Chapter IX
FINDINGS

The researcher through questionnaire contacted farmers, traders, hamals, market officials and analyzed the data. Researcher also had discussion with the market officials, farmers, regulators, hamals and traders. The researcher has also gone through the literature review, newspaper articles and extensive use of internet. Researchers has identified facts with the help of data collected through the questionnaires, interviews and observation during visits as well as from annual reports of respective APMCs. After analyzing the data and facts researcher is presenting the findings as per the objectives of the research.

9.1 STUDY OF APMCS

9.1.1 Organization structure: It is observed that the selected market committees have uniform organization structure of markets prescribed in section 13 of APMC Act. 1963 with 18 members

- Agriculturist Constituency (10 members)
- Trader Constituency(3 members)
- Co-operative sector member(1 members)
- Local member(2 members)
- Govt. Nominee(2 members)

It is found that agriculturist members are rarely from common and small farmer community. They are always big farmers with political influence. Selected traders are also having political links and number of times unfair
practices are followed by them. Rather market committee platform is used as entry level platform in politics.

9.1.2 Appointment:
Market official appointed according to Section 35 APMC Act 1963. Most of the officials are local people appointed by market committee. Market committee Secretary is the most experienced person in each market committee and became secretary after getting promoted from position of clerk. Most of the market committee staff is linked to local politician.

9.1.3 Uploading Job:
In all the selected market committees clerks or accountants are performing a job of uploading the information of market rate. Ahmednagar Market committee and Rahuri Market committee, have a separate IT department and qualified staff. Where as in other market committees, IT trained clerks and accountants are doing the job of IT. It is found that this job is done without understanding the importance of accurate and timely information. IT staff of is not doing the job in time.

9.1.4 Amenities:
Among the selected market committees, Ahmednagar APMC has the highest i.e 28 amenities available for the usage of participants followed by Sangamer i.e 21 and Rahuri i.e 21 (Chapter 7). On the contrary, Newasa has the lowest number of amenities though it is among early established committees (1960). Parner is younger and growing market committee, adding amenities gradually. Shrigonda is next to Rahuri with 17 amenities. Very few amenities are provided at Shvegoan 13, Parner 11 and Newasa with lowest 10. It is found that except annual report the list of amenities available is not displayed anywhere. Even farmers are not motivated to use
the facilities. The amenities at certain places remain unused or used for some other purpose.

9.1.5 **Working days:**
All the market committees are open for six days a week. Majority of the market committees are having Sunday as a weekly holiday. Depending upon the arrival and as per the season and convenience of participant’s, market committees have fixed specific days of week for specific commodity auctions e.g onion auction conducted at Parner on Sunday. Direct Tomato sale at Sangamner is conducted on Sunday and Wednesday. Auction schedule is not planned properly. Many times farmers have to wait for long time even day or two.

9.1.6 **Composition of Licenses:**
It is found that lot of variation in composition of licenses of selected APMCs. License issue is very much influenced by politics and unfair practices.

9.1.7 **Market Charges:**
It is found that there is no uniformity in the market charges. Hamali charges varies from Rs. 1.5 to Rs. 2.7 while weighing charges varies from Rs. 1.5 to Rs. 2.05. Besides these charges, there are many hidden charges that are charged from the farmers e.g weight against bag, weigh reduction due to unclean produce etc

9.1.8 **Platform Scales:**
Among seven selected market committees, Ahmednagar and Parner Market committee have platform scales. At Ahmednagar market committee loaded vehicle weight is recorded with computer network terminal available at the entry gate. At Parner market committee it is recorded manually. Few
traders have electronic balances available in Ahmednagar and Sangmner APMCs.

9.1.9 **Licensed Weighmen:**
In all the selected market committees licensed weighman is available and is present at the time of weighing.

9.1.10 **Payment System :**
In all selected markets, payment system is very much improved. 80% of farmer collect their payment immediately after the auction is over, for remaining 20%, payment is available but they may not able collect it due to their personal problem.

9.1.11 **Disputes Resolution:**
Disputes regarding the payment are resolved by market officials quickly. The researcher found, number of times disputes regarding weighing remain unsolved in favors of trader/commission agent.

9.1.12 **Sale Method :**
In all selected APMCs, majority times, sales method followed is open auction for the all types of grains (e.g wheat, jawar etc) as well as for vegetables like onion and tomato. At Shrigonda, Newasa, Shevgoan committees is it not a fair operation. Even dummy auctions are also witnessed.

