

Competitive Assessment of Onion Markets in India (2012)

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1. Background and Methodology

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- ▶ A. Background
 - ▶ Price variation/volatility (variability and uncertainty) in Agriculture Commodities
 - ▶ Study of onion markets in Maharashtra and Karnataka
- ▶ B. Objectives and Scope
 - ▶ Analyse trends in area, production and productivity of onion
 - ▶ Analyse market structure
 - ▶ Analysis on price of onions
 - ▶ To provide policy recommendation
- ▶ C. Methodology
- ▶ D. Limitations of the Study

1. Background and Methodology

Table 1.1: Number of Farmers/Market Functionaries/Consumers Interviewed

Place	APMC	Farmers	Commission Agents (CA) and Wholesalers (WS)			Retailers	Consumers
			CA	WS	Total		
I. Maharashtra							
1) Ahmednagar	1	25	17	3	20	10	10
2) Sangamner	1	25	4	6	10	10	10
3) Yeola	1	25	4	6	10	10	10
4) Lasalgaon /Pimplgoan	1	25	9	11	20	10	10
5) Mumbai (Washi)	1	15	18	2	20	10	10
6) Pune	1	15	15	5	20	10	10
<i>Sub-Total</i>	<i>6</i>	<i>130</i>	<i>67</i>	<i>33</i>	<i>100</i>	<i>60</i>	<i>60</i>
II. Karnataka							
1) Davangere	1	25	10	10	20	10	10
2) Gadag	1	25	10	10	20	10	10
3) Hubli	1	25	10	10	20	10	10
4) Bangalore	1	25	10	10	20	10	10
5) Belgaum	1	25	10	10	20	10	10
<i>Sub-Total</i>	<i>5</i>	<i>125</i>	<i>50</i>	<i>50</i>	<i>100</i>	<i>50</i>	<i>50</i>
III. Grand Total (I+II)	11	255	110	110	200	110	110

2. Overview of Onion Industry in India

- ▶ India is the second largest producer of onion in the world next to China
- ▶ India contributes nearly 19.25 percent of world onion production
- ▶ The Republic of Korea has the highest onion productivity of 63.84 tonnes/ha, whereas the yield of onion in India (14.21 tonnes/ha)
- ▶ In India, Maharashtra is the leading producer of onion in the country with the contribution of 32.6% followed by Karnataka (17.6%)
- ▶ India is the one of the largest exporter of onion among the world and it is primarily regulated by NAFED (National Agricultural Cooperative Marketing Federation)
- ▶ In case of Domestic market, whenever there is glut, NAFED intervenes, it analyses the total production in India, prices at various major markets and tries to regularise it.
- ▶ In case of External trade, NAFED is responsible of fixing Minimum Export Price (MEP) (which is done on 15 days to monthly basis)
- ▶ NAFED has also set up cold storages in many states of India.

2. Overview of Onion Industry in India

- ▶ The data shows that in most of the markets, some of the months with highest onion arrivals also have the highest prices of onion. This indicates presence of exploitative elements in the markets hindering the competition. For e.g.

Market		Highest
Delhi	Arrivals	Nov., Dec., March & June
	Prices	Oct., Nov., Dec. & Jan

- ▶ This is mainly observed in the metropolitan city
- ▶ It can be noticed that large wholesalers/traders mainly operates in metropolitan city markets and large number of farmers dispose their bulk of produce in nearby markets because of absence of storage facility, immediate cash need for loans, family expenses, purchase of inputs of next season, etc.
- ▶ Lean season phenomena(festival season)

