

Haryana Kisan Ayog Government of Haryana





Working Group Report on Linking Farmers to Market in Haryana

2014



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The Working Group

CHAIRMAN

Dr. Ramesh Chand

Director NCAP, New Delhi

MEMBERS

Dr. P. S. Birthal

Principal Scientist NCAP, New Delhi

Dr. S. S. Sangwan

Prof. SBI Chair, CRRID, Chandigarh Former General Manager (NABARD)

Dr. B.S. Duggal

Managing Director HSSDC, Panchkula

Dr. J. S. Rana

Marketing Manager KRIBHCO, Haryana

NODAL OFFICER

Dr. K. N. Rai

Former Professor & Head Dept. of Agric. Economics, CCS HAU, Hisar Presently Consultant, Haryana Kisan Ayog





Foreword

The production and demand for agri-foods are witnessing rapid transformation. Also, increased emphasis is currently being laid on processing, value addition, storage, marketing and retailing in the country. As income increases, consumers are becoming more conscious in terms of quality and safety of food. Affluent consumers are also demanding convenience food products and ready to eat items along with assurance of their product safety. It is being increasingly realized that processing and value addition would hold the key for the second Green Revolution.

In spite of the ever increasing importance of marketing in increasing farmer's income, most of the development initiatives are loaded with programs and policies for increased production and very little emphasis is placed on marketing. Major part of the agricultural produce in the State is moving through traditional marketing channels overcrowded with middlemen. Way back in 2002, Company Act was modified paving the way for formation of producers companies, but till today producers companies are about non-existant. Contract farming, another new model linking farmers to market, has little penetration at ground level. Similar is the situation with modern retail chain stores. The major problem being faced by the retail chains is the aggregation of the products produced by small and marginal farmers. Now, need of the time is for increased emphasis on marketing to overcome these hurdles.

The concept of linking farmers to markets (LFM) requires the development of long-term business relationships rather than support only for sales from time to time. To start with, the agricultural extension agencies in the State can help in linking farmers to perspective buyers and arranging meetings with the farmers. Small traders can also search out new suppliers or can advise the existing suppliers to develop new improved products. Also, the broad approach should be to identify markets for specific products and organize farmers to form self-help groups or form Producers Company to take the advantage of scale economy and minimize to the extent possible a long chain of middlemen. Contract farming can also help in ensuring better and stable prices, beside the benefit of foreign expertise in marketing. The potential advantages of LFM are numerous. This report is an exhaustive study dealing with all aspects of linking farmers to market and will go a long way in improving agricultural marketing efficiency, benefiting farmers in the State.

Dr. Ramesh Chand, Chairman, Dr. P.S.Birthal, Dr. S.S.Sangwan, Dr. B.S.Duggal, Dr. J.S.Rana members of the Working Group and Dr. K.N.Rai, Nodal Officer deserve all appreciation for their hard work and devotion in preparing the "Working Group Report on Linking Farmers to Market in Haryana". I congratulate them for their sincere efforts in this regard. I am confident that this report will turn a new leaf and provide 'Way Forward' to revolutionize agricultural marketing system in Haryana. It will also help in turning agricultural producer from price seekers to price setters.

I am sure that this publication being the outcome of thorough investigations and interface with stakeholders will be immensely useful to the organizations/institutions involved in agricultural marketing research and development. It will also be equally useful to the administrators, planners, policy makers, farmers, entrepreneurs and the other stakeholders having interest in agricultural marketing.

(R.S.Paroda)

Director NCAP, ICAR & Chairman

Working Group on Linking Farmers to Market in Haryana



Preface

A gricultural marketing has become one of the most important policy issues in the recent years. There are several reasons for this. Development of market institutions, regulation and infrastructure has not kept pace with the changes in other spheres of economic activities, technology and changing requirement of supply, demand and trade. As a result several deficiencies and weaknesses have crept into the marketing system and producers are not able to get full value for their produce and take advantage of emerging opportunities. On the other hand, consumers are not able to realize full value of their money. Marketing mechanisms that connect farmers to market and end users have become exploitative. It is seen that the benefit of higher prices at retail and wholesale level are slowly and only partly passed on to producers and lower prices at farm level are poorly reflected in wholesale and retail level. Whereas, a small drop in retail and wholesale prices are quickly and disproportionately passed on to producer farmers. These changes have created a sort of disconnect between farmers and market and these are depriving farmers from getting their due share from marketing system. Such a system provides poor incentive, and even discourages farmers, to raise and modernize production and also causing adverse effect on farm income and farm economy. Another serious consequence of poor marketing system is frequent and sometimes violent price fluctuations detrimental to producers, consumers and overall economic system.

Marketing being a state subject the major responsibility for improving marketing and linking farmers to market lies with the State Governments. Haryana Kisan Ayog needs to be congratulated for the initiative to set up a Working Group (WG) to prepare report on Linking Farmers to Market. The Working Group is highly grateful to Dr. R. S. Paroda, Chairman Haryana Kisan Ayog, for his interest and participation in deliberations and discussions with representatives of farmers, traders, industry and officials. The Group benefitted immensely from the formal and informal discussions with Dr. Paroda.

The WG thank Dr. R. S. Dalal, Member Secretary, Haryana Kisan Ayog for facilitating smooth functioning of the WG and for providing his own insights on issues related to agricultural marketing and needs of farmers. Dr. K. N. Rai of Haryana Kisan Ayog and Nodal Officer of the WG took lot of pains in arranging WG meetings and interactions with various stakeholders. We thank him and other officials of the Ayog for their wholehearted support to Working Group.

The Working Group thank the representatives of farmers, traders and industry, marketing officials for their valuable input and suggestions for linking farmers to market and for improving agricultural marketing system in the State. We hope Government of Haryana will find the report useful and consider its recommendations seriously for improving system of agricultural marketing in the state and to enable farmers to get better deal in the market.

(Ramesh Chand)





Acknowledgement

This report of working group on Linking Farmers to Market in Haryana is an outcome of series of meetings and fruitful discussion carried out with planners, policy makers, scientists, exporters, market functionaries, NGOs and selected farmers in the State. The working group consisting of Dr. Ramesh Chand, Chairman, Dr. P.S.Birthal, Dr. S.S.Sangwan, Dr. B.S.Duggal, Dr. J.S.Rana Members and Dr. K.N.Rai as Nodal Officer was constituted by the Chairman of Haryana Kisan Ayog. The Ayog is indebted with a deep sense of appreciation for the vision and leadership of its Chairman Padma Bhusan Dr. R.S.Paroda who selected eminent experts having expertise in the field of agricultural marketing along with good knowledge of the agricultural marketing system in Haryana. The Ayog express its sincere thanks to Dr. Ramesh Chand, Dr. P.S. Birthal, Dr. S.S.Sangwan, Dr. B.S.Duggal, Dr. J.S.Rana and Dr. K.N.Rai for completing this important task by identifying the complex issues and problems of agricultural marketing and suggesting appropriate solutions for better returns to farmers and making farming a more remunerative venture.

The Ayog feels highly indebted to Sh. Roshan Lal, IAS, Principal Secretary, Agriculture, Govt. of Haryana, Sh. Anand Mohan Sharan, IAS, Chief Administrator, Haryana State Agricultural Marketing Board (HSAMB), Dr. K.S. Khokhar, Vice-Chancellor, Deans, Directors and faculty of CCS HAU, Hisar, Sh. Brijendra Singh, IAS, DG, Agriculture, Dr. A.S.Saini, DG, Horticulture, and Dr. G.S. Jakhar, DG, Animal Husbandry & Dairying, Govt. of Haryana, Sh. S.K.Goel, General Manager (Agri. Business), Zonal Administrators, Marketing Enforcement Officers, Market Committees Secretaries, and other officers of Haryana State Agricultural Marketing Board for their active participation in the relevant meetings and fruitful discussion as well as valuable suggestions.

The Ayog is grateful to the President Rice Exporters Association, representatives from different agroprocessing industries, NGOs, farmers' entrepreneurs, traders and other market functionaries for their valuable suggestion during discussions held at different point of time.

The Ayog is also thankful to the farmers for their participation and valuable suggestions during the course of discussions in different meetings.

Finally, Ayog thanks its Consultant, Dr. R.B. Srivastava and Research Fellows, Dr. Gajender Singh and Dr. Sandeep Kumar, Account Officer, Mr. R.S.Mor and Computer Programmer, Ms. Meenakshi as well as other non-technical staff of the Ayog for their support and necessary help in the preparation of this important report on Linking Farmers to Market in Haryana.

(Dr. R. S. Dalal)

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Executive summary

A gricultural markets are not developing and moving forward enough to keep pace with the changes in production, demand, and commercialization of agricultural activities. As a result the gap between farm harvest prices and prices paid by end-users has been increasing. The evidence is accumulating that much of the benefit from rise in prices resulting from buoyancy in demand for agricultural commodities is pocketed by middlemen and very little is passed on to producer farmers. This disconnects or weak connect between consumer prices and farm harvest prices are also adversely affecting incentives for producers to adjust and raise production to meet future demand.

Scope for value addition in post-harvest stage is quite high and rising. However, farmers are not getting fair share from value addition in post-harvest stage of agriculture value chain. There is a need to equip or empower farmers to get adequate benefit from post harvest value addition, get better price realization for their produce and harness emerging opportunities by bringing necessary changes in the system of marketing.

The agricultural production portfolio in the state of Haryana is diversifying but slowly. Share of crop sector in agricultural output is declining and share of livestock is increasing. In crop sector area and production of basmati rice has increased substantially in the past two-decades. Share of area under horticulture in the state as per land use statistics is quite low though vegetable cultivation has spread in some pockets. The productivity differentials between horticultural and non-horticultural crops are quite large and indicate that bringing 5 per cent more area under horticulture can raise its contributions to 20 per cent of value of output and give a big boost to farmers' income. Haryana needs a strategy to accelerate the pace of diversification towards fruits, vegetables, fish and animal production. State's vicinity to Delhi is an opportunity for the diversification of agriculture.

In the last decade export of fruits as well as vegetables from India has increased by 20 per cent per year in \$ value. Haryana in particular enjoys export advantage in basmati rice, guar and selected vegetables. The State has also great potential for increasing production and export of poultry and inland fish. Trade liberalization between India and Pakistan will offer tremendous



scope and advantage to the state for export of several products through land route.

Haryana has wherewithal for production of high value agriculture and high potential for supplying agricultural products to overseas markets. The state has high quality germplasm of murrah buffaloes which are also in high demand in many countries. Road network, water quality and irrigation, proximity to New Delhi airport strongly favor production of high value export oriented products. Harnessing these opportunities and potential require a new vision to bring changes in production portfolios and develop value chain to integrate farm production with consumption.

The State has taken several measures to modernize marketing system, upgrade marketing infrastructure and put in place new institutional mechanisms to benefit producers and consumers. Some important initiatives are (1) setting up of ten Agri-Business & Information Centres (2) New Fruit and Vegetable Markets at each district headquarters in a phased manner with modern facilities (3) farmers markets at Karnal and Rohtak (4) Market on wheels initiative of HSAMB in order to overcome post harvest losses (5) Kisan call centre at Panchkula for guiding farmers in the field of agricultural marketing. (6) Cold storage cum pack house being set up at 11 stations (7) Agro Malls for inputs under one roof and space for sale of agricultural produce for primary producers.

The State holds large potential for growth of milk and dairy based industry. It enjoys the location advantage of its proximity to one of the largest consumer markets of national capital Delhi and the adjoining urban agglomerations. As such, the state offers attractive potential for the establishment of agro-based and food processing industry. This not only includes the manufacturing of value added products but also the associated service industry for provision of cold chain, storage, grading & sorting, segregation and packaging of the vegetable and fruit products for ultimate supply to the consumer market.

Marketing of agricultural produce especially foodgrains has not seen significant change during last four decades. Producers bring their produce to regulated markets managed by Agricultural Produce Market Committees (APMCs), which is sold through open auction. The ongoing practice involves several transactions and intermediaries for transfer of produce from seller to ultimate users. Each transaction and intermediary involves some cost, and some margin, generally, on small lots. This results in fragmented market channel and crowding of market operations with large number of firms (actors) trying to operate business on a small volume of output. Obviously, they seek large margin due to small volume of business to keep their business economically attractive.



