratan	Malihabad	Lucknow	UP
190	Ran Vijay Singh	Surendra Vaksh Singh	Mal	Malihabad	Lucknow	UP
191	Sundar Lal	Ram Swarup	Sultan Pur mal	Malihabad	Lucknow	UP
192	Phool Singh Gautam	Fakore	Aumau	Malihabad	Lucknow	UP
193	Munni Lal	Bulaki	Aumau	Malihabad	Lucknow	UP
194	Durga Prasad	Phakere	Aumau	Malihabad	Lucknow	UP
195	Rakesh Kumar	Agnu Ram	Gaudwa Barauki	Malihabad	Lucknow	UP
196	Munnu Singh	Ram Pal	Baheliya	Malihabad	Lucknow	UP
197	Madari Lal	Mohan	Shahmau	Malihabad	Lucknow	UP
198	Chandika Prasad	Chotkau	Kedaura	Malihabad	Lucknow	UP
199	Om Prakash	Mohan Lal	Dharam Nagari	Malihabad	Lucknow	UP
200	Ramautar Yadav	Bhola Yadav	Bhadesar mau	Malihabad	Lucknow	UP
201	Dauri Lal	Shyam Lal	Shivdaspur	Malihabad	Lucknow	UP
202	Amit Kumar Yadav	Chote lal Yadav	Sultanpur	Malihabad	Lucknow	UP
203	Narendra singh	Gurdayal Singh	Niwarsi	Ladwa	Kurukshetra	Har
204	Anil Kumar Goel	Om Prakash	Ladwa	Kurukshetra	Kurukshetra	Har
205	Subhash Rana	Karam Singh	Lukkhi	Thanesir	Kurukshetra	Har
206	Karan Pal Singh Rana	Parmal Singh Rana	Lukkhi	Thanesir	Kurukshetra	Har
207	Ashwani Kumar	Parmeshwari Prasad	Amin	Thanesir	Kurukshetra	Har
208	Sushil Kumar	ShamSher Singh	Sainsa	Pihauwa	Kurukshetra	Har
209	Sudesh Kumar	Munshi Ran	Salarpur	Thanesir	Kurukshetra	Har
210	Ranbir Singh	Ranjeet Singh	Khediram Nagar	Thanesir	Kurukshetra	Har
211	Surendra Kumar	Hoshiyar Singh	Kirmuch	Thanesir	Kurukshetra	Har
212	Suraj Bhan	Sardara Ram	Dhangali	Thanesir	Kurukshetra	Har
213	Gurdiyil Singh Malik	Balak Ram	Umari	Thanesir	Kurukshetra	Har
214	Baljeet Singh	Ramesh Singh	Kirmach	Thanesir	Kurukshetra	Har
215	Sanjeev Kalra	Ashwani Kalra	Shahabad Markanda	Shahabad	Kurukshetra	Har
216	Mam Chand	Tara Chand	Bapedi	Ladva	KuruKshetra	Har