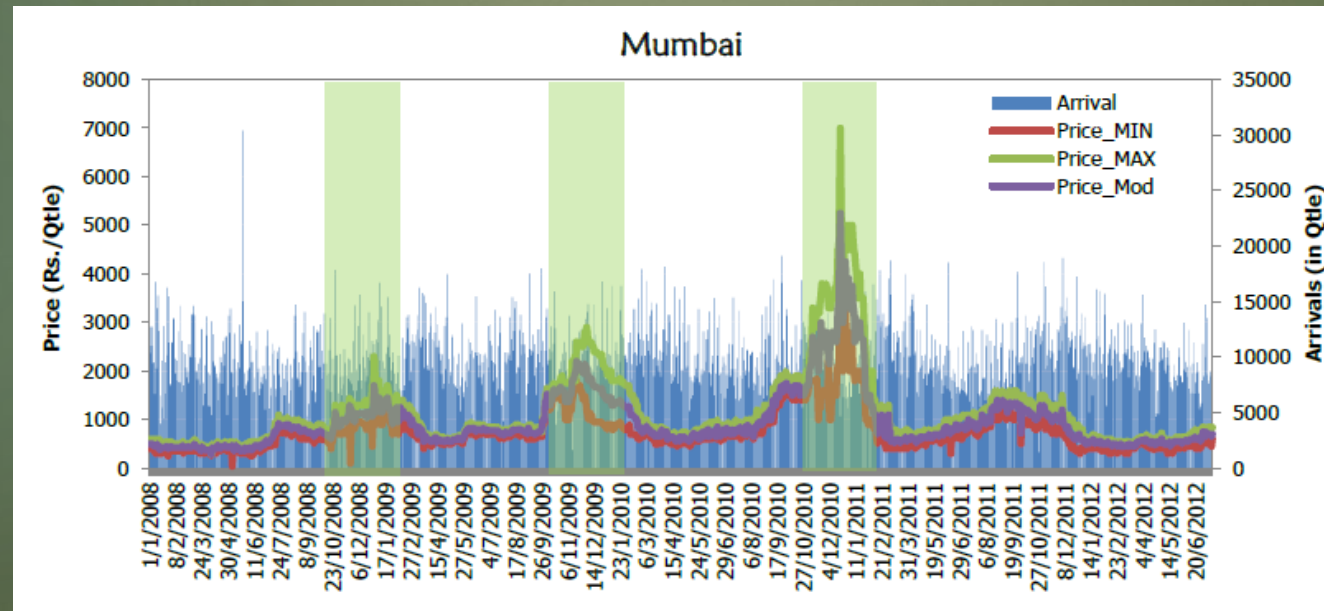
2. Overview of Onion Industry in India

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- Some data analysis results:
- The wholesale prices of the onion are more volatile than the retail prices in all major markets.

Table 2.9: Coefficients of Variations of Onion Prices in Major Markets in India

Cities	Wholesale Prices					Retail Prices				
	2008	2009	2010	2011	All	2008	2009	2010	2011	All
Mumbai	21.09	48.60	62.46	58.51	53.90	NA	14.10	55.86	47.87	48.69