It is often felt that there is a disconnect between prices received by the producers and prices paid by consumers for agricultural products and the price spread does not reflect the value addition. The main reasons for this are weak market infrastructure, and low competition in market. Agricultural markets are also not vertically integrated even though they are horizontally integrated in most cases.

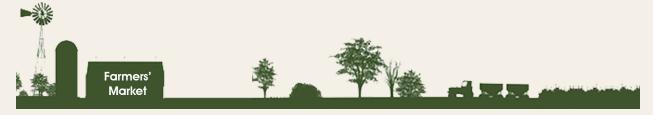
In the last two decades market arrivals of wheat have more than tripled and market arrivals of paddy, and fruits and vegetables have more than doubled. The increase in number of agricultural markets in the state during the last two decades has been less than one tenth of the increase in market arrivals of agricultural produce. Development of market infrastructure need to keep pace with growth in marketed surplus, urban settlement patterns, consumers' preferences and development in commerce and market technology.

The revenue collected from agricultural markets is not fully ploughed back into market development. As a result market infrastructure and market facilities have not kept pace with increased arrivals. Farmers who bring their produce to market have to take favors of Arhtiya for simple facilities and amenities which oblige farmers to sell their produce through particular middlemen. In some cases marketing is locked with credit. To meet their needs farmers often take credit from commission agent. This binds them to sell their produce on terms dictated by the financer commission agent. The concept of marketing finance has not picked up due to the absence of assured purchase at later stage. Mechanism of warehousing receipt has not percolated to ground level to equip farmers to benefit from intra year price variations. This forces producers to sell their produce immediately after harvest rather than deferring sale to lean period when prices invariably go higher than post harvest period.

Small holder farmers are in a particular disadvantageous position in terms of small size of marketable surplus. They often face high transport and marketing cost and lower net price realization. Thus collection of such produce like milk at or near farm gate, or through aggregators is a real challenge.

In a marketing system, market information is an important function which facilitates the marketing decisions and regulates the competitive market processes and mechanisms. Seasonal price variations and price volatility are getting large. Producers can't benefit from these variations in prices as they do not have reliable advance information on prices.

The APMC Act has served very important purpose of removing several malpractices and imperfections from agricultural markets and in bringing fairer deal to farmers in sale of produce. However, lot of changes have taken place during the last three and half decades which require



changes in APMC Act to improve marketing of agricultural products. It is felt that this Act prevented markets to enter into next stage of development. Though the Model Act has been adopted by state of Haryana it has not succeeded in bringing significant changes in the system of marketing. No private market has come in the state. Direct purchase from farmers and contract farming are not fully liberalised.

There is a misplaced feeling that participation by big players in agricultural marketing would subject the market to manipulation and aggravate the inflation. This may not be true if entry of big players in agricultural marketing increases competition and efficiency.

Inefficiencies and large price spread in the agricultural marketing necessitate development of alternative marketing models. The best marketing model for producers and consumers are where producers sell directly to consumers either as individuals or as some sort of organization like Apni Mandies. Such Innovative marketing should be promoted on large scale. A well-functioning supply chain can reduce the cost of marketing by linking farmers more closely to processing firms and consumers and guide the production to meet changing consumer preferences for quantity, quality, variety, and food safety.

A few experiments such as direct procurement backed with technical support extended by 'Safal', a division of the National Dairy Development Board have benefited the farmers immensely. Similarly, vertical integration of production under integrators who supply everything from inputs to technical support and pay the producer a predefined fixed price, have been very successful. These indicate that participation of cooperatives and private sector firms in marketing of agricultural produce under specific environment can help farmers.

The contract farming has become an important mechanism for better price realization by farmers and for arranging desired supply by trade and industry. Due to various impediments contract farming is not progressing. There should be an institutional arrangement to record all contractual arrangements, may be with the local market committee or panchayat or some Government machinery. This will promote and strengthen confidence building between the parties and also help solve any dispute, arising out of violation of contract. The contract farming should have a provision for both forward and backward linkages; unless both input supply and market for the produce are assured, small farmers will not be in a position to participate in contract farming. The contracts should be managed in a more transparent and participatory manner so that there is greater social consensus in handling contract violation from either side without the costly as well as lengthy process of litigation.

Despite several factors favoring organized retail trade, it is still in a nascent stage in the



country. Integration of farmers into the retail chain through contractual arrangements can fetch higher and assured prices to farmers and at the same time allow food retail chains to plan the quality and quantity of supply.

Farmers can benefit from selling their produce together through economies of scale in the use of transport and other services and by raising their bargaining power in sales transaction as the group action strengthens bargaining power of the farmers and marketing expenses get distributed resulting in better share in net returns. A well managed producers association is very useful in a competitive trade environment to protect the farmers from exploitative private trade practices.

In response to a long pending demand from farmers groups, Government of India amended the Indian Companies Act 1956, in 2002 for incorporating producer companies with the Registrar of Company (RoC). Such companies can go a long way in improving the well being of producers through group action in production, and post harvest activities and by promoting business of marketing, and trading. However, they will require some handholding in the initial stages.

Keeping in view the prevailing problems and needs in agricultural marketing, the Working Group makes the following recommendations to upgrade and improve marketing system and to link farmers to market:

- Most of the reforms needed in agricultural marketing are proposed in the model APMC Act prepared by the Ministry of Agriculture at Centre. The state must implement model Act in true spirit of competitiveness.
- Direct purchase and contract farming by big business and mega malls operating in Haryana may be encouraged for benefits of consumers and producers. State law and regulation should accommodate such possibilities.
- The recent initiative to reduce security deposit for firms entering into contract farming from 15 percent to 5 percent is a welcome step. The firms of national and international repute should be fully exempted from such deposits.
- Apprehensions of exploitation of farmers by corporate houses in a liberalized market are exaggeration. The state should facilitate private investments and check market inefficiency through competitive marketing environment. Legal impediments like stock limit etc should be removed as required for taking advantage of scale in market operations.
- Allow and promote integrator (assembler) in all agricultural commodities to collect small marketable surplus from producers and sell it on their behalf in mandis.



- Alternative models of marketing like producers organizations, producers companies should be promoted to impart bargaining power, to bypass middlemen and fetch better prices for farm produce. Such organizations will require hand holding and capacity development in the initial stages and credit support.
- Producers companies should be encouraged to harness latent demand for beneficial product attributes through certification trademark and brand names like "Taraori basmati" and other niche products. Facilities for the same should be provided.
- Agricultural diversification by integrating production with processing and retailing and export should be encouraged. This should be done by identifying area specific specializations and providing technical and logistic support in the identified pockets along with linkage of production with processing, retails, export etc.
- Rationalization of taxation structure on farm produce to check diversion of marketed surplus to neighboring states and to keep taxes at moderate level to attract agri-business to state markets should be done. Effort should be also made to avoid multiple taxations as in case of cotton and it's by products.
- The best marketing model for producers and consumers are where producers sell their produce directly to consumers either as individuals or as some sort of organization. Such models in the form of Apni Mandi or Kisan Bazar should be set up in all towns with reasonable population. It should be ensured that only genuine farmers are allowed to sell produce in such markets.
- Changing demand pattern of agricultural commodities both at consumer and industry level favour integrated supply chain rather than conventional marketing channels, assured market rather than open market and specific produce rather than generic one. Such supply chains also offer a tremendous scope to reduce middleman's margin. The state should create congenial and legal environment for supply chain development.
- About one tenth of facility and business space in Agro-Malls should be reserved for producers
 organizations like farmers cooperatives and farmers companies. This should include space in
 agro malls, market yards, shops for commission agents and other facilities. This will promote
 competition with private traders.
- Licenses and other requirement for agric business should be liberalized.
- Warehouse receipt offers opportunity for meeting credit need in post-harvest period and taking advantage of higher price in lean period. State should strengthen mechanism for taking





advantage of warehouse receipt system.

- State should modernize markets by improving physical infrastructure and modernizing market operations.
- The concept of Virtual markets is very effective for mapping targeted produce and targeted consumers. There is considerable scope for high value realization for produce from Haryana through virtual market development. Beside individual consumer, this type of arrangement can benefit from supply for various types of social functions. The state should encourage young entrepreneur in the state of Haryana to promote virtual markets in farm produce.
- Farmers should be educated about higher value realization for their produce through grading, cleaning, sorting, packaging quality production, and secondary agriculture. State should facilitate value addition through such activities. A part of revenue earned by Mandi Board should be used for training farmers in marketing and building their institutions like producer association or companies.
- Farmers are not able to take advantage of price hike due to price risk and lack of information services like price forecast and market opportunities. The state of Haryana should set up a Price Forecast and Market Research Cell in CCS Haryana Agricultural University to prepare price advisories and market intelligence for the farmers.
- The product diversification by HDDCF should be developed on the line of AMUL in Gujarat.
- The state of Haryana has started a couple of initiatives for linking farmers to consumers and for modernisation of agricultural marketing system. There is a need to ensure that these initiatives serve desired outcome. The efficacy of new initiatives needs to be monitored and successful experiences need to be documented and replicated.
- Vegetable production is picking up in the state. A modern state-of-the-art wholesale market for vegetables and fruits should be set up by the Agriculture Produce Market Committee (APMC) in Gurgaon. This should be equipped with all amenities like separate display racks for vegetables, fruits, flowers and herbs. Facilities like testing and certification laboratory, central electronic auction system, online spot commodity trading platform, ripening chamber and cold storage, agriculture training centre for farmers, banking facilities, mechanized material handling system etc., may be set up inside the market. Vegetable markets with facilities at par with Azadpur market of Delhi may be set up on the border of Delhi and Haryana near the National Highways.



- The State should encourage foreign direct investment (FDI) to bring more capital, technology and managerial skills of international standard in value chain development. It would be helpful in strengthening forward and backward linkages, creating a proper farm to fork infrastructure through direct purchase from farmers.
- Processing needs special attention through incentives, special packages, training in processing
 and production of processing specific quality produce, establishment of service centers and
 facilitate marketing of small scale agro-processing industries products. Emphasis should be
 laid on agro-processing complexes rather than single commodity approach.
- Integration of farmers into the retail chain through contractual arrangement can fetch higher and assured prices to farmers and at the same time allow food retail chains to plan the quality and quantity of supply. The other advantages are reduction in transportation and handling costs, absence of middlemen and assured market.
- In the absence of adequate covered sheds, farmers have to face a number of problems in the case of aberrant weather conditions. Hence construction of more covered sheds involving Commission agents may be considered to protect farmers produce in the market.
- Creation of assembly centres with grading and storage facilities in and around a cluster of villages need to be encouraged in public private partnership to decongest existing mandis.
- Development of roadside markets especially along the highways at appropriate distance/ places
 will be helpful to farmer in fetching better prices and provide easy access to consumers to fresh
 produce.



CHAPTER 1 INTRODUCTION

grifood demand and production are witnessing tremendous changes. Prices of agri-food commodities have shown steep increase at the wholesale and retail level in recent years. Agriculture has become highly commercial activity requiring reasonable price realization for producers to stay in production business. However, agricultural markets are not developing and moving forward keeping pace with the changes in production, demand, and commercialization of agricultural activities. As a result the gap between farm harvest prices and prices paid by end-users has been increasing. The evidence is accumulating that major portion of the benefits from rise in prices resulting from buoyancy in demand for agricultural commodities is pocketed by middlemen and very little is passed on to producer farmers. This is one of the reasons for slow growth or stagnation in farm income. This disconnect or weak connect between consumer prices and farm harvest prices is also adversely affecting incentives for producers towards raise in production to meet future demand. It is also observed that value addition in post-harvest stage is increasing over time at a much faster rate than value addition in production. Moreover, the farmers are not getting fair share from value addition in post-harvest stage of agriculture value chain. The broader issue here is how to equip or empower farmers so as they get adequate benefit from post harvest value addition, get better price realization for their produce and thus harness advantage of emerging opportunities.