9.1.13 **Market Information :**
In all the selected market committees market information is displayed on the black board. Sangamner, Rahuri, Newasa market committees are uploading prices regularly on the MSAMB web site. Ahmednagar, Parner, Shevgoan and Shrigonda are not updating the information in time. At
Rahuri and Ahmednagar market committees Projection TV is available to display the rate continuously. Periodical price information on AGMARKNET portal is uploaded through the central uploading facility available at Ahmednagar by the NIC officials.

9.1.14 SMS service:
MSAMB has started SMS service for dissemination of market information and intelligence. This is a joint initiative by MSAMB and Reuters. Many farmers from selected market committees are availing this facility.

9.1.15 Internet Facility:
Every selected APMC has been connected to the internet with broadband along with minimal IT infrastructure. APMC employees who are responsible for uploading current auction information have been given training by both NIC and MSMB. Information is available and updated but not reaching to the participants for whom it is basically made for. Not a single farmers is aware about the fact that this kind of facility is available in their market committee.

9.1.16 Number of commodities notified:
There are 79 different commodities notified. Rahuri APMC has highest 53 notified commodities followed by Parner i.e 49 commodities. Ahmednagar market committee has 44 commodities in the list while Sangamner has 42 and Shrigonda has 41 in the list. Shevgoan has 34 which is lowest among the list. It is observed from the list that commodity list depends on the cropping patterns followed in the area of the respective market committees.
9.2 PROBLEMS IN AGRICULTURE MARKETING

The researcher has visited seven market committees Ahmednagar, Rahuri, Sangamner, Shevgaon, Newasa, Parner and Shrigonda respectively. Researcher identified number of problems related to market functions such weighing, pricing/market information, transport, market charges. They are as follows

9.2.1 Source of Information:
It is found 80% of the farmers make use of traders’ information to decide about the sale of the produce. Traders often have up-to-date information but number of times they guide the farmers according to their needs and their tie-up with other wholesale traders. 72% of them get information from other farmers neighbors, relatives from the same village. They contact them personally or through telephone/mobile to get information. Others IT tools like radio, TV are also used by the participants to get the information about where to sell.

9.2.2 Awareness about Internet:
There are very few farmers who are aware that, market committees have internet and they can get the reliable, accurate, up-to-date, un-biased information and decide where to sell.

9.2.3 Grading Problem:
Though separate graders are appointed in each market committee, they are hardly aware with different methods of grading. Except Ahmednagar marketing committee, other market committees don’t have grading equipments in their premises. Farmers face many problems related to grading.
a. While grading there is no fix standard,
b. Defective visual grading,
c. Grading methods not clear,
d. It is biased.
e. Reduction in weight in the name of grading.

In each market committee weigh-men are available. Farmers from all the marketing committees are facing problems related to weighing. Farmers feel deceived by the traders and weighman. There is lot of variation as far as reduction in weight for bag is concerned. It ranges from 300 gm to 1Kg, which is authorized. It is also found that market officials do not take any action regarding un-authorized reduction in weight. There is collision with traders and weighman. There is un-authorized pasang system i.e extra addition of produce above weight.

9.2.4 Problems about price information:
In the survey researcher found that farmers mostly rely on traders and commission agent for the price information. Farmers are facing number of problems; they feel that prices they are getting are not adequate. Number of times it happens that for same quality of produce, producers are getting different prices. Farmers don’t like the biased approach of traders and commission agent towards big farmers. They also suffer from uncertainty of prices i.e sudden price fall and suffer from big loss.

9.2.5 Transport:
It is found that transport is carried out with the help of truck, tempo, tractor, bullock cart and pickup van, railway and in case of export through ship. Ahmednagar, Rahuri and Sangamner are located on highways due to which number of vehicle available are large in number. Road network is
also better. Shevgoan, Newasa and Parner are located in the interior, hence less dense road network and no rail route is available. Condition of rural roads especially driving in rainy season reduces efficiency of transport system. Though enough number of vehicles are available at each market committee, there are number of problems faced by participants such as, very high cost of transport, monopoly of local transportation facilities, non-availability of vehicle in time, loss of produce in transportation.

9.2.6 **Payment**:
Payment of produce is done on the same day of auction. But still there are problems related to payment such as details are not mentioned(hidden charges), reduction in weight, not getting computerized bill of the produce.

9.2.7 **Market charges**:
Market charges are one of the major issues of disputes that are faced by the participants. Farmers feel that market charges are too high, lot of burden of charges is on seller as compared to buyer. It is also found that they are not getting correct information about the charges. There is no transparency in market charges. Lot of hidden market charges are charged.