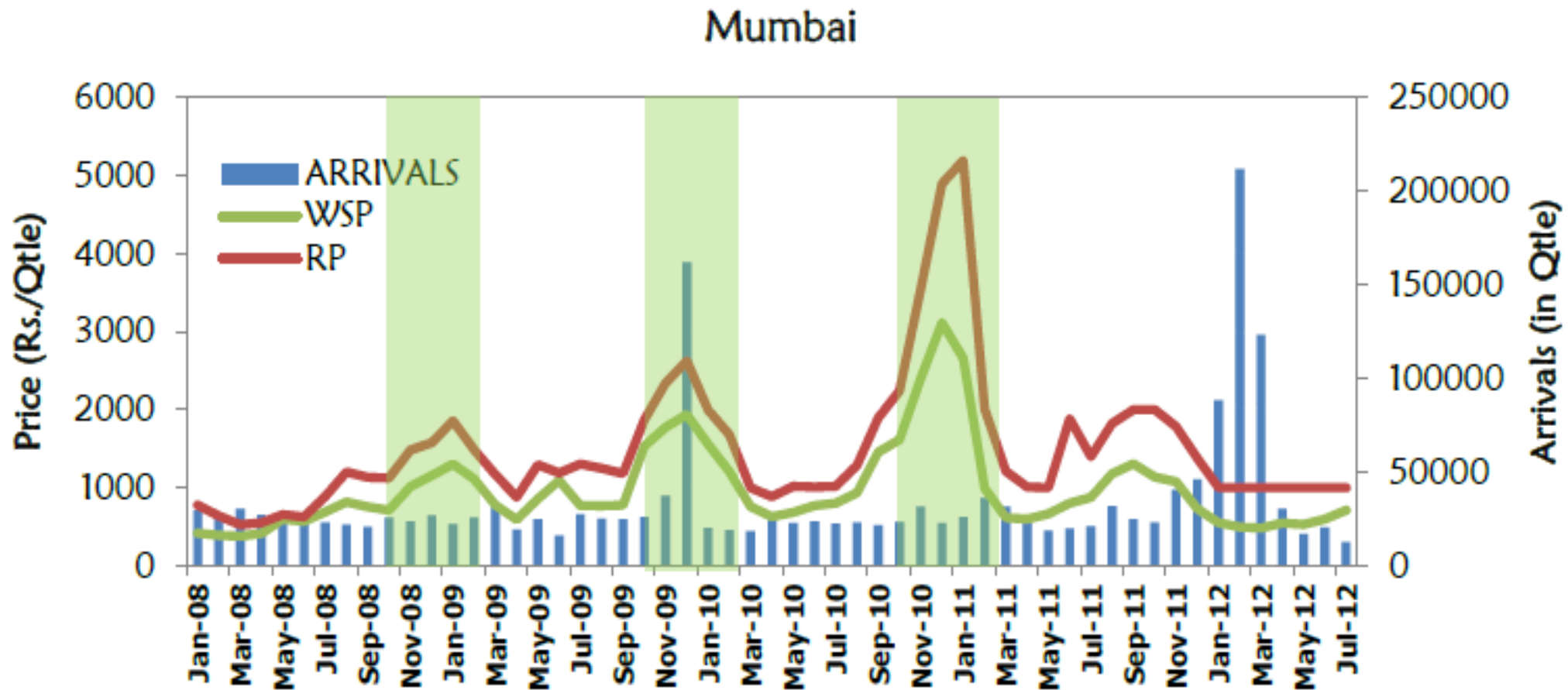


2. Overview of Onion Industry in India – December 2010 case

- ▶ On December 23 of 2010 in The Times of India published in an article that on Tuesday alone, wholesale traders in Delhi bought onion at about Rs.34 per kg while it was sold in retail at Rs. 80 per kg, the margin of Rs. 46 per kg or 135 per cent.
- ▶ In the weeks of November and December, wholesale price remains high, so retailers do not get much profit, but even after that when wholesale price go down, retailers particularly in metro cities, show strong rigidity in holding price and earn margin from 60 to 110%.
- ▶ This clearly shows that along with traders, retailers also exploit the situation of crisis for their own benefits.
- ▶ If we take this forward, then government policies also had a great role in the December 2010 high price episode (export of 1.33 lakh tones onion in October 2010)

2. Overview of Onion Industry in India

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3. Market Structure of Onion

- ▶ Introduction of APMC (Agricultural Produce Marketing Committee) in 1950s and 1960s
- ▶ It offered open auctions, reliable weighing, standardised market charges, payment of cash to farmers without undue deductions, dispute settlement mechanism and reduction in physical losses of produce, etc.
- ▶ Despite this, it had several limitations/advantages:
 - ▶ Inefficiency in market functioning due to collusion/formation of cartels among traders
 - ▶ In some regulated markets, there was no elected Market Committee, nor a market yard of the Committee where produce could arrive and auctions take place. Hence sales often took place in the shop of the commission agent without any supervision
 - ▶ The market fee collected by the APMC was barely used for development of the market and provision of modern facilities
 - ▶ Also, there were no proper facilities for the farmer to wait till his produce was finally sold

3. Market Structure of Onion

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- ▶ To address these bottlenecks, Government of India did introduce reforms in marketing sector like APMC Model Act 2003
- ▶ Changes like future markets, direct marketing, private markets and contract farming were brought into the picture, but its effectiveness in improving the efficiency of the marketing system