217	Rajpal	Tara Chand	Athaun	Thanesar	Kurukshetra	Har
218	Fakir Chand	Sagat Ram	Intal kalan	Vind	Jind	Har
219	Dalpat Singh	Daya Chand	Bagar Khurd	Safido	Jind	Har
220	Mandeep Singh	ShamSher Singh	Kauyal	Narwana	Jind	Har
221	Balraj	Ramkishan	Kharakramji	Jind	Jind	Har
222	Pala	Naurang	Kharakramji	Jind	Jind	Har
223	Ramniwas	Rameshwar	Uchana Khurd	Jind	Jind	Har
224	Ramlal	Ransingh	Kurad	Safido	Jind	Har
225	Rajendra Kumar	Ache Ram	Dumarkha Khurd	Narwana	Jind	Har
226	Ganga Dutt	Hajari Lal	Madi Kalan	Narwana	Jind	Har
227	Jogindra Singh	Jitu Ram	Alewa	jind	jind	Har
228	Suresh	Ramswaroop	Madi kalan	Narwana	Jind	Har
229	Virendra Singh Ghanghar	Bhagat Singh Ghanghar	Shanpur	Safida	Jind	Har
230	Kapil Dev	Mahendra Pal	Mandi Kalan	Narwana	Jind	Har
231	Anil Kumar	Birkhram	Koyal	Narwana	Jind	Har
232	Vikram Singh	Rohitash Singh	Shanpur	Safidon	Jind	Har
233	Rampal Malik	Puran Mal	Pathri	Jind	Jind	Har
234	Balwan Singh	Laxminchand	Nagura	Jind	Jind	Har
235	Jatan Ram	Ruli Ram	Rankli	Jind	Jind	Har
236	Ramchand	Makad Ram	Dhani Teksingh	Narwana	Jind	Har
237	Anil Kumar	Mohindra Singh	Dhabi Tek Singh	Narwana	Jind	Har
238	Surendra Singh	Tara Chand	Dhabi Tek Singh	Narwana	Jind	Har
239	Rajesh Kumar	Diwan Singh	Dhabi Tek Singh	Narwana	Jind	Har
240	Jaivbir Singh	Chatar Singh	Hathwala	Julana	Jind	Har
241	Rajendra Singh	Ram Kumar	Barsaula	Jind	Jind	Har
242	Mai Ram	Pura Chand	Kheda Khemawati	Safido	Jind	Har
243	Satish	Ranchandra	Kalwa	Safido	Jind	Har
244	Krishna	Indra	Kalwa	Safido	Jind	Har
245	Dharam Singh	Lakhmi Chand	Nagura	Jind	Jind	Har
246	Chhaju Ram	Deelip Singh	Baueena	Julana	Jind	Har
247	Jale Singh	Bisram	Kharakramji	Jind	Jind	Har
248	Satbeer Singh	Sarup Singh	Ramrao	Jind	Jind	Har
249	Amit	Satbeer Singh	Ramrai	Jind	Jind	Har
250	Taqdeer	Satynarayan	Kalwa	Safido	Jind	Har
251	Mahaveer Singh	Ratan Singh	Baghdu Kalan	Safido	Jind	Har
252	Parmar Dasrath Singh	Mahendra Singh Rai Singh	Saradia	Sakheda	Baroda	Guj
253	Raju Bhai Bariya	Arjun BHAI Bariya	Sardiya	Sakheda	Baroda	Guj
254	Bariua Kalpesh	Bariua Arvind Bhai	Raypur	Sankheda	Baroda	Guj

	Kumar					
255	Bariya Narendra Bhai	Gajanan Bhai	Sardiya	Sankheda	Baroda	Guj
256	Ratan Bhai Bariya	Vaj Bhai Bariya	Sardiya	Sankheda	Baroda	Guj
257	Bariya Girish Bhai	Bariya Kand Bhai	Sardiya	Sankheda	Baroda	Guj
258	Manu Bhai Tarasda	Raubhai Tarasda	Sadepura	Sankheda	Baroda	Guj
259	Kauji Soma Bhai	Kauji Mohan Bhai	Sundarpura	Sankheda	Baroda	Guj
260	Chatur Bhai	Dalsukh Bhai	Sundarpura	Sankheda	Baroda	Guj
261	Bariyei Ramesh Bhai	Baruyei Damshi Bhai	Saradiya	Sankheda	Baroda	Guj
262	Parmar Meghraj Singh	Parmar Rajendra Singh	Saradiya	sankheda	Baroda	Guj
263	Jyondra singh	Ummed singh	Sardiya	Sankheda	Baroda	Guj
264	Parmar shardar singh	Parmar indra singh	Sardiya	sankheda	Baroda	Guj
265	Cheppi bhai	Bhaiji bhai	Sardiya	Talluka	Baroda	Guj
266	Hira bhai	Gopi bhai	sardiya	sankheda	Baroda	Guj
267	Imran khan	Sarrahu din khan	Sardiya	sankheda	Baroda	Guj
268	Tasaba kalpesh	Bhagvan Bhai	Sundar pura	Sankheda	Baroda	Guj
269	Ranjan singh	Chandra singh	Sardiya	Sankheda	Baroda	Guj
270	jaypal sinshchatr	chatar Singh	Sardiya	Sankhera	Baroda	Guj
271	Ashok bhai	Narsingh bhai	Sardiya	Sankheda	Baroda	Guj
272	Kana bhai	Gbhai bhai	ksubiyas	Sankhera	Baroda	Guj
273	Trimochan bhai	Jhapree bhai	Kasubiyas	Sankhesa	Baroda	Guj
274	Gopal bhai	Nandu bhai	Raipur	Sankheda	Baroda	Guj
275	Chuchul bhai	Babu bhai	Raipur	Sankheda	Baroda	Guj
276	Vinod bhai	Tulsi bhai	Kasumbiya	Sankheda	Baroda	Guj
277	Manoj kumar	Madhu bhai	Raipur	Sankheda	Baroda	Guj
278	Manoj kumar	Iswar singh	Gundicha	Sankheda	Baroda	Guj
279	Mast ladh	Bhawnar ladh	Dusugiya	Sankheda	Baroda	Guj
280	Raman bhai	Magan bhai	Kasumbia	Sankhera	Baroda	Guj
281	Kamal singh	Chandra singh	Sardiya	Sankhera	Baroda	Guj
282	RakeshKumar	Moti singh	Gordhanpura	Sankhera	Baroda	Guj
283	Gajendra singh	Abhey singh	Gordhanpura	Sankhera	Baroda	Guj
284	Arvind bhai	Ambalal	Raipur	Sankheda	Baroda	Guj
285	Virendra singh	chandra singh	Sardiya	Sankheda	Baroda	Guj
286	Raju bhai	Babu bhai	raipur	Sankheda	Baroda	Guj
287	Dinesh	Jetha bhai	Raipur	Sankheda	Baroda	Guj
288	Barlal bhai	jetha bhai	Sardiya	sankheda	Baroda	Guj
289	Dinesh bhai	Chiman bhai	Raipur	Sankheda	Baroda	Guj
290	Ram das bhai	Chagan bhai	Sardiya	sankheda	Baroda	Guj
291	Raman bhai	Jibha bhai	sardiya	sankheda	Baroda	Guj
292	Arvind bhai	Chiman bhai	Sardiya	sankheda	Baroda	Guj
293	Vithall bhai	Prabhat bhai	sardiya	sankheda	Baroda	Guj