9.2.8 **Amenities Available**:
It is found that Ahmednagar, Rahuri, and Sangamner market committees are providing many amenities including separate halls for different produce. Parner, Shevgoan, Shrigonda and Newasa are providing fewer amenities. There are not sufficient godowns available for storage. No market committee is providing cold storage facility. It creates a big loss for perishable produce like vegetable. Due to non-availability of cold storage, they either have to sell their produce at very cheaper rate or simply throw away the produce. The available facility is also not adequate, it is not
secure. Due to rats and other rodents they have to suffer big losses. Market committees are not able to protect the produce from rain.

9.3 IT-INFRASTRUCTURE FOR AGRICULTURE MARKETING

9.3.1 Internet Connection:
Every selected APMC is connected through the internet to the centralized marketing board i.e MSAMB (Maharastra State Agriculture Marketing Board) as well as AGMARKNET portal of NIC(National Informatics Centre). At every market committee telephone line with dial-up internet connection is made available under scheme of State Marketing Board. Internet facility is provided by BSNL under rural plan.

9.3.2 Government Initiatives:
AGMARKNET(National Informatics Centre portal for Agriculture Marketing) and MSMB (A portal developed by Maharashtra State Marketing Board) are two important IT initiatives available at every selected APMC.

9.3.3 Researcher has found following features of the initiatives

i. AGMARKNET:
• Price and Arrivals: The portal provides access to commodity-wise, variety-wise daily prices and arrivals information of various wholesale markets. Future prices from national multi-commodity exchanges are reflected online. Also linkages are established with Web sites of the FAO and Asia & Pacific Coconut Community (APCC) to access international commodity.
• **Commodities and Varieties:** A commodity base, comprising of more than 300 commodities and about 2,000 varieties has been evolved. The commodities are being categorized into various groups: cereals, pulses, oil seeds, fruits, vegetables, spices, fiber crops, beverages, forest products, drugs and narcotics, dry fruits, flowers, forest products, livestock/poultry, and so forth to facilitate easy retrieval of market information.

• **Grading and Standardization:** To promote the importance of quality among the farming community, the portal emphasizes on standardization and grading aspects of the agricultural products. The information is provided in the form of documents/specifications prescribed by the act/rules of DMI and other agencies. It also links to the Codex International food standards, guidelines, and related texts such as the codes of practice under the joint FAO/World Health Organization (WHO) Food Standards Programme.

• **Market Atlas:** The market profiles and various Geographical Information System (GIS)-based thematic maps are under development.

• **E-Directory of Markets:** With the networking of agricultural markets, timely and effective exchange of information electronically is now possible. E-mail addresses of the agencies involved are progressively published for public access so as to facilitate direct interaction.

• **Weather Information:** All India weather conditions, weather forecast, climate, rainfall, temperature, and soil moisture are made available through the Indian Meteorological Department Web site.

ii. MSAMB :

• **User friendliness:** Home page is organized very properly with important information and proper links are provided. It is very easy for
the user to search for the desired link. Researcher is of the opinion that, since it is made for farmers it should be made simple, user friendly and in local language. Use of simple graphics and messages can make it more user friendly. The information should be grouped according to functions carried out at APMCs e.g. Transport, Grading, Packaging, Pricing etc. The look and feel of portal need to be improved so that user can access it easily and quickly.

- **Prices and Arrivals**: It is easy to select options for prices and arrivals which are given on this portal. Data is not available for all selected market committees. Researcher is of the opinion that menu should be classified according to groups of commodities so that it becomes accessible. Better search techniques should be implemented for faster search. Most important is menu should be available in local language.

- **Commodities and varieties**: The commodities are not categorized. There should be various groups: cereals, pulses, oil seeds, fruits, vegetables, spices, fiber crops, beverages, forest products, drugs and narcotics, dry fruits, flowers, forest products, livestock/poultry. Current commodity prices are also available. But for very few market committees these rates are available. Researcher opines that link should be provided and information of prices for the given market/markets should display with the help of link.

- **Grading and Standardization**: To promote the importance of quality among the farming community not much information is available. Researcher is of the opinion that it should be made available for selected commodity if possible with graphical presentation. Then only it will able to sensitize the farmers regarding grading and standards.

- **Market Profile**: Market profile part is given in details and properly organized. Especially selecting correct APMCs is simple task. Most of the profiles of the selected market committees available are detailed. But
the data available is not up-to-date. Researcher is of the opinion that unless data is made up-date and complete information is made available then only it is of any use.