3. Market Structure of Onion

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- ▶ Summary of Market Structure:
 - ▶ Small Holding Farmers
 - ▶ Marketing produce as per grade necessity (different region different requirement)
 - ▶ Local markets act as a reference market to small growers
 - ▶ Concentration of large storage capacities with traders
 - ▶ Vertical Integration of various market functions by onion traders(one name, many roles)
 - ▶ Existence of established traders and barrier to new entry
 - ▶ Less number of Active traders during slack season

3. Market Structure of Onion

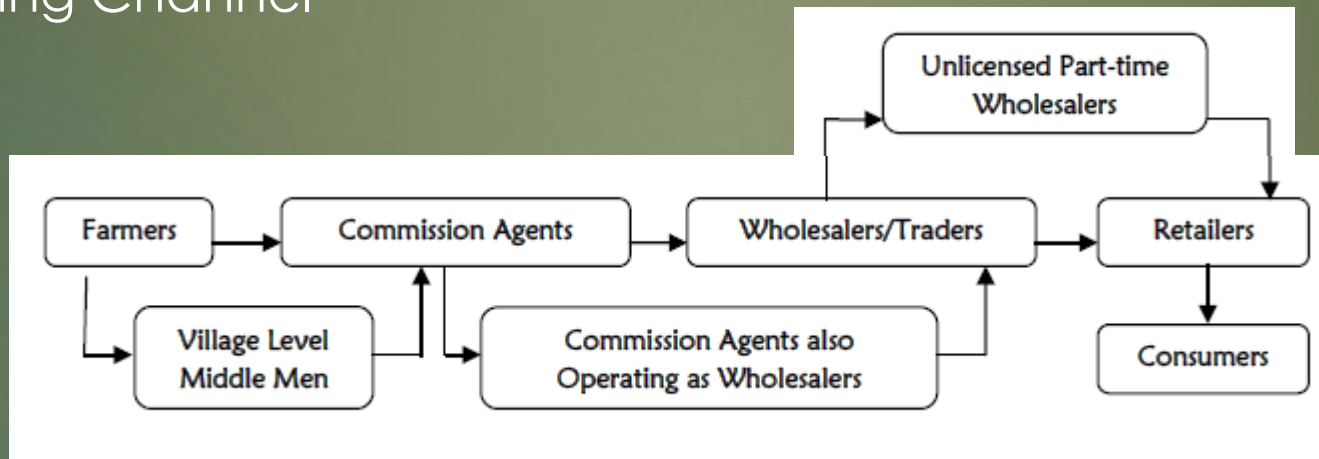
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- ▶ Market Infrastructure in Karnataka
 - ▶ Procedure of Auctioning of Agriculture Commodity
 - ▶ Market Regulations (Same as APMC stated)
 - ▶ Market Infrastructure imperfections like inter-locking of credit and commodity markets, inefficiency in grading and packaging, creating conditions that the farmer cannot go back from the market yard without selling the product
- ▶ Market Infrastructure in Maharashtra
 - ▶ Farmers can sell their produce directly to consumers
 - ▶ In this, farmers can deal with any licensed person, partnership firm, co-operative society, NGO, etc
 - ▶ Contract Farming
 - ▶ Rural godowns, and onion storage structures are being constructed
 - ▶ Computerisation of APMCs
 - ▶ Maharashtra is one of the progressive and industrial states in the country. But in terms of relative infrastructural facilities, the state is far behind Punjab, Haryana, Tamil Nadu, Kerala and Uttar Pradesh

4. Conduct for competition analysis

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- ▶ Usually there is 6% commission have to be paid by farmers. In Maharashtra there is 1% Market fee, but in Karnataka it is 6%, which also includes commission
- ▶ Marketing Channel



- ▶ Farmers own 2.41~3.09 Acres Land
- ▶ Usually, wholesalers have more experience than commission agents

4A. Analysis of market intermediaries – Farmers

- ▶ Average Season-wise Area under Onion in 2010-11

State	Kharif	Rabi	Summer	Total
Maharashtra	0.72	0.42	0.01	1.15
Karnataka	1.3	0	0	1.3

- ▶ Factors Governing the Decision of Cultivating Onion
 - ▶ Maharashtra indicated that weather suitability, short duration of crop and onion being as a cash crop were main factors, for Karnataka it was last year price.
 - ▶ If farmers decide to grow onion based on last years' price, then higher prices certainly force them to grow the crop, causing bumper crop production and a cycle of lower cultivation/production and higher prices and vice-versa in the subsequent years.