294	Vipan bhai	Amba lal	Raipur	sankhedda	Baroda	Guj
295	Jagdish bhai	Jai veer bhai	Raipur	sankheda	Baroda	Guj
296	Rajeet bhai	Shana bhai	Raipur	sankheda	Baroda	Guj
297	Subhas bhai	Prabhat bhai	Raipur	sankheda	Baroda	Guj
298	Arvind bhai	Zaver bhai	Sardiya	sankheda	Baroda	Guj
299	Abdul karim	Rahim bhai	Dbhai	Dbhai	Baroda	Guj
300	Dilawar husen	Karim bhai	Dabhoi	Dabhoi	Baroda	Guj
301	Nilesh bahi	Bhai lal bhai	Gojali	dabhoi	Baroda	Guj
302	Pyare lal	Motilal	Cukar	Dabhoi	Baroda	Guj
303	Shailendra	Rajendra bhai	kukad	Dabhoi	Baroda	Guj
304	Jitendra bhai	bhupendra bhai	Kukar	Dathari	Baroda	Guj
305	Ketan bhai	Prahlad	Kukar	Dabhoi	Baroda	Guj
306	Bhoral bhai	Chiman bhai	Vasai	Dabhoi	Baroda	Guj
307	Shabir husen	Nurbhai	Dabhoi	Dabhoi	Baroda	Guj
308	Sanish bhai	Ishwar bhai	Wshaiapur	Dabhoi	Baroda	Guj
309	Dinesh bhai	Gordhan bhai	Wasai	Dabhoi	Baroda	Guj
310	Jagdish bhai	Dahya bhai	Vasai	Dabhoi	Baroda	Guj
311	Raman bhai	Himat bhai	Tibi	Dabhoi	Baroda	Guj
312	Mohamad hushen	Rahim bhai	Dabhoi	Dabhoi	Baroda	Guj
313	Sahid hushen	Rahim jajuk	Dalod	Dabhoi	Baroda	Guj
314	Ramesh bhai	Himat bhai	Vasai	Dabhoi	Baroda	Guj
315	Chandrakana	China bhai	Vasai	Dabhoi	Baroda	Guj
316	Tulsi das	Parsaram	Vasai	Dabhoi	Baroda	Guj
317	Ayub hushen	Ibradim bhai	Dabhoi	Dabhoi	Baroda	Guj
318	Noor mohamd	Yarubhai	Dabhoi	Dabhoi	Baroda	Guj
319	Jaynti bhai	Nanbhai	Dabhoi	Dabhoi	Baroda	Guj
320	Mohamad hanif	Khushn bhai	Dabhoi	Dabhoi	Baroda	Guj
321	Mohamad aslam	Raje bhai	Dabhoi	Dabhoi	Baroda	Guj
322	Yashvant	Purushotam das	Vasai	Dabhoi	Baroda	Guj
323	Hitesh	Chandrakant bhai	Amreshwar	Dabhoi	Baroda	Guj
324	Vijay	Valbh bhai	Gojali	Dabhoi	Baroda	Guj
325	Amul bhai	Deshai bhai	Vasai	Dabhpoi	Baroda	Guj
326	Ranchore bhai	Dyal bhai	Sardiya	Dabhoi	Baroda	Guj
327	Rithal	Rahul bhai	Gajoli	Dabhoi	Baroda	Guj
328	Mahadi hushen	Nurmohamad	Dabhoi	Dabhoi	Baroda	Guj
329	Pasi bhai	Chiman bhai	Dholad	dabhoi	Baroda	Guj
330	Bhawesh bhai	Ramesh bhai	Tholad	Dabhoi	Baroda	Guj
331	Kiran bhai	Kanchan	Prayagpura	Dabhoi	Baroda	Guj
332	Hanif bhai	Nurbhai	Dabhoi	Dabhoi	Baroda	Guj
333	Sakir	Shale bhai	Dabhoi	Dabhoi	Baroda	Guj
334	Ikbal bhai	Abdual bhai	Dabhoi	Dabhoi	Baroda	Guj