In this background Haryana Kisan Ayog constituted a Working Group (WG) to prepare a report on Linking Farmers to Market. The Terms of Reference (TOR) of the Working group were:

- 1. To review the present status of marketing infrastructure facilities (collection centres including processing, grading and packaging systems, warehouses, cold chains, transportation etc.) in the state.
- 2. To identify the alternative forms of marketing such as direct marketing, markets run by farmers or their associations, contract farming, corporate entities, cooperatives etc. and suggest strategies / policies required to encourage their involvement.



- 3. To study the market information services, including Information and Communications Technology (ICT) its dissemination through media and suggest appropriate measures to make these more accessible, efficient and useful to the farmers and consumers alike.
- 4. To examine the level of professionalism in agricultural marketing system and recommend ways and means for skill up gradation and human resource development.
- 5. To review the current export status and future potential of agricultural commodities and suggest measures for enhancing the scope of export of agricultural commodities from the State.

The constitution of the Working Group was as under:

- 1. Dr. Ramesh Chand, Chairman, Director, NCAP, New Delhi
- 2. Dr. P.S. Birthal, Member, Principal Scientist, NCAP, New Delhi
- 3. Dr. B.S. Duggal, Member, Managing Director, Haryana State Seed Development Corporation, Panchkula.
- 4. Dr. S.S. Sangwan, Member, Professor SBI Chair & Former General Manager, National Bank for Agriculture and Rural development(NABARD)
- 5. Dr. J.S. Rana, Member, Marketing Manager, KRIBHCO, Haryana
- 6. Dr. K.N. Rai, Nodal Officer, Consultant, Haryana Kisan Ayog, Panchkula

APPROACH ADOPTED BY WORKING GROUP

The WG adopted three approaches to prepare its report. These include (i) desk study to collect information and literature relevant to farming and agricultural marketing in Haryana (ii) consultation with various stakeholders and (iii) discussions among members of the WG. The WG organized following meetings and discussion:

- July 19, 2012: Discussed outline of report, division of work, details of consultations and modalities, at NCAP, New Delhi.
- August 16, 2012: Meeting with the Chairman, Haryana Kisan Ayog, in the Committee Room of TAAS, New Delhi.
- August 27, 2012: Meeting with officials of State Government and officials involved with agricultural markets and marketing in Haryana, at Panchkula.
- October 19, 2012: Meeting with Haryana Kisan Ayog officials and experts in CCS Haryana Agricultural University Campus, Hisar.
- November 23, 2012: Meeting with Chairman Haryana Kisan Ayog and representative of



farmers, processing industries and export houses at Khandsa Mandi, Gurgaon.

- March 29, 2013: Visit to mandi and meeting with traders, commission agents and other market functionaries, Hisar.
- June 11, 2013: Meeting of Committee Members in the Committee Room of NCAP, New Delhi.
- **September 13, 2013:** Meeting of Nodal Officer with Chairman working Group for interim report held at NCAP, New Delhi.

STRUCTURE OF THE REPORT

The report is presented in six chapters including Introduction. Chapter 2 discusses agriculture and farming in Haryana, to provide a context for preparing report on agricultural markets. Chapter 3 provides details of existing Agricultural Marketing system, institutions and related aspects. Chapter 4 discusses challenges and problems in agricultural markets. Emerging models of marketing are discussed in Chapter 5. Way Forward and Recommendations suggesting ways & means for linking farmers to market are presented in Chapter 6.

The first Green Revolution has run its course. Cereal yields are rising very slowly, water tables are plunging, and agricultural growth is also low. India needs a second Green Revolution which takes rice and wheat cultivators beyond the grain production stage to agro-food processing and gives value addition and would also solve the issue of constraints in raw material procurement. This high end initiative requires commitment from all the stakeholders in the food value chain.

FICCI



CHAPTER 2 FARMING IN HARYANA

2.1 Structural Transformation

The economy of Haryana has undergone a gradual structural transformation in the past three decades. Share of agriculture in the state domestic product has declined from 43.7 per cent in 1980-81 to 15.9 per cent in 2010-11, and the share of manufacturing and services has grown rapidly (Table 1). Despite a significant decline in its income share, the sector engaged 63 per cent of the rural workforce and 45 per cent of the total workforce of the state in 2011. In fact, the share of workers in agriculture declined from 51 per to 45 per cent only during the last decade of 2001-2011. Transfer of labour from agriculture to non agriculture had been slow in the earlier decades but the last decade experienced large shift out of agriculture. Another important feature of the agricultural workforce in the state is its changing composition. Share of cultivators in the agricultural workforce declined from 70 per cent in 2001 to 62 per cent in 2011, while the share of agricultural labourers increased from 30 per cent to 38 per cent. This indicates rising wage bill in agricultural production.

Table 1: Changes in share of agriculture in output, employment and labour productivity in Haryana

Year	Percent share			ed(Income) per 2004-05 prices)	Ratio of per worker income in non-
	NSDP (at 2004-05 prices)	Work-force	Agriculture	Non-agriculture	agriculture and agriculture sectors
1981	43.7	54.5	40909	63142	1.54
1991	36.6	53.4	52828	104965	1.99
2001	27.4	51.3	40283	112310	2.79
2011	15.9	45.0	57754	257591	4.46

Source: NSDP: Central Statistics Office (CSO); Workforce: http://censusindia.gov.in/



The sluggishness in movement of labour from agriculture to non-agricultural sectors can be attributed to a low share of manufacturing in the state's economy and of its disappointing employment performance. The share of manufacturing sector in the state Gross Domestic Product (GDP) increased marginally from 15 per cent in 1981 to 20 per cent in 1991 and since then it has remained around 20 per cent.

The decade of 1980s was a golden period for Haryana agriculture during which the growth of agriculture was at its peak of 4.62 per cent per year (Table 2). As a consequence the labour productivity also improved considerably during this period, from about Rs 41 thousand to Rs 53 thousand per agricultural worker. Much of this can be attributed to the spread of Green Revolution. In the 1990s agricultural growth slumped to 2.21 per cent and the labour productivity fell to the level of 1981. Agricultural growth accelerated to 3.3 per cent during the 2000s, which together with a decline of 6.7 per cent in the absolute number of agricultural workers helped improve labour productivity to about Rs 58 thousand per agricultural worker. On the other hand, the non-agricultural sector grew at a faster and accelerated rate in the past three decades - 7.09 per cent during 1980s, 7.64 per cent during 1990s and 10.05 per cent during 2000s. As a consequence of high non-agricultural growth, comparatively low agricultural growth and continued high employment pressure on agriculture the gap in labour productivity between agricultural and non-agricultural sector continued to widen and their ratio stood at 4.46 in 2011.

Table 2: Percent annual growth in agriculture vis-à-vis non-agriculture in Haryana

Period	Agriculture	Non-agriculture	Overall
1980-1990	4.62	7.09	6.11
1990-2000	2.21	7.64	5.88
2000-2010	3.30	10.05	8.65

Source: Central Statistics Office

2.2 Agrarian Structure

Agrarian structure in Haryana has not undergone a significant change in the past two decades. Average size of landholding declined from 3.53 hectare (ha) in 1981 to 2.43 ha in 1991 and the decline has been less pronounced thereafter with average size of 2.32 ha in 2000-01 and 2.25 ha in 2010-11(Table 3). Small holdings (less than or equal to 2 ha) dominate the agrarian structure in the state. Their share in the total holdings increased to 67.6 per cent in 2011 from 51.4 per cent in 1981. However, in spite of the sub-division and fragmentation over years, it may be noted that in Haryana, average size of landholding is almost double the all India average (1.2 ha), and the





proportion of small holdings in the total holdings is lower than the national average of 85 percent.

There has been a significant improvement in the agricultural productivity as measured by net state domestic product (NSDP) or value added per hectare. Rapid gains occurred in the 1980s; the value added per hectare increased by 52 per cent between 1981 and 1991. In the subsequent decades, improvements in agricultural productivity continued but at a slow rate. It increased 26 per cent between 1991 and 2001, and 30 per cent between 2001 and 2011. The value added per farm increased by 5 per cent between 1981 and 1991 and 20-25 per cent in the following two decades. Slow increase in farm income in the 1980s is a consequence of proliferation of land holdings. The number of total holdings between 1981 and 1991 increased by 51 per cent, and afterwards their number remained almost stagnant.

Table 3: Changes in size of landholding and agricultural productivity in Haryana

Year	Size of holding (ha)	Small farms (%)	Value added (Rs/farm)	Value added (Rs/ha)
1980-81	3.53	51.4	90067	25581
1990-91	2.43	60.5	94135	38811
2000-01	2.32	65.3	113293	48758
2010-11	2.25	67.6	143186	63503

Source: Landholding: http://agcensus.dacnet.nic.in/; NSDP: Central Statistics Office (CSO)

2.3 Production Diversification

The agricultural production portfolio in the state is diversifying but slowly. Crops, with a share of about 63 per cent in the gross value of agricultural output, though remain the main constituent of the sector; have shown a declining trend in their share since the early 1990s (Table 4). On the other hand, share of livestock, which was almost constant until the early 1990s, increased afterwards reaching close to 31 per cent in 2010-11. Other allied activities such as aquaculture and forestry contribute 5 per cent to the gross value of the agricultural output.

These changes in the composition imply slow growth in crop sub-sector. Table 4 also compares decadal growth rates of different components of the agricultural sector. Growth in crop sector has been decelerating continuously; from 4.3 per cent in the 1980s to 3.2 per cent in the 1990s and further to 2.5 per cent in the 2000s. On the other hand, livestock sector has been growing consistently at a rate of 4 per cent or more. The value of output of livestock in the state is more than twice the value of paddy and 20 per cent more than the value of wheat. Milk is the main output of livestock in Haryana and in the past two decades its share in total value of livestock output has largely remained more than 80 per cent.



Table 4: Changes in the composition of the agricultural sector of Haryana

Per cent share in value of output						
Year	Crops	Livestock	Others	Total		
TE 1982-83	69.0	27.2	3.8	100		
TE 1992-93	68.8	26.5	4.8	100		
TE 2002-03	66.1	28.8	5.1	100		
TE 2010-11	63.3	31.1	5.6	100		
Per cent annual growth						
1980s	4.3	3.9	6.4	4.2		
1990s	3.2	4.0	4.5	3.5		
2000s	2.5	4.3	3.6	3.0		

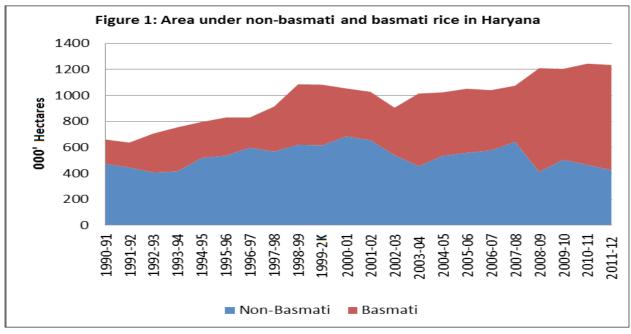
Source: Central Statistics Organisation (CSO)

The slowdown in growth rate of crop output, a dominant activity for farm household, in the wake of rising wage bill and cost of inputs is squeezing farm income. In the absence of technological breakthrough the farmers are increasingly looking at better market prospects and avenues for higher price realization for their produce as a source of improving their income.