4A. Analysis of market intermediaries – Farmers

- ▶ Cost of Production of Onion
 - ▶ The average operational cost of onion production in Maharashtra (Rs 28,876 per acre) was almost 94 per cent higher than that of Karnataka (Rs. 14,875 per acre). (Reason – Unseasonal rain)
- ▶ Cost of Marketing
 - ▶ Farmers in Maharashtra sold their entire produce in APMCs. In Karnataka, some farmers, however, sold their produce in nearby villages.
 - ▶ On an average, bagging and loading cost farmers Rs 7.2 per quintal in APMC in Maharashtra and Rs 5 per quintal in village sale in Karnataka.
 - ▶ The average marketing cost incurred by farmers in Karnataka (Rs.85.6/qtle) is lower than that of Maharashtra (Rs. 102.2/qtle)

4A. Analysis of market intermediaries – Farmers

- ▶ Method of Sale of Onion by Sample Farmers
 - ▶ Apart from Pune and Vashi (method of sale – negotiation- secret bidding), in both the states, method of sale was open auction.
- ▶ Reasons for Preferring Sale in APMC and Source of Price Information
 - ▶ quick disposal, cash payment, proximity to the markets and transportation facility (, relatively better price for Karnataka)
 - ▶ However, this need careful interpretation as most of the sample farmers in the state had no other option/substitute and prices prevailing in APMCs may have been misunderstood as a better price
 - ▶ Karnataka many farmers (65.6 per cent) had personal relations with commission agents and trades. This ensured the farmers timely advance credit, but also created a space for their exploitation
 - ▶ In both the states, farmers did not receive price, which they were expecting

4A. Analysis of market intermediaries – Farmers

- ▶ Other Issues
 - ▶ 65.6 percent of the sample farmers in Karnataka were victims of interlocked market
 - ▶ Secret bidding (Ahmednagar)
 - ▶ A few farmers in Maharashtra (12.31 per cent) and Karnataka (17.6 per cent) aware of export option
 - ▶ Only 3.08 per cent sample farmers from Maharashtra and 11.2 per cent from Karnataka were aware of MSP
 - ▶ 54% farmers in Maharashtra and 72% in Karnataka felt that the government should purchase or help them in selling or exporting their onion

4A. Analysis of market intermediaries

– Commission Agents

- ▶ Average Monthly Transactions of the Commission Agent
 - ▶ Average (weighted) onion transaction is higher in the month of March in Maharashtra, whereas it is December in Karnataka. (difference in seasonal production pattern)
- ▶ Transaction Pattern during Very High and Low Prices of Onion
 - ▶ In Maharashtra and Karnataka commission agents purchased/transacted lower quantities when prices were very low and increased the purchase moderate to high when prices were very high.
- ▶ Source of Price Information
 - ▶ Varies from mandi to mandi, but almost 43.3 per cent commission agents in Maharashtra and 53 per cent in Karnataka had access to prices prevailing in various other markets
 - ▶ As argued earlier, in such a situation the possibility of collusiveness among commission agents and wholesalers and a few dominant traders acting as commission agents cannot be ignored.
- ▶ Perceptions and Suggestions for the Improvement of Infrastructure Facilities
 - ▶ Many were satisfied with market facilities and had no suggestions for government, but few asked government for allowing continuous exports