- **Other Information**: Other useful information related various schemes, export and training is made available on this web portal. It is very user friendly and important for farmers.

9.3.4 **Researcher has found following problems with the portals AGMARKNET:**

- **User friendliness**: Home page itself contains lot of information and become very crowded with so many links. It becomes very difficult for the user to search for the desired link.

- **Prices and Arrivals**: It is very daunting task to select options for prices and arrivals which is given on this portal. Data is not available for all selected market committees.

- **Commodities and varieties**: The commodities are being categorized into various groups: cereals, pulses, oil seeds, fruits, vegetables, spices, fiber crops, beverages, forest products, drugs and narcotics, dry fruits, flowers, forest products, livestock/poultry. Current commodity prices are also available. But for which market committee these rates belongs to is not clear from the table.

- **Grading and Standardization**: To promote the importance of quality among the farming community, the portal emphasizes on standardization and grading aspects of the agricultural products by providing documents of Acts related to grading and standards. There are grading standard details available only for wheat, rice commodities. It is observed that information in not organized properly.

- **Market atlas**: Market atlas is very useful facility available on the website but its speed is very slow and it is very complex to use. Market
profile part is incomplete. Especially selecting correct APMCs is complex task. Most of the profiles of the selected market committees available are incomplete. The data available is not up-to-date.

ii. MSAMB

- **Prices and Arrivals:** Data is not available for all selected market committees and all commodities.
- **Commodities and varieties:** The commodities are not categorized. Prices are available for few market committees.
- **Grading and Standardization:** To promote the importance of quality among the farming community not much information is available.
- **Market Profile:** Market profile the data available is not up-to-date and incomplete.
- **Other Information:** Information about export, schemes, training is available but not dynamic.

**9.3.5** Researcher has found that infrastructure available is not sufficient except Rahuri and Ahmednagar market committee. It is not available for farmers for use.

**9.3.6** It is found that traders of selected market committees are all using mobile for communication. Most of the traders at Ahmednagar, Rahuri, Sangamner are having their own computerized billing and inventory system available. One of the traders at Sangamner market committee has his own portal through which he performed remote transactions with his distant office. But Traders and Shevgoan, Newasa, Paner and Shrigonda are not yet having computers. Researcher observed that traders use the available equipment very efficiently e.g mobile for transportation, establishing links.
with other traders. B2B links for online bank transactions become very useful for them to get prompt payment.

9.3.7 Researcher has identified that the farmers need information regarding
- current price,
- market arrivals,
- storage,
- quality requirements,
- future trends etc. to plan his own marketing arrangements.

In addition to the information of the spot market, the forward and futures market prices are also required to be disseminated which is
- area specific,
- crop specific,
- buyer specific etc.

9.4 BENEFITS OF IT-APPLICATION FOR AGRICULTURE MARKETS

9.4.1 It is found that all the market participants i.e farmers, traders and commission agents, hamals as well as market officials are using ICT tools such as radio, TV and mobile. Survey conducted by researcher identified that each of the participant use these tools to carry out their functions more efficiently and effectively. All the participants opined that these tools save their valuable time as well as manpower to great extend.

9.4.2 It is found that farmers use mobile, telephone, information from radio and information from TV to make decision about where to sell. With the help of mobile contact of trader and commission agents, as well as
other sources, farmers decide whether to sell in local APMC or other markets. Farmers get information using mobile or rely on TV/telephone/radio and take decision to sell the produce immediately or wait for prices to increase. Farmers use these ICT tools for getting information about:

- Decision about where to sell
- Decision about when to sell
- Grading information
- Pricing Information
- Weighing Information
- Transport Information
- Storage Information
- Information about amenities

9.4.3 It is found that these tools are benefiting a lot to the farmers especially in transport operation and pricing. By application of these tools they save their time as well as manpower significantly.

9.5 AWARENESS OF IT-APPLICATION AMONGST AGRICULTURE MARKET PARTICIPANTS

9.5.1 It is found that all the participants are well aware with IT tools like radio, TV and Telephone, mobile.

9.5.2 It is found that traders, market officials, farmers and hamals are aware about computer either by themselves or through their family members.

9.5.3 Market officials, traders and very few farmers know about the internet facility. AGMARKNET project has started in 2000. But as on today even
after 6 years, farmers for whom this service is made are not aware of this facility. Even only 60% market officials and 28% traders/commission agent are aware of this facility.