335	Naran bhai	Purushotam	Kadadhara	Dabhoi	Baroda	Guj
336	Dhanpat	Jhethlal bhai	Gajora	Dabhoi	Baroda	Guj
337	Chiman bhai	Moti bhai	Vasai	Dabhoi	Baroda	Guj
338	Narendra bhai	Daya ram	Prayag pura		Baroda	Guj
339	M.M sayeed	M.S sayeed	Inchal	Bailhangal	Belgaum	Karnataka
340	Shivanarayan	Rudrappa	Bailhangal	Bailhangal	Belgaum	Karnataka
341	Mahesh harakuni	Irappa harakuni	Bailhangal	Bailhangal	Belgaum	Karnataka
342	S.S Patil	S.P.patil	Hosur	Bailhangal	Belgaum	Karnataka
343	M.B.yakkundi	Basappa yakkindi	Hosur	Bailhangal	Belgaum	Karnataka
344	Akthar ismail	K.A ismail	Bailhangal	Bailhangal	Belgaum	Karnataka
345	S.S.Dalwi	C.F.Dalwi	Inchal	Bailhangal	Belgaum	Karnataka
346	Hasmi kampali	Hussain kampali	Bailhangal	Bailhangal	Belgaum	Karnataka
347	F.A. Attar	Ahemad kahan	Bailhangum	Bailhangum	Belgaum	Karnataka
348	Sakeel ahmad	Hussain sahaab	Inchal	Bailhangal	Belgaum	Karnataka
349	Anwar khan	Fayaz khan	Bailhangal	Bailhanage	Belgaum	Karnataka
350	Mullapa vgarol	Rudrappa	Bailhangal	Bailhangal	Belgaum	Karnataka
351	Chandra shekhar	Kallayya	Bailhangal	Bailhangal	Belgaum	Karnataka
352	Fakeerappa	Erappa	Bailhangal	Bailhangal	Belgaum	Karnataka
353	Hanumawrappa marad	Ulavappa marad	Bailhangal	Bailhangal	Belgaum	Karnataka
354	Pachatappa	G.gadadavar	Bailhangal	Bailhangal	Belgaum	Karnataka
355	Rafiq Badiger	Mustaq Badiger	Bailhangal	Bailhangal	Belgaum	Karnataka
356	Rudrappa	Sanjeev	Inchal	Bailhangal	Belgaum	Karnataka
357	Basavantappa	Dyamappa meti	Bailhangaum	Bailhangaum	Belgaum	Karnataka
358	Ashok Itagi	Erappa	Inchl	Bailhangal	Belgaum	Karnataka
359	Ramappa Huded	Basappa	Inchal	Bailhangal	Belgaum	Karnataka
360	Gurupad Hiramath	Channabasayya	Bailhangal	Bailhangal	Belgaum	Karnataka
361	Valavappa	Siddappa meti	Bailhangal	Bailhangal	Belgaum	Karnataka
362	Munir Attar	Allasaab Attar	Bailhangal	Bailhangal	Belgaum	Karnataka
363	Wasim Akram	Muktham sahaab	Bailhangal	Bailhangal	Belgaum	Karnataka
364	D.R.Wavale	R.wavale	Bailhangal	Bailhangal	Belgaum	Karnataka
365	Mahantesh	Gangadhar	Bailhangal	Bailhangal	Belgaum	Karnataka
366	Somashekhar	Shankarayya	Bailhangal	Bailhangal	Belgaum	Karnataka
367	SB.cheelad	B.cheelad	Bailhangal	Bailhangal	Belgaum	Karnataka
368	Basavraj tadasad	Channappa	Ankalagi	Khanapur	Belgaum	Karnataka
369	Shankar Patil	Mahangowda	Ankalagi	Khanapur	Belgaum	Karnataka
370	Bhairapp Kanbaragi	Bal krishan kanbaragi	Dasarwadi	Belgaum	Belgaum	Karnataka
371	Raju	Pradhm ji	khanapur	Hukkeri	Belgaum	Karnataka
372	Shivanand kanadr	Vasanta Kanadr	Nilaji	Raibag	Belgaum	Karnataka
373	Basappa H.K.	Shettepa	Dasarwadi	Belgaum	Belgaum	Karnataka
374	Laxman N.managerkar	Nagoji managerkar	Bennli	Belgaum	Belgaum	Karnataka