4A. Analysis of market intermediaries – Wholesalers

- ▶ Monthly Transaction Pattern and Transaction Price of Wholesalers
 - ▶ The average price of onion transacted by wholesaler was Rs. 1129 per quintal in Maharashtra and Rs.1083 per quintal in Karnataka.
 - ▶ These commission agents/wholesalers also indicated that they store onion. However, when an attempt was made to find out the quantity store by them, they were very reluctant to disclose the information.
- ▶ Transaction Pattern during Very High and Low Prices of Onion
 - ▶ About 30 per cent of wholesalers in Maharashtra and 60 per cent in Karnataka reported that they adjusted their purchase and sale pattern in times of very high or low prices
- ▶ Source of Price Information and Determinants of Purchase Price
 - ▶ Almost all the wholesalers in Maharashtra and Karnataka get the information on the prices of the onion from contacting commission agents and wholesalers operating in various markets.
- ▶ Wastage of Onion in Transaction
 - ▶ 5% in MH and 3% in Karnataka
- ▶ About Infrastructure facilities, almost all were happy and had no problem

4A. Analysis of market intermediaries – Retailers

- ▶ Type of Retail Establishment
 - ▶ Out of the 50 retail establishments selected, it was observed that 91.7 per cent of them were wet (local fresh fruits & vegetable) markets, while 6.7 per cent were Kirana shops.
- ▶ Purchase Pattern of Retailers
 - ▶ Annually 223.2 quintals in Maharashtra and 91.73 quintals in Karnataka
- ▶ Net Margin Earned by Retailer
 - ▶ Karnataka (Rs. 524 per quintal) earned more on the transactions of onion than the retailer of onion in Maharashtra (Rs.408 per quintal).
- ▶ Wastage of Onion
 - ▶ 4 per cent of onion purchased by retailers was wasted in Maharashtra and 12.41 per cent in Karnataka

4A. Analysis of market intermediaries – Consumers

- ▶ Details on Consumers' Choice of Place, Frequency of Purchase and Others
 - ▶ 78.3 per cent of respondents preferred wet market as their first choice
 - ▶ consumers in Maharashtra (91.7 per cent) purchased onion once in two weeks and in Karnataka (76 per cent) once a week
- ▶ Some of the consumers suggested that to improve the supply chain of onion, government should bring the policies to reduce the number of intermediaries and at the same time provision could be made for direct sale by farmers to consumers

4B. Relationship between farmer-commission agents and traders/wholesalers at selected markets in Maharashtra

- ▶ In some markets, commission agent had good relations with farmers and in some with the wholesalers.
- ▶ Commission agents pay immediately to farmers after charging 6% commission. But they allowed wholesaler to pay after sale in a month or two.
- ▶ If wholesalers wished to pay within fifteen days, they passed on 2 per cent of their commission to wholesalers
- ▶ This indicates commission agents in the markets are quite interested to keep strong relations with wholesalers

4C. Trader's view on market imperfections leading to problems of plenty as well as scarcity of onion

- ▶ Connectivity Problem
- ▶ Less wagons are allocated than required
- ▶ Other mode of transportation like by road doubles the transport cost
- ▶ Nashik-Guwahati case
- ▶ Export ban issue
- ▶ Arbitrary way of fixing MEP
- ▶ Improvement on post harvest technology (like cold storages, etc)
- ▶ During our the field visits in Hubli and Belgaum APMCs, two types of collusions, namely price fixing and bid rigging came to our notice (connection with Goa and Andhra Pradesh)

5. Conclusion – Policy Recommendations

- ▶ Entry of new commission agents, strict regulation on the multiple roles
- ▶ Stringent measures for those who indulge in intentional hoarding
- ▶ No secret bidding
- ▶ involvement of APMC officials in the auctioning process should be mandatory
- ▶ Charges collected from the APMCs should be effectively used for providing better infrastructure
- ▶ Better system for forecasting total production considering economic and meteorological events
- ▶ Promoting direct sales of farmers produce to wholesaler and more particularly linking small farmers produce to retail chains
- ▶ Necessary changes should be made in the APMC Act in line with the Competition Act of 2002 to bring healthy competition