9.5.4 It is very important finding about computer awareness that more than 60% farmer’s family members have done MSCIT and gained the awareness about computers. MSCIT is contributing lot in spreading the awareness of computer at grass-root level. But unfortunately there are no measures taken by the market committee in spreading the awareness about internet and the important project such as AGMARKNET and MSAMB.

9.5.5 Basically these projects are governed by NIC (National Informatics Centre) and Maharashtra State Agriculture Marketing Board respectively. Both of these organizations have provided training to the market officials regarding Market Information Uploading.

9.5.6 Researcher found that hamal groups are using mobiles very effectively. The leader of the hamal contact the group members through mobile whenever there is a work of loading and unloading, within no times all of them gather at the spot. But very few of them are aware of computers and internet.

9.5.7 All market officials are aware of majority of the IT tools. Awareness of AGMARKNET and MSAMB is only among those officials who are either doing the uploading work or who are providers of price information. The percentage of awareness is only 60%. Two market committees i.e Ahmednagar and Rahuri are having separate IT departments and specially trained IT staff. In all the market committees at least two people have been given training of uploading prices information of MSAMB project. AGMARKNET, price information Data uploading is done by NIC officers.
at Taluka level. Both AGMARKNET and MSAMB have provided training to the officials but it is not percolated to all

9.6 PROBLEMS IN IT IMPLEMENTATIONS:

9.6.1 Researcher has identified following problems in IT implementation.

a. Education
b. Awareness
c. Infrastructure
d. Government policy Implementation.
e. Lack of localization
f. Lack of user involvement

9.6.2 Education level of farmers is improving year after year. It is also found that educated family member come to the market for selling the produce. But still farmer’s low education level is problem in implementation of IT because it is difficult to train these farmers for using IT tools.

9.6.3 It is found that, even after six years of starting it, farmers are not knowing the IT facility like AGMARKNET. It is going to be main hurdle in implementation. It is found that awareness level of IT tools like radio, TV is much higher in all market participants. Mobile and computer usage is also increasing day by day. But there is very less, almost no awareness about project like AGMARKNET, MSAMB among farmers(1%), traders(28%), hamals(0%). Selected market officials got the training of the same but have not understood the importance. Traders though aware with these tool, very few are using them. They too do not rely on the information provided by these projects but rely on personal contact(mobile or telephone).
9.6.4 It is found that for APMCs interruptions in electrical power in taluka headquarters and delay in maintenance of computers at taluka level by vendors are a big infrastructure problems.

9.6.5 For Authorities of NIC, the main difficulties experienced during 2 years of launching of the system are:

- Lack of understanding about importance of reliable & timely information in decision making while marketing the produce at market as well as producer's level.
- Delay in supply and installation of hardware owing to local difficulties/indifference on the part of both vendor—suppliers and market committees.
- Inadequate availability of Local ISPs in different parts of the country.
- Transferring of staff trained for the scheme without training the substitute. At times vacancy remains unfilled for considerable time, lack of alternative arrangement in the absence of regularly trained person.
- Casual approach to collection and reporting of data/information. Lack of due regard to authenticity of data.
- Irregularity in reporting of data. The number of days a market reporting data varies from 1 to 25 days. Intermittent supply of data affects the credibility of the portal.
- Tendency to discontinue reporting of data even in case of minor faults or requirement of minor investments in repairs, etc. or trained personnel to report data in case of need.

9.6.6 It is found that, onion grower farmers from Paner taluka are more interested in knowing about onion market while people from Sangmner are interested in tomato market detail. As the demography changes accordingly
cropping pattern changes and market information requirement also changes.

9.7 IMPACT OF IT TRAINING PROGRAMS OF GOVERNMENT AND APMC

9.7.1 It is found that training of AGMARKNET project is provided through NIC(National Informatics Centre) to selected APMCs. The training is given for 5 days. According to the market officials training it is not sufficient. They require more training to understand the system thoroughly. If any technical problem comes, they are not able understand it and get the solution.

9.7.2 Besides provisions in the Act training given to participants is rare. Only few farmers from the selected market committees received the training. They got the training regarding grading of the produce. This training of grading is mainly for onion by experts.

9.7.3 It is found that participants believe that IT can help them very well in getting timely and credible market information. Majority of them are already getting lot of benefit of most widely used IT tool like mobile. They agree with the fact that IT tools can help them in getting more details, correct grading and standard information which is always a issue of dispute.

9.7.3.1 It is found that detail market charges related information can help them in paying only valid market charges. Especially farmers at Ghodegoan have mentioned incidence regarding price dispute and how market officials have solved it using price information on the MSAMB web portal. They have already experienced the time and cost saving in transport.