375	Piraji Anandji	Yallappa Anandji	Bennali	Belgaum	Belgaum	Karnataka
376	Chandra kant	Hanzamat	Bennli	Belgaum	Belgaum	Karnataka
377	Kadppagonda	Hanamanthgouda	Khanapur	Hukkeri	Belgaum	Karnataka
378	Suresh	Sahnkar	Khanapur	Hukkeri	Belgaum	Karnataka
379	Prakash	Annappa	Khanapur	Hukkeri	Belgaum	Karnataka
380	Shivanand Hatti	Styappa	Khanapur	Hukkeri	Belgaum	Karnataka
381	Raju pasanathi	Sattyappa	Ullagaddi khanapur	Hukkeri	Belgaum	Karnataka
382	Bharmappa	Rayappa	Khanapur	Hukkeri	Belgaum	Karnataka
383	Shri shail B. jarahi	Basavantappa	Khanapur	Hukkeri	Belgaum	Karnataka
384	Duradundi Rudragoudar	Rayappa	Khanapur	Hurreki	Belgaum	Karnataka
385	Shanfinufh s. Auute	sidduppa babu Auute	Khanapur	Hukkeri	Belgaum	Karnataka
386	Janglisaab Kullar	Makbul saahab kullar	Guggaragatti	Belgaum	Belgaum	Karnataka
387	Yellappa mallappa Jolad	Yellappa Jolad	Dasarwadi	Belgaum	Belgaum	Karnataka
388	Muttapaa Y.Hulinar	Yallappa.hulinar	dasarwadi	Belgaum	Belgaum	Karnataka
389	Yellappa Jallannavar	Durgappa	Bennali	Belgaum	Belgaum	Karnataka
390	Mahaveer Duge	Adhinaath	Khanapur	Hukkeri	Belgaum	Karnataka
391	Appanana	Irappa Naik	Ullagaddi Khanapur	Hukkeri	Belgaum	Karnataka
392	Ravi M. Dasanatti	Marote	U.Khanapur	Hukkeri	Belgaum	Karnataka
393	Riamesh B. ohupadoll	B.ohupadoll	Ginaral	Hukkeri	Belgaum	Karnataka
394	Raju A.Konnuri	Allappa Konnuri	U.Khanapur	Hukkeri	Belgaum	Karnataka
395	Lokesh I. Jarali	Irappa	U.Khanapur	Hukkeri	Belgaum	Karnataka
396	Shzuafina Nayik	Ballappa	U. khnapur	Hukkeri	Belgaum	Karnataka
397	Annappa Rudragoudar	R.Rudragoudar	Khanapur	Hukkeri	Belgaum	Karnataka

NATIONAL INSTITUTE OF AGRICULTURAL MARKETING, JAIPUR

QUESTIONNAIRE FOR FARMER

(A) General Information:

1. Name of the farmer :
2. Telephone/ Mobile No.
3. Father's Name :
4. Age (years) :
5. Village :
6. Tehsil :
7. District :
8. Occupation (Main) :
9. Subsidiary Occupation :

10. Annual Income (Optional) :

11. Education :

12. Total holding:

< 1 acre	1-5 acres	5-10 acres	>10 acres

13. Cropping pattern:

Season	Crop
Kharif	
Rabi	
Summer	

(B) Awareness about Agricultural marketing:

(I) Awareness about APMCs

14. Do you know about APMCs (Agricultural Produce Marketing Committee)?

Yes No

15. Awareness about APMC Act?

Yes No

16. What for these regulations were brought in? **(Tick)**

- a. To arrange for Sale of Commodity
- b. Correct weightment
- c. Immediate payments of sale proceed.
- d. Scientific price discovery
- e. To prevent unauthorized deduction
- f. To provide market infrastructure
- g. To provide backward and forward linkage.