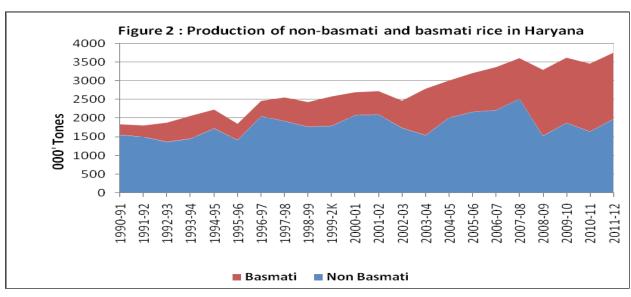
Cropping pattern in Haryana is dominated by wheat and paddy, sharing 38.6 per cent and 18.9 per cent of the gross cropped area in TE 2010-11; and 34 and 19.4 per cent shares in the value of output of the crop sector (Table 5). Paddy has gained considerable area share since 1980s, but appears to have stabilized in recent years. Two types of paddy are grown in Haryana: Basmati and non-Basmati. Driven by export demand and premium price in the domestic market the share of Basmati in the total area and production of paddy has increased substantially in the past two-decades i.e., from 34 per cent in TE 1992-93 to 62 per cent in TE 2011-12 (Figure 1). Its share in total paddy production in TE 2011-12 increased to 50 per cent from 20 per cent in TE 1992-93 (Figure 2).

Wheat area also expanded in the 1980s and 1990s. A consistent rise in area share of paddy and wheat is because these crops face little production and market risks. While their larger area under irrigation reduces production risks, and their assured off-take for public distribution system by the government insulates these crops against market risks. Coarse cereals have lost their area share significantly, from over one-fifth in TE 1982-83 to 12 per cent in TE 2010-11 mainly because of their lack of competitiveness due to low yield and prices. Likewise there has been a substantial decline in the area share of pulses, from over 15 per cent in TE 1982-83 to less than 3 per cent in TE 2010-11. Area under oilseeds and cotton improved initially and seems to have stabilized afterwards.





Source: Department of Agriculture, Haryana



Source: Department of Agriculture, Haryana



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Table 5. Changes	in the cro	nnning nafferr	i and composition	of output in Haryana
Table 3. Changes	in the cr	phine barrers	i ana composition	or output in maryana

	Per cent share in gross cropped area			Per c		ı value of oı 05 prices)	ıtput	
	TE 1982-83	TE 1992-93	TE 2002-03	TE 2010-11	TE 1982-83	TE 1992-93	TE 2002-03	TE 2010-11
Paddy	9.2	11.6	16.2	18.9	18.5	18.2	19.7	19.4
Wheat	29.8	32.4	37.5	38.6	28.3	32.4	36.3	34.0
Total cereals	60.4	57.9	65.5	69.2	51.6	53.8	58.9	56.5
Pulses	15.4	9.2	2.6	2.6	6.5	4.2	1.0	1.0
Oilseeds	4.4	10.6	8.8	8.1	2.8	8.5	6.8	7.1
Cotton	6.5	9.3	9.2	7.5	7.7	9.5	6.1	8.5
Fruits & vegetables	0.9	1.2	1.01	1.12	3.5	3.4	8.5	10.1

Source: Area: http://eands.dacnet.nic.in/StateData 96-12Year.htm;

http://eands.dacnet.nic.in/LUS_1999_2004.htm Value of output: Central Statistics Organisation (CSO).

It is pertinent to point out that share of area under horticulture in the state as per land use statistics is around 1 per cent and did not show any increase after 1992-93. As per the Horticulture Department area under horticulture in Haryana is about 5 per cent of gross cropped area. Fruits and vegetables contribute 10 per cent of crop output in value terms. The productivity differentials between horticultural and non-horticultural crops are quite large. Bringing 5 per cent more area under horticulture can raise its contributions to 20 per cent of value of output and give a big boost to farmers' income

Enabled by irrigation expansion, cropping intensity in Haryana has increased considerably from 150 per cent in the early 1990s to over 180 per cent in 2011-12 though the net cropped area has remained around 3.5 million hectares in the past two decades. The yield growth rates of the paddy and wheat has been decelerating and the ground-water has been over-exploited. These trends imply that there is little scope to accelerate growth of agriculture in the state through (i) area expansion, and (ii) shifting area under paddy and wheat. The alternative strategy could be to accelerate the pace of diversification towards fruits, vegetables, fish and animal production. State's vicinity to Delhi is an opportunity for the diversification of agriculture.

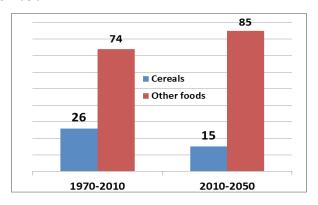
2.4 Adjusting Production Portfolios to Changes in Demand

According to long term food projections demand for cereals will increase at close to 1 per cent a



year whereas demand for high value products is projected to increase 2 to 3 times faster than the demand for cereals on account of rise in per capita income, fast growing urban population, change in lifestyles and increasing consumer concerns for nutritional security. As a result, the scope for expansion of cereal production will be much less compared to high value products (Fig 3). A comparison of the past 40 years with next (future) 40 years reveal that between 1970 and 2010 cereals accounted for 26 per cent of total increase in demand for food commodities. In next 40 years only 15 per cent of additional demand for food commodities has been projected to be met from cereals and the rest will be from non cereal food products. These projections indicate that in future demand prospects are quite high for non cereal food and low for cereal foods.

Fig 3. Share of cereals and other food commodities in incremental demand during 1970 to 2010 and 2010 to 2050



Source: NCAP, Vision 2050

Similarly, it is projected that one third of the increase in demand will be for quality attributes and there will be a preference for improved quality products like basmati rice in place of non basmati rice. These changes suggest that farmers in any state can benefit more from growth in non cereal food commodities than cereals. These changes in demand prospects require reorientation of crop production pattern.

Gradual shift in the food basket of Indian consumers away from staple cereals towards high-value food commodities, such as fruits, vegetables, milk, meat, eggs and fish is creating opportunities as well as challenges for the farmers, particularly small farmers. High-value food commodities have a strong potential for higher returns to land, labour and capital as well as for exports, and therefore are expected to benefit the farmers. Indian farmers have responded well to the demand signals. The share of high-value food commodities in the gross value of farm output has now increased to about



50 per cent as compared to one-third in the early 1980s. In fact, high value crops have turned out to be an engine of growth of agricultural sector in India in the recent decade driven by demand in domestic and overseas markets.

2.4.1 Agricultural Export

In the last decade export of fruits as well as vegetables from India has increased by 20 per cent per year in \$ value. All the states of the country have an opportunity to beneft from this growth. Haryana in particular enjoys export advantage in basmati rice, guar and selected vegetables. The State enjoys 1st position in the country in basmati production and second position in guar production, both of which have high export demand. The State has also a great potential for increasing production and export of poultry and inland fsh. Trade liberalization between India and Pakistan will offer tremendous scope and advantage to the state for export of several products through land route. The last three years exports data published by APEDA, for the commodities in which Haryana has competitive advantage, is presented in Table 6. It shows buoyancy in overseas demand in recent years particularly for fruits and vegetables and their seeds, buffalo meat, dairy products, basmati and non basmati rice, wheat and maize.

Table 6: Three years export statement of APEDA: Selected products

Product	Quantity: 000 tone			Value: Rs. Crore		
	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
Fruits & vegetable seed	11.6	15.2	17.2	184.9	287.8	347.7
Fresh onion	1182.3	1309.9	1666.9	1779.3	1723.0	1966.6
Other fresh vegetables	499.3	734.2	768.6	921.4	1310.5	1516.3
Other fresh fruits	255.0	270.4	264.0	511.8	755.4	779.8
Buffalo Meat	726.7	986.6	1107.5	8613.2	13745.7	17412.9
Poultry Products	516.8	624.2	577.9	314.3	458.1	494.9
Dairy Products	37.4	25.6	87.8	548.0	289.4	1412.1
Cereal Preparations	226.5	301.3	293.1	1261.8	1888.6	2240.8
Basmati Rice	2370.7	3178.2	3459.9	11354.6	15449.6	19409.4
Non Basmati Rice	100.7	3997.7	6688.0	231.3	8659.1	14448.8
Wheat	0.4	740.7	6514.8	0.7	1023.3	10529.0
Other Cereals	3220.1	4073.7	5431.6	3648.5	5492.9	8167.7

Source: APEDA

Haryana is a leading State in the export of basmati rice for a long time. Taraori region of the



State is famous world over for production of quality basmati rice. Basmati rice produced in Taraori is preferred in international markets over basmati rice from any other parts of the world. It has its unique aroma, softness and elongation after cooking. According to the data from Basmati Rice Exporters Association the export of basmati rice from India has steadily increased from less than 5 lakh tone in early 1990s to 32 lakh tone in year 2011-12. In the same period export of basmati rice from Haryana is estimated to increase from less than 2 lakh tone to more than 16 lakh tone. This has raised share of Haryana at national level in Basmati export from India from 40 percent to 50 per cent (Table 7). According to some estimates the share of Haryana has reached to 60 per cent of the total basmati export from the country. The State must capitalize on export advantages in basmati rice through incentives and policy support, particularly in marketing and quality control.

Table 7: Export of basmati rice from Haryana and country as a whole

Year	Export from Haryana in 000' tone*	Export from country as a whole in 000' tone	Share of Haryana %
1991-92	107	267	40.00
1992-93	130	325	40.00
1993-94	211	527	40.00
1994-95	177	442	40.00
1995-96	149	373	40.00
1996-97	209	523	40.00
1997-98	297	593	50.00
1998-99	299	598	50.00
1999-2k	319	638	50.00
2000 01	425	849	50.00
2001-02	334	667	50.00
2002-03	354	709	50.00
2003-04	386	771	50.00
2004-05	563	1126	50.00
2005-06	583	1167	50.00
2006-07	523	1046	50.00
2007-08	592	1183	50.00
2008-09	778	1556	50.00
2009-10	1008	2017	50.00
2010-11	1185	2371	50.00
2011-12	1606	3212	50.00

^{*} Estimated based on input from President, Basmati Rice Exporters Association.



Guar is another important commercial crop and about 80 per cent of the world demand for guar gum is met from India. Haryana accounts for 11 per cent of national production of guar gum. During the three years ending with 2010-11 guar seed was cultivated on 2.92 lakh ha area which yielded seed output of 4.27 lakh tones. About 75 per cent of the guar produced in the State is exported in the form of guar gum and its derivatives. Since Haryana has not developed adequate modern guar processing facilities, it is sent to the neighboring State of Rajasthan for processing. The State should give priority to establish modern processing and quality testing facilities at suitable locations within the State and encourage its proper marketing and export.

Haryana State is one of the leading producers of quality button mushroom in the country and this strength shall be further exploited through commercial production, processing and export of high value mushroom.

Haryana has wherewithal for production of high value agriculture and high potential for supplying agricultural products to overseas markets. The state has high quality germplasm of murrah buffaloes which are also in high demand in many other countries. Road network, water quality and irrigation, proximity to New Delhi airport strongly favour production of high value export oriented products. Harnessing these opportunities and potential require a new vision to bring changes in production portfolios and develop value chain to integrate farm production with consumption.

India needs a second green revolution with an end-to-end approach where production and productivity patterns are tied up with markets and end users. This according to me is India's biggest challenge—and must be faced by both the public and the private sector.

Sharad Pawar, Agriculture Minister



CHAPTER 3 AGRICULTURAL MARKETING IN HARYANA

Marketing of agricultural produce in Haryana is regulated by the Agricultural Produce Markets Act, 1961 enacted by the Government of Punjab before carving out the existing state of Haryana from it in 1966. The Act provides for the regulation of marketing of the agricultural produce, improving efficiency of marketing, and promoting agro-processing and agricultural exports by means of establishing markets and their proper administration.

3.1 Haryana State Agricultural Marketing Board (HSAMB)

As to implement the provisions of the Act, the Government of Haryana set up 'Haryana State Agricultural Marketing Board (HSAMB)' on August 1, 1969 with the main aim of improving market infrastructure and to better regulate sale, purchase, storage and processing of agricultural products within the framework of Agricultural Produce Markets Act. At the level of market, the Market Committee is an important arm of the HSAMB. It enforces provisions of the Marketing Act at the ground-level, and also help in creating market infrastructure and services. The main objectives of the Board are:

- Develop infrastructure including market yards, purchase centres, link roads etc. for improving marketing efficiency.
- Ensure transparency and competition among traders at the various market yards, sub yards and purchase centres for the best price discovery for farmers.
- Regulation and administration of Market Committees in state as per the Agricultural Produce Markets Act, 1961.
- Collect market fee and other levies on market transactions taking place in the Mandis.
- Create additional facilities, along with expansion and maintenance works on behalf of Market Committees.



• Facilitate procurement of foodgrains by the organizations such as Food Corporation of India (FCI), Warehousing Corporation and Haryana State Cooperative Supply and Marketing Federation Limited (HAFED).

At present, there are 106 regulated Market Committees in the state. Each Market Committee is headed by a Chairman, who is nominated by the government and an Enforcement Officer-cum-Secretary appointed by the Board. These Market Committees are grouped into three zones (Karnal, Gurgaon and Hisar) which are headed by the Zonal Administrators.

3.2 Markets and market charges

The State, at present, has 106 principal market yards (mandis), 182 sub-yards and 178 purchase centres, 30 fruit and vegetable mandis, 25 fodder mandis and 106 grains markets spread over the state (Table 8). Thus, each regulated market serves about 66 villages, and a farmer has marketing facilities available within a radius of 6-8 kms.

Table 8: Commodity-wise number of markets in Haryana, 2011-12.

Commodity	Number of markets
Grains	106
Fruits and vegetables	30
Fish	3
Fodder	25
Cotton	33
Wool	1

Source: HSAMB

The state levies a market fee of 2 per cent ad valorem on the commodities traded in the market except on maize, bajra, barley, jowar, gram, arhar, dry peas, moong, moth, mash, masar, sarson, toria, taramira, til, sunflower seeds, groundnut, methi, sunehari, oats, guar, and gur & khandsari that are levied a market fee of 1 per cent (Table 9). In addition, a rural development fee of 2 per cent is also levied. The commission charges range from 2 to 5 per cent of the value of commodity traded. Most commodities carry auction charges of 0.08 per cent and brokerage of 0.16 per cent ad valorem.



Table 9: Market fee and other charges on agricultural produce in Haryana: % value

Commodities	Market fee	Commission charges	Auction charges	Brokerage charges
1 Wheat	2	2.50	0.08	0.16
2 Paddy	2	2.50	0.08	0.16
3 Cotton	2	2.50	0.08	0.16
4 Wool	2	2.00	0.08	0.16
5 Groundnut (Unshelled)	2	2.00	0.08	0.16
6 Chillies (Dry)	2	2.00	0.08	0.16
7 Non-perishable vegetables*	2	5.00		
8 Perishable vegetables and fruits	2	5.00		
9 Dry/ Green Fodder	2	3.00		
10 Others*	1	2.50	0.08	0.16

Note:

 Others include Bajra, Mash, Moong, Moth, Masar, Sarson, Toria, Tara Mira, Til, Methi, Sunehri, Oats, Guar, Maize, Gram (Kabli & Black), Barley, Jowar, Dry Peas, Arhar, Gur, Shakkar, Khandsari, Ground-nut, Sun Flower Seed (Suraj Mukhi Beej)

2. Non-perishable vegetables viz. Potatoes, Shakarkandi, Onion, Arvi, Garlic & Ginger

Source: HSAMB

Other marketing charges include loading, unloading, weighing, stitching etc., which are charged on the physical volume of trade. Their details are provided in table 10.

Table 10: Incidental charges payable by farmers

Commodity	Unloading	Cleaning & dressing	
		Manual	Mechanical
Wheat/50kg.	1.05	1.05	1.75
Paddy/50kg.	1.40	1.30	2.30
Other cereals, pulses, oilseeds & guar/50kg.	1.00	1.05	1.70
Cotton/40kg.	1.35	1.15	
Wool/40kg.	1.35	1.15	
Groundnut (unshelled)/30kg.	1.35	1.10	
Chillies dry/17kg.	1.35	1.15	
Non perishable vegetables/ bag	0.80		
Perishable vegetables & fruits/unit	1.00		
Dry fodder/trolley	25.00		

Source: HSAMB



3.3 New initiatives

The state has taken several measures to modernize marketing system, upgrade marketing infrastructure and put in place new institutional mechanisms to benefit producers and consumers. These are briefly described below:

- 1. In order to enhance farmers' access to information on markets and agronomic practices the Board has set up ten Agri-Business & Information Centres (ABICs) at Sirsa, Hisar, Karnal, Thaneswar, Fatehabad, Jind, Ellenabad, Dabwali, Kalanwali and Bhiwani. These centres house Agricultural Development Officers and provide regular training to farmers and help in improving the quality of the agricultural products brought in the market. These centres also provide information on market trends and agronomic practices. Seminars, workshops and buyer-seller meets are also organized to educate farmers. The state's initiative to have ABICs at all district headquarters in coming years is highly admirable.
- 2. New Fruit and Vegetable Markets are also envisaged to be set up at each district headquarters in a phased manner with separate retail and wholesale sections. These markets will have modern facilities for information and quality up gradation of the products of farmers. These markets will have storage facility and cooling chambers.
- 3. In order to provide opportunity to the farmers for selling their produce directly to the consumers and realize better prices, two farmers markets at Karnal and Rohtak are in operation. The HSAMB future plan is to open farmers market at each district headquarters.
- 4. The Board is in the process of setting up of an Ultra-Modern Terminal Market for Fruits and Vegetables at Rai in Sonepat district with the aim of catering to the registered bulk buyers and exporters. This market is planned to handle at least 1000 tones of fruits and vegetables a day and will be equipped with electronic grading-sorting lines, cooling chambers and electronic bidding systems. To feed to this market, it is planned to establish collection centres in selected villages within a catchment of 50 km. These collection centres will have facilities of grading and sorting, information, banks and insurance for the farmers.
- 5. Another major initiative taken by the Haryana State Agricultural Marketing Board (HSAMB) is to set up India International Horticulture Market (IIHM) at Ganaur in Sonepat district on an area of about 540 acres. Ganaur is located on NH-1 and has a proximity to Azadpur mandi in Delhi and the objective is to decongest the Azadpur mandi. Around 30 per cent of the total inflow and 28 per cent of the total outflow of Azadpur market passes through Ganaur which is likely to be captured by the IIHM. The Board is also contemplating establishment of National Horticulture Pavilion in this market as to provide space to the Central and State level Horticulture agencies to develop robust backward linkages.



- 6. Market on wheels is another initiative of HSAMB to overcome post harvest losses. Accordingly, the HSAMB has decided to start with a pilot project of supplying fruits & vegetables in mobile refrigerated vans through the supply chain of farmers and retailer thereby reducing the post harvest losses and price gap between farmers and consumers. This program is running successfully in Panchkula district. Further, another facility provided is in the form of taking orders from consumers for home delivery of fruits & vegetables through Market on Wheels in all sectors of Panchkula & Chandigarh. Similar initiative has been taken in Rohtak as well.
- 7. Kisan Call Centre at Panchkula has been set up by HSAMB for guiding farmers in the field of agricultural marketing. One Agribusiness Manager has been deputed to supervise this centre.
- 8. Cold storage cum pack house has been designed to reduce post harvest losses through modern sorting, washing, grading, packing, waxing, preservation etc. In first phase, this facility is being set up at 11 stations. Ten projects at Panchkula, Panipat, Hisar, Narnaul, Rohtak, Karnal, Gurgaon, Abubshahar, Shahabad, Jhajjar have been completed. Under phase II work at 4 stations i.e. Faridabad, Jind, Pehowa and Yamuna Nagar has been taken up. Out of these 4 units are in operation.
- 9. Agro Malls are being constructed by HSAMB so that farmers can get seed, fertilizers, insecticides, pesticides, bank loans and other agriculture related facilities under one roof. The construction of four agro malls at Rohtak, Panipat, Karnal and Panchkula is in progress. The building of agro mall at Rohtak stands completed. Fifty percent space in the agro malls is earmarked for agricultural produce. About 20 per cent space will be provided to the primary producers.
- 10. Another initiative is opening of farmer markets. Farmer markets at Karnal and Rohtak are in operation. It is planned to construct one farmer market at each district headquarters.
- 11. Apani Mandis are in operation at each district headquarters except for Jhajjar and Mewat.
- 12. Two multi-commodity processing plants at Rohtak and Sirsa are being established by HSAMB in public-private partnerships mode in order to avoid post harvest losses and add value to the product.
- 13. Human resource is an important component for proper development of any sector of an economy. To cater to this need HSAMB has established a training institute at Panchkula named" Haryana Institute of Agricultural Marketing". This institute is designed in such a way that it will meet out the training needs of officials engaged in HSAMB as well as farmers. It is further planned to extend this facility at each district headquarters in near future.



14. Marketing Board has introduced a new approach on pilot basis in Faridabad market where only user's charges will be realized from the users and there will be no market fee.

3.4 The Haryana State Cooperative Supply and Marketing Federation Limited (HAFED)

The Haryana State Cooperative Supply and Marketing Federation Limited (HAFED) was established on November 1, 1966 and now is the largest apex cooperative federation in Haryana. The HAFED provides marketing services to the producers and consumers in the state. Its food retailing activities are also spread to other states. The main activities of HAFED are described below:

- 1. HAFED is the largest supply chain network for distribution of agro-inputs such as fertilizers, pesticides and certified seeds to the farmers of Haryana at reasonable prices at the right place and time through a network of 62 Cooperative Marketing Societies and 2200 Primary Agricultural Cooperative Societies. HAFED is the sole State Nodal Agency for arrangements, advanced stockings and distribution of fertilizers. It has direct agreements for procurement of Urea and DAP with suppliers like IFFCO, KRIBHCO, NFL, IPL etc. In 2012-13 it distributed 4.49 lakh tone of Urea and 2.20 lakh tonnes of DAP.
- 2. HAFED is a leading agency for the procurement of food grains mainly paddy, wheat, for the central pool. It also sometimes procures bajra, barley and mustard at minimum support price. For the last five years (2008-09 to 2012-13) its share in total procurement of paddy and wheat in the state has been around 35 per cent. HAFED has a warehouse or storage capacity of 10.50 lakh tonne, open plinths storage capacity of 14.81 lakh tones.
- 3. HAFED is among the largest chains for agro-processing in the country. It has 11 rice mills, two animal feed plants, one pesticides plant, two mustard oil plants, one barley malt plant, one sugar mill, one turmeric plant and one wheat flour plant. It is a major supplier of quality, hygienic and safe consumer products, animal feeds in the domestic and overseas markets. Basmati rice is the premium product from HAFED. Its products are available at its retail outlets/ consignee agents in Chandigarh, Delhi, Punjab, Kolkata, Himachal Pradesh, Jammu & Kashmir and Bangalore besides Haryana. HAFED's products are also sold through retail outlets of Kendriya Bhandar, National Consumer Cooperative Federation, Nafed, State Civil Supplies Cooperatives in Delhi & Himachal Pradesh etc.
- 4. HAFED has also initiated contract farming of basmati rice (750 acres) in Karnal, Kaithal and Kurukshetra districts; of desi wheat in Jhajjar and Mewat districts and various other crops including pulses and vegetables in Sirsa district.



3.5 Haryana State Warehousing Corporation (HSWC)

Haryana State Warehousing Corporation (HSWC) was established in 1967 with an aim of minimizing post-harvest losses by providing storage and warehousing facilities to farmers and industry in the state. With a beginning of 16 warehouses of 17,000 MTs capacity, today it operates a network of 107 warehouses with a storage capacity of over 17 lakh tones (85% is covered), which is almost one-third of the total storage capacity in the state (Table 11).