17. What are the services provided by APMCs **(Tick)**

- a. To arrange for Sale of Commodity
- b. Civic amenities

- c. Farmer's rest house
- d. Drinking Water Facilities
- e. Parking Facilities
- f. Loading and Unloading
- g. Weighment
- h. Grading
- i. Others (Specify)

(II) Awareness about Grading and Standardisation

18. Do you carry out on farm grading?

Yes No

19. If yes, what are the criteria's? **(Tick)**

- a. Size b. Shape c. Colour d. Maturity e. Any other

Name of Commodity	Criteria for grading

20. Do you get benefit of Grading?

Yes No

If Yes, how?

(III) Awareness about packaging

21. Do you go for packaging of Produce?

Yes No

If yes,

Produce	Mode of packing

IV) Awareness about transportation:

22. Transportation of Produce?

Produce	Mode of transport

(V) Awareness about storage :

23. Do you store the produce?

Yes No

If yes,

Produce	Where Stored	How long	Storage Charge	Pre storage Price	Post price Storage

24. What are the reasons for storage of Produce? **(Tick)**

- a. for better price
- b. off season sale
- c. for own consumption
- d. Others (specify)

25. Do you get better price after storage?

Yes No

26. If yes, how much benefit received?

.....
.....

(VI) Awareness about Post Harvest Losses :

27. According to you maximum post harvest losses occurs at: **(Tick)**

- a. Grading
- b. During Transportation
- c. During Storage
- d. At mandi level
- e. Others (Specify)

(VII) Awareness about Alternate Marketing Channels :

28. Please complete the table below indicating **where you market your produce**,

S.N.	Place of Marketing	(Tick)
1.	Local Mandi	
2.	Contract Company	
3.	Farmers Market	
4.	Own Shop	
5.	Company / NGO / Govt.	
7.	Exporter/Processor	
8.	Cooperatives	
9	Own processing business	
10.	Direct to trader	
11.	Direct to shop	
12.	others	

29. Sale of farm produce:

SI. No.	Commodity	To whom sold	Method of sale	Qty sold	Price per unit	Total volume

30. Do you know about **Alternate Marketing Channels? (Tick)**

Alternative Marketing methods	Advantageous	Disadvantageous
Contract Farming		
Group Marketing		
Cooperetive Marketing		
Spot Marketing		
Futures Markets		
Pre Harvest Contractor		
Traders/ Dealers		
Retail Chains		
Any other		

31. Did you sell your crop last year, satisfactorily?

Yes No

32. If no, please specify what are the factors responsible?

33. Marketing Charge paid by farmer

Produce	Market fee	Commission Charge	Cleaning Grading	Unauthorized deductions	Weighment charges	Total

34. Any other cost incurred in selling.

(VIII) Awareness about Government's Schemes :

35. Do you know any scheme of govt to give benefit to the farmer :

Name of the scheme	Benefit
-	
-	
-	
-	

(IX) Awareness about Agricultural Marketing Reforms :

36. Are you aware about Agricultural Marketing Reforms?

Yes No

(C) Training Need Assessment:

37. Problems / constraints encountered in Marketing of Produce

- a.
- b.
- c.
- d.

38. Suggestions for improvement in Marketing System

- a.
- b.
- c.
- d.

39. Do you feel training is required in any of the following Area? **(Tick)**

Topics	Yes	No
a. Post Harvest Management		
b. Information Technology Application in Agricultural Marketing		
c. Future and Forward Markets and Commodity Exchanges		
d. Food Safety, Quality		
e. Legal Reforms		
f. Marketing of Organic and Medicinal and Aromatics Plants		

g. Contract farming		
h. Coop Marketing		
i. Grading, Standardization & Certification		
j. WTO: Globalization and its impact on Agriculture		
k. Warehousing and Storage		

(Signature of Surveyor)