Table 11: Warehouses and their capacity in Haryana (March 31, 2012)

Agency	Warehouses (no.)	Capacity (000't)
Central Warehousing Corporation	28	537
State Warehousing Corporation	107	1683
Food Corporation of India		
Owned		768
Hired		1593
Covered and plinth		349
Total		2710
Cooperative Godown		932
Grand Total		5862

Source: FAI

3.6 Haryana Dairy Development Cooperative Federation Ltd. (HDDCF)

Haryana Dairy Development Cooperative Federation Ltd was established on April 1, 1977. It is registered under the Haryana Co-operative Societies Act. It has a three-tier system with Federation at state level, Milk Unions at district level and milk producers' cooperative societies at the village level. The main aim of Haryana Dairy Development Cooperative Federation Ltd. is to encourage the economic interests of the producers of milk in the state of Haryana especially of those that belong to the poor sections of the society. Haryana Dairy Development Cooperative Federation Ltd. produces a wide range of products such as Pasteurized Full Cream Milk, Standard Milk, Toned Milk, Double Toned Milk, Flavored Milk, Ghee, Paneer, Milk Cake, Table Butter, Mithi Lassi, Namkeen Lassi, Chhach, Dahi, Kheer, Kaju Pinni, Ice Cream, etc. The products of Haryana Dairy Development Cooperative Federation Ltd. are sold in the market under the brand name Vita. In 2012-13 the state had 3395 functional milk producers' cooperative societies which procured 1409.90 lac litres of milk, equivalent to 3 per cent of the total milk produced in the state. Out of the total milk procured 71 per cent was sold as liquid milk and the rest was converted into value-added



products. The milk plants of HDDCF are situated in Jind, Ambala, Rohtak, Ballabhgarh and Sirsa and together have a registered capacity to handle 880 thousand liters of milk per day. In addition to the plants in the cooperative sector, the state has 31 plants with a capacity of 2417 thousand liters per day.

3.7 Cold storage

There are 227 cold storage units in the state, with a storage capacity of 3.7 lakh tones (Table 12). Most of these storage units are owned by the private players. In fact, 98 per cent of the storage capacity has been created in the private sector. By commodity, 61 per cent of the total capacity is utilized for storing potatoes, 0.3 per cent for milk and milk products and the rest for multiple purposes.

Table 12: Cold storage in Haryana, 2011-12.

Туре	Number	Capacity (tones)	%age to total
a. Ownership			
Cooperative	5	1283	0.3
Public	4	7534	2.0
Private	218	359627	97.7
All	227	368444	100.0
b. Use			
Potato	167	225878	61.3
Milk and milk products	5	1283	0.3
Multi-purpose	55	141283	38.4
Total	227	368444	100.0

Source: APEDA

3.8 Agro-processing

Haryana is a major contributor to the national food-grains pool. The State is home to the high quality Murrah Buffalo and it has a good base for production of quality milk. The state holds large potential for growth of milk and dairy based industry. It enjoys the locational advantage of proximity to one of the largest consumer markets of national capital Delhi and the adjoining urban agglomerations. As such, the State offers attractive potential for the establishment of agro-based and food processing industry. This not only includes the manufacturing of value added products but also the associated service industry for provision of cold chain, storage, grading & sorting,



segregation and packaging of the vegetable and fruit products for ultimate supply to the consumer market.

Keeping the above in view, steps have been taken to strengthen the infrastructure for facilitating growth of this sector. Food Parks at Rai (Sonepat) and Saha (Ambala) have been developed by the HSIIDC and industrial plots have been allotted to the food processing Units. Further, in order to facilitate capacity building and cater to the needs of skill development for this sector, the HSIIDC has allotted 100 acre of land at Kundli (Sonepat) for the establishment of National Institute of Food Technology, Entrepreneurship and Management (NIFTEM), being set up by the Ministry of Food Processing, Government of India. The institute would be one of the premier institutions for imparting training and offering courses in the field of food technology and other management streams.

In view of the above, the structure of agro-processing, has changed considerably; away from manufacturing of paper and paper products, whose share in total value added in the agro-processing sector declined from 34 per cent in 1990-91 to 9 per cent in 2000-01 and further to less than 4 per cent in 2010-11(Table -13). Food manufacturing (including beverages and tobacco) and textiles and apparel are the dominant sub-sectors of the agro-processing in the state. In 2010-11 their share in value added was estimated at 47 per cent and 38 per cent, respectively.

Table 13: Structure of registered agro-processing in Haryana, 2010-11 (value added in lakh rupees at current prices)

Sector	1990-91	2000-01	2010-11
Manufacture of food products, beverages and tobacco	16128	79342	313044
Manufacture of textiles and apparel	11287	71708	255818
Manufacture of wood and wood products	394	2118	19097
Manufacture of leather and related products	1214	11008	59846
Manufacture of paper and paper products	14741	16022	25125
Total	43764	180198	672930
Total Manufacturing industries	189943	710569	2994007
% share of agro-processing in total	23.0	25.4	22.5

Source: http://www.epwrfits.in/ASITreeview TwoDigitIndustry State.aspx

Interactions with traders in the state reveal that higher value added tax (VAT) rates in Haryana vis – vis Rajasthan and Punjab have resulted into flight of many ginning and oil expeller units to outside the state.



CHAPTER 4 CHALLENGES AND PROBLEMS IN AGRICULTURAL MARKETS

There is little change in the system of marketing of agricultural produce especially foodgrains during last 3-4 decades. Producers bring their produce to regulated markets managed by Agricultural Produce Market Committees (APMCs). There the produce is sold through open auction to wholesalers, processors and retail traders which take the produce to consuming centres in different geographic locations. A part of the produce is also sold overseas by exporters. A typical market channel is presented below:

"Producer - Commission agent- Wholesaler- Retailer - Consumer"

In this channel small producers are sometime unable to come in market due to small volume. Sometimes commission agents and wholesalers are the same which results in the manipulation of the market. Movement of agricultural produce from farm gate to consumers involves a number of transactions and transfer of produce among a number of actors. This process involves a large number of intermediaries. Each transaction and intermediary involves some cost, and some margin, generally on small lots. This results in fragmented market channel and crowding of market operations with many firms (actors) trying to operate business on small volume of output. Obviously, they seek large margin due to small volume of business to keep their business economically attractive.

It is often felt that there is a disconnect between prices received by the producers and prices paid by consumers for agricultural products and the price spread does not reflect the value addition. The main reasons for this are weak market infrastructure, and low competition in market. Agricultural markets are also not vertically integrated even though they are horizontally integrated in most cases

4.1 Market Infrastructure

Development of market infrastructure needs to keep pace with growth in marketed surplus, urban



settlement patterns, consumers' preferences and development in commerce and market technology. In the state of Haryana market arrivals of most of the commodities have witnessed sharp increase due to growth in production and increase in ratio of marketed surplus to production. In the last two decades market arrivals of wheat have more than tripled and market arrivals of paddy have more than doubled (Table 14). Market arrivals of fruits and vegetables have also more than doubled. Market arrivals of cotton and oilseeds have faced small decline of 20-25% in the last two decades. During early 1990s annual market arrival of wheat, paddy, bajra, oilseeds, cotton and fruits and vegetable taken together was 62.5 lakh tones. This has increased to 143 lakh tone per year in the last three years registering an increase of 129 per cent over a period of 20 years.

Table 14: Progress of market arrival of major crops and regulated markets in Haryana.
Unit: Market arrival in Lakh quintal

Sr.NO.	Стор	1990-91 to 1992-93	2009-10 to 2011-12	Increase%	
1	Wheat	230.8	684.7	196.7	
2	Paddy	247.4	546.5	120.9	
3	Bajra	2.1	14.0	577.7	
4	Oilseeds	23.8	18.1	-24.3	
5	Cotton	67.8	53.4	-21.2	
6	Fruit & vegetables	53.1	113.2	113.2	
7	Potato	14.9	43.5	191.8	
8	Onion	6.4	15.7	147.3	
9	Sum of 1 to 6	625	1430	128.8	
Number of regulated markets					
10	Principal	96	106	10.4	
11	Sub market yard	153	178	16.3	
12	Total	249#	284	12.3	

[#] Number of regulated markets refer to year 1988

Similarly, between 2004-05 and 2010-11 marketed surplus of rice increased from 2.806 million tones to 3.4 million tones. In the same period marketed surplus of wheat increased from 6.8 million tones to 9.5 million tones. Even crop like bajra has seen annual growth of 3.86 per cent a year. These growth rates (table 15) indicate requirement for more market space under present system of marketing through physical auction in mandi, or, alternative system of sale by producers to consumers.



Table 15:	Marketed	surplus o	f cereals i	in Haryana

Cwan	Marketed surpl	Growth rate		
Crop	Average 2003-04 & 2004-05	Average 2009-10 & 2010-11	% per year	
Rice	2806	3402	3.26	
Wheat	6834	9514	5.67	
Bajra	725	910	3.86	

Source: Computed from data on production and marketed surplus reported in Agricultural statistics at A glance, Ministry of Agriculture, GOI, New Delhi.

In contrast to the growth in market arrivals and marketed surplus the growth in number of regulated markets for agricultural produce has witnessed little increase. Total number of regulated markets in the state was 249 in the year 1988 consisting of 96 principal markets and 153 sub market yard. Over a period of more than two decades the number of regulated markets has increased only by 12 per cent (table 14). It is observed that the increase in number of agricultural markets in the state during the last two decades has been less than one tenth of the increase in market arrivals of agricultural produce.

It has also been noticed that the revenue collected from agricultural markets is not fully ploughed back into market development. As a result market infrastructure and market facilities have not kept pace with market arrivals. Rains often play havoc with market arrivals. Market clearance is slow and inefficient. Farmers who bring their produce to market have to take favors of arhtiya for simple facilities and amenities which obliges farmers to sell their produce through particular middlemen. The present system of purchase at MSP encourages heavy arrival of marketed surplus in a very short period resulting into depressed prices in post harvest period.

In some cases marketing is locked with credit. To meet their needs farmers often take credit from commission agent. This binds them to sell their produce on terms dictated by the financer commission agent. The concept of marketing finance has not picked up due to absence of assured purchase at later stage. Mechanism of warehousing receipt to equip farmers to benefit from intra year price variations has not percolated to ground level. This forces producers to sell their produce immediately after harvest rather than deferring sale to lean period when prices invariably go higher than post harvest period.

Small holder farmers are in a particularly disadvantageous position in terms of small size of marketable surplus. They often face high transport and marketing cost and lower net price





realization. Daily turnover of crops like vegetables whose harvest extends over a period turns out to be unviable for marketing. Thus collection of such produce like milk at or near farm gate, or through aggregators is a real challenge.

In a marketing system, market information is an important function which facilitates the marketing decisions and regulates the competitive market processes and mechanisms. It is helpful to the farmers for planning, production and marketing of their commodities. Seasonal price variations and price volatility are getting large. Producers can't beneft from these variations in prices as they do not have reliable advance information on prices. It involves setting up of mechanism for price forecast and dissemination which is missing not only in the state of Haryana but in almost all other states.

One of the biggest constraints of present system of marketing is the absence of option to withdraw produce from mandi if offered price is not attractive to producer seller. The cost incurred by farmer in terms of transport of produce to mandi, labour charges etc goes against such decisions. Mandis also do not have facility for keeping produce of farmers if he wants to wait for a few days before selling his produce.

4.2 Market Regulation

The regulatory framework for agricultural markets consists of two distinct set of measures. The first set includes measures for development and regulation of wholesale markets and the second set includes a series of legal instruments for regulation of market conduct and trade activities.

Agricultural Produce Market Regulation Act (APMRA)

All wholesale markets for agricultural produce in Haryana are regulated under APMRA. The Act mandates that the sale/purchase of notifed agricultural commodities is carried out in the market area, yards or sub yards as per the provision of the Act. The APMC Act has served very important purpose of removing several malpractices and imperfections from agricultural markets and bringing the fairer deal to farmers in the sale of produce. This Act was needed and was relevant when private trade was a highly underdeveloped, exploitative, and totally controlled by mercantile power. However, lot of changes have taken place during the last three and half decades which require changes in APMC Act to improve marketing of agricultural products.

The present APMC Act grants marketing monopoly to the state and it is felt that it prevented private investments in agricultural markets. Some provisions of this Act like purchase rights only to licensed traders have prevented new entrants and thus reduced competition. It is felt that this Act



prevented markets from entering the next stage of development.

To address these issues a new model of APMC Act was proposed by the Ministry of Agriculture in 2003 to encourage states to prepare their individual Act. Under the model Act private sector can be licensed to set up market. The model Act also allows for contract farming and direct marketing by private trade.

Though the Model Act has been adopted by state of Haryana it has not succeeded in bringing significant changes in the system of marketing. No private market has come in the state. Direct purchase from farmers and contract farming are not fully liberalised.

Legal Instruments

Apart from APMC Act, the activities of market functionaries are regulated by several other legal instruments promulgated and revised from time to time by the Centre and State governments. The most important regulation is Essential Commodities Act (ECA), 1955. Almost all agricultural commodities like cereals, pulses, edible oilseeds, oilcakes, edible oils, raw cotton, sugar, gur, jute are included in the list of essential commodities. The Act provides for instruments like license, permits, regulations and orders for price control, storage, stocking limits, movement of produce, distribution, disposal, sale, compulsory purchase by government and sale (levy) to government. A very large number of control orders have been put into force by the Central government and State governments under the ECA.

The main aims of various regulations were (a) to keep a check on exploitation of producers and consumers by private trade through collusion, hoarding etc., (b) price stabilization and (c) to raise standards of markets and to improve market performance. Lot of changes have taken place in marketing and trade environment since these regulations were framed. Development of transport and communication network, expansion of marketing and increased competition in economic activities have facilitated increased role of private sector in agricultural marketing. Numerous regulations have led to excessive control and intervention by government, which are hampering participation of private trade in agricultural marketing and are proving counter-productive. This is hindering competition in agriculture markets and depriving producers from getting better returns for their produce.

There is a misplaced feeling that participation by big players in agricultural marketing would subject the market to manipulation and aggravate the infation. This will not be true since entry of big players in agricultural marketing increases competition and effciency. Government need to follow consistent policy on market reforms and encourage private sector participation at all



stages of agricultural marketing and trade in the long term interest of the sector. In some cases very stringent licensing requirements also discourage private players from participating in various trading activities.

Marketing creates Time utility Place utility Possession utility Form utility



CHAPTER 5 EMERGING MODELS OF MARKETING

Agricultural marketing suffers from inefficiency, increasing gap between prices received by the producers and prices paid by consumers for agricultural products, fragmented and long marketing channels, poor maintenance of markets and inadequacy due to absence of additional facility as per rising arrivals over time. It is also found that in total value added in production and marketing, the share of value added in post-harvest segment is rising and that in production is falling. In some cases value addition in marketing is larger than value addition in production. With farm size getting smaller day by day, return to producers can be improved by enabling the farmers to get a share of value added in marketing. This requires developing new models of marketing and strengthening marketing mechanisms which includes producers as partners.

5.1 Direct Sale by Producers to Consumers

The best marketing model for producers and consumers is where producers sell directly to consumers either as individual or as some sort of organization. Such models have been developed in some states such as Apni Mandies in Punjab and Haryana, Rythu Bazaar in Andhra Pradesh and Uzavaar Sandies in Tamil Nadu. Under these arrangements, farmers are allowed to sell their produce as retail to consumers in the towns on selected days and time without intermediaries. The scale of operation of these marketing arrangements is quite low as only farmers located in the vicinity of big towns can benefit from this form of marketing. Such Innovative marketing should be promoted on large scale.

5.2 Value Chain Development

Demand pattern of agricultural commodities both at consumer and industry level has been changing rapidly towards processed products, quality product and specific traits. These changes favour integrated supply chain rather than conventional marketing channels, assured market rather than open market and specific produce rather than generic one. Such supply chains also offer a



tremendous scope to reduce middleman's margin. A well-functioning supply chain can reduce the cost of marketing by linking farmers more closely to processing firm and consumers and guide the production to meet changing consumer preferences for quantity, quality, variety, and food safety. Modern supply chain also often involves private standards and their enforcement that help coordinate supply chains by standardizing product requirements for suppliers over many regions or countries. It also enhances efficiency and lowers transaction costs. The concept of supply chain is more beneficial to small producers who dominate India's agricultural production.

5.3 Direct Purchases

A few experiments such as direct procurement backed with technical support extended by 'Safal', a division of the National Dairy Development Board even without advance price assurance has benefited the farmers immensely. Similarly, vertical integration of poultry meat production under integrators who supply everything from inputs to technical support and pay the producer a predefined amount based on body weight of the bird, have also been very successful. These indicate that participation of cooperatives and private sector firms in marketing of agricultural produce under specific environment can help farmers. This calls for a thorough review of the existing agricultural marketing policies and implementing changes that will bring the producer closer to the consumer.

5.4 Contract Farming

Amendment of APMC Act on the lines of model Act involves removal of legal restrictions on contract farming. This has paved the way for vertical co-ordination as a viable model for food processing industry as well as Agri-commodity markets. Some initiatives, though at small scale, have been taken in recent years in this direction. Some notable contract farming models working in the country are: Escorts Krishi Sansar, Mahindra Shubhlabh, and Satnam Overseas and Tata Chemicals contract farming. Coimbatore Hatchery (poultry), NAFED (mushrooms in Sonepat), ITC Agro Tech (edible oilseeds) are the other examples. Some exporters/bulk buyers have tied up with farmers for assured purchases of such products as baby corn, tomato, potato, basmati rice, barley in different areas. Though, these initiatives are in the right direction, there are some reported inherent dangers like over use of natural resources, violation of contracts and introduction of undesirable seeds. Keeping the pros and cons in view, the Union Ministry has drafted a model contract farming agreement and a supportive legislation for insertion in the APMR Acts. The model provides for compulsory registration of contracts, dispute settlement mechanism, settlement of claims within three months, and a ban on agreement on farmer's land. Some of the suggestions for making contract farming successful are:



- 1. The contract farming should be made legal. In case of violation of contract, from either side, farmers as well as the company should be in a position to approach an organization or institution, which can mediate and settle the dispute.
- 2. There should be an institutional arrangement to record all contractual arrangements, may be with the local market committee or panchayat or some Government machinery. This will promote and strengthen confidence building between the parties and also help solve any dispute, arising out of violation of contract.
- 3. The contract farming should have a provision for both forward and backward linkages; unless both input supply and market for the produce are assured, small farmers will not be in a position to participate in contract farming.
- 4. The contracts should be managed in a more transparent and participatory manner so that there is greater social consensus in handling contract violation from either side without getting involved in costly as well as lengthy process of litigation.

5.5 Organized Retailing

Organized retailing in India has seen steady growth during the last decade. Official claims are that FDI in organized retail will provide big boost to organized food retail and benefit farmers in a big way. Past experience shows that a single model like "organized retail" can help some pockets but it cannot serve multitude of Indian farmers. Therefore, organized retail, with or without FDI, should not be seen as a panacea for addressing problems of agricultural marketing and it should not deflect attention from other models and mechanisms for improving competitiveness of agricultural marketing.

Organized retailing in India has seen steady growth during the last decade and it is seen as a sunrise industry. Food World (of the RPG group) has been the leader among the organized food retail chains and there are many more retailing agencies like 'FabMall', 'Monday to Sunday', 'Family Mart'; 'More for you' 'Heritage' etc operating in the country. Most food chains are regional in nature, having one or two food retail outlets in a particular city without extensive presence outside the states. Rapid urbanization, growth in urban population, increase in income and consumer spending, changing lifestyle and access to technology have been the important factors that have been responsible for the expansion of food retail chains in India. Despite several factors favouring organized retail trade, it is still in a nascent stage in the country. Factors such as well-established traditional retailers, costly real estate, government policies and consumer perception and purchase behavior are found to be limiting the growth of food retail chains. At the macro level,



restrictions on foreign direct investments in the retail sector, regulations regarding purchase of agricultural commodities, multiplicity of controlling agencies and regulations, stringent labor laws and multiple layers of taxation have been identified as major factors impeding the growth of foods retail chains in India.

Integration of farmers into the retail chain through contractual arrangements can fetch higher and assured prices to farmers and at the same time allow food retail chains to plan the quality and quantity of supply. This arrangement has worked very successfully in poultry meat production and gherkin production. Comparison of farmers' share in consumer's rupee indicates that farmers received a higher share of consumer's rupee in this model compared to traditional marketing channels. The other advantages of this model are reductions in transportation costs, handling costs, absence of middlemen, assured market and reduction in price risks.

5.6 Farmers' Associations and Companies

Farmers can benefit from selling their produce together through economies of scale in the use of transport and other services and by raising their bargaining power in sales transaction as the group action strengthens bargaining power of the farmers and marketing expenses get distributed resulting in better share in net returns. A well managed producers association is very useful in a competitive trade environment to protect the farmers from exploitative private trade practices.

The farmers associations are similar to those of cooperatives but are not governed by cooperative legislation and hence less prone to government control and political interference. They are registered organizations enjoying a lot of flexibility in the enrolment of members, raising funds, decision making and carrying out of the chartered activities following plural management process. Many successful marketing organization models can be cited in this regard. Mahagrapes in Maharashtra is the first group marketing organization established having characteristics of both cooperative and public sector partnership firm. The role Mahagrapes as a marketing entity played is a policy innovation.

In response to a long pending demand from farmers' groups, Government of India amended the Indian Companies Act 1956, in 2002 for incorporating producer companies with the Registrar of Company (RoC). According to the amended Act any ten or more individuals, each of them being a producer, or any two or more producer institutions or combination of both, and cooperatives can form a producer company to undertake production, harvesting, procurement, grading, pooling, handling, marketing, selling, export of primary produce of the members, or import of goods or services for their benefit; processing including preserving, drying, distilling, brewing, venting, canning and packaging of produce of its members. Such companies can go a long way in ensuring



well- being of producers through group action in production, and post harvest activities and by promoting business of marketing, and trading. However, they will require some handholding in the initial stages. Farmers companies or farmers association are quite favorable for attracting potential buyers who need assured supply like processor and super market suppliers.

Haryana, which enjoys considerable advantage in terms of connectivity and location has yet to see spread of such initiatives in a big way.





CHAPTER 6 WAY FORWARD AND RECOMMENDATIONS

A gricultural markets and marketing in most of the states of the country including Haryana have not kept pace with growth in market supply and forces of modernization. As a result, agricultural marketing is found to suffer from inefficiency, high and rising gap between prices received by the producers and prices paid by consumers for agricultural products, fragmented and long marketing channels, poor maintenance of markets, no addition to market space and lack of modernization. It has also been found that in total value added in production and marketing, the share of value added in post-harvest segment is rising. In some cases value addition in marketing is larger than value addition in production.

While taking up the issue of linking farmers to market it is important to draw distinction between crops/produce procured by official agencies and the produce without government intervention in terms of procurement and where price is determined by market forces. The former offers stable price environment and there is not much scope for improving price realization for farmers by improving market linkage. Linking farmer to market is important in those cases where price is left to be determined by market forces rather than fixed by government.

With farm size getting smaller day by day, returns to producers can be improved by enabling the farmers to get a share of value added in marketing. This requires developing and strengthening marketing mechanisms which includes producers as partners. Urgent reforms are needed in agricultural marketing to achieve such goals and to address conditions prevailing in agricultural markets.

Haryana has a very good network of roads and all producing areas are connected to state or national highways through rural roads. The state also has geographic advantage of being in the vicinity of the metropolitan city of Delhi and adjoining urban conglomerate which offers tremendous demand for high value products. The state also has reasonable quantity and good quality water available for agricultural uses. This type of natural resource endowment coupled



with very good infrastructure offers very favourable supply side prospects for production of high value products. Similarly, large market in Delhi in its neighborhood with millions of consumers willing to pay for quality and attribute based products offers tremendous scope from demand side. Though, some individual efforts have been made to promote high value products but the full scope of their production and value addition is yet to be realized by the state of Haryana. The state can harness this advantage and transform its agriculture in a big way to raise income of its farmers. But this will happen if appropriate marketing mechanism and climate for private investments in agri-business improves in the State.

The WG makes following recommendations to link farmers to market and to enable them to take advantage of opportunities available to the state.

- Most of the reforms needed in agricultural marketing are proposed in the model APMC Act prepared by the Ministry of Agriculture at the Centre. The State must implement model Act in true spirit of competitiveness. This will certainly pave the way for direct marketing, vertical coordination through contract farming, provide alternative options to producers for sale of produce and create competitive environment for services which are currently a monopoly of Agricultural Produce Market Committee. The State should remove all hurdles in the way of contract farming, and direct sale-purchase of agricultural produce.
- Sale of farm produce through regulated APMC markets should remain as one of the options but not the only option for sale of farm produce. Direct purchase and contract farming by big business and mega malls operating in Haryana may be encouraged for benefits of consumers and producers. In the present system farmer is price taker but he is not a price setter or price dictator. In the case of direct sale at farm, a farmer can have more bargaining power because he has the option to retain the produce if the offer is not attractive to him. State law and regulation should accommodate such possibilities.
- The recent initiative to reduce security deposit for firms entering into contract farming from 15 percent to 5 percent is a welcome step. The firms of national and international repute should be exempted fully from such deposits.
- Agriculture markets require integration, scale economy, and elimination of a large number of
 middlemen and transactions. This requires entry of more and more large sized players, and new
 investments in agricultural markets. Apprehensions of exploitation of farmers by corporate
 houses in a liberalized market are exaggeration and serve to strengthen status quo of marketing
 that benefit hordes of middlemen. The State should facilitate private investments and check
 market inefficiency through competitive marketing environment. Legal impediments like stock



limit etc should be removed as required for taking advantage of scale in market operations.

- Allow and promote integrator (assembler) in all agricultural commodities to collect small marketable surplus from producers and sell it on their behalf in mandis.
- Promote alternative models of marketing like producers organizations and producers' companies
 to impart bargaining power, bypass middlemen and fetch better prices for farm produce. Such
 organizations will require hand holding and capacity development in the initial stages and credit
 support. Producers companies should be encouraged and facilitated to harness latent demand
 for beneficial product attributes through certification trademark and brand names like "Taraori
 basmati" and other niche products.
- Encourage agricultural diversification by integrating production to processing and retailing, and export. This should be done by identifying area specific specializations and providing technical and logistic support in the identified pockets along with linkage of production with processing, retails, export etc. Mechanism like producer-industry linkage will be highly helpful in this endeavor
- Rationalize taxation structure on farm produce to check diversion of marketed surplus to neighboring states and keep taxes at moderate level to attract agri-business to state markets. Effort should also be made to avoid multiple taxations as in case of cotton and it's by product.
- The best marketing model for producers and consumers are where producers sell their produce directly to consumers either as individuals or as some sort of organization. Such models in the form of Apni Mandi or Kisan Bazar should be set up in all towns with reasonable population. Such model loses its objective due to entry of large number of non farmers in these markets. It should be ensured that only genuine farmers are allowed to sell produce in such markets.
- Demand pattern of agricultural commodities both at consumer and industry level has been changing rapidly towards processed products, quality product and specific traits like organic food, ethnic food, fresh food, well packaged produce. These changes favour integrated supply chain rather than conventional marketing channels, assured market rather than open market and specific produce rather than generic one. Such supply chains also offer a tremendous scope to reduce middleman's margin. A well-functioning supply chain can reduce the cost of marketing by linking farmers more closely to processing firm and consumers and guide the production to meet changing consumer preferences for quantity, quality, variety, and food safety. Modern supply chain also often involves private standards and their enforcement that help coordinate supply chains by standardizing product requirements for suppliers over many regions or



countries, enhancing efficiency and lowering transaction costs. The concept of supply chain is more beneficial to small holders who dominate India's agricultural production. The state should create congenial and legal environment for supply chain development.

- About one tenth of facility and business space in Agro-Malls should be reserved for producers' organizations like farmers cooperatives, farmers companies. This should include space in agro-malls, market yards, shops for commission agents and other facilities. This will promote competition with private traders.
- Licenses and other requirement for agric –business should be liberalized.
- Warehouse receipt offers opportunity for meeting credit need in post-harvest period and taking advantage of higher price in lean period. State should strengthen mechanism for taking advantage of warehouse receipt system.
- Market infrastructure development has not kept pace with growth in volume of market arrivals, hence need for fresh investments and improvement. Several mandis do not have adequate pucca and covered platform. Some mandis do not have warehouses for farmers to store their produce to meet any eventuality. Market operations are slow and traditional. State should upgrade market by improving physical infrastructure and modernizing market operations.
- The concept of Virtual markets is very effective for mapping targeted produce and targeted consumers. It saves lot of transaction cost and is catching up with modern consumers. Under such dispensation a consumer in urban area requiring fresh and particular quality produce can place order through internet if authentic supplier in rural areas are established. There is a considerable scope for high value realization for produce from Haryana through virtual market development. Beside individual consumer, this type of arrangement can benefit from supply for various types of social functions. The state should encourage young entrepreneur in the state of Haryana to promote virtual markets in farm produce.
- Farmers should be educated about higher value realization for their produce through grading, cleaning, sorting, packaging quality production, and secondary agriculture. State should facilitate value addition through such activities.
- A part of revenue earned by Mandi Board should be used for training farmers in marketing and building their institutions like producer association or companies.
- Price volatility and price spread between post harvest and lean month is increasing. It is often
 found that farmers sell their produce when prices are at the lowest and soon after prices rise



steeply. Farmers are not able to take advantage of price rise due to price risk and lack of information services like price forecast and market opportunities. The state of Haryana should set up a price forecast and Market Research Cell in CCS Haryana Agricultural University to prepare price advisories and market intelligence for the farmers.

- The APMC Act had resulted in up gradation of agricultural markets and regulation and order in sale-purchase of produce. With the present stage of commerce and business the Act is found to be a hurdle in further modernization and progress of markets. It will be worth to try how markets will function now without this Act in some cases
- Foodgrains markets in Haryana were constructed in seventies and since then market arrivals have increased manyfold. Inadequate covered space was reported as problem by arhtyas. Almost all amenities require expansion and up-gradation.
- Dairy accounts for more than 30 % of agricultural income in the state. The product diversification by Haryana Dairy Development Cooperative Federation should be developed on the line of AMUL in Gujarat.
- The state of Haryana has started couple a of initiatives for linking farmers to consumers and for modernisation of agricultural marketing system. There is a need to ensure that these initiatives serve the desired outcome. The efficacy of new initiatives needs to be monitored and successful experiences need to be documented and replicated.
- Vegetable production is picking up in the state in a big way. The following action points are suggested to sustain this:
 - 1. Cities like Gurgaon in the state are getting larger part of vegetable-supply from Azadpur Market of Delhi. Even farmers from Haryana are selling in Azadpur market which is then routed by traders to Gurgaon adding cost for the ultimate consumers. Therefore, a modern state-of-the-art wholesale market for vegetables and fruits should be set up by the Agriculture Produce Market Committee (APMC) in Gurgaon in place of almost non-existent vegetable market within the Khandsa Grain market. It may offer to consumer's vegetables, fruits and flowers directly plucked from the farmlands of Gurgaon and adjoining districts of Mewat, Palwal, Faridabad, Rewari and Mohindragarh. The modern state-of-the-art wholesale market may be equipped with all amenities like separate display racks for vegetables, fruits, flowers and herbs. Facilities like testing and certification laboratory, central electronic auction system, online spot commodity trading platform, ripening chamber and cold storage, agriculture training centre for farmers, banking facilities, mechanized



material handling system etc., may be set up inside the market. Besides vegetables; cereals and pulses, general shopping mall for grocery, clothes, jeweler, shoe etc can also be display. The wholesale market may be a one-stop shop for the city residents. They could be able to shop anything and everything under one roof at discounted prices. Such modern market can enable every farmer to sell their commodities without the interference of middlemen. Moreover, the market would benefit the end consumers who would be satisfied not only with the quality of the commodities, but also on the price front. It will give quantum jump in the fee of the APMC and save Delhi from pollution.

- 2. The location of markets should be easily accessible to consumers and vendors but cleaning and grading centers can be located on the outskirts on the supply roads to keep the city clean of huge removable material with the vegetables. The wet material can also be used for conversion in compost which can be purchased by farmers. It will also reduce the requirement of market space in middle of the city. This strategy can be applied in all big cities especially where vegetable markets are congested.
- 3. Haryana is surrounding the Delhi from three sides. To take benefit of its vicinity and the route of the states of Himachal Pradesh, Punjab and Rajasthan which pass through Haryana vegetable markets with facilities at par with Azadpur market of Delhi may be set up on the boarder of Delhi and Haryana near the National Highways. This will enable Haryana farmers and mandis to feed vegetables to majority of Delhi population. The farmers will save entry tax of Delhi and the state can earn a lot of revenue.
- 4. Haryana may also adopt the model of Delhi to market the vegetables and fruits as per SAFAL mechanism of Mother Dairy. HDDCF has allotted milk booths in all sectors and locality of the states. Along with these booths small place may be provided to market vegetables and fruits. Consumers coming for milk purchase will be captive buyers for fruits and vegetables too.
- Dairy sector in Haryana has not seen the kind of progress commensurate with state's potential. Presently the share of organized sector in milk marketing is 28 percent, within this cooperative sector accounts for only 5 percent. There is a need for improving functioning of milk collection centers and establishment of small processing units at village level.
- The State should encourage massive investments from within the country and FDI to bring more capital, technology and managerial skills of international standard in value chain development. It would be helpful in strengthening forward and backward linkages, creating a proper farm to fork infrastructure through direct purchase from farmers.



- Processing needs special attention through incentives, special packages, training in processing
 and production of processing specific quality produce, establishment of service centers and
 facilitate marketing of small scale agro-processing industries products. Farmers should also be
 helped in the selection of varieties suited to the processing units. Emphasis of agro-processing
 units should be on multiple commodities complexes rather than individual commodity approach.
- Integration of farmers into the retail chain through contractual arrangement can fetch higher and assured prices to farmers and at the same time allow food retail chains to plan the quality and quantity of supply. The other advantages of the model are reduction in price risk, transportation costs, handling costs, absence of middlemen and assured market.
- In the absence of adequate covered sheds, farmers have to face a number of problems in the case of aberrant weather conditions. Hence construction of more covered sheds involving Commission agents may be considered so as to protect farmers produce in the market.
- Creation of assembly centers with grading and storage facilities in and around a cluster of villages needs to be encouraged in public private partnership to decongest existing mandis.
- Development of roadside markets especially along the highways at appropriate distance/ places will be helpful to farmers in fetching better prices and provide easy access to consumers to fresh produce.



Acronyms

ABICs : Agri-business Information Centres

APEDA : Agricultural Processed Food Products Export Development Authority

APMCs : Agricultural Produce Market Committee Act
APMCs : Agricultural Produce Market Committees
APMRA : Agricultural Produce Market Regulation Act

CSO : Central Statistical Organisation
ECA : Essential Commodity Act
FAI : Fertilizers Association of India
FCI : Food Corporation of India
FDI : Foreign Direct Investment
GDP : Gross Domestic Product

Ha : Hectare

HAFED : Haryana State Cooperative Supply and Marketing Federation Limited

HDDCF: Haryana Dairy Development Cooperative Federation Limited

HKA : Haryana Kisan Ayog

HSAMB : Haryana State Agricultural Marketing Board

HSIIDC: Haryana State Industrial Infrastructure Development Corporation

ICT : Indian Tobacco Company

IIHM : India International Horticulture Market

ITC : Indian Tobacco Company

MSP : Minimum Support Price

NCAP : National Center for Agricultural Economics & Policy Research

NAFED : National Agricultural Cooperative Marketing Federation of India Limited
NIFTEM : National Institute of Food Technology, Entrepreneurship and Management

NSDP : Net State Domestic Product

RoC : Registrar of Company
SBI : State Bank of India

TAAS : Trust for Advancement of Agricultural Sciences

TE : Triennium Ending
VAT : Value Added Tax
WG : Working Group



Head Office

Haryana Kisan Ayog

Anaj Mandi, Sector-20, Panchkula - 134116

Tel.: +91-172-2551664, 2551764

Fax: +91-172-2551864



Camp Office

Haryana Kisan Ayog

Kisan Bhawan, Khandsa Mandi, Gurgaon - 122001

Tel.: +91-124-2300784, 2300789